

## **Ethnic Differences in Conduct Disorders, Antisocial and Prosocial Behavior among 11 Year Olds in the United Kingdom**

Richard Lynn

*University of Ulster, Coleraine, Northern Ireland*

Helen Cheng

*Department of Psychology, University College London, UK*

\* Corresponding author: [lynnr540@aol.com](mailto:lynnr540@aol.com)

Data are presented from a representative, ethnically diverse sample of 7258 11-year-old children for measures of internalizing and externalizing behavior disorders and prosocial behavior assessed by teachers in the United Kingdom. The results show that compared with whites, black children had higher scores of externalizing behavior disorders, Pakistanis and Bangladeshis had about the same scores, and Chinese, Indians and Other Asians had lower scores. For prosocial behavior, the pattern was reversed. For internalizing behavior disorders, Chinese, Indians and Other Asians had lower scores than whites. These results provide some confirmation for the theory advanced in Lynn (2002) based on studies in the United States that conduct disorders and psychopathic personality/antisocial personality disorders are higher in blacks and lower in Northeast Asians than in whites, and extends the theory further with evidence indicating that the prevalence of these disorders in South Asians is intermediate between Northeast Asians and whites.

**Key Words:** Ethnicity; conduct disorder; internalizing and externalizing problems; prosocial behavior; psychopathic personality; SDQ; Millennium Cohort Study.

The condition known as psychopathic personality/antisocial personality disorder was identified in the early nineteenth century by the French physician Philippe Pinel (1801), who described patients who had “a lack of restraint and whose behavior was marked by a complete remorselessness of their actions” (Perez, 2012, p.519). Some years later, the British physician John Pritchard (1835) proposed the term “moral imbecility” for those deficient in moral sense but whose intellectual ability was unimpaired. In 1904 the German psychiatrist Emil Kraepelin (1904) introduced the term psychopathic personality to describe the condition and this has been employed as a diagnostic label throughout the twentieth century and up to the present. In 1941 the condition was described by Cleckley (1941) in what has become a classical book *The Mask of Sanity*. He described the criteria for the condition as being a “general poverty of affect” (i.e. emotion), defective insight, absence of nervousness, lack of remorse or shame, superficial charm, pathological lying, egocentricity, inability to love, failure to establish close or intimate relationships, irresponsibility, impulsive antisocial acts, failure to learn from experience, reckless behavior under the influence of alcohol, and a lack of long-term goals.

In 1984 the American Psychiatric Association dropped the term psychopathic personality and replaced it with “antisocial personality disorder”. However, many psychiatrists and psychologists have continued to use the term psychopathic personality and a number of authorities such as Lykken (1995) regard antisocial personality disorder as simply a synonym for psychopathic personality.

In 1994 the American Psychiatric Association (1994) issued a revised Diagnostic Manual in which it listed 11 features of antisocial personality disorder. These are: (1) inability to sustain consistent work behavior; (2) failure to conform to social norms with respect to lawful behavior; (3) irritability and aggressivity, as indicated by frequent physical fights and assaults; (4) repeated failure to honor financial obligations; (5) failure to plan ahead or impulsivity; (6) no regard for truth, as indicated by repeated lying, use of aliases, or “conning” others; (7) recklessness regarding one’s own or others’ personal safety, as indicated by driving while intoxicated or recurrent speeding; (8) inability to function as a responsible parent; (9) failure to sustain a monogamous relationship for more than one year; (10) lacking remorse; and (11) the presence of conduct disorder in childhood.

In 2002 the theory was advanced that there are racial and ethnic differences in psychopathic personality conceptualized as a continuously distributed trait rather than a discrete condition (Lynn, 2002). This theory proposed that high values of the trait are present in blacks and Native Americans, intermediate values in Hispanics, lower values in whites and the lowest values in East Asians.

Evidence for the theory was adduced largely from studies in the United States and derived from questionnaire measures and behavior such as rates of crime and sexual promiscuity. The theory was criticized by Skeem et al. (2003) and Zuckerman (2003), followed by a reply by Lynn (2003).

