

## مقایسه اختلال رفتار هنجاری در پسران و دختران

### Comparing Conduct Disorders in Adolescent Boys and Girls

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#### Abstract

In order to study gender and age differences in adolescents' conduct problems, 881 male and female high school students in London, grades 7 – 9, answered a friendship inventory and the Rutter's B scale (1967), measuring psychological problems. While gender and age differences in psychological problems were not significant, older adolescents showed more conduct problems and a significantly higher level of scores on fighting in friendship scales. Furthermore, the gender differences between no conduct problem group and the fighter group were not significant.

**Key words :** Conduct disorders, gender, adolescence, age.

#### چکیده

در این پژوهش کوشش شده تا درک بهتری از اختلال رفتار هنجاری با توجه به جنس و سن نوجوانان ارائه شود. بدین منظور تعداد ۸۸۱ دانش‌آموز نوجوان در سنین اوایل نوجوانی (۱۳ تا ۱۵ سالگی) از دبیرستانهای جنوب لندن انتخاب شدند. از دانش‌آموزان خواسته شد تا پرسشنامه دوستی و مقیاس مشکلات روانشناختی (راتر، ۱۹۶۷) را تکمیل کنند. نتایج نشان دادند که بین دختران و پسران در مورد اختلال رفتار هنجاری تفاوت معناداری وجود نداشت. همچنین بین نوجوانان دو جنس در گروه فاقد مشکلات رفتار هنجاری و گروه علاقه‌مند به «دعوا» تفاوت معنادار مشاهده نشد. تحلیل زیر مقیاسهای آزمون راتر نیز نشان داد که نوجوانان سنین بالاتر در مقایسه با نوجوانان سنین پایین‌تر، دارای مشکلات رفتار هنجاری بیشتری بودند و نمره‌های آنها در مقیاس راتر و در مقوله «دعوا» در پرسشنامه «دوستی» به طور معناداری بالاتر بود.

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## Introduction

Different terms have been used to refer to conduct problems such as acting out, bullying, externalization behaviors, delinquency, coercion, antisocial, predelinquent and aggressiveness. Although researchers have attempted to clarify these terms and make distinction between them, in practice they are often used interchangeably (Hollin, 2001; Kazdin, 1987; Lorion, Tolan & Wahler, 1987; Paterson, 1982; Sadock & Sadock, 2003; Tolan & Mitchel, 1990).

Farrington (1993), Cook, & Philip (2001) distinguished between delinquency and conduct disorder. In general, conduct disorder refers to the behavior of children, while delinquency is more likely to be used for adolescents. LeMarquand & Tremblay (2001) and Zoccolillo (1993) argued that delinquency, criminality and aggression are different from conduct disorder. He maintain that delinquency and criminality are more common in males and tend to be associated with factors like race, neighborhood, socio-economic status and may involve a transition to antisocial behavior. Conversely, conduct disorder is more influenced by the family context rather than extra familial factors. Finally, conduct disorder is a "trait like" antisocial behavior, Kazdin (1987) described conduct disorder in children as involving antisocial behavior and severe impairment in daily functioning either in school or at home. In addition, significant persons complain that the child can not manage his / her behavior and is out of control. More recently, Sadock

& Sadock (2003) confirmed that conduct disorder does not develop overnight, in fact, the develop -pment process evolves over time and leads to a persistent and continuous pattern encompassing violating the rights of others.

In ICD 10 (WHO, 1993) conduct disorder is defined as a repetitive and perpetual pattern of asocial, aggressive, or defiant conduct. The symptoms of conduct disorder include : fighting, cruelty to animals or people, severe destructiveness to property, fire setting, lying, truancy, temper tantrums, and disobedience. DSM IV-TR (APA, 2000) describes conduct disorder as persistent antisocial behavior which dominates all aspects of a child's behavior. Impairments are seen in all realms of functioning such as home, social and academic environments. ICD 10 (WHO, 1993) calssified four types of conduct disorders :

- 1) Conduct disorder confined to the family context in which the abnormal behavior is contained in the family.
- 2) Unsocialized conduct disorder : lack of positive and effective peer relations and offending others are the most important symptoms which distinguish these children from other conduct disorder types.
- 3) Socialized conduct disorder : these children, in general, are well adjusted within their peer groups.
- 4) Oppositional defiant disorder : this type of conduct disorder is found in children under 10 years old characterized by defiant, disobedient and provocative behaviors.

Kazdin (1987) noted that the prevalence of conduct disorder varies according to age, sex, social class, and geographical locale. However, the rate of conduct disorder is usually found to be between 4% to 10% (Butler & Seto, 2002; Charlton, Bloomfield & Timm, 1993; Earls, 1994; Rutter, Cox, Tuplin, Berger, & Yule, 1975; Rutter Tizard, & Whitmore, 1970). Kosky, McAlpine, Silburn & Richmond (1985) reported that 10% of children attending outpatient clinics displayed conduct disorder. The rate of conduct disorder has increased in recent years compared with earlier decades (DSM IV, APA, 1994). Overall, male adolescents exhibit higher rates of conduct problems than female adolescents (Charlton et al., 1993; Graham, 1979; Kazdin 1987). Kazdin (1987) postulated that nearly 9% of boys and 2% of girls under the age of 18 demonstrate conduct disorder. Several other studies confirm that males show conduct disorder three or four times more often than females (APA, 1994; Rutter et al., 1970). In addition these differences may be partly caused by parental behavior patterns which are different for boys and girls (West, 1985). It is important to note that conduct disorder is the most common dysfunction for girls (Kashani, Beck & Hooper, 1987; McGee, Fehan, Williams, Portidge, Silva & Kelly, 1990). Robins (1966) indicated that the mean age for the onset of antisocial behavior in boys was 7 years old, while for girls it was 13. In contrast, Robins (1986) reported no gender based differences in conduct problems in a five year follow up, and Rutter

et al (1970) found that at age 10, behavioral problems are generally powerfully predictive of later behavioral problems for both sexes. Rutter et al. (1975) found that the rate of conduct problems, assessed by scores on Rutter B (teacher rating) in inner London Borough, for boys was 14.2% and for girls 5.1%. According to DSM IV (APA, 1994) the rate of conduct disorder ranges from 6% to 16% for males (under age 18) and from 2% to 9% for females. However, new research does not tend to strongly distinguish the sex differences. The average age at which conduct disorder begins is relatively later in girls (14 to 16 years old) than in boys (10 to 12 years old) (Sadock & Sadock, 2003).

Zoccolillo (1993) reviewed studies concerning gender differences and proposed that for several reasons the findings of previous studies are not sufficient to support the sex differences in conduct disorder. First, the majority of studies focused on male subjects or both sexes without gender differentiation. Second, the bulk of the research examined criminal subjects, most of whom were males. Third, The DSMIV (APA, 1994) and DSM-IV-TR (APA, 2000) criteria are based on male subjects. Thus, these criteria have not been validated for females. Fourth, conduct disordered females are less likely to be seen in psychiatric or criminal settings. Moreover, Robins, Lemare & Lollis (1990) concluded that the criteria for conduct disorder have not been clarified. With regard to these complicated and important issues, Zoccolillo (1992, 1993) suggested that there

may be no sex differences in conduct disorder, except in their manifestation. He proposed that;

a) Conduct disorder symptoms emerge later in girls or

b) The imperfect criteria of conduct disorder for girls may cause some difficulties in finding conduct symptoms among them. McGee et al. (1992) demonstrated that aggressive conduct disorder is more frequent in males, while nonaggressive conduct disorder is more common in females. Kazdin (1987) and Rutter et al. (1970) argued that, in general, boys are more prone to engage in behavioral problems such as stealing, fighting, truancy, and lying than girls. The purpose of this study was to provide a better understanding of adolescent conduct problems in terms of gender. More precisely, we inquired the views of teachers and peers of adolescents with conduct problems. In addition, this study examined, more closely, the relationship between attitudes and conduct problems in early adolescence.

