



Relationship between personality disorder dimensions and verbal memory functioning in a community population

Subin Park ^a, Jin Pyo Hong ^a, Hochang B. Lee ^b, Jack Samuels ^b, O. Joseph Bienvenu ^b, Hye Yoon Chung ^a, William W. Eaton ^c, Paul T. Costa Jr. ^d, Gerald Nestadt ^{b,*}

^a Department of Psychiatry, Asan Medical Center, School of Medicine, Ulsan University, Seoul, Republic of Korea

^b Department of Psychiatry and Behavioral Sciences, School of Medicine, The Johns Hopkins University, Baltimore, MD, USA

^c Department of Mental Health, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

^d Gerontology Research Center, National Institute on Aging, Baltimore, MD, USA

ARTICLE INFO

Article history:

Received 24 February 2011

Received in revised form 18 August 2011

Accepted 21 August 2011

Keywords:

Memory complaints
Verbal memory
Personality traits
Personality disorders

ABSTRACT

Based on the Baltimore Epidemiologic Catchment Area (ECA) follow-up survey, we examined relationships between dimensions of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) personality disorders and both subjective and objective memory functioning in a community population. Our study subjects consisted of 736 individuals from the ECA follow-up study of the original Baltimore ECA cohort, conducted between 1993 and 1996 and available for assessment in the Hopkins Epidemiology Study of Personality Disorders from 1997 to 1999. Subjects were assessed for DSM-IV personality disorders using a semi-structured instrument, the International Personality Disorder Examination, and were asked about a subjective appraisal of memory. Verbal memory function, including immediate recall, delayed recall, and recognition, were also evaluated. Multiple linear regression analyses were used to determine associations between personality dimensions of DSM-IV Axis II traits and subjective and objective memory functioning. Scores on schizoid and schizotypal personality dimensions were associated with subjective and objective memory dysfunction, both with and without adjustment for Axis I disorders. Borderline, antisocial, avoidant, and dependent personality disorder scores were associated with subjective memory impairment only, both with and without adjustment for Axis I disorders. This study suggests that subjective feelings of memory impairment and/or objective memory dysfunction are associated with specific personality disorder dimensions.

© 2011 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Individuals diagnosed with personality disorders (PDs) tend to have enduring patterns of difficulties in cognition, affect, interpersonal functioning, and impulse control (American Psychiatric Association, 2000). Symptoms of borderline, schizotypal, and antisocial PDs, such as impulsivity, poor planning, dissociation, questionable judgment, and aggression, have suggested that individuals with PDs may have impaired neuropsychological function. The literature on several PDs abounds with reports of memory difficulties (Vogtmaier et al., 1997; Korfine and Hooley, 2000; Monarch et al., 2004; Mitropoulou et al., 2005), perceptual distortions (George and Soloff, 1986; Sundbom et al., 1989; Stevens et al., 2004), and impaired executive function (Gorenstein, 1982; Malloy et al., 1990; Burgess, 1992; Vogtmaier et al., 1997; Stevens et al., 2004).

Individuals with PD seen by medical personnel often report lowered cognitive functions, especially those related to memory. Subjective memory complaints may be related to real memory deficits, or may be

associated with personality characteristics such as feelings of poor mastery, low perceived self-efficacy, and high neuroticism (Vermeulen et al., 1993; Hanninen et al., 1994; Comijs et al., 2002). Subject self-ratings about everyday functioning have been reported to be much more strongly correlated with scores on a personality inventory than with results of neuropsychological tests (Heaton and Pendleton, 1981).

Previous studies of cognition in PD patients have focused mainly on schizotypal (Vogtmaier et al., 1997; Bergman et al., 1998; Mitropoulou et al., 2005; Noguchi et al., 2008), borderline (Burgess, 1992; Korfine and Hooley, 2000; Monarch et al., 2004; Stevens et al., 2004), and antisocial (Gorenstein, 1982; Malloy et al., 1990; Burgess, 1992) PDs, and there have not been comprehensive reports that have included all Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) PDs. In addition, previous studies generally measured objective cognitive function, with only one report assessing subjective memory function in individuals with schizotypal PD (Chan et al., 2008). We therefore examined the relationships between personality scores for each DSM-IV PD, measured dimensionally, and subjective appraisals and objective measures of memory function.