In the present paper we present new evidence bearing on Lynn's theory in the form of the prevalence of race differences in conduct disorders among 11-year-olds in the United Kingdom. A number of studies have shown that conduct disorders in children are a frequent precursor of antisocial personality disorder in later adolescence and adulthood (e.g. Bernstein et al., 1996; Loeber, 1990; Mealey, 1995), and conduct disorders are one of the criteria for the diagnosis of psychopathic personality/antisocial personality disorder given by the American Psychiatric Association (1994).

It is therefore predicted from Lynn's thesis that conduct disorders would be more prevalent in blacks than in whites and less prevalent in Northeast Asians than in whites. The data to be reported provide a test of this prediction.

## **Method**

The present study draws on data collected for the Millennium Cohort Study (MCS), a survey of 18,819 babies born between September 2000 and January 2002 into 18,552 families living in the United Kingdom and described by Dex & Joshi (2005). The fifth sweep of the Millennium Cohort Study was carried out in 2012 when the children were aged 11 and in their final year of primary school. Due to disproportionate sampling, special weights are applied in analyzing the data (Plewis et al., 2004).

The behavior of the children at the age of 11 years was assessed by their teachers, using the Strengths and Difficulties Questionnaire (SDQ), age 4-15 years version (<http://www.sdqinfo.com>). The SDQ consists of 25 questions about five domains of social and emotional behavior, namely: conduct problems, hyperactivity, emotional symptoms, peer problems, and prosocial behavior (Goodman, 1997). The first four of these are all expressions of the broader construct of conduct disorders. There is theoretical and empirical support for combining the SDQ's hypothesized emotional and peer subscales into an 'internalizing' subscale and the hypothesized conduct behavioral problem and hyperactivity subscales into an 'externalizing' subscale, alongside the fifth prosocial subscale (Goodman, Lamping & Ploubidis, 2010).

Using multitrait-multimethod (MTMM) analyses (assessing the construct validity of a set of measures by multiple methods) on a combined sample of 18,222 parents, teachers and youth in the UK, Goodman et al. (2010) have provided evidence of the convergent and discriminant validity of the ten-item

internalizing and externalizing SDQ subscales, and suggested that there are advantages in using the broader internalizing and externalizing SDQ subscales for analyses in low-risk samples, while retaining all five subscales when screening for disorder. In the present study, we have therefore used the teacher's ratings of behavior problems on the "internal" and "external" dimensions, together with the prosocial subscale of the SDQ to examine whether there are racial and ethnic differences in the United Kingdom. Each SDQ item has three possible answers which are assigned a value 0 = 'Not true', 1 = 'Somewhat true', or 2 = 'Certainly true'. The Cronbach's alpha for conduct problems was .75, for hyperactivity was .86, for emotional symptoms was .77, for peer problems was .72, and for prosocial behavior was .82. Alpha for the SDQ total score was .87. When conduct problems and hyperactivity were combined as "externalizing problems", the alpha was .86; and when emotional symptoms and peer problems were combined as "internalizing problems", the alpha was .80.

The following analyses are based on 7258 children for whom there are data on the teachers' ratings of the children's externalizing and internalizing disorders, prosocial behavior and ethnicity. Ethnicity is a derived variable from the data archive, which includes six ethnic groups: White; Mixed; Indian; Pakistani/Bangladeshi; Black Caribbean/Black African/Other Black; and Other Asian (including Chinese, Other). We divided the Other Asian into Chinese and Other Asian thus making a total of seven ethnic groups.

## Results

The results are shown in Table 1. This gives the means and standard deviations for the ethnic groups for the internalizing and externalizing disorders and pro-social behaviors, as well as the four behavioral problems identified in Goodman (1997): conduct problems, emotional problems, hyperactivity, and peer problems. The column headed *d* gives the differences between whites and the other groups in standard deviation units calculated from the white SD. The column headed *t* gives the values of *t* for the statistical significance of the differences between white and other ethnic minority groups.

## Discussion

The results that the black children had significantly more externalizing behavior problems than whites ( $d=.22$ ) and that the Chinese children had significantly fewer externalizing behavior problems than whites ( $d = .61$ ) confirms Lynn's (2002) thesis of a gradient of black-white-Northeast Asian differences in psychopathic personality. Prosocial behavior is the antithesis of psychopathic personality, so the results that the black children showed

significantly less prosocial behavior ( $d=.22$ ) than whites and that the Chinese children showed more prosocial behavior than whites ( $d=.22$ , ns) provides some further support for Lynn's (2002) thesis.

