Measures of Financial Capacity: A Review

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Abstract

Purpose of the Study: Capacity to manage finances and make financial decisions can affect risk for financial exploitation and is often the basis for legal determinations of conservatorship/guardianship. Several structured assessments of financial capacity have been developed, but have not been compared regarding their focus, validity, or reliability. Therefore, we conducted a review of financial capacity measures to examine these factors.

Design and Methods: We searched electronic databases, reference lists in identified articles, conference proceedings and other grey literature for measures of financial capacity. We then extracted data on the length and domains of each measure, the population for which they were intended, and their validity and reliability.

Results: We identified 10 structured measures of financial capacity. Most measures could be completed in 25–30 min, and were designed to be administered to older adults with some level of cognitive impairment. Reliability and validity were high for most.

Implications: Measurement of financial capacity is complex and multidimensional. When selecting a measure of financial capacity, consideration should be made of the population of focus and the domains of capacity to be assessed. More work is needed on the cultural sensitivity of financial capacity measures, their acceptability, and their use in clinical work. Better understanding of when, and to whom, to administer different financial capacity measures could enhance the ability to accurately detect those suffering from impaired financial capacity, and prevent related negative outcomes like financial exploitation.

Keywords: Finances, Capacity, Financial competence, Assessment, Dementia

The ability to make financial decisions is an essential life skill, impacting the ability to effectively handle one’s property and financial affairs, and potentially increasing vulnerability to financial exploitation (Acierno et al., 2010; Laumann, Leitsch, & Waite, 2008; Lichtenberg, Stickney, & Paulson, 2013; Stiegel, 2012). Assessment of financial capacity can be the basis for determinations of conservatorship or guardianship (American Bar Association Commission on Law and Aging & American Psychological Association, 2008). However, financial capacity is complicated to define and has been conceptualized in multiple ways (see Marson, 2016 for a review). The earliest conceptualizations viewed financial capacity as a specific instrumental activity of daily living, and focused on the ability to complete specific financial tasks such as budgeting, writing checks, paying rent and other bills, and receiving and monitoring income (Lawton & Brody, 1969). Marson and others then expanded financial capacity to include a broader set of skills and activities needed for independent functioning in the community. These include performance and judgment, and vary from basic skills such as identifying and counting coins/currency, higher-level skills such as managing a checkbook, and more.
complex activities such as making financial investment decisions (Flint, Sudore, & Widera, 2012; Marson & Hebert, 2008; Marson, Triebel, & Knight 2012). Financial capacity in this conceptualization therefore involves not only skills around financial performance, but also sound judgment that optimizes one’s own interests and ability to follow values that generally guide one’s financial choices (American Bar Association Commission on Law and Aging & American Psychological Association, 2008). Another approach, the cognitive psychological model, views financial capacity as a set of financial abilities and skills needed for independent functioning (Marson et al., 2000; Pinsker, Pachana, Wilson, Tilse, & Byrne, 2010), specifically: (a) declarative knowledge (the ability to describe financial concepts); (b) procedural knowledge (the ability to carry out financial activities), and (c) judgment that enables making sound financial decisions.

Another element of financial capacity is decisional capacity; here, the emphasis is on the ability to make financial decisions (Appelbaum & Grisso, 1988). Components include choice (the ability to make a choice about a financial transaction/situation); understanding (the ability to understand information about a financial transaction/situation and associated choices about the transaction/situation); appreciation (the ability to appreciate the personal consequences of different choices about the financial transaction/situation); and reasoning (the ability to reason and think logically about different choices presented by a financial transaction/situation; Marson, 2016). Others have conceptualized financial decision-making under a person-centered model (Lichtenberg, Stoltman, Ficker, Iris, & Mast, 2015), which focuses on the specific individual and their actual financial situation, and their decision-making abilities and judgment in relation to their specific history. The focus here is on ability to make decisions free from exploitation or influence and that are consistent with prior values. Finally, the Institute of Medicine (IOM) and National Academy of Science (NAS), defines financial capacity as the ability to demonstrate financial knowledge and financial judgment within real-life settings; the emphasis is on the on the person’s current financial environment and focused on real-world financial performance (National Academies of Sciences, Engineering, and Medicine, 2016).

Given the conceptual complexity of financial capacity, and the multiple domains involved, assessing financial capacity can be challenging. In practice, clinical judgment is often used to assess financial capacity (see Pinsker et al., 2010 for a review of clinical measures), with physicians, psychologists, or gerontologists making these determinations. Clinical judgments are made based on interview information, neuropsychological tests, and sometimes limited props; judgments are usually made of the individual as financially “capable,” “marginally capable,” and “incapable” (American Bar Association Commission on Law and Aging & American Psychological Association, 2008). There are limitations to clinical judgment, however, as it forces reliance on anecdotal and subjective evidence, and prevents generalization of results across raters or populations. In recent years, several structured assessments of financial capacity have been developed. Previous reviews have described clinical interviews for financial capacity (Pinsker, Pachana, Wilson, Tilse, & Byrne, 2010), measures of financial skills in adults with acquired cognitive impairments (Engel, Bar, Beaton, Green, & Dawson, 2016), financial and testamentary capacity evaluation instruments and general procedures (including traditional neuropsychological and functional assessments as well as forensic assessment instruments; Sousa, Simões, Firmino, & Peisah, 2014), and financial exploitation measures used in prevalence studies (Jackson, 2016).

However, to our knowledge no work has reviewed or compared structured assessments of financial capacity, in regard to their psychometric properties and uses. A review of the available financial capacity assessments, and description and comparison of key measurement components, may assist researchers, clinicians, caseworkers, and attorneys in identifying the appropriate and most psychometrically robust financial capacity assessments for their given population and purpose. This knowledge may also improve public health detection and in turn, prevent incidence of financial exploitation or devastating loss through routine financial capacity assessments. This article provides a comprehensive overview and comparison of available structured financial capacity measures.

**Methods**

**Search Strategy**

We searched three major electronic databases: PubMed, Web of Science, and PsycInfo. The search strategy was designed to capture a broad range of articles in the area of financial exploitation and capacity. We used the search terms: (“financial capacity” OR “financial abilities”) AND (“assessment” OR “measurement”). We also searched for “financial” OR “financial capacity,” OR “financial assessment.” The reference list for each relevant article was reviewed for other pertinent articles. Reference lists of articles discussing concepts of financial capacity were also reviewed. Finally, we searched conference proceedings and other grey literature using the same search terms; the electronic databases allowed for searching of a range of grey literature document types (e.g., conference proceedings, theses, reports).

**Inclusion Criteria**

Titles and abstracts of all articles/chapters were assessed for inclusion by two independent reviewers (A. R. Ghesquiere and C. McAfee). Inclusion criteria were that the measures were structured (not solely clinical interviews, which was the focus of the Pinsker review), were available in English, were focused on financial capacity, and had been pilot tested on at least one sample. Measures that assessed capacity more broadly, but did not focus on financial capacity in particular (e.g., the Assessment of Capacity for
Everyday Decision-Making, or ACED (Karlawish & Lai, 2008) were not included, as the focus of this review is on financial capacity, not complete capacity. Financial capacity is only one component of general decision-making capacity (American Bar Association Commission on Law and Aging & American Psychological Association, 2008). Included articles were retrieved in full. Published articles/chapters were included if they provided evidence of measurement properties for any measure of financial capacity. We allowed inclusion of measures for any age group.

Data Extraction
For each assessment included in the review, we extracted information considered important in the evaluation of assessment instrument (Streiner, 2003). These included, but were not limited to, number of items, length of administration, scoring methods and interpretation, expertise of administrator, and study and patient characteristics. We also extracted all available psychometric information, including reliability and validity.

Results
Description of Instruments
Instrument properties are outlined in Table 1. We identified a total of 10 standardized instruments: the Financial Assessment and Capacity Test (FACT) (Black, Ross, Flanagan, Rabheru, & Breiter, 2007), the Financial Capacity Instrument (FCI) (Marson, Hethcox, Shawaryn, & Novack, 2000), the Financial Capacity Instrument-Short Form (FCI-SF) (Gerstenecker et al., 2015; Marson et al., 2014), the Financial Competence Assessment Inventory (FCAI) (Kershaw & Webber, 2008), the Lichtenberg Financial Decision Rating Scale (LFDRS) (Lichtenberg et al., 2015), the Lichtenberg Financial Decision Screening Scale (LFDSS) (Lichtenberg et al., 2016), the financial section of the Hopemont Capacity Assessment Interview (HCAI) (Edelstein et al., 1993; Edelstein 1999), the Measure for assessing Awareness of Financial Skills (MAFS) (Cramer, Tuokko, Mateer, & Hultsch, 2004), the Property and Finance Capacity Assessment (PFCA) (Darzins, Molloy, & Strange, 2000) and the Semi-Structured Clinical Interview for Financial Capacity (SCIFC) (Marson et al., 2009). Most were tested in older adults; many studies did not describe the racial, ethnic, or cultural background of participants, though the LFDRS was tested in a sample of African American older adults (Lichtenberg, Ficker, & Rahman-Filipiak, 2016). Specific uses, strengths, and weaknesses are outlined below, and properties of each measure are described in Table 1.

The Financial Assessment and Capacity Test (FACT) (Black et al., 2007)

Specific Uses
This measure was developed for use with those with psychiatric conditions. The FACT measures specific financial skills, knowledge, confidence, and beliefs about finances. The FACT’s main purpose is to help develop intervention strategies tailored to each respondent’s functional needs. It also includes consideration of four competence areas (understanding, appreciation, reasoning, and expressing a choice).

Strength
This appears to be the only measure validated for assessing financial capacity in those with a range of psychiatric disorders. It is also the only measure validated for administration and scoring by nonprofessionals; the measure was administered by undergraduate research assistants who received some training by professionals. The four competence areas (understanding, appreciation, reasoning, and expressing a choice), were identified through their appearance in Ontario legislation (where the measure was developed), as well as input from professionals in psychology, occupational therapy, and psychiatry, all of which enhances the measure’s potential clinical and legal applicability. Specific cut-off scores were established by examining match with physicians’ opinion and the Managing Money subscale of the Independent Living Scale, establishing the concurrent validity of the measure. The measure focuses not only on specific skills, but also insight, confidence, knowledge, and beliefs. It has high internal consistency and good inter-rater reliability.

Weaknesses
The measure uses hypothetical scenarios that may not be applicable to each individual respondent. To establish the concurrent validity of the measure with physician ratings and the Independent Living Scale (ILS) Money Management subscale, the authors examined categories “competence,” “incompetence” and versus “marginal competence,” but in practice the FACT would only be a starting place for determinations of competence. The instrument was specifically developed for use in Ontario. Its applicability to other populations requires further study.

The Financial Capacity Instrument (Marson et al., 2000)

Specific Uses
The measure was developed for assessing cognitive capacity specifically in older adults with mild to severe dementia. The FCI was designed to correspond to the conceptual model in which financial capacity has three different levels: specific financial abilities (tasks), general financial abilities (domains), and global financial ability (total score), and measures the three aspects of financial capacity outlined in the cognitive psychological model of financial capacity (Marson et al., 2000; Pinsker et al., 2010): declarative knowledge, procedural knowledge, and judgment.

Strengths
This measure appears to be among the most thoroughly validated of the measures assessing financial capacity in
## Table 1. Measures of Financial Capacity