Individuals can suffer simultaneously from an Axis I condition as well as a PD, making it difficult to differentiate the effects of PD and

* Corresponding author at: Meyer 131, 600 N Wolfe St., Baltimore, MD 21287, USA. Tel.: +1 410 955 4838; fax: +1 410 614 5913.

E-mail address: gnestadt@jhmi.edu (G. Nestadt).

the Axis I condition on memory function and complaints in such subjects. Thus, several studies have excluded PD patients with comorbid Axis I conditions (Vogtmaier et al., 1997; Mitropoulou et al., 2002; Stevens et al., 2004; Noguchi et al., 2008). However, personality and Axis I disorders may share genetic (Stein et al., 2002; Siever and Davis, 2004), neurophysiological (Siever and Davis, 2004; Kiang and Kutas, 2005), neuropsychological (Spaulding et al., 1989; Siever and Davis, 2004), and neuroimaging (Dickey et al., 2002) abnormalities, making it difficult to completely separate these disorders. For example, schizotypal PD may be related to schizophrenia (Siever and Davis, 2004), and avoidant personality disorder and social phobia may be overlapping constructs, with slight differences in severity (Widiger, 1992). We therefore assessed the relationship between memory functioning and specific personality disorder dimensions, both with and without adjusting for Axis I disorders. An important strength of this study is that these participants were community-residing individuals not selected for treatment.

The main research questions were addressed were:

1. Are scores on personality disorder dimensions related only to subjective, self-reported memory decline, or are they also related to objectively measured memory functioning?
2. Do scores on personality disorder dimensions have effects on memory, independent of the effects of Axis I disorders?

Based on the results of previous studies, we hypothesized that 1) personality disorder dimensions are associated with memory dysfunction; 2) some personality disorder dimensions are associated with subjective appraisal, but not objective measures, of memory function; and 3) other personality disorder dimensions are associated with both objective measures and subjective appraisals of memory function.

2. Methods

2.1. Sample

The Hopkins Epidemiology of Personality Disorder Study (HEPS) has been described in detail elsewhere (Samuels et al., 2002). Individuals in the HEPS were sampled from the Baltimore Epidemiologic Catchment Area (ECA) follow-up survey, which has also been described previously (Eaton et al., 1997; Samuels et al., 2002). In the original Baltimore ECA study, 3481 adult residents of households in east Baltimore were sampled probabilistically and were interviewed using the Diagnostic Interview Schedule (DIS); 810 of these subjects were also examined by psychiatrists as part of a Clinical Reappraisal (Anthony et al., 1985).

In the early 1990s the Baltimore ECA follow-up study re-interviewed participants from the original Baltimore ECA sample. Of those known to be alive at the time of follow-up, 1920 individuals (73%) were re-interviewed using the DIS and the Schedule for Clinical Assessment in Neuropsychiatry (SCAN, version 1.5). From these 1920 subjects, we selected all those who were examined by psychiatrists in 1981 ($n = 443$), as well as all subjects who were identified by the DIS as having a lifetime diagnosis of mania, depression, panic disorder, obsessive–compulsive disorder, alcohol use disorders, or drug use disorders, at follow-up ($n = 593$). In addition, a random sample (222/884; 25%) was selected from the remaining subjects.

Of the 1258 subjects selected using these criteria, 516 could not be interviewed because they (a) could not be traced ($n = 144$); (b) refused participation ($n = 134$); (c) were deceased ($n = 103$); or (d) were too ill or elderly to participate ($n = 92$); another 43 subjects had interviews pending when data collection was terminated for budgetary reasons at the end of 1999. A total of 742 subjects completed personality examinations between 1997 and 1999, and 736 subjects were included in the present study after excluding 6 subjects who had been diagnosed with dementia. The gender and ethnic distributions of these subjects were similar to those of the 516 subjects who were not interviewed; however, the interviewed subjects were younger (mean age 51 years) than non-interviewed subjects (mean age 61 years). The gender and ethnic distributions of the study subjects were also similar to those of the 3481 subjects examined in 1981, although the study subjects were younger.

2.2. Personality assessment

The personality assessments were conducted by four Master's level clinical psychologists. Informed consent was obtained from each subject prior to the interview. Personality disorder dimensions were assessed using the International Personality Disorder Examination (IPDE) (Loranger et al., 1994), a semi-structured instrument designed to be administered by clinicians to detect all relevant criteria for diagnosis of all DSM-IV or ICD-10 PDs. The psychologists were directed to evaluate abnormal personality

traits manifested by subjects over their entire adult lives. Each criterion was rated '0' (absent), '1' (accentuated or exaggerated), '2' (criterion level or pathological), or '9' (missing or unknown). A dimensional score was calculated for each of the 10 DSM-IV PDs by summing the scores for each constituent feature of the specific disorder.

