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Convergent validity of the Timeline Followback for persons with comorbid psychiatric disorders engaged in residential substance use treatment

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Abstract

This study examined the convergent validity of the Timeline Followback (TLFB) for individuals with comorbid (Axis I and/or Axis II) psychiatric disorders in a sample of persons ($N=150$) engaged in residential treatment for substance use disorders (SUDs). Approximately one-half of the sample was diagnosed with at least one comorbid psychiatric disorder. Validity was assessed comparing data from the TLFB with data from the Addiction Severity Index (ASI) and collateral reports. For the entire sample, data from the TLFB was significantly correlated with data from the ASI and collateral reports of substance use. No significant differences were found between those with and those without a comorbid psychiatric disorder, suggesting that the TLFB was equally valid for both groups. © 2006 Published by Elsevier Ltd.

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1. Introduction

Epidemiological data from treatment populations (Najavits et al., 1998; Thomas, Melchert, & Banken, 1999) and from community samples such as the National Comorbidity Study (NCS; Kessler et al., 1997) indicate that rates of co-occurring substance use disorders (SUDs) and psychiatric disorders are high. For example, a recent large-scale representative study reported that 35% of individuals in a VA residential SUD treatment program had a comorbid psychiatric disorder (Moos, Finney, Ouimette, & Suchinsky, 1999). Estimates of co-occurrence range from 26% to more than 50% for psychiatric disorders among persons with SUDs (Kessler et al., 1996; Merikangas et al., 1998; Regier et al., 1990). Given the high incidence of co-occurrence, calls for further examination of the validity of assessment measures for individuals with comorbid disorders have been made repeatedly in recent literature (Carey, 1997, 2002; Carey & Correria, 1998).

The Timeline Followback (TLFB; Sobell & Sobell, 1992) has been the primary measure of treatment outcome in many studies of SUD treatment including Project Match (Project Match Research Group, 1997), and its reliability and validity has been extensively examined with substance using populations (Fals-Stewart, O'Farrell, Freitas, McFarlin, & Rutigliano, 2000; Sobell & Sobell, 1996). For example, among outpatients seeking SUD treatment, Fals-Stewart et al. (2000) examined the concurrent validity of the TLFB by examining correlations between the percentage of days of use reported on the TLFB and the drug and alcohol use severity subscales of the Addiction Severity Index (ASI, McLellan et al., 1992) and reported significant moderate correlations. However, reliability and validity information for the TLFB have not been examined until recently for persons with co-occurring disorders and often studies conducted with substance using populations have not reported the rates of other disorders in the samples.

Carey (1997) examined the temporal stability and convergent validity of the TLFB in an outpatient psychiatric sample and found that the 30-day test–retest reliability among those who reported some alcohol use was good ($r = .82$, $n = 10$, $p < .004$). However, when the degree of concurrent validity for the number of days of alcohol use reported on the TLFB and the ASI was examined for the same 30-day time period the degree of association was less impressive ($r = .50$, $n = 23$, $p < .01$), raising some concern about the validity of the TLFB among psychiatric outpatients with SUDs. Carey and Simons (2000) examined the convergent validity of the ASI in a sample of psychiatric outpatients and reported only modest agreement between self-report of substance use on the ASI and collateral report. They concluded that discrepancies were mostly the result of the patients reporting use that the collateral did not report. Another study comparing self and collateral reported substance use for persons seeking inpatient SUD treatment found that self-reported use was generally valid and that the level of convergent validity was similar for both persons with and without a comorbid psychiatric disorder (Stasiewicz, Bradizza, & Connors, 1997). In addition, psychological symptom severity was not related to participant–collateral agreement.

While existing research supports that the TLFB is a reliable and valid measure for individuals with SUDs, differences in the validity of the TLFB for persons with and without a comorbid psychiatric disorder have not been fully examined. Previous research suggests the test–retest reliability of the TLFB for a recent 30-day period for persons with comorbid psychiatric disorders was stable (Carey, 1997). The current study was intended to examine the convergent validity of the TLFB in an inpatient veteran population diagnosed with comorbid SUDs and psychiatric disorders (Axis I and/or Axis II). The current data was collected as baseline data in a clinical trial that examined the effect of a cognitive–behavioral intervention on aftercare utilization and subsequent substance use outcomes. Three limitations in the