Autism: Mental Retardation, Use or Misuse of Measures of Intelligence.

In her preface to the article"Are the majority of children with autism Mentally Retarded? A systematic Evaluation of the data" in "Focus on autism and other Developmental disabilities" Vol. 21, Number 2, Summer 2006, Professor Meredyth Goldberg Edelson questions the long held view of the basis from which conclusions were drawn that autistic individuals are mentally retarded. She notes that "There are frequent claims in the literature that a majority of children with autism are mentally retarded. The present study examined the evidence used as a basis for these claims, reviewing 215 articles published between 1937 and 2003. Results indicated 74% of the claims came from non-empirical sources, 53% of which never traced back to empirical data. Most empirical evidence for the claims was published 25 to 45 years ago and was often obtained using developmental or adaptive scales rather than measures of intelligence. Furthermore, significantly higher prevalence rates of Mental Retardation were reported when these measures were used. Overall, the findings indicate that more empirical evidence is needed before conclusions can be made about the percentages of children who are mentally retarded".

The main body of her article is dedicated to explanation of her methodology, validating her claims by reviewing results from both Nonempirical articles and Empirical articles. Professor Edelson posits an analysis as to why authors continue to cite high prevalence rates of mental Retardation long after it has been shown that the data are not present to support these claims.

In her conclusion, Professor Edelson writes,"In view of the present findings on these three issues, the conclusion that the majority of children with autism also have MR does not seem warranted. Most of the claims originate from nonempirical sources that (a) do not trace to empirical data, (b) cite empirical research that is 25 to 45 years old, (c) used inappropriate measures, or (d) typically failed to acknowledge the possible interference of autism on the assessment of intelligence. Furthermore, only 15.7% of all claims made actually traced to empirical data that were obtained from studies whose authors described specific methods used to assess intelligence. Thus, only a small percentage of studies reported methods that could be evaluated with regard to their validity.

Although recent data have shown that some children with autism do, in fact, have MR, the rates are much lower than the high prevalence rates cited in the past. Recent epidemiological surveys have shown that the prevalence rates of MR in children with autism is between 40% and 55% (e.g., Chakrabarti & Fombonne, 2001), much lower than the typical rates cited in the literature. Recent empirical studies indicate that when appropriate measures of intelligence are used—those that take into account the interference of autism—a significantly lower prevalence rate of MR is found relative to the rates typically reported in the literature (see Edlson, Schubert,& Edelson,1998; Koegel,Koegel, & smith, 1997".

"However, the practice of claiming that a majority of children with autism are mentally retarded continues largely unabated. These claims can be found in recent journal articles (e.g., Bodfish, Symons, Parker, & Lewis, 2000; Dennis, Lockyer, Lazenby, Donnelly, Wilkinson, & Schoonheyt, 1999; Happe, 1999; Ruble & Dalrymple, 2003); chapters on autism in edited books, many of which are still in books on MR (e.g., Kasari, Freeman, & Paparella, 2001; Minshew, Johnson, & Luna, 2001; Volkmar & Klin, 2001); chapters on autism from child psychopathology textbooks (e.g., Mash & Wolfe, 2002; Wicks-Nelson & Israel, 2000); chapters in abnormal psychology textbooks (e.g., Davison &: Neale, 2003; Scligman, Walker, & Rosenhan, 2001); "ask the editor" columns in journals on autism (Volkmar, 2003); and in the most recent edition of the *Diagnostic find Statistical Manual of Mental Disorders* American Psychiatric Association, 2000).

Given the present results, it seems prudent to obtain additional empirical evidence before making any definitive conclusions regarding the prevalence rates of MR in children with autism. Empirical studies need to be conducted in which measures of intelligence take into account the interfering symptoms of autism on the process of assessment, examiners are knowledgeable about and have experience in assessing children with autism, and modifications to the testing situation arc made to minimize the "construct-irrelevant" error in test outcome. Until that time, researchers in the autism field should use caution when making assumptions or citing claims about the rates of MR in children with autism."

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April 2008