In 40 jointly rated interviews, the intra-class correlation coefficients for number of DSM-IV PD traits rated present ('1' or '2') were as follows: schizoid (0.81); schizotypal (0.58); paranoid (0.63); antisocial (0.80); borderline (0.76); histrionic (0.62); narcissistic (0.62); avoidant (0.89); dependent (0.76); and obsessive–compulsive (0.70).

During the informed consent procedure, the subject was asked to provide the names of three individuals who knew him/her well over most of his/her adult life. Following the interview, the examiners interviewed at least one of these informants by telephone, using questions from the IPDE, scored as above. The examiners were required to evaluate more than half of the criteria for each of the PDs, and they were also encouraged to ask the informant about additional criteria. The required criteria were those that occurred most frequently, based on prior studies in eastern Baltimore (Samuels et al., 1994). The total personality assessment (subject and informant) took an average of about 3 h to complete. After each interview, the psychologist formulated a final rating for each criterion based on clinical judgment of both subject and informant reports, and completed a case summary describing the personality of each subject. This assessment has been described previously (Samuels et al., 1994).

2.3. Assessment of Axis I disorders

Lifetime psychiatric diagnoses were made by board-certified psychiatrists who examined participants using the SCAN (Wing et al., 1990) for psychiatric disorders according to DSM-III-R criteria (American Psychiatric Association, 1987). The DSM-III-R disorders assessed in this study included alcohol use disorders; substance use disorders other than alcohol; major depressive disorder; bipolar disorder; psychotic disorders including schizophrenia, delusional disorder, and psychotic disorders not elsewhere classified; and anxiety disorders, including obsessive–compulsive disorder, panic disorder, agoraphobia, and social phobia. We were unable to divide psychotic disorders and anxiety disorders into subcategories because of the low prevalence of these conditions, which would have decreased statistical power.

2.4. Memory assessment

During the ECA follow-up study of the original Baltimore ECA cohort between 1993 and 1996 (Eaton et al., 1997), each participant was asked how his/her memory compared with that of other people of the same age, rated on a 5-point scale as "excellent (1)", "good (2)", "fair (3)", "poor (4)", or "very poor (5)". Participants also were asked whether they ever worried about forgetting things they needed to remember, and to rate the frequency of worry as "none (1)", "occasional (2)", and "often (3)". To measure objective verbal memory function, a modified version of the Californian Verbal Learning Test (CVLT) (Delis et al., 1987) was used. Participants were told 20 words and asked to recall them immediately and again 20 min later (i.e., immediate and delayed recall). Participants were also asked to recognize these 20 words among a set of 40 words (i.e., recognition). Numbers of correct answers are scores of each test; therefore, the higher the score is, the better memory function of the participant is.

2.5. Statistical analysis

Proportion and frequency distribution of all data were presented through descriptive statistics calculation. We used multiple regression analysis employing either subjective appraisal or an objective measure of memory as the dependent variable and each IPDE personality score as an independent variable. Separate models were evaluated, with and without controls for comorbid Axis I disorders (alcohol use disorders, substance use disorders other than alcohol, major depressive disorder, bipolar disorder, psychotic disorders, and anxiety disorders). All models included age, gender, education, and marital status, as these might confound any relationship between personality trait score and memory. All statistical analyses were performed using SPSS (version 12.0; SPSS Inc., Chicago, IL), with statistical significance defined as an alpha level <0.05.

3. Results

Table 1 shows the demographic and clinical characteristics of respondents. Mean age was 51.2 (S.D.: 12.6) years, and mean education level was 12.1 (S.D.: 2.7) years.

Table 2 shows the subjective appraisal of memory and performance on the modified version of the CVLT of participants. Only 3.7% of participants answered that their memory functioning was poor to very poor compared to other people of the same age, and only 5.4% of participants answered that they often worried about forgetting things they needed to remember.

Table 3 shows the results of multiple regression models with subjective appraisal of memory as the main outcome variable and each personality disorder dimension score as the principal predictor, with

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