Data Trends

Summaries of research on mental health services for children and adolescents and their families

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Source: Vander Stoep, A., Weiss, N. S., McKnight, B., Beresford, S. A. A., & Cohen, P. (2002). Which measure of adolescent psychiatric disorder—diagnosis, number of symptoms, or adaptive functioning—best predicts adverse young adult outcomes? *Journal of Epidemiology and Community Health 56:* 56-65.

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This study, conducted on a random, representative sample of high school teens and their families, suggests that knowing youth functioning at school and home, or knowing the types of mental health symptoms that they are experiencing, may be more predictive of eventual school success and non-criminal activities than a mental health diagnosis. According to the authors, this is the only study to date that investigates the relative validity of *diagnosis*, *symptom count*, and *level of functioning* to predict adverse outcomes among teens. Although preliminary, the results of this study may lead to the development of a screening measure for emotional and behavioral problems among adolescents that is both cost-effective and simple to use. Such a measure could be used by schools and other community-based services.

Participating youth and their families were initially selected as part of a larger study initiated in 1975 when the children were between the ages of 1-10. The larger study (the CICS/YAICS) documented the developmental course of youth who were representative of the national population in socioeconomic status (SES), family structure, and urban/rural status. For the present study, these youth (N = 181) and their families were interviewed eight years later, when the youth had reached a median age of 16.7 years. During these interviews, mental health symptoms and levels of functioning were recorded, and a diagnosis was determined for *disruptive*, *anxiety*, *affective*, and *drug abuse* disorders and *any psychiatric diagnosis*. Teen levels of functioning were also acertained at this time, and included questions about academic achievement, general sociability, self- esteem, interpersonal difficulties, resistance to maternal control, social competence, and participation in extrcurricular activities.

In order to determine whether diagnosis, or symptom count, or level of functioning, could predict school failure and criminal involvement, the authors conducted numerous analyses on each indicator of mental health alone, and in relation to each other. Thus, 56% of teens were found to have a psychiatric disorder "based on either diagnosis, being in the upper 40th centile for symptom count, or being in the lower 40th centile for adaptive functioning" (p. 60). However, that figure fell to 15% when data were based on all three indicators.

When teens were about 18 years old, they and their families were reinterviewed to find out whether they had completed (or expected to complete) high school, and whether they had engaged in any criminal activities within the previous two years. With regard to school completion, teens were simply asked if they had completed, or were on target for completing school. Criminal involvement was measured in two ways: (a) teens and their families were asked whether they had ever been in trouble with the police, and these reports were compared with police records; (b) teens and their families were also asked about youth criminal involvement in general, and in cases where these reports conflicted, interviewers accepted any account of criminal activity reported by either teen or parent.

Twenty-two teens failed to complete secondary school. Regardless of the approach used to determine psychiatric disorder, adolescents with a disorder were more likely to fail secondary school than teens with no disorder. Importantly, the total number of symptoms provided the most sensitive measure for predicting school failure. Although psychiatric disorder was strongly related to school failure among youth who were in

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Prepared by the Research and Training Center for Children's Mental Health, Louis de la Parte Florida Mental Health Institute, University of South Florida, 13301 Bruce B. Downs Blvd. Tampa, FL 33612, (813) 974-4661
For more information, contact kutash@mirage.fmhi.usf.edu; Website: http://rtckids.fmhi.usf.edu
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both upper and lower SES categories, youth in the lower SES stratum were less likely, overall, to complete school. An analysis of youth demographics (age, gender, SES) combined with the number of symptoms, was a stronger predictor of school failure than symptoms only or demographics only. Additionally, age, gender, and social class alone were better predictors of school completion than were diagnosis or functioning. In summary, the number of psychiatric symptoms and level of adaptive functioning were found to be "at least as informative as a psychiatric diagnosis" (p. 63) in predicting school completion, especially among youth in the lowest SES group.

Findings also revealed that 24 youth were involved in criminal activities (70% were assaults or property crimes). Disruptive symptoms combined with a disruptive disorder diagnosis provided the best ability to predict criminal involvement, and all three indicators combined showed that boys were more likely to engage in criminal behavior than girls. Disruptive symptoms and demographic characteristics also provided greater predictive validity when compared to disruptive symptoms alone or to demographics alone. In general, youth with disruptive, substance abuse, and depressive disorder diagnoses were at increased risk of criminal involvement, while having an anxiety disorder reduced that risk. The number of disruptive symptoms was found to be at least as informative in predicting criminal involvement as a disruptive disorder diagnosis, especially in boys.

Limitations of the study include its small size, and the fact that other scales which measure functionality (Child Global Assessment Scale and the Child and Adolescent Functional Assessment Scale) have been developed since the 1980s. Nonetheless this study suggests alternate ways of predicting outcome among youth that are less complicated than standard diagnostic procedures based on the DSM.

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For more information, contact kutash@mirage.fmhi.usf.edu; Website: http://rtckids.fmhi.usf.edu
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