Older Adult Psychological Assessment: Current Instrument Status and Related Considerations

Barry A. Edelstein, PhD
Erin L. Woodhead, MS
Daniel L. Segal, PhD
Marnin J. Heisel, PhD
Emily H. Bower, MS
Angela J. Lowery, PhD
Sarah A. Stoner, MS

ABSTRACT. The psychological assessment of older adults is often challenging due to the frequent co-morbidity of mental and physical health problems, multiple medications, interactions among medications, age-related sensory and cognitive deficits, and the paucity of assessment tools.
instruments with psychometric support for use with older adults. First, psychological assessment instruments for examining five important clinical areas (suicide ideation, sleep disorders, anxiety, depression, and personality) are discussed in light of the most current research regarding their psychometric properties and suitability for use with older adults. Instruments developed specifically for older adults are distinguished from instruments developed for younger adults that have some psychometric support for their use with older adults. Second, the potential sensory deficits that could compromise assessment, factors to consider in light of these deficits, and accommodations that can be made to minimize their effects are discussed. doi:10.1300/J018v31n03_01

KEYWORDS. Aging, psychological assessment, depression, anxiety, sleep, personality

The psychological assessment of older adults can be very challenging, particularly in light of age-related and non-normative sensory deficits, and the paucity of psychometrically sound psychological assessment instruments developed for older adults. This instrument void places clinicians in the uncomfortable position of foregoing formal testing or having to rely on assessment instruments developed for and with younger adults (American Psychological Association, 2004). Limited psychometric support exists for a modest number of these assessment instruments when used with older adults, although many still have insufficient support across all psychometric domains. Because the selection of appropriate and psychometrically sound assessment instruments can thus be a challenge when working with older adults, we are providing up-to-date information on selected psychological assessment instruments created for older adults and for those with at least limited support available for their use with older adults. Psychological assessment instruments for examining five important clinical areas (suicide ideation, sleep disorders, anxiety, depression, and personality) are discussed in light of the current research regarding their psychometric properties and suitability for use with older adults. These clinical domains were selected because these are commonly assessed in clinical practice. Though sleep is not typically assessed with great thoroughness, it was included in part to encourage more thorough assessment due to its particular significance for older adults. Other
domains certainly could have been included in a lengthier article. Although the selected group of instruments is not exhaustive, it comprises what appears to be the most commonly used instruments with older adults. It is important to emphasize that self-report measures (e.g., for depression and anxiety) are primarily used as screening tools and as a way to quantify symptoms rather than to formally diagnose psychiatric disorders. In many research settings and some clinical settings, a structured or semi-structured interview is used to assist in the formal diagnostic process, along with clinician judgment. Several instruments are available that focus on a broad array of clinical disorders and can be used to facilitate differential diagnosis. For more in-depth coverage of structured interviews, the interested reader is referred to Segal, Coolidge, O’Riley and Heinz (2006). A second purpose of this article is to inform the reader of important age-related sensory deficits that are often overlooked and that can invalidate psychological assessment if not accommodated. Considerations of and accommodations for these deficits are discussed. Characteristics of each instrument are described in Tables 1 through 5.

**ANXIETY ASSESSMENT**

The prevalence of anxiety symptoms among older adults without depression is approximately 15% and 43% among those with depression (Mehta, Simonsick, Penninx, Schulz, Rubin, Satterfield, & Yaffe, 2003). Approximately 11% of community dwelling older adults meet criteria for an anxiety disorder (Flint, 1994). Although anxiety disorders among older adults remain understudied, several assessment instruments with reasonable psychometric properties are available for the assessment of anxiety.

