Brief Report: Reliability and Validity of Instruments for Assessing Psychotropic Medication Effects on Self-Injurious Behavior in Mental Retardation

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INTRODUCTION

Treatment of self-injurious behavior (SIB), a devastating behavior disorder among individuals with severe/profound retardation and in autism, has become the target of renewed interest. Prevalence estimates vary greatly depending on circumstances of the respective studies (Rojahn, 1994), but a prudent estimate would be that SIB occurs in approximately 5 to 10% of the population with mental retardation, and in about twice as many among persons with autism.

Chronic severe SIB has been found to be extremely difficult to treat. So far the most successful approach has been the behavioral technology based on operant principles of learning. The behavioral technology, how-

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ever, has a few drawbacks, not the least of which is the fact that successful
treatment tends to come at a high expense in terms of human resources
(Schroeder, Schroeder, Rojahn, & Mulick, 1990). As a consequence, be-
avior modification programs often fall short in achieving long-term main-
tenance of treatment effects (Schroeder et al., 1982). It has become obvious
that despite the remarkable success of applied behavior analysis, there re-
mains a hard core of cases for which behavioral technology alone is insuf-
ficient and for whom appropriate pharmacological treatment, if available,
might be of great benefit.

There is a paucity of SIB drug research and little evidence available
on the effectiveness of medication (Aman, 1993; Baumeister, Todd, &
Sevin, 1993; Farber, 1987; Singh & Millichamp, 1985). While some drugs,
such as thioridazine (Singh & Aman, 1981), haloperidol (Aman, Teihan,
White, Turbott, & Vaithianathan, 1989), and other neuroleptic drugs, have
been shown to reduce stereotyped behavior in some individuals, less evi-
dence exists for the effectiveness of medication for SIB. However, advance-
ments in the neurochemistry and psychopharmacology of SIB have been
made (Schroeder & Tessel, 1994; Thompson & Gray, 1994) and new types
of drugs are emerging that hold great promise for the treatment of this
behavior disorder.

One of the key prerequisites in valid psychopharmacology research
is the use of psychometrically sound assessment instruments (Schroeder,
1988; Sprague & Werry, 1971). Aman (1991) has done an extensive critical
review of instruments for assessing psychopathology and behavior problems
in persons with mental retardation. Only a few of these instruments have
adequate psychometric studies to support them. Some instruments, for ex-
ample, The Behavior Problems Inventory (BPI; Rojahn, 1989), do have psy-
chometric data (see Aman, 1991, for a review) but have not as yet been
used in drug studies. The purpose of the present study was to examine the
reliability and validity of variety of instruments consisting of behavior rating
scales, side effects checklists, and a comprehensive, ecobehavioral observa-
tion system that have been used in several previous drug studies of de-
structive behavior among persons with mental retardation.

METHOD

Subjects

Thirty residents from a long-term public residential facility who were
known for their long history of SIB and other severe behavior disorders
served as subjects in this study (Table I). Fifteen of them constituted the