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Child Abuse & Neglect 31 (2007) 567–572

Child Abuse  
& Neglect

## Parental self-confidence, parenting styles, and corporal punishment in families of ADHD children in Iran

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Received 6 March 2002; received in revised form 18 December 2006; accepted 23 December 2006

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### Abstract

**Objective:** This study examines the relationship between parental self-confidence, warmth, and involvement, and corporal punishment in families of children with attention deficit/hyperactivity disorder (ADHD).

**Method:** The diagnosis of ADHD was established through clinical interviews with the parents, children, and teachers, according to the criteria in DSM-IV-TR. This diagnosis was also established by having the parents complete the Conners' Parent Rating Scale, and the teachers complete the Conners' Teacher Rating Scale. Two groups of Iranian parents, one group with children who have ADHD ( $N=130$ ) and a control group ( $N=120$ ), completed questionnaires measuring parental self-confidence and parenting styles.

**Results:** Parents of children with ADHD were found to have lower self-confidence and less warmth and involvement with their children, and used corporal punishment significantly more than the parents of control children.

**Conclusions:** The study provides strong evidence that children with ADHD are at considerable risk of abuse by their parents. Rather than focusing only on the child's ADHD, treatment may also need to address the parents' functioning.

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*Keywords:* Parenting styles; ADHD; Iran; Corporal punishment; Conners' Rating Scales

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0145-2134/\$ – see front matter © 2007 Published by Elsevier Ltd.  
doi:10.1016/j.chiabu.2006.12.005

## Introduction

Children with attention-deficit/hyperactivity disorder (ADHD) typically show considerable problems with attention, activity level and impulsivity, and it is estimated that ADHD affects 3–7% of school-aged children (American Psychiatric Association, 2000). There is increasing evidence that ADHD is primarily a genetically-based and neurological disorder (e.g., Castellanos et al., 1994; Coolidge, Thede, & Young, 2000; Filipek et al., 1997; Giedd et al., 1994; Roth & Saykin, 2004; Sergeant, Geurts, Huijbregts, Scheres, & Oosterlaan, 2003), but this does not diminish the need for research concerning the family dynamics of children with this disorder. In addition, we would suggest that further research in this area is warranted because the parents of children with ADHD are an important source of external feedback for their children, and these children tend to have more delicate relationships with their parents.

Although studies suggest that there are frequent difficulties in the families of children with ADHD, parental dysfunction is not a main causal factor for ADHD (Conte, 1991). However, because of their biological and self-regulatory problems, children with ADHD often make family relationships challenging. For this reason, children with ADHD may create more family stress (Abidin, 1983) and the parents of these children may frequently misinterpret their child's behavior or intentions. These negative attitudes can affect the child's capacity to develop internal direction (Goldstein & Goldstein, 1998).

The present study was designed to increase understanding of the impact that parental self-confidence and parenting styles have upon families of children with ADHD compared to those without ADHD. It was hypothesized that parents of children with ADHD would have lower self-confidence, report less warmth and involvement in the parenting of their children and would be prone to greater use of corporal punishment. Gender differences in these measures were also explored.

## Method

### *Participants*

The sample consisted of 125 families that had a student attending public elementary schools in Tehran, Iran. There were 65 students diagnosed with ADHD, and 60 students were chosen as a control group. The controls were matched with respect to demographic characteristics (see Table 1). Level of parental education was used as an indicator of socioeconomic status.

The mean age for children in the ADHD group was 9.3 ( $SD = 1.4$ ), whereas the mean age for children in the non-ADHD group was 9.0 ( $SD = 1.3$ ). Within the ADHD group, the mean age for boys was 9.3 years ( $SD = 1.5$ ), and the mean age for girls was 9.4 years ( $SD = 1.3$ ). In the non-ADHD group, the mean age for boys was 8.9 years ( $SD = 1.4$ ), and the mean age for girls was 9.3 years ( $SD = 1.5$ ). The mean age of parents in the ADHD group was 36.4 years ( $SD = 6.7$ ), whereas the mean age for parents in the control group was 36.9 years ( $SD = 5.3$ ). The average number of the siblings for the children in the ADHD group was 2.8 ( $SD = 1.2$ ), compared to 2.4 ( $SD = 1.1$ ) for the non-ADHD group. For children in the ADHD group, 19% had divorced parents and/or lived with just one parent, compared to 8.6% in the non-ADHD group. Twenty-five percent of the mothers in the ADHD group suggested that the child with ADHD was unwanted, compared to 2% of mothers in the control group.