### Procedure

The goal of this research was to verify the views of teachers and peers on conduct problems in male and female adolescents. We proposed to answer two main questions :

- 1) Are there any differences between adolescents with conduct problems with respect to their gender?
- 2) Whether or not there are associations between teacher assessment and peer

evaluation on conduct problems?

The participants of this study consisted of high school students in grades 7 to 9 (N = 881) within the age range of 11 to 14 (629 girls and 252 boys). The mean age of the subjects was 12.3 (SD = 0.87) and all were selected from 3 male and 3 female high schools in south London. All subjects were requested to take part in the study after receiving the parental and school consent forms. It is important to note that the number of girls participants increased in the study because many schools, particularly all male schools, declined to participate in the study. After carrying out the questionnaires, 88 students were identified as conduct problem adolescents.

The questionnaires which were used in the study included :

- 1) The Rutter Teacher Scale (B). The Rutter Teacher Scale (B) was developed for children ages 9-13 in the UK to identify disturbed children (Rutter et al. 1970). This scale consists of 26 statements concerning children's behavior and emotions. The scale is completed by teachers by checking whether or not the statements apply to the child on three levels : "does not apply", "applies some-what", or "certainly applies". These levels are scored "0" , "1" and "2" and total scores range from "0-52" over the 26 items. The discriminative cut – off for the Rutter Scale for clinic and non – clinic children is a total score of 9 or more. The total score of 9 or more suggests that the child is likely to

have psychological problems.

2) **Friendship Questionnaire.** Peer assessment of behavior is one of most applied means of research. In the peer assessment of behavior children are asked to evaluate their classmates' behavior on the basis of different behavioral roles or characters (Robins, Lemare & Lollis, 1990). The literature shows that this approach has been widely used as a reliable and valid method in many studies (Coie & Dodge, 1988; Rubin et al., 1990). This inventory consists of 9 questions and students were requested to name up to three peers who best fitted 9 behavioral descriptions relating

to liking, shyness, fighting and leadership.

### Results

The mean score of the subjects on the Rutter scale was 3.8 (SD = 5.3). AS Table 1 illustrates, 82% of boys and 84% of girls had no psychological problems. More boys (12.7%) than girls (8.9%) had behavioral problems, while more girls (6.5%) than boys (5.2%) showed emotional problems. In total 16.5% of the subjects had psychological problems, 88 with conduct problems 54 with emotional problems, and 3 with mixed conduct and emotional problems.

Table 1 : Frequency and Percentage of psychological problems on Rutter Scale (B).

	Rutter Teacher Scale								
	No problem		Behavioral problem		Emotional problem		Mixed problem		Total
	N	%	N	%	N	%	N	%	
Boys	207	82	32	12.7	13	5.2	0	0	252
Girls	529	84	56	8.9	41	6.5	3	0.5	629
Total	736		88		54		3		881

T-Test analysis indicated that there were no significant differences between males and females ( $P = 0.57$ ). The results of Friendship questionnaire (Table 2) revealed that the scores of adolescents on all positive items (like most, like best) had negative association with psychological problems scores on Rutter Scale ( $r = 0.20$ ). In contrast, all negative items on Friendship Questionnaire. (like least, starting to fight, fight for nothing) had positive association with psychological problems ( $r = 0.40$ ). Based on

these results, we can say that most of the students with conduct problems were identified by both peer assessment and the Rutter Scale. In other words, evaluations by Friendship Questionnaire were in concordance with the Rutter Scale.

With respect to the association between psychological and behavioral problems on Rutter Scale and Friendship questionnaire, the scores on both Rutter scale and Friendship were computed with regard to their gender. Therefore, four groups of students

were identified as follows :

- 1) Non problem group, based on low scores on the Rutter Scale and Friendship (N = 658);
- 2) Fighting only group who did not show psychological problems on Rutter B, but had high scores on the fighting itmes of the Friendship (N = 58);
- 3) Conduct problem-fighter group who were identified as conduct problem persons by both their teachers (Rutter B) and their peer assessment as persons with high scores on fighting (N = 37); and

- 4) Conduct problem – non – fighter group who showed conduct problem on the Rutter B, but low scores on fighting items on Friendship (N = 36).

