

What's in a Disruptive Disorder? Temperamental Antecedents of Oppositional Defiant Disorder: Findings from the Avon Longitudinal Study

Argyris Stringaris, M.D., Barbara Maughan, Ph.D., MRCPsych,
Robert Goodman, Ph.D., FRCPsych

Objective: Oppositional defiant disorder (ODD) is classified as a disruptive disorder, but shows a wide range of associations with other psychopathology, including internalizing problems. The reasons for these associations are unclear. Here we test the hypothesis that two distinct early temperamental precursors—emotionality and activity—underlie ODD and differentially predict its comorbidities. **Method:** The Avon Longitudinal Study of Parents and Children (ALSPAC) community-based representative sample was used. Temperamental dimensions at the age of 38 months were derived through exploratory factor analysis from the Emotionality Activity Sociability (EAS) scale and used in logistic regression predicting to psychiatric diagnoses at the age of 91 months. **Results:** Pure ODD was predicted by both emotionality (relative risk ratio [RRR] = 1.34, CI = 1.09 to 1.66) and activity (RRR = 1.39, CI = 1.07 to 1.81). The strongest predictions were from early temperament to ODD with comorbidity: from emotionality to ODD plus internalizing disorders (RRR = 3.33, CI = 2.14 to 5.19), and from activity to ODD plus ADHD (RRR = 3.24, CI = 1.48 to 7.11). Temperamental activity was a predictor of the hyperactive-impulsive and combined types of ADHD but not of the inattentive type. **Conclusions:** Classified as a disruptive disorder, ODD is predicted by early emotion dysregulation as well as by high levels of temperamental activity. The findings of this study suggest that early emotionality and activity differentially contribute to the phenotype of ODD in middle childhood and may determine its range of co-occurrence with other psychopathology. Taking into account the heterogeneous origins of childhood oppositionality may help to refine clinical approaches to ODD. *J. Am. Acad. Child Adolesc. Psychiatry*, 2010;49(5):474–483. **Key Words:** oppositional defiant disorder, attention-deficit hyperactivity disorder, depression, irritability, Avon Longitudinal Study of Parents and Children

Oppositional defiant disorder (ODD) is classified as a disruptive behavior disorder in DSM-IV¹ and is a well-established risk factor for conduct disorder (CD)² in some children. In addition, ODD has a wide range of cross-sectional and longitudinal associations with other disorders such as ADHD and internalizing disorders.³ Indeed ODD, by virtue of the pattern and range of associations with

other disorders, is increasingly seen as occupying a central position in developmental psychopathology.^{3,4} However, the underlying reasons for these unique features of ODD development remain unclear. Recent findings suggest that youth oppositionality involves distinct dimensions each differentially predicting other psychopathology: an irritable dimension predicting primarily depression and generalized anxiety (GAD), a head-strong dimension as the predictor of attention-deficit/hyperactivity disorder (ADHD) and nonaggressive CD, and a hurtful dimension predicting aggressive conduct problems.^{5,6} Based on these findings, we have recently proposed that



This article is discussed in an editorial by Dr. David C. Rettew on page 441.

ODD represents the shared outcome of distinct risk pathways.⁵ In particular, we have proposed that different temperamental dimensions may contribute to the risk of ODD and underlie its wide range of relationships with other disorders. In addition, we have recently shown that a construct of mood lability, which shares features with temperamental emotionality, was not only a predictor of individual disorders but a particularly strong predictor of their co-occurrence.⁷

“Temperament” is a term most commonly used to describe how individuals differ in emotions, activity, attention, and in their ability to regulate these.⁸ It has a genetic basis but is also subject to maturation and experience, and temperament is closely related to the concept of personality, showing developmental continuity.⁸⁻¹⁰ The nature of the relationship between temperament and psychopathology has long been debated.^{11,12} Among a number of possibilities, two nonmutually exclusive models are commonly invoked to explain this relationship:^{8,13} in the spectrum model, disorders are construed as the extremes of temperamental dimensions, whereas in a vulnerability model, temperament acts as a risk factor for psychopathology. Regardless of explanatory model, the evidence for the association between temperament and psychopathology is overwhelming.^{8,11,14-17} However, most studies emphasize the contributions of temperament to either individual mental disorders or to the two broad dimensions of internalizing and externalizing problems while focusing less on the co-occurrence of disorders. This is surprising given that the co-occurrence of psychiatric disorders is common—in particular for ODD—and frequently needs to be addressed by clinicians. Moreover, there are sound theoretical reasons for assuming that temperament may underlie the co-occurrence of disorders and may thus be a determinant of concurrent and sequential comorbidity.¹⁸⁻²⁰ If disorders share the same risk factor, their chances of co-occurring will be increased.

Here we use data from a longitudinal community sample to address questions about risk factors for ODD with a focus on its comorbidity with other psychopathology. We use the well-established^{21,22} Emotionality Activity Sociability (EAS) scale of temperament measured at age 38 months as a predictor of ODD and other psychopathology clinically diagnosed at age 91 months. We test two specific hypotheses.

First, our model predicts that ODD may be

the shared outcome of distinct risk pathways; accordingly, we expect that temperamental emotionality and temperamental activity will both contribute to the prediction of ODD 5 years later. Second our model predicts that these distinct risk pathways will predict different patterns of associations between ODD and other psychopathology. In particular, we expect that early emotionality will predict comorbidity between ODD and internalizing disorders, whereas early activity will be particularly predictive of the co-occurrence between ODD and ADHD.

Our model did not lead us to anticipate that sociability, the third dimension of the EAS scale, would have specific associations with ODD or comorbidity; it was included in these analyses as a “control” variable to help rule out the possibility that any extreme temperament is associated with similar effects on ODD and comorbidity.

METHOD

Study Sample

We used the Avon Longitudinal Study of Parents and Children (ALSPAC) birth cohort (www.alspac.bris.ac.uk).²³ Pregnant women living in the area of Avon (United Kingdom [UK]) with expected dates of delivery between April 1, 1991, and December 31, 1992, were recruited; thus the sample consisted of 14,541 pregnancies with 14,062 live births, of which 13,988 individuals were alive at 1 year. The county of Avon comprised a mixture of rural areas, inner city, suburbs, and mid-sized towns, and the population has been found to be broadly representative of children in the UK at that time.²³ In particular, children in Avon were as likely as other children in the UK to be living with a single parent (4% ALSPAC versus 5% rest of the UK at the time the study was initiated), their parents equally likely to have a university degree (14% versus 13.7%), and were as likely to have non-European, non-Caucasian parents (5.1% versus 6.4%).²³

Ethical Approval

Ethical approval was obtained from the ALSPAC Law and Ethics Committee and the Local Research Ethics Committees. Informed consent was obtained from the parents of the children in the study.

Measures

At the age of 38 months, the 20-item Emotionality Activity Sociability (EAS) temperament measurement scale²¹ was administered to the mothers of the children in the study. The items, which are shown in Table 1,

Download English Version:

<https://daneshyari.com/en/article/324753>

Download Persian Version:

<https://daneshyari.com/article/324753>

[Daneshyari.com](https://daneshyari.com)