Current anxiety assessment instruments that are used with older adults but were originally developed for younger adults include the Anxiety Disorders Interview Schedule-Revised (ADIS-R; DiNardo & Barlow, 1988), Anxiety Sensitivity Index (ASI; Reiss, Peterson, Gursky, & McNally, 1986), Beck Anxiety Inventory (BAI; Beck & Steer, 1993), Fear Questionnaire (FQ; Marks & Mathews, 1979), reconstructed Hamilton Anxiety Rating Scale (HARS-R; Riskind, Beck, Brown, & Steer, 1987), Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994), Padua Inventory (PI; Sanavio, 1988), Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990), Social Phobia and Anxiety Inventory (SPAI; Turner, Beidel,
<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># Items</th>
<th>Validity</th>
<th>Reliability</th>
<th>Target</th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADIS-IV</td>
<td>Brown, DiNardo, &amp; Barlow, 1994</td>
<td>77 pages</td>
<td></td>
<td>r = .92 IR; k = .60-.78 (IR)</td>
<td>Community-dwelling older adults; GAD older adults</td>
<td>Pros: Multiple scales including fear of aging</td>
</tr>
<tr>
<td>AMAS-E</td>
<td>Reynolds, Richmond, &amp; Lowe, 2003</td>
<td>44</td>
<td>r = .65 (CV)</td>
<td>r = .71-.92 (IC); r = .91-.92 (IC)</td>
<td>Community-dwelling older adults</td>
<td>Pros: Multiple subscales; Cons: Length; limited psychometric research</td>
</tr>
<tr>
<td>ASI</td>
<td>Reiss, Peterson, Gursky, &amp; McNally, 1986</td>
<td>16</td>
<td>r = .50-.58 (CV)</td>
<td>r = .82-.91 (IC); r = .71 TR</td>
<td>Community-dwelling older adults</td>
<td>Pros: Length; Cons: Relatively few items for Social Concerns and Mental Incapacitation subscales</td>
</tr>
<tr>
<td>BAI</td>
<td>Beck &amp; Steer, 1993</td>
<td>21</td>
<td>r = .47-.73 (CV)</td>
<td>r = .90-.92</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Cons: Many somatic items</td>
</tr>
<tr>
<td>FSS-II-OA</td>
<td>Kogan &amp; Edelstein, 2004</td>
<td>22</td>
<td>r = .40-.47 (CV)</td>
<td>r = .97 (IC); r = .88 (TR)</td>
<td>Community-dwelling older adults</td>
<td>Pros: Content validity</td>
</tr>
<tr>
<td>FQ</td>
<td>Marks &amp; Mathews, 1979</td>
<td>24</td>
<td>r = .44-.78 (CV)</td>
<td>r = .82-.96 (TR); r = .83-.86 (IC)</td>
<td>Community-dwelling older adults</td>
<td>Cons: Poor content validity</td>
</tr>
<tr>
<td>HARS-R</td>
<td>Riskind, Beck, Brown, &amp; Steer, 1987</td>
<td>16</td>
<td>r = .41 (DV)</td>
<td>r = .92 (IR); r = .70-.74 (IC)</td>
<td>GAD older adults; Community-dwelling older adults</td>
<td>Pros: Clinician rated; Cons: Moderate correlation with depression</td>
</tr>
<tr>
<td>Measure</td>
<td>Year</td>
<td>Item Count</td>
<td>CV Correlation</td>
<td>IC Correlation</td>
<td>Subgroup</td>
<td>Pros</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
<td>------------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>PI</td>
<td>Sanavio, 1988</td>
<td>60</td>
<td>0.48-0.57</td>
<td>0.91 (IC); 0.80 (TR)</td>
<td>GAD older adults; Community-dwelling older adults</td>
<td>Pros:</td>
</tr>
<tr>
<td>PSWQ</td>
<td>Meyer, Miller, Metzger, &amp; Borkovec, 1990</td>
<td>16</td>
<td>0.45-0.55</td>
<td>0.83 (IC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAI</td>
<td>Turner, Beidel, Dancu, &amp; Stanley, 1989</td>
<td>45</td>
<td>0.28-0.41 (CV); 0.18-0.40 (DV)</td>
<td>0.89-0.99 (IC)</td>
<td>Community-dwelling older adults</td>
<td>Pros:</td>
</tr>
<tr>
<td>STAI-State</td>
<td>Spielberger et al. (1983)</td>
<td>20</td>
<td>0.33-0.36 (CV); 0.45-0.49 (DV)</td>
<td>0.85-0.94 (IC)</td>
<td>Community-dwelling adults; Psychiatric patients</td>
<td></td>
</tr>
<tr>
<td>STAI-Trait</td>
<td>Spielberger et al. (1983)</td>
<td>20</td>
<td>0.33-0.55 (CV); 0.59-0.70 (CV)</td>
<td>0.79-0.88 (IC)</td>
<td>Community-dwelling adults; Psychiatric patients</td>
<td></td>
</tr>
<tr>
<td>WS</td>
<td>Wisocki, Handen, &amp; Morse, 1996</td>
<td>35</td>
<td>0.57-0.73</td>
<td>0.79-0.93 (IC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. IC = Internal consistency, CV = Convergent validity, DV = Discriminant validity, IR = Inter-rater reliability, TR = Test-retest reliability.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># Items</th>
<th>Validity</th>
<th>Reliability</th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES-D</td>
<td>Radloff, 1977</td>
<td>20</td>
<td>$r = .68-.79$ (CV)</td>
<td>$r = .82-.91$ (IC)</td>
<td>Pros: Several short forms available. Acceptable with ethnically diverse older adults. Cons: Response set may be difficult for some older adults.</td>
</tr>
<tr>
<td>BDI-II</td>
<td>Beck, Brown, &amp; Steer, 1996</td>
<td>21</td>
<td>$r = .69-.71$ (CV), $r = (-.27)-(-.68)$ (DV)</td>
<td>$r = .85-.90$ (IC)</td>
<td>Pros: Valid with community-dwelling older adults. Cons: Inclusion of somatic items complicates diagnosis. Guttman scale may be difficult for cognitively impaired clients.</td>
</tr>
<tr>
<td>COPPES</td>
<td>Rider, Gallagher-Thompson, &amp; Thompson, 2004</td>
<td>66</td>
<td>N/A</td>
<td>$r = .85$ (TR Frequency scale) $r = .87$ (TR Pleasure scale) $r = .77-.86$ (IC)</td>
<td>Pros: Activities are tailored to older adults. Cons: Large number of items</td>
</tr>
<tr>
<td>HRSD</td>
<td>Hamilton, 1960</td>
<td>17-21</td>
<td>$r = .62-.76$ (CV), $r = -.79$ (DV)</td>
<td>$r = .83$ (IC)</td>
<td>Pros: Extracted 17-item version validated with physically ill older adults. Cons: Original has poor psychometric support.</td>
</tr>
<tr>
<td>MADRS</td>
<td>Montgomery &amp; Asberg, 1979</td>
<td>10</td>
<td>N/A</td>
<td>$r = .61-.77$ (IC)</td>
<td>Pros: Stronger psychometric properties than the HRSD in medically ill older adults. Cons: No published validity data with older adults.</td>
</tr>
<tr>
<td>GDS</td>
<td>Yesavage, 1983</td>
<td>30, 15, or 4 item versions</td>
<td>$r = .71$ (CV)</td>
<td>$r = .84$ (IC)</td>
<td>Pros: Has an informant version. Majority of somatic items removed. Cons: Yes/No scoring technique can be problematic.</td>
</tr>
<tr>
<td>Scale</td>
<td>Reference</td>
<td>Items</td>
<td>CV Correlation</td>
<td>IC Correlation</td>
<td>Pros</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>--------</td>
<td>----------------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>HADS</td>
<td>Bjelland, Dahl, Haug, &amp; Neckelmann, 2002</td>
<td>14</td>
<td>r = .73-.79</td>
<td>r = .67-.90</td>
<td>Pros: Excludes symptoms related to physical illness. Cons: Limited research examining psychometrics.</td>
</tr>
<tr>
<td>IDS</td>
<td>Rush, 1996</td>
<td>30 or 16 item versions</td>
<td>r = .86-.96</td>
<td>r = .86-.92</td>
<td>Pros: Variety of formats and lengths. Cons: Needs psychometric data with older adults.</td>
</tr>
<tr>
<td>HSCL-25</td>
<td>Frojdh, Hakansson, &amp; Karlsson, 2004</td>
<td>15 for depression section</td>
<td>r = .77</td>
<td>r = .93</td>
<td>Pros: Measures both anxiety and depression. Cons: Limited research examining psychometrics.</td>
</tr>
<tr>
<td>DAC</td>
<td>Grayson, Lubin, &amp; Van Whitlock, 1994</td>
<td>32-34 adjectives per list</td>
<td>r = .30-.63</td>
<td>r = .80-86, r = .20-.36, r = .83-.88 (trait; TR)</td>
<td>Pros: Adjectives describe mood, not physical symptoms. Cons: Validated with convenience samples.</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>Pinto-Meza, Serrano-Blanco, Peñarrubia, Blanco, &amp; Haro, 2005</td>
<td>9</td>
<td>r = .73</td>
<td>r = .75-.89 (IC), r = .84 (TR)</td>
<td>Pros: Telephone version available. Cons: No psychometric data specific to older adults.</td>
</tr>
<tr>
<td>DMAS</td>
<td>Chen et al., 2002</td>
<td>17 items for depression</td>
<td>r = .47-.89</td>
<td>r = .77 (IC), r = .63 (TR)</td>
<td>Pros: Developed specifically for older adults with cognitive impairment. Cons: Not valid with advanced dementia patients.</td>
</tr>
<tr>
<td>CS</td>
<td>Alexopoulos, Abrams, &amp; Young, 1988</td>
<td>19</td>
<td>r = .36-.60</td>
<td>r = .65-.86 (IC)</td>
<td>Pros: Has both patient and caregiver sections. Cons: May not detect minor depression. Limited psychometric data.</td>
</tr>
<tr>
<td>PES-AD</td>
<td>Logsdon &amp; Teri, 1997</td>
<td>53 or 20 items</td>
<td>r = .45-.57</td>
<td>r = .86-.95 (IC)</td>
<td>Pros: Offers many options for potentially reinforcing events. Cons: Does not directly assess depression.</td>
</tr>
</tbody>
</table>

