



Verbal memory, problem-solving skills and community status in schizophrenia

Nadine Revheim^{a,*}, Alice Medalia^b

^a*Nathan Kline Institute for Psychiatric Research, 140 Old Orangeburg Road, Orangeburg, NY 10962, USA*

^b*Department of Psychiatry and Behavioral Sciences, Montefiore Medical Center and Albert Einstein College of Medicine, USA*

Received 2 December 2002; received in revised form 10 July 2003; accepted 18 July 2003

Abstract

Neuropsychological deficits have been associated with poor community functioning in individuals with schizophrenia. Previous research suggests that verbal memory capacity is related to functional capacity. The purpose of this study was to investigate the relationship between verbal memory, problem-solving skills and community functioning, as measured by treatment status (inpatient vs. outpatient) in people with schizophrenia spectrum disorders. Evaluations were done on 162 individuals with schizophrenia or schizoaffective disorder, seen in inpatient ($n = 87$) and outpatient settings ($n = 75$). Verbal memory was assessed using narrative recall and list recall measures. Problem-solving skills for independent living were assessed using a social reasoning measure and a daily problem-solving skills measure. Better verbal memory performance was associated with better problem solving for independent living. However, inpatient vs. outpatient status was best determined by problem-solving skills for independent living rather than verbal memory performance. The results reveal the importance of daily problem-solving skills for community status in schizophrenia. Although verbal memory performance is associated with problem-solving skills for independent living, predictive probability of community status does not improve when memory performance is taken into account. © 2003 Elsevier B.V. All rights reserved.

Keywords: Community status; Community functioning; Verbal memory; Problem-solving skills; Schizophrenia

1. Introduction

Individuals diagnosed with schizophrenia or schizoaffective disorder show impairment in cognitive functioning (Beatty et al., 1993; Gold and Harvey, 1993; Granholm and Jeste, 1994; Silverstein et al., 1988) with deficits in attention, memory and problem solving considered to be among the core areas of cognitive impairment. Furthermore, neuropsychological functioning in individuals with schizophrenia

predicts psychosocial functioning, treatment efficacy, rehabilitative success, rehospitalization, functional outcome and community reintegration (Goldman et al., 1993; Perlick et al., 1992; Brekke et al., 1997; Green, 1996; Wykes et al., 1990; Breier et al., 1991; Lezak, 1995). An understanding of the way underlying cognitive deficits impact on outcome and capacity for independent living is important since it may be possible to develop strategic rehabilitation strategies. Rehabilitation efforts typically offer skills training to facilitate independent functioning. Cognitive remediation is one such intervention that can be guided by an understanding of the cognitive factors that predict outcome.

* Corresponding author. Tel.: +1-845-398-6543; fax: +1-845-398-6545.

E-mail address: revheim@nki.rfmh.org (N. Revheim).

Some studies cite verbal memory as an important correlate of functional outcome (Goldman et al., 1993; Green, 1996; Green et al., 2000; Kolakowska et al., 1985; Perlick et al., 1992), others cite the role of problem solving in outcome (Loeb, 1996). Problem solving as a neuropsychological function is typically measured with the Wisconsin Card Sorting Test or Tower of Hanoi, both tests that require conceptualization, working memory, mental flexibility, the ability to plan in multiple steps and to use feedback to monitor behavior (Lysaker and Bell, 1994; Morris et al., 1995). Recognizing that problem solving is a complex skill and perhaps the end product of multiple intellectual processes, attempts have been made to delineate the underlying cognitive skills that are associated with good problem solving. Recall memory on a verbal learning task was found to have a significant association with the generation of solutions to interpersonal problems (Corrigan and Toomey, 1995). Evidence was also found for the important relationship between working memory and problem-solving skills in schizophrenia (Gold et al., 1997). Thus, it may be that not only are memory and problem solving associated with each other, but they may also contribute to functional outcome in different ways.

The purpose of this study was to examine the relationship of specific aspects of verbal memory and problem-solving skills for individuals with schizophrenia or schizoaffective disorder. Two questions were specifically addressed: (1) Is verbal memory capacity associated with problem-solving skills for independent living? (2) How do verbal memory and problem-solving skills relate to community status? We chose to assess problem-solving skills as they relate to community status rather than as a noncontextualized neuropsychological skill. Thus, the problem-solving tests used were designed to capture these skills as they are used in independent living situations and not as they apply to an abstract task.

2. Method

2.1. Participants

Data were collected across inpatient (Bronx Psychiatric Center) and outpatient settings (Feder-

ated Employment Guidance Service, FECS). Participants carried a diagnosis of DSM-IV schizophrenia or schizoaffective disorder, and were English speaking and between the ages of 18–55. Diagnoses were made by the treating psychiatrist based on clinical interview and confirmed by chart review. Individuals were excluded for significant neurological conditions (e.g. head trauma, seizure disorder), severe behavioral disturbances or mental retardation.

A total sample of 162 participants was obtained: 87 inpatients (53.7%) and 75 outpatients (46.3%). The inpatient sample represented a portion of all the potential research candidates in another study (Medalia et al., 2000, 2001). The outpatient sample was recruited from the Continuing Day Treatment and Intensive Psychiatric Rehabilitation Treatment programs at FECS. After a complete description of the study was given to the participants, written informed consent was obtained for the protocol as approved by the institutional review boards of each study site.

As noted in Table 1, the inpatient and outpatient groups did not differ significantly in age ($t=0.63$, $df=160$, $p=0.5$), age of first hospitalization ($t=-1.7$, $df=160$, $p=0.087$), education ($t=-0.095$, $df=160$, $p=0.9$), gender ($\tau=0.001$, $p=0.7$), ethnicity ($\tau=0.011$, $p=0.156$), socioeconomic status ($\tau=0.003$, $p=0.6$) and anticholinergic dose ($t=0.761$, $df=160$, $p=0.45$). However, significant group differences were found for diagnostic codes ($\tau=0.019$, $p=0.02$) and history of alcohol or drug abuse ($\tau=0.066$, $p=0.001$).

In order to evaluate history of chronicity, the length of hospital stay for inpatients was compared to the length of time spent in an outpatient day treatment program for outpatients. The mean hospital length of stay for inpatients was 767.4 days (S.D.=1315.1). The mean length of time spent in an outpatient day treatment program was 657.1 days (S.D.=886.5). There was no significant difference between the groups in terms of time spent in treatment ($t=0.62$, $df=160$, $p=0.54$).

2.2. Research design

The research design was nonexperimental and cross-sectional in nature.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات