

# This Week's Citation Classic

CC/NUMBER 43  
OCTOBER 24, 1983

**Vaughn C E & Leff J P.** The influence of family and social factors on the course of psychiatric illness: a comparison of schizophrenic and depressed neurotic patients. *Brit. J. Psychiat.* **129**:125-37, 1976. [Medical Research Council Social Psychiatry Unit, Inst. Psychiatry, London, England]

The main finding of Brown *et al.*<sup>1</sup> was replicated for two clinically different groups of psychiatric patients. The expressed emotion (EE) of a key relative was the best single predictor of symptomatic relapse, independent of all other factors investigated. Important additive effects between social influence and pharmacological treatments provided clear guidelines for clinical intervention. [The *Science Citation Index*<sup>®</sup> (SCF<sup>®</sup>) and the *Social Sciences Citation Index*<sup>®</sup> (SSC<sup>®</sup>) indicate that this paper has been cited in over 215 publications since 1976]

Christine E. Vaughn  
Schizophrenia Research Unit  
Prestwich Hospital  
Manchester M25 7BL  
England

October 4, 1983

"In 1971, I was a research assistant in the MRC Social Psychiatry Unit when I read my colleague George Brown's latest paper concerning the social environment and relapse in schizophrenia.<sup>1</sup> I was enormously excited by the clinical implications of the findings reported, especially the idea that the relationship between a highly critical, emotional family atmosphere and relapse might be moderated not only by phenothiazine medication but also by reduced contact between patient and relative. I wondered whether I might pursue this line of research for my dissertation, perhaps extending the work by comparing schizophrenic patients with patients from another diagnostic group.

"At first, only Julian Leff shared my enthusiasm for doing what essentially would be a replication of a replication. Eventually, however, it was agreed that he and I might carry out the proposed project if I somehow could streamline the main family interview used to rate relatives' expressed emotion (EE). The interview's great length was a major obstacle since I was to be responsible for all the family assessments. Fortunately, I was able to demonstrate that the production of criticism (the main EE component) was

independent of the length of interview, thereby justifying the use of a carefully abbreviated interview schedule. Within weeks the study was under way in what I now realize were near perfect research conditions: full cooperation, few distractions, and no grant continuation applications to write!

"This paper has been highly cited for several reasons. It gave rise to a virtual 'EE industry' of international replications, concurrent validity studies, and clinical intervention programs. It received a lot of attention as did the definitive early papers of Brown *et al.*,<sup>1,2</sup> who first elucidated all the themes which appear in our later work. Undoubtedly we benefited from the progressive refinement of research methods over the years, and the verification of results by the repetition of studies over long periods. The controversial nature of some of our conclusions probably also contributed to the paper's impact. In particular, we made provocative statements about the role of medication in the prevention of relapse in schizophrenia, indicating that social rather than clinical factors accounted for medication failures. The implications for the management and rehabilitation of patients were obvious: pharmacological and social treatments must be prescribed together. Clinical support for this view comes from recent successful attempts to reduce relapse rates of high-risk schizophrenic patients through a combination of medication, mental health education, and specific family interventions.<sup>3,4</sup>

"Our results also went some way toward vindicating the much maligned family of the schizophrenic patient, although this aspect of the EE research regrettably tends to be overlooked. The depression data, interesting in their own right, demonstrated that the attitudes associated with relapse in schizophrenia were not specific to that disorder. Furthermore, psychophysiological experiments by Tarrier and Sturgeon have confirmed our impression that many relatives of schizophrenic patients usually exert a positive influence, aiding in the patient's recovery and making future relapses less likely."

1. Brown G W, Birley J L T & Wing J K. Influence of family life on the course of schizophrenic disorders: a replication. *Brit. J. Psychiat.* **121**:241-58, 1972. [The SCI and the SSCI indicate that this paper has been cited in over 300 publications since 1972.]
2. Brown G W, Monclé E M, Cantata G M & Wing J K. Influence of family life on the course of schizophrenic illness. *Brit. J. Prev. Soc. Med.* **16**:55-68, 1962. [The SCI and the SSCI indicate that this paper has been cited in over 145 publications since 1962.]
3. Falloon I R H, Boyd J L, McGill C W, Razani I, Moss H B & Gildeerman A M. Family management in the prevention of exacerbation of schizophrenia. *N. Engl. J. Med.* **306**:1437-40, 1982.
4. Leff I P, Knipcn L, Berkowitz R, Ebrclcin-Vriet R & Sturgeon D. A controlled trial of social intervention in the families of schizophrenic patients. *Brit. J. Psychiat.* **141**:121-34, 1982.