Note. IC = Internal consistency, CV = Convergent validity, DV = Discriminant validity, TR = Test-retest reliability.
### TABLE 3. Properties of Suicide Assessment Instruments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># Items</th>
<th>Validity</th>
<th>Reliability</th>
<th>Target</th>
<th>Pros/Cons</th>
</tr>
</thead>
</table>
| SSI     | Beck, Kovacs, & Weissman, 1979 | 19      | $r = .17-.65$ (CV) | $\alpha = .88-.89$; $r = .90$ (IC) | Mental health inpatients and outpatients | Pros: Comprehensive Assessment of Suicide Ideation  
Cons: Not developed for older adults; not well-suited for non-clinical populations; distribution of scores highly skewed among non-clinical populations |
| SAHD    | Rosenfeld et al., 1999    | 20      | $r = .42-.69$ (CV); $r = .23-.36$ (DV) | $\alpha = .88-.89$ | Seriously and/or terminally ill patients (e.g., with Cancer or HIV)  
| YES     | Prigerson et al., unpublished | 13      | (t = 23.02), associated with 2.69 times (2.18-3.30) greater likelihood of reporting plans to attempt suicide | $\alpha = .84-.88$; $r = .70$ (TR) | Not stated directly; was used in research with bereaved adults and older adults. | Pros: Brief measure of a wish to hasten death  
Cons: Not developed specifically for older adults; items were developed for a medically ill patient population and so require slight modification for a generally older adult population; True/False format has no neutral response option  
Cons: Not developed nor validated specifically with older adults; complex scoring system; uses items from other measures not designed for older adults; measure not yet published. |
<table>
<thead>
<tr>
<th>Scale</th>
<th>Authors</th>
<th>Sample</th>
<th>Internal Consistency</th>
<th>Convergent Validity</th>
<th>Discriminant Validity</th>
<th>Test-Retest Reliability</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFL-OA</td>
<td>Edelstein et al., 2000</td>
<td>69</td>
<td>$\alpha = .98$</td>
<td>$r = .40-.53$ (CV)</td>
<td>Community-residing older adults; mental health inpatients and outpatients.</td>
<td></td>
<td>Pros: Assesses resiliency to suicidal ideation and behavior; differentiates patients with versus without self-harm histories&lt;br&gt;Cons: Lengthy for busy clinical practices; subscales not yet developed; measure not yet published.</td>
<td></td>
</tr>
<tr>
<td>GSIS</td>
<td>Heisel &amp; Flett, 2006</td>
<td>31</td>
<td>Total score $\alpha = .93$&lt;br&gt;Subscales $\alpha = .82-.84$ (IC);&lt;br&gt;$r = .86$ (TR)</td>
<td>$r = .54-.77$ (CV);&lt;br&gt;$r = .29-.54$ (DV)</td>
<td>Community, residential, medical and mental health inpatients and outpatients</td>
<td></td>
<td>Pros: Assesses late-life suicide risk and resiliency factors; developed and validated with diverse samples of older adults&lt;br&gt;Cons: Lengthy for busy medical practices; little validation with ethnic minorities; largely female scale development sample</td>
<td></td>
</tr>
</tbody>
</table>

Note. IC = Internal consistency, CV = Convergent validity, DV = Discriminant validity, TR = Test-retest reliability.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># of Items</th>
<th>Validity</th>
<th>Reliability</th>
<th>Target</th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polysomnograph</td>
<td>e.g., Edinger et al., 1992; Friedman et al., 2000</td>
<td>N/A</td>
<td>*</td>
<td>*</td>
<td>Community-dwelling, outpatients, and inpatients</td>
<td>Pros: Thorough physiological assessment, measures apnea; Cons: Expensive, requires overnight stay</td>
</tr>
<tr>
<td>REMviewTM</td>
<td>Edinger et al., 2004</td>
<td>N/A</td>
<td>r = .51-.99 (CV)</td>
<td>N/A</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Inexpensive, portable; Cons: Does not measure time spent in bed, no measure of apnea</td>
</tr>
<tr>
<td>Actigraph</td>
<td>e.g., Edinger et al., 2004; Friedman et al., 2000</td>
<td>N/A</td>
<td>r = .67-.99 (CV)</td>
<td>N/A</td>
<td>Community-dwelling, outpatients, and inpatients</td>
<td>Pros: Inexpensive, portable, also used to measure activity; Cons: No measure of apnea</td>
</tr>
<tr>
<td>SAD</td>
<td>Kelley &amp; Lichstein, 1980</td>
<td>N/A</td>
<td>*</td>
<td>N/A</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Inexpensive, portable; Cons: Can take time for older adults to learn to use</td>
</tr>
<tr>
<td>PSD</td>
<td>Monk et al., 1994</td>
<td>17</td>
<td>r = .43 (CV) (for number of awakenings after sleep onset)</td>
<td>r = .561 to .814 (TR)</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Variable in items that can be measured, also measures items that occur during the day related to sleep, Cons: Patients may overestimate delay of sleep onset and underestimate total time spent asleep</td>
</tr>
<tr>
<td>SHQ</td>
<td>Kump et al., 1994</td>
<td>16</td>
<td>*</td>
<td>N/A</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Brief assessment for apnea, Cons: Several questions need to be asked of roommate</td>
</tr>
<tr>
<td>PSQI</td>
<td>Buysse et al., 1989</td>
<td>14</td>
<td>*</td>
<td>r = .46-.85 (TR)</td>
<td>Community-dwelling and outpatients</td>
<td>Pros: Easily administered, Cons: Not an objective measure of sleep</td>
</tr>
</tbody>
</table>

Note. IC = Internal consistency, CV = Convergent validity, DV = Discriminant validity, TR = Test-retest reliability.
### TABLE 5. Properties of Personality Assessment Instruments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># Items</th>
<th>Target</th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEO-PI-R</td>
<td>Costa &amp; McCrae, 1992</td>
<td>243</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Provides dimensional ratings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Does not directly measure psychopathology</td>
</tr>
<tr>
<td>MMPI-2</td>
<td>Butcher et al., 2001</td>
<td>567</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Most commonly used personality measure; A massive database supports its psychometric properties</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Length of administration may cause fatigue or disinterest; Not DSM-IV-TR aligned</td>
</tr>
<tr>
<td>MCMI-III</td>
<td>Millon, Davis &amp; Millon, 1997</td>
<td>175</td>
<td>Adults in mental health settings; Individuals suspected of having personality disorder pathology</td>
<td>Pros: Linked to Millon’s evolutionary theory of personality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Personality disorder conceptualizations not fully aligned with DSM-IV-TR</td>
</tr>
<tr>
<td>PDQ-4+</td>
<td>Hyler, 1994</td>
<td>99</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Simple True/False response format</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: High rate of false positive diagnoses</td>
</tr>
<tr>
<td>CATI</td>
<td>Coolidge, 2000</td>
<td>225</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Includes a neuropsychological dysfunction scale and an executive functions scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Some item overlap on the PD scales</td>
</tr>
<tr>
<td>Structured Clinical Interview for DSM-IV Axis II Personality Disorders</td>
<td>First, Gibbon, Spitzer, Williams, &amp; Benjamin, 1997</td>
<td>NA*</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Modular (disorder-by-disorder) approach leads to easy adaptation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Requires trained interviewer; Structured approach may affect rapport</td>
</tr>
<tr>
<td>Structured Interview for DSM-IV Personality</td>
<td>Pfohl, Blum, &amp; Zimmerman, 1997</td>
<td>NA*</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Items grouped according to “topical sections” make intent of interview less transparent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cons: Requires trained interviewer; Structured approach may affect rapport</td>
</tr>
</tbody>
</table>
Dancu, & Stanley, 1989), and State-Trait Anxiety Inventory (STAI; Spielberger, 1983).