In terms of gender effect, a chi-square analysis was carried out between the above groups and it failed to show significant results [ $\chi^2 = 1.58$  (3df, N = 789);  $p = 0.66$ ]. These figures suggested that no gender difference was found between the conduct problem groups and the normal group.

Table 2 : Psychological problems correlation scores on Friendship Rutter Scale

Friendship Q	Like best	Like most	Liked by every one	Liked least	Starting to fight	Fight for nothin
Corr.	-0.17	-0.18	-0.14	0.36	0.42	0.38
Sig.	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

## Discussion

Finding demonstrated that 10% of the total the sample conduct problems (girls = 8.9% and boys = 12.7%) which is in agreement with the prevalence of conduct problems in the general population. In studies by Rutter and colleagues (Rutter et al., 1970, 1975; Rutter, Taylor & Hersov, 1994). The range is from 4 to 10% and in DSM IV (APA, 1994) the range is 6-16% for boys and 2-9% for girls. Comparing our data, which was derived from an Inner London Borough, with a similar population (Inner London Borough) to the Rutter study (Rutter et al., 1975), it was found that the rate of conduct problems in the present study was similar for boys (12.7% versus 14.2%) but

higher for girls (8.9% versus 5.1%). It implies that conduct problems are more likely to occur for girls in the recent decades than compared to the past. In addition, conduct problems are occurring at a younger age.

Although boys had a higher rate of conduct problems than girls, significant differences were not found. Similarly, gender differences were not found between different defined conduct problem groups (i. e., conduct problem fighters, teacher identified only and peer identified only). Our finding are in agreement with the study in adolescence. In contrast, our findings did not support the studies which indicated gender differences in both normal and clinical populations (APA, 1994; Charlton et al.,

1993; Kashani et al., 1987; McGee et al., 1990; Rutter et al., 1975).

The lack of gender differences in conduct problems in our normal population sample and the gender differences found in the previous studies lead us to the following considerations :

- 1) It is obvious that in the recent decades the rate of conduct problems has increased and this increase has occurred more in female adolescent with the implication that the gender difference is diminishing. However, several other factors could have affected the results of this study. These include having a majority of females in the sample, non-participation of some all male schools in the study, and a high rate of behavioral problems in the area in which the study was conducted.
- 2) It may be that today both sexes are expressing aggressive behaviors in a similar pattern. Perhaps girls feel free to express their aggression in the same way as boys in modern society and to imitate boys. Future research should focus on accounting for changes relating to differences in behavioral problems.
- 3) As Zoccolillo (1993) concluded, most of the previous studies concerning gender differences have concentrated on male subjects and examined particular types of conduct problems in males more so than in females.
- 4) It is possible that the conduct problem questionnaire used was not able to

identify children with conduct problems properly. However, Rutter et al. (1994) confirmed that 90% of conduct problem children could be identified correctly using the same Rutter Scale.

- 5) It is possible that diagnostic criteria are biased towards identifying males. Based on this assumption, the following conclusion can be drawn :
  - 1) The diagnostic criteria for conduct disorders should take into consideration the results of studies on conduct problem females;
  - 2) As Zoccolillo (1993) propounded gender differences in conduct disorder may be ascribed to differences in the types of conduct disorder behaviors rather than in the overall rate of conduct problems; and
  - 3) Females are less likely to be seen in criminal settings.

However, the present study is not a longitudinal study, so the association between teachers' and peers' views could not be observed in a developmental process. Several schools refused to participate in the study, thus causing sample biases. It would be interesting to examine biological factors and IQ, in adolescents with conduct problems. In such a study, it will be important for the link between personality and psychological factors in conduct problem adolescents to be compared with the effects of environmental factors on the above issues.

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