**Table 1.** Scores for SDQ internalizing and externalizing problems, prosocial behaviors, and the four specific behavioral problems of 11-year-olds in the United Kingdom.

Group	N	Conduct problems		Hyperactivity		Emotional problems		Peer problems		Prosocial behavior		Internalizing problems		Externalizing problems	
		Mean (SD)	d t-test	Mean (SD)	d t-test	Mean (SD)	d t-test	Mean (SD)	d t-test	Mean (SD)	d t-test	Mean (SD)	d t-test	Mean (SD)	d t-test
White	5979	0.63 (1.32)		2.22 (2.46)		1.40 (1.90)		1.15 (1.69)		8.15 (2.07)		2.55 (3.05)		2.86 (3.40)	
Mixed	255	0.88 (1.69)	.19 2.46*	2.43 (2.81)	.09 1.21	1.25 (1.75)	-.08 1.39	0.99 (1.54)	-.09 1.71	7.92 (2.17)	-.11 1.72	2.22 (2.82)	-.11 1.87	3.29 (4.17)	.13 1.72
Indian	220	0.31 (.91)	-.24 4.47***	1.64 (1.85)	-.74 4.05***	0.96 (1.54)	-.23 3.62***	0.71 (1.17)	-.26 4.80***	8.39 (1.87)	.12 1.67	1.67 (2.33)	-.29 4.81***	1.95 (2.40)	.27 4.82***
Pakistani/ Bangladesh	471	0.67 (1.32)	.03 0.44	2.22 (2.34)	.05 0.88	1.11 (1.59)	-.15 2.98**	1.27 (1.69)	.07 1.22	7.78 (2.20)	-.18 2.74**	2.38 (2.80)	-.06 0.95	2.89 (3.27)	.01 0.13
Black <sup>1</sup>	256	0.94 (1.61)	.23 2.38*	2.67 (2.52)	.18 2.39*	1.28 (1.70)	-.06 0.97	1.02 (1.40)	-.08 1.28	7.99 (2.19)	-.22 2.83**	2.29 (2.54)	-.09 1.35	3.60 (3.76)	.22 2.71**
Chinese	10	0.13 (.58)	-.38 2.95*	0.67 (1.91)	-.63 2.77*	0.06 (0.34)	-.71 11.98***	0.92 (1.06)	-.14 0.72	8.61 (2.00)	.22 0.79	.99 (1.06)	-.51 4.93***	0.80 (2.44)	-.61 2.65*
Other Asian	67	0.14 (.53)	-.37 6.25***	1.14 (1.52)	-.44 4.65***	0.80 (1.23)	-.32 3.31**	0.85 (1.51)	-.18 1.37	8.76 (1.66)	.29 2.52*	1.65 (2.17)	-.30 2.82**	1.26 (1.88)	-.46 5.71***
Total	7258	0.64 (1.33)		2.22 (2.46)		1.37 (1.87)		1.13 (1.67)		8.13 (2.07)		2.50 (3.01)		2.86 (3.41)	

Note: Observations (N) are unweighted, means and SD are weighted with UK sampling weight.

<sup>1</sup> Includes Caribbean, Black African, Other Black.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ; two-tailed t-test.

At the four more fine-grained categories: conduct problems, emotional problems, hyperactivity, and peer problems, the patterns were similar as the broader constructs of internalizing and externalizing, except that the more specific measure of conduct problems showed less significant differences than the more general "externalizing" score for the Chinese group ( $d = -.38$  vs  $d = -.61$ ,  $p < .05$ ) and the Other Asian group ( $d = -.37$  vs  $d = -.46$ ,  $p < .001$ ), but more significant differences for the Mixed group ( $d = .19$ ,  $p < .05$  vs  $d = .13$ , ns).