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<tr>
<th>Name of measure</th>
<th>Authors, year</th>
<th>Items and domains</th>
<th>Time to administer</th>
<th>Scoring</th>
<th>Who administered measure</th>
<th>Setting and population in which tested</th>
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<tr>
<td>Financial Assessment and Capacity Test (FACT)</td>
<td>Black et al., 2007</td>
<td>46 items in nine domains: -Memory -Reading/writing comprehension -Calculating/attention -Daily financial tasks -General financial knowledge -Understanding assets -Financial insight -Financial confidence -Rational beliefs about money</td>
<td>30 min</td>
<td>Scoring ranges correspond to physician determinations of “competent,” “incompetent” or “marginal capacity.”</td>
<td>Undergraduate research assistants trained by study PIs</td>
<td>94 geriatric psychiatry inpatients from five regional geriatric psychiatry wards. Age ranged from 60–88.</td>
<td>Geriatric psychiatry patients, though noted that could be tested in those with psychiatric conditions in the community.</td>
<td>-Internal consistency was .896. -Inter-rater reliability was .858. -Test-rest reliability was not measured.</td>
<td>-Concurrent validity was .859–.847, as measured by association with the Money Management subscale of the Independent Living Scale (ILS), the FACT, and participants’ psychiatric assignment classification as competent. -Content validity was not explicitly described, but items were selected by professionals in psychology, occupational therapy and psychiatry through selection of content items using Appelbaum and Grisso’s model. -Construct validity was not described.</td>
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<td>The Financial Capacity Instrument (FCI)</td>
<td>Marson et al., 2000</td>
<td>14 tasks in six domains: - Basic monetary skills - Financial conceptual knowledge - Cash transactions - Checkbook management - Bank statement management - Financial judgment</td>
<td>- 30 to 40 min with older controls (no cognitive impairment). - 40 to 50 min in patients with dementia.</td>
<td>Comparing scores between controls and patients with dementia showed different means, which allowed for categorization into “Capable,” “Marginally Capable,” and “Incapable.”</td>
<td>Unclear—it is administered but article does not state by whom.</td>
<td>23 normal controls and 60 patients diagnosed with Alzheimer’s (30 mild severity, 30 moderate severity). No age cut-off but average age was 70.3 for control and 73.8 for those with Alzheimer’s. They all were living in the community.</td>
<td>Patients with dementia (both mild and moderate).</td>
<td>- Internal consistency for each domain ranged from .85 to .93. - Inter-rater reliability for each domain ranged from .86 to .997. - Test-rest reliability for each domain ranged from .85 to .98, and readministration occurred an average of 22.7 days later.</td>
<td>- Concurrent validity was not described. - Content validity was not described, but the authors conceptualized financial capacity as a series of domains to be consistent with legal doctrine adopted by most states’ legal jurisdictions. - Construct validity was not described.</td>
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<td>The Financial Capacity Instrument-Short Form (FCI-SF)</td>
<td>Gerstenecker et al., 2015 (validation), but cites Marson et al. (in review—not yet published) as source of measure</td>
<td>37 items in domains of: - Coin/currency knowledge - Financial conceptual knowledge and problem solving - Understanding &amp; using a checkbook - Understanding &amp; using a bank statement Plus 4 tasks: - Medical deductible task - Simple income tax task - 2 Checkbook/register tasks</td>
<td>Less than 15 min</td>
<td>Items summed to five component scores. - Mental calculation - Financial conceptual knowledge - Single Checkbook/Register Task - Complex Checkbook/Register Task - Using Bank Statements Norms for time to complete each task. Total score ranges from 0 to 74.</td>
<td>Trained psycho-metrists</td>
<td>Tested on 1,344 cognitively normal community dwelling older adults age 70–96.</td>
<td>Any older adult, though designed to detect functional impairment in earlier phases of AD</td>
<td>- Internal consistency was .90. - Inter-rater reliability was .96. - Test-rest reliability was not described.</td>
<td>- Concurrent validity was .91, as measured by correlation with the FCI. - Content validity was not described. - Construct validity was not described. However, the measure did robustly discriminate control, MCI, and AD group performance and differentiated amyloid positive older adults from amyloid negative older adults.</td>
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<td>The Financial Competence Assessment Inventory (FCAI)</td>
<td>Kershaw &amp; Webber, 2008</td>
<td>41 items (questions and tasks) in 6 different subscales: - Everyday financial abilities  - Financial judgment  - Estate management  - Cognitive functioning related to financial tasks  - Debt management  - Support resources</td>
<td>Not stated.</td>
<td>The authors indicated using a standard administration procedure and objective scoring.</td>
<td>PhD level researchers.</td>
<td>- 178 adults (84 men, 94 women), mean age 52.68 with a cognitive impairment (ABI—Acquired Brain Injury, schizophrenia, dementia, intellectual disability)  - 59 adults (23 men, 36 women), mean age 52.49 without a cognitive impairment, in comparison group.</td>
<td>Adults with any cognitive impairment.</td>
<td>- Internal consistency was .96 for the entire measure.  Five of six subscales had high internal consistency (everyday financial abilities—.89, financial judgment—.86, estate management—.84, cognitive functioning related to financial tasks—.91 and debt management—.84) and one subscale had low internal consistency (support resources—.54). Split-half reliability was .97.  - Inter-rater reliability was .86</td>
<td>- Concurrent validity was not reported.  - Content validity was not reported.  - Construct validity was 76, as measured by correlations between the FCAI total score and MMSE scores.</td>
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<td>Hopemont Capacity Assessment Interview (HCAI) Financial section</td>
<td>Edelstein, 1999</td>
<td>30 Items. Three scenarios describing decision-making situations serve as stimuli for questions. The interviewee is asked questions about the context of the scenarios, then asked to make a decision and then explain the decision-making process.</td>
<td>45 min</td>
<td>Used a criterion-referenced approach. Compare answers against definitions of adequate performance, using a 3-point system, with answers considered 2 (adequate), 1 (some elements of an adequate answer but insufficient to demonstrate the knowledge or skills addressed by the question), or 0 (inadequate).</td>
<td>Unclear, but all original administrators appear to be trained clinical psychologist</td>
<td>93 nursing home residents.</td>
<td>Older adults with a cognitive impairment. Scenarios at a sixth grade reading level.</td>
<td>-Test-rest reliability was .93 for the entire measure, with subscales ranging from .57 to .98 (everyday financial abilities—.97, financial judgment—.95, estate management—.93, cognitive functioning related to financial tasks—.68, debt management—.57, support services—.93). Readministration occurred an average of 7.1 weeks later.</td>
<td>-Concurrent validity was not described.</td>
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<td>Content validity was considered by making scenario content consistent with what nursing and social work staff typically questions nursing home staff, as well as Appelbaum and Grisso's legal standards for assessing competency. The authors also attempted to create multiple scenarios with multiple possible outcomes to assess capacity in financial situations. Construct validity was .60, calculated with MMSE correlation.</td>
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<td>Lichtenberg Financial Decision Rating Scale (LFDRS)</td>
<td>Lichtenberg et al., 2015; Ficker, &amp; Rahman-Filipiak, 2016</td>
<td>61 items in four domains</td>
<td>Depending on the answers to certain items, it is possible to be asked up to 17 additional questions. Domains are: -Financial Situational Awareness (18 questions), -Psychological Vulnerability (12 questions), -Current Financial Transaction (20 questions), -Undue influence and financial exploitation (11 items)</td>
<td>15–40 min. Majority completed in 23–28 min</td>
<td>Score leads to rating of decisional abilities in each domain rated on a 3-point scale: 0 = lacks decisional abilities; 1 = has marginal decisional abilities; 2 = has full decisional abilities</td>
<td>Expert examiners; the first author administered all of the assessments.</td>
<td>Five adults aged 60 years and older who had completed a major financial transaction or decision within the previous 2 months, or who were contemplating making a transaction/decision in the next 2 months.</td>
<td>Adults age 60 and over who recently made or are considering a major financial decision.</td>
<td>Internal consistency was not reported. -Inter-rater reliability ranged from .80 to 1.00. -Test-rest reliability was not reported -Concurrent validity was measured by calculating correlation between the LFDRS and age, education, MMSE scores, and the ILS Managing Money subscale. The decisional ability subscale was significantly correlated with education (0.235), MMSE score (0.327) and the ILS (0.254). The current decisional ability risk total was significantly correlated with the MMSE (0.226) and the ILS (0.204).</td>
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-Content validity was established through creation of a conceptual model, meetings of experts from various disciplines to critique the model, provide input on content and structure, and select final items.

-Construct validity was measured by comparing LDFSS risk scores for individuals for whom had substantiated financial exploitation to those without APS substantiation; these groups differed significantly in LFDSS risk scores.
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<tr>
<td>The Lichtenberg Financial Decision Screening Scale (LFDSS)</td>
<td>Lichtenberg et al., 2016</td>
<td>10 items in two domains— Intellectual Factors and Susceptibility to Undue Influence</td>
<td>Not stated.</td>
<td>The administering professional assigns an overall decision-making score that ranged from 0 (major concerns) to 2 (no concerns). An overall risk score is assigned using 5 of the 10 items.</td>
<td>APS and other professionals were trained to use the measure. 29 adults age 60 and over seen by Adult Protective Services workers and 79 seen by other professionals (e.g., elder law attorneys, financial planners, physicians) all of whom were making (or had made in the previous 6 months), a significant financial decision.</td>
<td>Any older adult</td>
<td>- Internal consistency was not reported. - Inter-rater reliability was not reported. - Test-rest reliability was not reported.</td>
<td>- Concurrent validity was measured by comparing scores to both the Mini-Mental Status Exam (MMSE) (.26) and the money management subscale of the ILS (−.20). - Content validity was not reported. However, the measure was modeled after the LFDS, which did report some content validity.</td>
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<td>Construct validity was measured by comparison to APS substantiation. Clients in whom financial exploitation was substantiated by APS had significantly higher LDS risk scores than those for whom there was no APS substantiation. Cases in which non-APS professionals raised concerns about decision-making abilities were compared to cases with no concerns, and scores also differed significantly.</td>
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<td>Measure for assessing Awareness of Financial Skills (MAFS)</td>
<td>Cramer et al., 2004</td>
<td>Contains three separate questionnaires, for participants, informants. -In the participant questionnaire, 34 items on financial management, asking about difficulty carrying out specific financial tasks and amount of help they receive to complete them, and 2 items on general capability -In the informant questionnaire, same 34 items as the participant questionnaire except asked to rate their perceptions of the participants' abilities -In the performance measure, six performance items on six functional tasks (e.g., checkbook balancing)</td>
<td>Participant section took about 90 min and informant session about 20 min</td>
<td>Scoring includes: (1) A participant total score (2) An informant total score (calculated by adding together the 34 items, with possible range of 0–102) (3) A performance total score. To examine reporting accuracy, calculate a participant performance prediction score, an informant performance prediction scores (based on dichotomizing certain items from each scale) and an unawareness scores (informant total score minus participant total score)</td>
<td>-Two questionnaires are self-report. The performance measure is scored based on observation.</td>
<td>10 adults with dementia and 25 older adults without cognitive impairment, all age 66–89</td>
<td>Any adult.</td>
<td>-Internal consistency was 0.92 for the participant questionnaire and 0.97 for the informant questionnaire. -Inter-rater reliability was not reported. -Test-rest reliability was not reported.</td>
<td>-Concurrent validity was measured by comparing unawareness scores with physicians' ratings of their financial awareness. Unawareness scores were not significantly correlated with physicians' ratings (-0.051). -Content validity was measured by expert judge ratings. Expert judges were asked to match each item from the MAFS to the objective that it represents.</td>
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<tr>
<td>Name of measure</td>
<td>Authors, year</td>
<td>Items and domains</td>
<td>Time to administer</td>
<td>Scoring</td>
<td>Who administered measure</td>
<td>Setting and population in which tested</td>
<td>Intended recipients</td>
<td>Reliability measures</td>
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<td>Property and Finance Capacity Assessment (PFCA)</td>
<td>Darzins, Molloy &amp; Strange, 2000</td>
<td>Total number of items N/A. Domains of -Knowledge of assets, debts, income and expenses -Obligations to family -Understanding of one’s choices -Appreciation of consequences</td>
<td>Information N/A Information N/A</td>
<td>Information N/A Information N/A</td>
<td>Information N/A Information N/A</td>
<td>Older adults with dementia</td>
<td>-Internal consistency information was not validity available. -Interrater reliability not available. -Information was not Content validity information available. -Test-retest reliability information was not available. -Construct validity information was not available.</td>
<td>All of the judges reported that 18 of the 19 objectives (95%) were included in the item content. Construct validity was examined by comparing unawareness scores to the social desirability and NEO-N subscale. Level of awareness was not significantly correlated with social desirability (-0.045) nor the tendency to experience native emotions (0.307)</td>
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<tr>
<td>Name of measure</td>
<td>Authors, year</td>
<td>Items and domains</td>
<td>Time to administer</td>
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<td>Semi-Structured Clinical Interview for Financial Capacity (SCIFC)</td>
<td>Marson, et al., 2009</td>
<td>Eight core items in eight domains: - Basic monetary skills - Financial conceptual knowledge - Cash transactions - Checkbook management - Bank statement management - Financial judgment - Bill payment - Knowledge of personal assets and estate (experimental domain that requires obtaining corroborating information)</td>
<td>Not stated.</td>
<td>General scoring criteria Physicians (geriatricians, and neurologists)</td>
<td>Physicians (geriatricians, and neurologists)</td>
<td>Healthy older adults with a cognitive impairment (N = 75), patients with amnestic Mild Cognitive Impairment (N = 58), mild Alzheimer's Disease (N = 97) and moderate Alzheimer's Disease (N = 31), all at a tertiary medical center</td>
<td>Older adults with a cognitive impairment were not reported.</td>
<td>- Internal consistency was not reported. - Inter-rater reliability was &gt; .80 for all domains and in overall capacity agreement was .78. - Test-retest reliability was not reported. However, there was a higher proportion of marginal and incapable scores among those with higher AD severity.</td>
<td>- Concurrent validity was not reported. - Content validity was not reported. - Construct validity was not reported.</td>
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</table>
older adults with dementia. It focuses not only on specific skills, but also on knowledge, and general financial judgment. It includes specific tasks to measure financial performance. Domains on the measure were selected to be relevant to psychologists working with those at risk for financial capacity, as well as to be relevant to the legal standards common across most states for financial capacity. Each domain and task was reviewed by a range of professionals, including doctors, gerontologists, a lawyer, and a judge. The FCI classifies the patient as capable, marginally capable, or incapable, with specific cut-off points for each established compared to normative samples.