The BAI has good evidence for its internal consistency and moderate discriminant validity with primary care older adults of mixed ethnicity (Wetherell & Areán, 1997), but may overestimate anxiety in older adults due to inclusion of somatic symptoms caused by medical illness (Wetherell & Gatz, 2005). The PSWQ measures the frequency and intensity of worry symptoms, but not specific worry content. Preliminary evidence suggests it has fair test-retest reliability among individuals with generalized anxiety disorder, adequate convergent validity with other anxiety measures, and discriminates well between worry and depression.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Citation</th>
<th># Items</th>
<th>Target</th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Personality Disorder Examination</td>
<td>Loranger, 1999</td>
<td>NA*</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Separate modules assess PDs according to DSM-IV or International Classification of Diseases, 10th edition systems Cons: Requires trained interviewer; Structured approach may affect rapport</td>
</tr>
<tr>
<td>Personality Disorder Interview-IV</td>
<td>Widiger, Mangine, Corbitt, Ellis, &amp; Thomas, 1995</td>
<td>NA*</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Separate interview booklets arrange diagnostic questions either by PD or by thematic content areas Cons: Requires trained interviewer; Less widely used than the other semistructured interviews</td>
</tr>
<tr>
<td>Diagnostic Interview for DSM-IV Personality Disorders</td>
<td>Zanarini, Frankenburg, Sickel, &amp; Yong, 1996</td>
<td>NA*</td>
<td>Community-dwelling and psychiatric patients</td>
<td>Pros: Selected as the primary diagnostic measure in the Collaborative Longitudinal Personality Disorders multi-site, prospective, naturalistic study of PDs Cons: Requires trained interviewer; Structured approach may affect rapport</td>
</tr>
</tbody>
</table>

*Semistructured interview format.*
The STAI has two forms, one for measuring trait anxiety and one for measuring state anxiety. The STAI has good internal consistency among older adults (Stanley et al., 2001), good evidence for the convergent validity of the trait subscale (Stanley, Beck & Zebb, 1996; Stanley et al., 2001), and mixed discriminant validity evidence (Stanley et al., 2001). The content validity of the STAI has not been examined with older adults, which could be problematic if there are age-related symptom experiences or presentation (cf., Kogan, Edelstein, & McKee, 2000). The PI (Sanavio, 1988), a measure of obsessive-compulsive symptoms, has support for its convergent validity, internal consistency, and test-retest reliability with older adults (Stanley et al., 1996). This is the only self-report inventory for obsessive-compulsive symptoms that has psychometric support with older adults. The ASI is a measure of thoughts and fears of anxiety- and panic-related symptoms using a five-point rating scale. The ASI has psychometric support for its convergent validity with community dwelling older adults (Mohlman & Zinbarg, 2000). As with the PI, this is the only anxiety sensitivity measure that currently has older adult psychometric support. The FQ was designed to measure fear severity and can be used to monitor change with treatment. It has a main scale (Total Phobia Scale) which contains three subscales: agoraphobia, blood/injury, and social. The FQ includes a distress index, anxiety/depression scale, and main target phobia scale. The FQ has mixed psychometric support, at best, for its use with older adults (Fuentes & Cox, 2000; Stanley et al., 1996). Though it has been used with older adults, it does not adequately sample the fears of older adults. Many of the fears of older adults are not contained in the FQ, suggesting poor content validity for this population. The reconstructed HARS is a clinician-administered instrument that includes a list of symptoms. The instrument was originally developed to provide an index of symptom severity of individuals who were already diagnosed with anxiety disorders. It has adequate internal consistency, and correctly differentiates young-old adults with Generalized Anxiety Disorder (GAD) from normal controls. HARS scores overlap considerably with ratings of depression and its content validity has yet to be established with older adults. However, if a rating scale is needed for following the progress of treatment, this might be a useful, albeit limited, instrument due to its questionable content validity and its construct validity with older adults without GAD diagnoses. The HADS-A is one scale of a multi-scale instrument that employs a 4-point rating scale. It contains no somatic items. It has evidence of good internal consistency and modest support for its construct validity and factor structure across age groups (Bjelland, Dahl,
Haug, & Neckelmann, 2002), but lacks sensitivity and specificity with older adult medical inpatients (Davies et al., 1993). The ADIS-R demonstrates good inter-rater reliability for GAD, coexistent anxiety disorders, and coexistent affective disorders (Stanley et al., 2003). Though it can be time-consuming to administer, it can be useful when performing differential diagnoses. The SPAI has high internal consistency, moderate support for convergent validity, and weak support for discriminant validity as indexed by correlations with measures of depression (Gretarsdottir, Woodruff-Borden, Meeks, & Depp, 2004). Its psychometric properties have been examined with ethnically diverse older adult populations (see Wetherell & Arean, 1997). This appears to be the only measure of social anxiety that has psychometric support with older adults, and thus a reasonable choice for those seeking such a focused measure.

Anxiety assessment instruments developed specifically for older adults include the Adult Manifest Anxiety Scale-Elderly Version (AMAS-E; Reynolds, Richmond, & Lowe, 2003, as cited in Lowe & Reynolds, 2006), Fear Survey Schedule-II-Older Adult (FSS-II-OA; Kogan & Edelstein, 2004), the Worry Scale (WS; Wisocki, Handen, & Morse, 1986), and the Geriatric Anxiety Inventory (GAI; Pachana, Byrne, Siddle, Koloski, Harley, & Arnold, 2006). The WS measures the content and frequency of worry in three content domains (social, financial, and health). It has good internal consistency (Stanley, Beck & Zebb, 1996; Stanley et al., 2001) and moderate test-retest reliability. Evidence for convergent validity is good. WS scores are moderately correlated with measures of depression. The AMAS-E is a multi-dimensional measure of manifest (chronic/trait) anxiety that comprises three clinical subscales: fear of aging, physiological anxiety, and worry/oversensitivity, and one lie scale. The AMAS-E demonstrates adequate internal consistency and temporal stability. Preliminary evidence for construct validity and discriminant validity appears promising. The FSS-II-OA contains several fears specific to older adults that are not addressed on other fear surveys, and a useful daily interference scale. It has good internal consistency and temporal stability, and preliminary support for its convergent validity. The GAI is a relatively brief measure of older adult anxiety that has good preliminary internal consistency, test-retest reliability, and convergent validity evidence with normal older adults and those seeking psychiatric care. It discriminates between older adults with and without GAD. The number of somatic items is minimized, and a dichotomous item format is used. This appears to be a good overall choice in light of its item format, psychometric support, and focus on older adults. No data are available on the use of this instrument with ethnic minority older adults.
DEPRESSION ASSESSMENT

The prevalence rate for major depression among community-dwelling older adult women is approximately 4.4%, and approximately 2.7% among older men (Steffans et al., 2000). However, the rates are higher for subsyndromal depression (15-30%) and for depressive symptoms (8-37%; U.S. Department of Health and Human Services, 1999). Older adults are more likely than younger adults to report somatic symptoms of depression, and less likely to report sadness, dysphoria, worthlessness, and ideational symptoms (Gallo, Anthony, & Muthen, 1994; Fiske, Kasl-Godley, & Gatz, 1998).

Instruments developed for younger adults that are often used with older adults include the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), Beck Depression Inventory (BDI-II; Beck, Brown, & Steer, 1996), Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960), and the Montgomery-Asberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979). The CES-D has several short forms, and many studies support its sensitivity, specificity, and criterion-related validity among community dwelling older adults (e.g., Beekman, Deeg, Van Limbeek, & Braam, 1997). Additionally, the CES-D has adequate reliability and validity among older ethnically diverse individuals (Areán & Miranda, 1997; Mui, Bernette, & Chen, 2001; Mackinnon, McCallum, Andrews, & Anderson, 1998). The CES-D (Radloff et al., 1977) was revised in 1994 to reflect the updated criteria for major depressive disorder in the DSM-IV (Eaton, Muntaner, Smith, Tien, & Ybarra, 2004). The revised version has both a short form of 20 items and a longer form of 35 items. It includes an additional response option to better align with diagnostic criteria (“nearly every day for 2 weeks”), and assesses symptoms from each of the nine symptom groups for the diagnosis of major depression. Although the CESD-R has acceptable reliability (r = 0.92) and convergent validity with adult populations (r = 0.88 with CES-D), it has not been thoroughly examined for use with older adults. Both the 20-item and 35-item versions of the CESD-R are available for free online (www.mdlogix.com/cesdr.htm). The BDI-II is often criticized for having too many somatic items, and for aligning its items with the DSM-IV, which does not always align with symptom presentation in older adults. This instrument may not be the most appropriate choice for use with cognitively impaired clients, as the Guttman scale can be confusing to this group. However, psychometric support for the BDI-II has been demonstrated among community-dwelling older adults (O’Riley, Segal, & Coolidge, 2005).
The HRSD is often considered the “gold standard” for depression assessment, but research has consistently reported poor psychometric support for this instrument (Bagby et al., 2004; Deifenbach, Stanley, Beck, Novy, & Averill, 2001; Hammond, 1998). An extracted 17-item version has good psychometric properties with older medical patients (Rapp, Smith, & Britt, 1990). An alternative to the HRSD is the MADRS, which has stronger internal consistency than the HRSD, relies heavily on cognitive features of depression, thus eliminating many somatic items, but has no validity evidence with older adults. This instrument is not often reported for use with older adults, but it has many properties that are similar to other popular semi-structured interviews.

Instruments developed for older adults include the GDS, Brief Assessment Schedule Depression Cards (BASDEC; Adshead, Cody, & Pitt, 1992), and the California Older Persons Pleasant Events Schedule (COPPES; Rider, Gallagher-Thompson, & Thompson, 2004). The GDS eliminates many somatic items and employs a yes/no response format. It does not include an item assessing suicide ideation. This dichotomous format has been criticized for being too simple, and creating problems when a client cannot decide between a “yes” and “no” answer. Research suggests that it is not unidimensional. A short-form of the GDS had higher sensitivity and specificity in a nursing home population than the CES-D (Blank, Gruman, & Robison, 2004). Therefore, the GDS might be considered over the CES-D when working with nursing home residents. Evidence for the validity of the GDS when used with ethnically diverse older adults is not strong (Mui, Burnette, & Chen, 2001), although it has been translated into many languages and is used around the world. The BASDEC uses a card sorting method, with questions written on cards. It was designed for use in a nursing home, and to eliminate some of the problems with reading assessment questions amid the noise present in a nursing home. Some individuals may find the task of sorting questions into piles less challenging that circling answers on a self-report inventory. The BASDEC has also been validated among older adults with COPD (Yohannes, Baldwin, & Connolly, 2000).

The COPPES can be used to assess pleasant events among healthy, community-dwelling older adults, and is available at no cost at www.oafc.stanford.edu. The COPPES is a 66-item self-report instrument that asks the client to indicate how often a pleasant event occurred in the past month (frequency scale), how enjoyable it was (pleasure scale), or how enjoyable it would have been, had they engaged in the activity in the past month. Scores from a normative sample of adults age 41 to 89 are provided in the manual. Estimates of internal consistency and test-retest
reliability are generally adequate, ranging from 0.80 to 0.91 for most subscales in several samples of older adult volunteers recruited by the authors. Because the instrument was not developed as a diagnostic measure of depression or as a formal measure of depression severity, validity estimates are not applicable. However, the authors do offer evidence of a relation between depression severity and number of pleasant events and level of item pleasure in their scoring manual.

There are several assessment instruments that have at least one study demonstrating psychometric support for use with older adults. The Hospital Anxiety and Depression Scale (HADS; Bjelland, Dahl, Haug, & Neckelmann, 2002; Flint & Rifat, 1996) was designed for the assessment of individuals in hospital settings, and excludes symptoms related to physical illness. Instead it focuses on symptoms related to anhedonia. Flint and Rifat (1996) found moderate support for the concurrent validity of the HADS with depressed psychiatric patients. Unfortunately the sensitivity and specificity of the instrument with an older adult medical inpatient population was found to be weak (Davies et al., 1993). The Inventory for Depressive Symptomatology (IDS; Rush, 1996) has been proposed as a substitute for the HRSD, and its psychometric properties are currently being examined with older adults. There are many forms of the IDS, including an informant form, which is useful when the client is unable to respond to items. The Hopkins Symptom Checklist-25 (HSCL-25; Frojd, Hakansson, & Karlsson, 2004) is unique in its ability to detect major, minor, and subsyndromal depression. This instrument has only been validated with older primary care patients, so there is little data available on the usefulness of this instrument with other populations. The Depression Adjective Checklist (e.g., Grayson, Lubin, & Van Whitlock, 1994) includes adjectives indicating mood problems, but not physical problems. There are two forms, both of which have been validated on older adults. This instrument might be considered for a broader assessment of mood, when a specific diagnosis is not being sought. Finally, the Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001; Pinto-Meza, Serrano-Blanco, Peñarrubia, Blanco, & Haro, 2005) was designed specifically as a screener for a primary care setting, and has a telephone administered version that can be read to older adult clients with vision impairments.

For cognitively impaired older adults, the Dementia Mood Assessment Scale (DMAS; Sunderland et al., 1988), Cornell Scale for Depression in Dementia (Alexopoulos, Abrams, & Young, 1988), and the Pleasant Events Schedule-Alzheimer’s Disease (PES-AD; Logsdon & Teri, 1997) all have acceptable convergent validity, concurrent validity, and internal
consistency. The DMAS is based on direct observation and a semi-structured interview with the patient. When the patient has limited ability to respond, a clinician might consider the Cornell Scale for Depression in Dementia, which includes an interview with the caregiver. The PES-AD does not directly assess depression, but can be used with depressed patients to determine potentially reinforcing events or the lack thereof.

The assessment instruments presented in this section are appropriate for many settings. Clinicians working with community-dwelling older adults might consider the BDI-II, GDS, or CES-D. Those working in a hospital setting might consider the HADS, HSCL-25, MADRS, or the Depression Adjective Checklist. The PHQ-9 is appropriate for primary care settings. The BASDEC is appropriate for a nursing home setting. The Cornell Scale, DMAS, PES-AD are appropriate for older adults with dementia. The majority of these assessment instruments are symptom checklists. Clinicians might also consider structured interviews for diagnostic purposes. Of note, only the CES-D has published data that support its use among ethnically diverse older adults. Clinicians working with a diverse population might consider the CES-D above the other assessments presented in this section.

**SUICIDE IDEATION ASSESSMENT**

Older adults 65 years or older have high rates of suicide, representing 12% of the U.S. population but 17% of deaths by suicide (WISQARS database; Centers for Disease Control and Prevention; 2006). Older adults have a suicide rate (14.6/100,000) 35% higher than the national average (10.8/100,000; WISQARS), necessitating the clinical assessment of suicide risk and protective factors (see Heisel & Duberstein, 2005).

Brown (2002) reviewed the psychometric properties of measures used in studies of late-life suicide ideation, including the Scale for Suicide Ideation (Beck, Kovacs, & Weissman, 1979), and depression scales containing a suicide ideation item, such as the HRSD (Hamilton, 1960), and the BDI-II (Beck, Steer, & Brown, 1996). Additional measures that have been used in research with older adults include the Montgomery Asberg Depression Rating Scale (Montgomery & Asberg, 1979), the Cornell scale for Depression in Dementia (Alexopoulos, Abrams, Young, & Shamoian, 1988), and the PHQ-9 (Kroenke, Spitzer, & Williams, 2001), each of which includes a suicide ideation item; the Schedule of Attitudes Toward Hastened Death (Rosenfeld et al., 1999), assessing a desire to hasten
one’s death; and the Yale Evaluation of Suicidality scale (see Latham & Prigerson, 2004), assessing suicidal thoughts, plans, and behavior. A majority of these measures was not developed specifically for use with older adults.

Instruments have recently been developed to assess late-life suicide ideation and related constructs in clinical and community contexts. Draper and colleagues (2002) developed the Harmful Behaviors Scale (HBS) with older nursing home residents in Australia. The HBS is a 20-item observer-rating scale comprising factors assessing Uncooperativeness, Active Self-Harm, Risk-Taking, Passive Self-Harm, and Disorganized Behavior. The HBS has strong internal consistency and interrater reliability; findings are mixed regarding its association with suicide ideation ratings and with 2-year mortality (Draper et al., 2002, 2003). The HBS requires direct observation. A majority of its items do not directly assess suicide ideation. This instrument would appear to be a good choice for nursing home residents since it does not require self-report of the resident. However, “suicidal” behavior may be less clearly defined.

Edelstein and colleagues (2000) developed the Reasons for Living scale—Older Adults version (RFL-OA), a 69-item self-report scale assessing adaptive beliefs associated with an orientation toward life and away from suicide. Preliminary findings indicate strong internal consistency and construct validity for the RFL-OA in clinical, community, and residential samples of older adults. This scale notably focuses upon resiliency rather than directly upon thoughts of suicide; its length and an absence of subscales potentially limit its use in busy clinical settings. This instrument would be useful in any setting in which individuals have sufficient cognitive skills to understand and respond to the items.

The Geriatric Suicide Ideation Scale (GSIS; Heisel & Flett, 2006) is a 31-item multidimensional measure assessing the presence and severity of Suicide Ideation, Death Ideation, Loss of Personal and Social Worth, and Perceived Meaning in Life among older adults. The GSIS has strong internal consistency, temporal stability, and construct validity with respect to depression, hopelessness, suicidal ideation and behavior, and absence of perceived life satisfaction and purpose. Research has supported the use of its brief subscales as stand-alone measures (Heisel & Flett, 2006). The GSIS has been translated into Chinese and shown to have strong reliability and validity in a Hong Kong sample (Chou, Jun, & Chi, 2005). There are some data suggesting strong reliability (acceptable for the Death Ideation subscale), and validity with an African American sample in New York State. As with the RFL-OA, this instrument would be most useful with individuals who have sufficient cognitive functioning.
Clinicians should not rely exclusively on suicide ideation measures when assessing suicide risk, given inevitable false positives and false negatives when using self-report instruments (Heisel & Duberstein, 2005). Sensitive suicide risk assessment should be conducted as part of a comprehensive clinical assessment, requires clinical skill and judgment, and occurs in the context of a therapeutic relationship. With the exception of the GSIS, there are few data available with multicultural groups for these suicide assessment instruments.

SLEEP DISORDERS ASSESSMENT

Important characteristics of sleep change as we age. For example, older adults experience more frequent shifts in sleep cycles (see Morgan, 2000), a decrease in rapid eye movement (REM) sleep, and trouble initiating and maintaining sleep (Schubert et al., 2001). Changes can occur in circadian rhythms, with older adults often feeling tired early in the evening and awakening early in the morning (Yoon et al., 2003). This shift in circadian rhythm, known as Advance Sleep Phase Syndrome (ASPS), can also be seen in the “sundowning” that can occur in Alzheimer’s disease (Bonanni et al., 2005). There are several sleep disorders that occur often in older adults such as sleep apnea, which is more common in men (13%) than women (4%) (Enright et al., 1996). Insomnia, present in 12 to 33 percent of older adults, is the most common sleep disorder (Morgan, 2000). Some cases of insomnia may be misdiagnosed cases of sleep apnea (Enright et al., 1996). Restless Leg Syndrome is another common sleep disorder that is estimated to affect up to 45% of community-dwelling older adults (Martin et al., 2000).

Several sleep assessment tools have been developed. Polysomnography is often considered the “gold standard.” It involves the use of an electrical recording device with electrodes that are attached to face, neck, limbs, and abdomen for the detection of muscle movement, eye movement, brain activity, limb movement, breathing rate, time spent sleeping, and stages of sleep (Edinger et al., 1992; Friedman et al., 2000). This is a relatively expensive assessment method, which typically requires one spending a night in a sleep laboratory. It would probably not be a good choice for moderate to severely cognitively impaired individuals. An actigraph is another electrical device that is worn on the wrist and measures physical activity (Friedman et al., 2000). Periods of low physical activity suggest that the person is sleeping. Measurements of total
time spent sleeping using actigraphy are strongly related to total time spent sleeping measured with polysomnography. An actigraph can be used with a wide range of populations in a wide range of settings. As with other devices that are attached to individuals, there is a risk of removal by individuals who are confused or severely cognitively impaired. Finally, the Sleep Assessment Device (SAD), designed to measure sleep onset and sleep interruptions, emits a soft tone at set intervals telling the person to indicate when still awake (Kelley & Lichstein, 1980; Edinger et al., 1992). No information was found that validated the use of this device in an older adult population; however, the utility of the SAD has been demonstrated with older adults (Lichstein et al., 1991). Older adults require more instruction in using SAD than younger adults.