Table 1  
Demographic characteristics of parents and children<sup>a</sup>

	ADHD group	Control group
Parental education		
Below high school	24.5%	22.4%
Parental education		
High school Graduate	47%	39.6%
Parental education		
Higher education	28.5%	38%
Parental age in years (Mean, <i>SD</i> )	36.4 (6.7)	36.9 (5.3)
Children's age	9.3 (1.4)	9.0 (1.3)

<sup>a</sup> There were no significant differences between the groups at  $p < .05$ .

### Procedure

Formal permission to conduct the present research was obtained from the offices of Tehran Education Regions for schools whose students' families would be considered of medium socioeconomic status. At the selected schools, the senior author met first with teachers, and later with parents, to give them information about the goals of the research and characteristics of children with ADHD.

In order to identify children with ADHD, the teachers were asked to complete the Conners' Teacher Rating Scale for any child or children suspected of having the disorder. The DSM-IV-TR (American Psychiatric Association, 2000) diagnostic criteria were then used by the senior author to confirm the diagnosis with the parents and school counselors of these children. Children with primary sensory, motor, neurological, or psychiatric problems (other than ADHD) were eliminated from the study. Also excluded were any children taking medication for ADHD. Children for the non-ADHD group were then selected based on interviews with the teachers, the parents, and the students, and matched to demographic characteristics of the ADHD group.

### Measurements

*Parenting styles and dimensions questionnaire (PSDQ)*. Parenting dimensions were measured using the PSDQ (Robinson, Mandelco, Olsen, & Hart, 2001). The PSDQ is a 62-item questionnaire, with established reliability and validity. The questionnaire uses a five-point Likert-type scale, as follows: 1 (Never) to 5 (Always), and measures three main dimensions of parenting styles: authoritative, authoritarian, and permissive. One subscale from each of the three dimensions was chosen for the present study: Lacks Self-Confidence with five items ( $\alpha = .61$ ) from the permissive scale; Warmth and Involvement with 11 items ( $\alpha = .83$ ) from the authoritative scale; and Corporal Punishment with six questions ( $\alpha = .57$ ) from the authoritarian scale.

*Conners' Rating Scales (CRS)*. The CRS is a widely used instrument designed for use by parents (Conners' Parent Rating Scale; CPRS) and teachers (Conners' Teacher Rating Scale; CTRS) to assess ADHD in children ages 3–17 (Conners, Parker, Sitarenios, & Epstein, 1998). The CTRS consists of 28 items answered on a four-point Likert scale and 10 of the 28 items specifically assess hyperactivity.

Table 2  
Results of ANOVAs for lack of self-confidence, warmth, and corporal punishment

	Parents of children with ADHD	Parents of control children
	Mean (SD)	Mean (SD)
Lack of self-confidence	13.0 (3.0)	10.3 (4.3)**
Warm/involvement	35.4 (13.8)	45.3 (7.6)*
Corporal punishment	15.4 (7.8)	11.5 (2.3)*

\*  $p < .01$ .

\*\*  $p < .005$ .

The CPRS consists of 48 items, used to assess five different groups of childhood problems, including impulsivity-hyperactivity. All of the measures used in the study were translated into Persian.

### Statistical design and analysis

A three-way ANOVA design was employed to test the relationships between parents of children with and without ADHD to parental self-confidence, warmth and involvement, and corporal punishment.

## Results

As predicted, the results indicated that the parents of children with ADHD were significantly less self-confident,  $F(1, 121) = 9.4, p = .003$ , scored significantly lower in warmth and involvement,  $F(1, 121) = 60.9, p < .01$  and were significantly more likely to use corporal punishment used more corporal punishment,  $F(1, 121) = 36.8, p < .01$ , than the parents of children in the non-ADHD group (see Table 2).

