

# This Week's Citation Classic

CC/NUMBER 24  
JUNE 13, 1983

Stewart M A, Pitts F N, Craig A G & Dieruf W. The hyperactive child syndrome. *Amer. J. Orthopsychiat.* 36:861-7, 1966.  
[Washington University School of Medicine, St. Louis, MO]

Thirty-seven hyperactive children, aged five to 11 and free of definite brain dysfunction, were compared with a like number of controls matched on demographics. Dependent variables included behavioral symptoms, development, school record, and age of onset. A clear picture of this presumed syndrome emerged. [The Science Citation Index® (SCI®) and the Social Sciences Citation Index® (SSCI®) indicate that this paper has been cited in over 185 publications since 1966.]

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March 3, 1983

"This paper was born of ignorance. In 1963, I was a postdoctoral fellow in pharmacology at Washington University and working on glucose metabolism in peripheral nerve. I had just finished a residency in psychiatry and, wanting to broaden my clinical experience, I volunteered to work in a pediatric neurology clinic. I hoped to see children who were retarded so that I might apply my neurochemical knowledge. Instead, almost all the children my two colleagues and I saw were hyperactive and apparently free from brain damage.

"None of us knew how the children came to be hyperactive or how to treat them, other than by giving stimulants. We had trained in the only program which was research oriented and nonpsychoanalytic at that time, so we put no stock in the anecdotal reports which made up the literature in child psychiatry. All we could find on the

subject of hyperactivity consisted of two British papers<sup>1,2</sup> on epileptic and brain damaged children and a rather limited description of hyperkinetic child syndrome in the *Journal of Pediatrics*.<sup>3</sup> The impetus for the study was simple then. We had to construct our own account of these children.

"Luckily, I came from a department which prided itself on rediscovering the science of clinical psychiatry. Under Eli Robins, George Winokur, and Sam Guze, I had learned how to go about defining a syndrome through systematic study of the clinical picture, natural history, family background, and response to treatment. The study was my first amateurish attempt to put their teachings into practice. Looking back I am embarrassed at the uncritical way in which I assumed that hyperactive children were a reasonably homogeneous group and at my failure to include a control group of children with problems other than hyperactivity.

"The study was easily done. There was no trouble finding the subjects and little in finding the controls. I did most of the interviewing and was responsible for writing up the results. The work was naive, but it was the first systematic description of this broadly defined group of children. I can only think that this is the reason for its being cited.

"Since those days there has been an explosive growth in research on hyperactivity and its different facets. My own interest has shifted to aggressive conduct disorder, but I am still intrigued as to what the different kinds of hyperactivity are and what they mean in terms of brain dysfunction. In the past few years, I have been working on the relationship of hyperactivity to conduct disorder<sup>4,5</sup> and have helped Jerry August with a series of studies comparing hyperactive boys<sup>3</sup> who have conduct disorder with those who do not."<sup>6-8</sup>

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2. Ingram T T S. A characteristic form of overactive behavior in brain damaged children. *J. Ment. Sci.* 102:550-8, 1956.
3. Lauffer M W & Denhoff E. Hyperkinetic behavior syndrome in children. *J. Pediatrics* 50:463-74, 1957.
4. Stewart M A, Cummings C, Singer S & deBlols C S. The overlap between hyperactive and unsocialized aggressive children. *J. Child Psychol. Psychiat.* 22:35-45, 1981.
5. Stewart M A, deBlols C S & Cummings C. Psychiatric disorder in parents of hyperactive boys and those with conduct disorder. *J. Child Psychol. Psychiat.* 21:283-92, 1980.
6. August G & Stewart M A. Is there a syndrome of pure hyperactivity? *Brit. J. Psychiat.* 140:305-11, 1982.
7. .... Familial subtypes of hyperactivity. *J. Nerv. Ment. Dis.* In press, 1983.
8. .... A 4-year follow-up of hyperactive boys with and without conduct disorder. *Brit. J. Psychiat.* In press, 1983.