Paper and pencil measures of sleep also are available. The Pittsburgh Sleep Diary (Monk et al., 1994) asks individuals to record variables such as bedtime, sleep quality, mood upon awakening, number of awakenings, caffeine intake during previous day, and latency to sleep onset. This is a good self-report measure, but requires considerable diligence on the part of the patient. The Sleep and Health Questionnaire (SHQ; Kump et al., 1994) is a 16-item, 5-point Likert-type scale that includes ratings of energy level, sleepiness, snoring, awakenings, apneas, and sleep latency, with some answers asked of the patient’s bed partner or roommate. It identifies sleep disturbances and symptoms of sleep apnea, and has been shown to predict sleep apnea (sensitivity of 65% and specificity of 90%; Kump et al., 1994). As with the Sleep Diary, one must be conscientious in using this instrument, and it requires information from a bed partner. Finally, the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1989) asks questions about sleep quality and overall sleep pattern, and includes 4 open-ended questions and 14 Likert-type questions. Seven aspects of sleep quality are assessed for differentiating “good” from “poor” sleepers. This instrument also requests answers from one’s bed partner, but this information is not scored. The PSQI has been shown to identify patients with insomnia with a sensitivity of 89.6% and a specificity of 86.5% (Buysse et al., 1989).

When evaluating the sleep of older adults, one should also assess for daytime symptoms as well as nighttime sleep difficulties (e.g., daytime sleepiness, low energy, napping; Martin et al., 2000). When assessing for sleep difficulties, consider potential medical and environmental causes for sleep problems. Finally, consider questioning the bed partner, as the partner may have additional insight into the patient’s sleep difficulties (e.g., snoring; Wiggins et al., 1990).
Considering various populations of older adults (e.g., community dwelling, nursing home), the actigraph is recommended as an objective and valid measure of sleep. The paper and pencil measures are useful in community dwelling patients to give insight into the nature of sleep difficulties, but still do not approach the strong relation with polysomnography of the actigraph. Although cultural research is lacking, a few of these instruments have been used with ethnically diverse older adult samples. The PSQI has been used with a sample of Japanese patients (Doi et al., 2001), and the polysomnograph and actigraph have been used with samples that included several African American individuals (Edinger et al., 2004; Morin et al., 1993).

### Normal and Maladaptive Personality Assessment

There are no objective personality assessment instruments designed specifically for older adults. Personality is generally stable across much of adulthood and the core dimensions of personality are thought to be generally similar across adulthood (with changes in degree but not kind of certain personality traits). However, many objective instruments designed for use with younger adults have been successfully applied to individuals in later life.

#### Objective Self-Report Measures of Personality

The Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) has strong psychometric properties with older adults. After age 30, neuroticism, extraversion, and openness to experience tend to decline whereas agreeableness and conscientiousness increase (Costa & McCrae, 2002).

The Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher et al., 2001) re-standardization sample included persons up to 85 years of age, but older adults were still underrepresented (about 5% of the sample) (Graham, 2006). On the standard scales, older adults tend to obtain higher scores on Hs (Hypochondriasis), D (Depression), Hy (Hysteria), and Si (Social Introversion), and lower scores on Pd (Psychopathic Deviate), and Ma (Hypomania). According to Graham (2006), these elevations probably do not indicate greater psychopathology among older persons but rather reflect biological maturation and age-graded changes in health problems and energy levels. The large number of items...
and length of administration time may be problematic for some older adults causing fatigue.

These measures are typically used when the clinician wants clarification of the client’s personality features (NEO and MMPI-2), and psychopathology (MMPI-2). Both measures can also be used to track changes over time. They are appropriate for use with older adults who are cognitively intact, able to read items, and reflect on their traits.

**Objective Self-Report Measures of Personality Disorders**

The diagnostic criteria sets from the DSM-IV may not necessarily capture the unique presentation of some personality disorders (PDs) in the context of later life (Segal et al., 2006). Whereas there is no specific PD inventory designed for older adults, several current instruments may be appropriately used with older adults.

The Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, Davis & Millon, 1997) includes 14 PD scales and 7 clinical syndromes scales (Axis-I related). Hyer and Harrison (1986) found high incidence rates for dependent PD and avoidant PD, and low rates for histrionic PD, narcissistic PD, and antisocial PD with geriatric inpatients using the original MCMI.

The Personality Diagnostic Questionnaire-4+ (PDQ-4+; Hyler, 1994) assesses the 10 standard DSM-IV PDs as well as passive-aggressive PD and depressive PD (in Appendix B of DSM-IV). The PDQ may be used in both normal and clinical populations and provides dimensional and categorical scores for each PD.

The Coolidge Axis II Inventory (CATI; Coolidge, 2000) assesses the 10 standard DSM-IV PDs as well as passive-aggressive, depressive, sadistic, and self-defeating PDs. The CATI includes three scales that may be particularly relevant to older adults: (1) a Personality Change Due to a General Medical Condition scale; (2) a Neuropsychological Dysfunction Scale, with 3 subscales: language and speech dysfunction, memory and concentration difficulties, and neuromuscular complaints related to brain dysfunction; and (3) an Executive Functions of the Frontal Lobe scale with 3 subscales: poor planning, decision-making difficulty, and task incompletion. A significant-other version is available. The CATI may be used in normal and clinical populations, and has been successfully used in several studies with older adults (e.g., Coolidge et al., 2000; Segal, Hook, & Coolidge, 2001).

Evidence for the concurrent validity of the MCMI and CATI among chronically mentally ill older adult inpatients is moderate and similar to
data from younger adults. The MCMI, PDQ, and CATI have been applied in the clinical and research domains with older adults. These measures are appropriate for use in purportedly normal and psychiatric older adults who are not cognitively impaired and not experiencing acute psychopathology. A typical application of these measures is that they are used by clinicians and researchers to screen for the presence of PDs or their features. Disorders that are elevated on the screening measure are then further examined through either a clinical interview or a structured interview (discussed next).

**Semi-Structured Interviews for Personality Disorders**

The five prominent semi-structured interviews for PDs are as follows: Structured Clinical Interview for DSM-IV Axis II Personality Disorders (First, Gibbon, Spitzer, Williams, & Benjamin, 1997; Structured Interview for DSM-IV Personality (Pfohl, Blum, & Zimmerman, 1997); International Personality Disorder Examination (Loranger, 1999); Personality Disorder Interview-IV (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995); Diagnostic Interview for DSM-IV Personality Disorders (Zanarini, Frankenburg, Sickel, & Yong, 1996). Each of these instruments covers the 10 standard PDs in DSM-IV and has solid evidence for reliability and validity among diverse adult respondents. Each measure has also been used successfully in research studies with older adults providing some support for their utility. Whereas limited psychometric data are available for older adults specifically, these measures are presumed to be as valid as the DSM-IV diagnostic system itself because they adhere to the diagnostic criteria of the DSM.