The FCI also has high internal consistency, good inter-rater reliability, and some evidence of construct validity. It is one of the few measures to examine test-retest reliability, which was strong.

Weaknesses
The FCI is among the longest measure to complete, taking 40–50 min in patients with dementia.

**The Financial Capacity Instrument-Short Form (Gerstenecker et al., 2015; Marson et al., 2014)**

**Specific Uses**
This measure was derived from the FCI, and was similarly developed for assessing financial capacity in older adults, with a focus on those with Alzheimer’s Disease. However, unlike most short forms of measures, the FCI-SF was not designed to replicate the longer measure, but to detect impairment in earlier phases of AD than the original measure. The FCI-SF used FCI-LF items most strongly associated with progression to AD over 1 year in a sample of patients with amnesiac MCI because of AD. It measures financial knowledge, understanding of checkbooks and banks statements, and includes specific financial tasks.

**Strengths**
The measure is brief (with 37 items across 12 different performance and timing variables items), and among the fastest to complete (at about 15 min). Its intended audience is also among the broadest: it was developed for any older adult. Moreover, though the FCAI does not provide cut-off scores and is intended as a guide, norm scaled scored are provided for specific conditions: dementia, schizophrenia, acquired brain injury, and intellectual disability. It has high overall internal consistency as measured both by both Cronbach’s alpha coefficient and Guttmann odd/even split half reliability coefficient, good inter-rater reliability, and preliminary evidence for concurrent validity other measures of financial competence. It is one of the few measures to test-retest reliability, and also found it to be high, which gives evidence of stability of scores over time. It was tested on adults with many different types of cognitive impairment. A follow-up study found that mean financial capacity performance scores were significantly lower in patients with dementia than normal controls, and that performance on the FCAI was also predicted by several other scales (such as the MMSE) (Pachana et al., 2014). It has been used in more empirical studies than most of the other measures (Pachana et al., 2014; Sousa et al., 2014).

**Weaknesses**
Although overall internal consistency was high, one subscale (on support resources) had an internal consistency of 0.54. A follow-up study found that removing the debt management subscale increased the internal consistency of the measure (Pachana et al., 2014). The debt management and support resources subscales may require refinement. The time to administer is unclear. The level of expertise required to administer the measure is also unclear. The instrument was developed in Australia, and has been primarily tested there. The measure’s applicability to populations outside of Australia requires further study.
Hopemont Capacity Assessment Interview (HCAI) (Edelstein et al., 1993; Edelstein 1999)

Specific Uses

The HCAI has two sections, one focused on capacity to make medical decisions, one on capacity to make financial decisions. The focus here is on financial decisions section. In the HCAI interview, the participant is first presented with the concepts of choice, cost, and benefit, and reviews these concepts with the interviewers. The participant is then presented with three financial scenarios. In the first, there is a limited amount of money and only they or their friend can use it to purchase something. In the second, the participant wants to make a purchase and is offered that item or offered twice the money. In the third scenario, a friend has a limited amount of money and is trying to choose how to spend it. The participant is asked questions about what they heard in each scenario and asked to explain the costs and benefits, to make a choice, and to explain the reasons for their choice. The HCAI was developed to follow the legal standards described by Appelbaum and Grisso (1988); questions are intended to assess understanding, appreciation of the significance, rational consideration, and ability to express a choice.

Strengths

The measure was designed to be easy to understand, and items are written at a sixth-grade reading level. The measure was designed to be accessible for cognitively impaired older adults, including those in nursing homes.