Scheffé's post-hoc test revealed that the parents of girls with ADHD were less self-confident than the parents of girls who do not have ADHD ( $p < .01$ ). Scheffé's post-hoc test for the parents in the control group reported significantly more warmth and involvement than the parents of the children with ADHD, for boys and for girls ( $p < .01$ ). Scheffé's test also showed that parents of both boys and girls with ADHD ( $p < .01$ ) were more likely to use corporal punishment than parents in the control group.

Post-hoc tests also revealed no significant difference between mothers and fathers of ADHD children or controls in the level of parental self-confidence. Mothers scored higher than fathers on warmth and involvement parenting practices in both the ADHD group ( $p < .01$ ) and in the control group ( $p < .01$ ). Fathers of the children with ADHD use more corporal punishment than the mothers ( $p < .01$ ), but there was no significant difference between fathers and mothers of normal children.

## Discussion

Generally, the hypotheses in the present study were supported, that is, parents of ADHD children were less self-confident, self-reported less warmth and involvement with their children, and used more corporal

punishment than parents of children without ADHD. As noted previously, the evidence is overwhelming that ADHD is a genetically based neurological disorder, and the present findings may not be interpreted in a causal fashion. However, the present results may be useful in the reduction of family stress and ultimately in improving an ADHD child's capacity to become happy and adjusted adults.

Comparison of the fathers' and mothers' parental strategies may help achieve a better understanding of the families of children with ADHD. Although we found no significant difference between maternal and paternal lack of self-confidence in the normal group or in the ADHD group, we found that mothers were more warm and involved than the fathers in both of the groups. This finding is consistent with other research indicating that a parent's gender predicts parenting styles, and that mothers are generally more authoritative, whereas fathers are more authoritarian (Aunola, Nurmi, Onatsu-Arviolommi, & Pulkkinen, 1999). On the other hand, dissimilarity of parenting styles within a family is related to higher parenting stress (Harvey, 2000). Furthermore, this parental stress, which is characterized by feelings of powerlessness and insufficiency (e.g., Onatsu-Arviolommi, Nurmi, & Aunola, 1998), has been shown to lead to ineffective parenting (Snyder, 1991) and often has negative consequences for children, (e.g., Webster-Stratton & Hammond, 1988).

Therefore, in clinical settings, we recommend examining the parenting styles of parents whose children have ADHD, and bolstering both the fathers' and mothers' self-confidence in dealing with their children. It may also be useful to educate the parents in their recognition that ADHD is not their fault, nor is it a consequence of something that they have done. It may be beneficial to explain the general but complex nature of the hereditary component in ADHD.

The finding that fathers, regardless of whether their children had ADHD or not, reported themselves as less warm and involved than the mothers is of interest. Perhaps these findings are unique to middle class Iranian parents. However, it would not be surprising if this finding could be replicated in other cultures. Before any recommendation is made with regard to increasing paternal warmth and involvement, the present study should be replicated, not only in Iran, but also cross-culturally.

The finding that the use of corporal punishment was greater in the families with ADHD children was alarming, especially because of the potential link between corporal punishment and child abuse (e.g., Gershoff, 2002). It has been well demonstrated that corporal punishment tends to be immediately effective in changing a child's behavior. However, it has also been demonstrated that once punishment ceases, children often return to their previous behavior, punishment does not help to establish new, desired behaviors, and punishment may be socially heritable, that is, children may model their parents' behavior when they become parents themselves (e.g., Coolidge, 1998). Thus it may be helpful for therapists to make parents aware of the repercussions of corporal punishment, and, at the very least, to help them develop parenting styles that involve rewards and reinforcement, as well. It also be of great interest, particularly cross-culturally, to determine whether corporal punishment and its short- and long-term repercussions in Iranian families differs from that in other cultures, especially western societies.

The present findings must be interpreted in light of limitations such as limited sample size, limiting the study to middle-class parents, and potential difficulties arising from the translation of the questionnaires from English into Persian and its subsequent appropriateness for an Iranian sample. There are also the additional sample selection problems of some families who declined to participate, the possibility that the teachers selected only the most severe ADHD cases, the elimination from the sample of ADHD children who had profound comorbid disorders, and children who were already on ADHD medications. All of these factors may have restricted the generalizability of the present findings.

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