In clinical settings, administration of a semi-structured interview may be used as part of a comprehensive and standardized intake evaluation although routine administration is uncommon due to the time and effort required. A more palatable variation on this theme is that sections of a structured interview may be administered subsequent to a traditional unstructured interview and/or objective self-report assessment of PDs to clarify and confirm the impressions of PD pathology.

Research concerning the application of the personality measures described in this section to ethnic minority older adults is limited. The accumulation of data regarding the MMPI-2 with adult minorities suggests that the differences between African Americans and Caucasians are small when the groups are matched on age and SES, that elevated scores among Hispanics may be due to low acculturation, and that high scores on many scales among American Indians probably reflect cultural factors
and not psychopathology. For all of the personality measures, we recommend that clinicians pay close attention to acculturation levels and stress experienced by the respondents, and contextual and cultural factors that may impact their responses. We also encourage researchers to specifically examine the psychometric properties of the personality instruments among older minorities.

**SENSORY CONSIDERATIONS AND ACCOMMODATIONS**

Consideration of sensory deficits is particularly important when assessing older adults. Older adults have a high prevalence of vision and hearing deficits. Nearly 24% of those 80 and older have low vision or blindness (Congdon et al., 2004), and over 7% of those over 65 years have blindness (Centers for Disease Control, 2004). Further, half of men and a third of women over age 65 have age-related hearing loss (Federal Interagency Forum on Aging-Related Statistics, 2004). Comorbidity should also be considered. Kirchner (1988) reports that 70% of severely vision-impaired people also have significant hearing loss.

Sensory deficits are important to consider in assessment because accuracy, reliability, and validity of the results can be compromised. Assessment should be conducted with assistive devices that the client currently uses (e.g., hearing aids, eyeglasses, magnifying glasses). For the reliability of future assessments, it is important to note sensory accommodations made in testing. Asking the clients what accommodations may be helpful for them to optimize testing cannot be overvalued.

**Vision Impairment**

Myopia (near-sightedness) and hyperopia (far-sightedness) may occur at any age, but are present in roughly one-fifth of those 80 and older (U.S. National Institutes of Health, 2004). Four additional clinical conditions are common in older eyes. First, in age-related macular degeneration, letters may appear crooked or missing and reading may be difficult. Second, in open-angle glaucoma, physical orientation and mobility may be problematic (Stuen, 2003). Third, cataracts can lead to blurred vision, impaired contrasting ability, and glare sensitivity (Stuen, 2003). Fourth, diabetic retinopathy can result in blurred and distorted vision in the central field, and blindspots.

Accommodations include large print (e.g., 16 point), magnifying glasses, and corrective lenses. Written material can presented orally.
The contrast between light and dark text can be enhanced, verbal cues can be provided, glossy paper can be avoided, and lights can be used. Many visual assistive devices are available (see www.lighthouse.org) that can aid in assessment and general quality of life.

**Hearing Impairment**

Hearing impairments are common and there are important implications for psychological assessment and referrals. Of those over 65 years of age, 28% have “profound hearing loss” (or deafness) (Centers for Disease Control, 2004). Institutionalized older adults show particularly high rates of hearing impairment, with prevalence reports ranging from 45 to 90% (Gutnick, 1989; Chafee, 1967, respectively).

To assess hearing quickly, the Whisper Test or Brief Hearing Loss Screener may be used. Geriatrics at Your Fingertips (GAF; Reuben et al., 2002) recommends the evaluator stand 2 feet behind the client, ask the client to cover the opposite ear, whisper a question, and note whether the client could hear the question. One study (Inouye, 1999) used the criteria of hearing six or fewer questions out of 12 for impairment. The Brief Hearing Loss Screener (Reuben, 1998), also available in GAF, uses self-report questions about every day hearing scenarios in a decision-tree format. If three or more items are endorsed, the authors recommend evaluation by a hearing specialist.

Psychologists can use practical solutions to reduce the influence of hearing deficits in assessment responses. Facing the client so that lip reading is possible, optimizing lighting, speaking clearly and normally, and eliminating background noise are important (Portis, 2006; Heine, 2002). Further, sensitivity to fatigue, lowering voice pitch (Storandt, 1994), pausing between phrases (Portis, 2006), and rephrasing may be helpful. Hearing impairment may be improved by the use of assistive listening devices, which can be obtained through audiologists.

**SUMMARY**

Psychological assessment of older adults can be quite challenging, particularly when one considers the heavy reliance on intact sensory processes and the paucity of psychometrically sound assessment instruments available. We have offered brief discussions of psychological assessment instruments that are suitable for many older adults, and potential accommodations for commonly encountered sensory problems. Caveats are noted when psychometric support for instruments is modest
or preliminary. Overall, the field could benefit from more psychometric examination of instruments created for older adults, and particularly for those created for younger adults that are being used with older adults. In the latter case, content validity is particularly important. Finally, we need more assessment instruments created specifically for older adults, in particular, individuals with compromised cognitive and sensory functioning.

REFERENCES


Costa, P. T., Jr., & McCrae, R. R. (2002). Looking backward: Changes in the mean levels of personality traits from 80 to 12. In D. Cervone & W. Mischel (Eds.), *Advances in personality science* (pp. 219-237). New York: Guilford.


Inouye, S. K., Bogardus, S. T., Charpentier, P. A., Leo-Summers, L., Acampora, D.,
delirium in hospitalized older patients. *New England Journal of Medicine*, 340(9),
669-676.
ment*, 2, 135-146.
Kirchner, C., & Peterson, R. (1988). Multiple impairments among noninstitutionalized
blind and visually impaired persons. In C. Kirchner (Ed.), *Data on blindness and vi-
the Blind.
Kogan, J., & Edelstein, B. (2004). Modification and psychometric examination of a self-
depression severity measure. *Journal of General Internal Medicine*, 16, 606-613.
grief as psychiatric disorder presenting greatest risk for suicidality. *Suicide and Life-
Threatening Behavior*, 34, 350-362.
sleep in the home. *Behavior Therapy*, 22, 531-548
properties and relation to depression and cognition in Alzheimer’s disease patients.
*Gerontologist*, 37, 40-45.
and ICD-10 Interviews*. Odessa, FL: Psychological Assessment Resources, Inc.
the Adult Manifest Anxiety Scale-Elderly Version scores. *Educational and Psycho-
idemiological Studies Depression Scale in older community samples in Indonesia,
North Korea, Myanmar, Sri Lanka, and Thailand. *Journals of Gerontology*, 53B,
P343-P352.
*Behaviour Research and Therapy*, 17, 263-267.
Martin, J., Shochat, T., & Ancoli-Israel, S. (2000). Assessment and treatment of sleep
validation of the Penn State Worry Questionnaire. *Behaviour Research & Therapy*,
28(6), 487-495.
Middelkoop, H. A., Neven, A. K., van Hilten, J. J., Ruwhof, C. W., & Kamphuisen,
H. A. (1995). Wrist actigraphic assessment of sleep in 116 community based sub-


RECEIVED: 06/02/2006
REVISED: 12/01/2006
ACCEPTED: 01/23/2007
doi:10.1300/J018v31n03_01