The results for the three South Asian groups were inconsistent. The Indians and Other Asian children had significantly fewer externalizing behavior problems than whites ( $d = -.27$ ,  $-.46$ ), but the Pakistani and Bangladeshi children showed no difference from whites ( $d = .01$ ). Pakistani and Bangladeshi children showed significantly less prosocial behavior than whites ( $d = -.18$ ) but Indian and Other Asian children showed more prosocial behavior than whites ( $d = .12$ ,  $.29$ ). Taken as a whole, the results suggest that the prevalence of externalizing and internalizing behavior problems and prosocial behavior in South Asians is intermediate between Northeast Asians and whites.

The results also suggest that racial-ethnic differences are mainly on the broader constructs of internalizing and externalizing behavior problems, rather than the specific dimensions. For example, black children have elevated scores both on *Conduct Problems* and *Hyperactivity*, making the broader construct of externalizing problems the best measure. They do not have higher scores on the scales measuring internalizing problems, indicating that the difference is not on the even broader construct of psychopathology. Indian children, however, have reduced scores both on the internalizing and externalizing scales. This suggests that ethnic and racial differences are not specific to conduct problems. They rather are on a broader syndrome of what we may call the "externalizing personality," or even a more general propensity for both internalizing and externalizing behavior problems. This is reminiscent of results from intelligence research showing that ethnic and racial differences are mainly on the general ( $g$ ) factor, rather than on specialized cognitive skills (Jensen, 1985).

## References

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders*. Washington DC: American Psychiatric Association.

Bernstein, D.P., Cohen, P., Skodal, A., Bezirgianian, M.D. & Brook, J.S. (1996). Childhood antecedents of adolescent personality disorder. *American Journal of Psychiatry* 153: 907–913.

Cleckley, H. (1941). *The Mask of Sanity*. St. Louis: Mosby.

Dex, S. & Joshi, H. (2005). *Children of the 21st Century. From Birth to Nine Months*. Bristol: Policy Press.

Goodman, A., Lamping, D. & Ploubidis, G. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): Data from British parents, teachers and children. *Journal of Abnormal Child Psychology* 38: 1179-1191.

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry* 38: 581-586.

Jensen, A.R. (1985). The nature of the Black–White difference on various psychometric tests: Spearman's hypothesis. *Behavioral and Brain Sciences* 8: 193-219.

Kraepelin, E. (1904). *Psychiatrie. Ein Lehrbuch für Studierende und Ärzte*, 7. Auflage, II. Band. Klinische Psychiatrie, pp. 815-851. Leipzig, Germany: Verlag Barth.

Loeber, R. (1990). Development and risk factors of juvenile anti-social behavior and delinquency. *Clinical Psychology Review* 10: 1–41.

Lykken, D.T. (1995). *The Antisocial Personalities*. Hillsdale, NJ: Lawrence Erlbaum.

Lynn, R. (2002). Racial and ethnic differences in psychopathic personality. *Personality and Individual Differences* 32: 273-316.

Lynn, R. (2003). Race differences in psychopathic personality: A reply to Skeem and Zuckerman. *Personality and Individual Differences* 35: 1471-1478.

Mealey, L. (1995). The sociobiology of sociopathy: An integrated evolutionary model. *Behavioral and Brain Sciences* 18: 523-599.

Perez, P.R. (2012). The etiology of psychopathy: A neuropsychological perspective. *Aggression and Violent Behavior* 17: 519-522.

Pinel, P. (1801). *Traité médico-philosophique sur l'aliénation mentale ou la manie*. Paris.

LYNN, R. & CHENG, H.

*ETHNIC DIFFERENCES IN CONDUCT DISORDERS*

Plewis, I., Calderwood, L., Hawkes, D., Hughes, G. & Joshi, H. (2004). *Millennium Cohort Study. Technical Report on Sampling*. London: Institute of Education, Centre for Longitudinal Studies.

Pritchard, J.C. (1835). *A Treatise on Insanity and Other Diseases Affecting the Mind*. Philadelphia: Harwell, Barrington & Harwell.

Skeem, J.L., Edens, J.F., Sanford, G.M. & Colwell, L.H. (2003). Psychopathic personality and racial/ethnic differences: A reply to Lynn (2002). *Personality and Individual Differences* 35: 1439-1462.

Zuckerman, M. (2003). Are there racial and ethnic differences in psychopathic personality? A critique of Lynn's (2002) racial and ethnic differences in psychopathic personality. *Personality and Individual Differences* 35: 1463-1469.