Weaknesses

As the HCAI scenarios are standardized, they do not take environmental or situational factors into account. Additional work is needed to determine if the measure predicts capacity to measure finances through other assessment methods, or in population samples.

The Lichtenberg Financial Decision Rating Scale (LFDRS) (Lichtenberg, Ficker, & Rahman-Filipiak, 2016; Lichtenberg et al., 2015)

Specific Uses

It was developed for assessing financial capacity in older adults living in the community, and focuses on older adult’s capacity to make financial decisions free from undue influence and financial exploitation. It includes items on financial situational awareness, psychological vulnerability, current financial transactions, and undue influence/financial exploitation.

Strengths

This measure was designed for a broad audience: any older adult considering making a major financial decision. It attempts to focus on the needs of the individual respondent, rather than using hypothetical questions. It attempts to use a person-centered approach. It focuses on decisional abilities framework described by Appelbaum and Grisso (1988). It is particularly relevant to forensic settings. It is the only measure to include a domain on financial exploitation experiences. The measure was recently evaluated in older African Americans and found to perform well in identifying self-reported cases of financial exploitation (Lichtenberg, Ficker, & Rahman-Filipiak, 2016). It was found to have high inter-rater reliability, and preliminary evidence of concurrent validity.

Weaknesses

This measure is among the longest of the identified measures, with 61 items (plus an optional additional 17 items). The initial measure validation occurred on a sample of only five individuals and the second validation was only in older African Americans, neither of which are sufficient for establishing applicability to larger populations.

The Lichtenberg Financial Decision Screening Scale (LFDSS) (Lichtenberg et al., 2016)

Specific Uses

An abbreviated version of the LFDRS, developed for use in assessing financial capacity in community-based settings.

Strengths

Like the LFDRS, it has a broad audience, and is applicable to any older adult considering making a major financial decision. Also like the LFDRS, it uses a patient-centered approach, and also focuses on decisional abilities framework described by Appelbaum and Grisso (Appelbaum & Grisso, 1988; Lichtenberg et al., 2016). It has the fewest items of any of the measures (only 10). It has preliminary evidence for concurrent validity with clinician categorizations of older adult clients’ capacity levels.

Weaknesses

It has only been tested on a small sample to date; applicability to larger populations is unknown. Further attention to reliability and validity is needed.

The Measure for assessing Awareness of Financial Skills (MAFS) (Cramer et al., 2004)

Specific Uses

This measure was developed for older adults with dementia. It includes item on financial management, ability to carry out specific tasks, and amount of help received. The measure has separate participant and informant sections.

Strengths

This is the only measure which includes an informant interview as a standard part of the assessment. It has high internal consistency, with evidence of content
validity, concurrent validity, and construct validity. The self-report nature of the measure increases its ease of administration.

**Weaknesses**
The original test sample is small, and its applicability to larger populations should also be examined. The participant section is among the longest of all of the measures (90 min). The participant self-report may not be valid in all recipients, particularly those with higher levels of impairment, and informant self-reports may also be biased. Validity was only examined in relation to the unawareness scores, not for participant and informant scores separately. Administration is dependent on having an available family member or friend who can complete the informant items. Many individuals do not have anyone in that role, which would limit use of this measure with them.

**The Property and Finance Capacity Assessment (PFCA)** (Darzins et al., 2000)

**Specific Uses**
It measures financial knowledge, obligation to family, understanding of choices, and appreciation of the consequences of choices.

**Strengths**
It appears to be the only measure to examine obligations to family and appreciation of consequences of behaviors.

**Weaknesses**
Details on the scoring, intended recipients, the level of expertise required to administer the measure, and psychometric properties of this measure could not be obtained by the authors.

**The Semi-Structured Clinical Interview for Financial Capacity (SCIFC)** (Marson et al., 2009)

**Specific Uses**
The SCIFC measures financial skills, knowledge, and judgment. It was developed for a range of levels of cognitive impairment in older adults.

**Strengths**
It includes specific tasks to measure financial performance. It has high inter-rater reliability, and high construct validity.

**Weaknesses**
It appears to require a high level of expertise (skilled clinician or physician) to administer. It requires further validity and reliability testing, and its applicability to larger populations could also be examined, as all participants were from a single tertiary medical center.

**Discussion**
Our review of existing measures of financial capacity showed great variability in terms domains of financial capacity covered. As noted in Marson’s review (Marson, 2016), financial capacity is conceptualized in many ways, and the measures reflected this. Domains ranged from concrete financial skills (e.g., managing cash transactions, checkbook balancing), to broader psychological vulnerabilities (e.g., general financial judgment) to specific knowledge of finances (e.g., financial conceptual knowledge, knowledge of assets). As a result, a person could potentially show low financial capacity on one measure and high financial capacity on others. When determining which measure to utilize, consideration of which concepts are most important to measure in each particular case, and the audience of focus, is essential. The MAPS, the FCI, and the FCAI are the most well-validated measures and the LFDRS and FCIFC-SF are the briefest, but each instrument is applicable in different contexts.

Specific characteristics of the intended recipient of the assessment may be useful in selecting the appropriate measure. For assessing cognitive capacity specifically in older adults with mild to severe dementia, the widest range of measures is available. The FCI appears to be among both the most thoroughly validated of the group. For assessing financial capacity in those with a range of psychiatric disorders, the FACT appears to be the only measure validated specifically in this population. And for assessing financial capacity in the community, both the LFDRS and the FCI-SF appear to be applicable. The FCI-SF is the briefest of the two and may not provide as much detail. Most measures (the FCI, the FCAI, the PFCA, the HCAI, and the SCIFC) were developed for older adults with some level of cognitive impairment, primarily those with mild to moderate dementia/Alzheimer’s disease. One measure, the FACT, was developed for anyone with a psychiatric condition, however. The FCI-SF, the LFDRS, and the LFDDSS seemed to have the broadest audience, with the FCI-SF developed for any older adult, and the LFDRS and LFDDSS for any older adult considering making a major financial decision. In selecting measures, the assessors should consider the population, the circumstances, and the end purpose of the assessment.

The measures were tested primarily in community-dwellers with a few exceptions such as a tertiary medical center, a geriatric psychiatry ward and nursing homes. All measures focused on adults 60 years and older. Most measures also utilized a comparison of normal/healthy older adults with no identified cognitive impairment, primarily those with mild to moderate dementia/Alzheimer’s disease. One measure, the FCI-SF, the LFDR S, and the LFDDSS seemed to have the broadest audience, with the FCI-SF developed for any older adult, and the LFDRS and LFDDSS for any older adult considering making a major financial decision. In selecting measures, the assessors should consider the population, the circumstances, and the end purpose of the assessment.
dementia spectrum (Sherod et al., 2009), and the measure was also recently used to identify cognitive predictors of declining financial capacity in persons with mild cognitive impairment (MCI); those with MCI showed significant decline on the FCI as well as on most cognitive variables, whereas normal controls showed relatively stable performance on the measure (Nicolai et al., 2016).

Most measures were found to have preliminary evidence for reliability and validity; this information was not available for all measures. Internal consistency reliability, for all measures that provided it (the FACT, the FCI, the FCI-SF, the FCAI, and the MAFS, was good (0.80 and above). However, some subscales demonstrated less reliability when compared to the total scale. For instance, on the FCAI, a subscale on support resources had internal consistency of 0.54.

Most measures (the FACT, the FCI, the FCI-SF, the FCAI, the HCAI, the LFDRS, and the SCIFC) provided inter-rater agreement scores. These were commonly established by experts rating subject responses using the specific measures while listening to recorded participant interviews. High inter-rater agreement (≥0.80) was found in all cases. Three measures (the FCAI, the FCI, and the HCAI) examined test-retest reliability. The average interval between first and second administration for the FCI was 22.7 days (about 3 weeks) and the average interval for the FCAI was 7.1 weeks; the HCAI was retested over 2 weeks.

Most measures considered some aspect of content validity in their creation, either through consideration of the existing literature, clinical expertise, or expert interdisciplinary focus groups. Many (the FACT, the FCI-SF, the MAFS, the LFDRS, and the LFDSS) also measured concurrent validity with other measures of capacity, such as the ILS, classification by experts, or, in the case of the FCI-SF, the longer version of the instrument. All found concurrent validity of 0.85 and above. Several measures (the FCI, the FCAI, the SCIFC) showed that the measure distinguished across different levels of cognitive impairment.

Yet though many researchers and clinicians have put a great deal of thought and effort into developing measures of financial capacity, much work remains to be done. Greater examination of the psychometric properties of measures should also be conducted. Although all measures considered internal consistency, only a few measures considered test-retest reliability and concurrent validity. Moreover, assessment of capacity often relies on expert ratings, making it difficult to have clear construct validity or a clear “gold standard,” for what limited capacity entails.

Measures should also be more widely tested in more settings, and populations, and by a range of administrators. Financial experience and skills can vary widely among cognitively normal individuals and are associated with education and socioeconomic status. Financial capacity can also be very sensitive to a range of medical conditions that affect cognitive and behavioral functioning, such as Alzheimer’s disease, Parkinson’s disease, severe psychiatric disorders like schizophrenia and bipolar disorder, substance abuse disorders, developmental disorders and even acute conditions that may alter an older adult’s mental status albeit temporarily (National Academies of Sciences, Engineering, and Medicine, 2016; Marson, 2016). However, most measures have focused on financial capacity occurring in the context of Alzheimer’s disease and related disorders.

Conclusion

Overall, measuring financial capacity is quite complex and multidimensional. Different measures may be used with different populations and to capture varying aspects of
financial capacity. Further work to identify whether measures are culturally sensitive, acceptable to recipients and providers, and can be feasibly implemented in routine practice can only enhance the ability to detect those suffering from impaired financial capacity, and prevent related negative outcomes like financial exploitation.

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**Conflict of Interest**

There are no conflicts of interest to disclose.

**References**


