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**To cite this article:** Peter A. Lichtenberg PhD, ABPP, Lisa Ficker PhD, Analise Rahman-Filipiak MA, Ron Tatro BA, Cynthia Farrell MSW, James J. Speir MSW, Sanford J. Mall JD, Patrick Simasko JD, Howard H. Collens JD & John Daniel Jackman Jr., MD (2016) The Lichtenberg Financial Decision Screening Scale (LFDSS): A new tool for assessing financial decision making and preventing financial exploitation, *Journal of Elder Abuse & Neglect*, 28:3, 134-151, DOI: [10.1080/08946566.2016.1168333](https://doi.org/10.1080/08946566.2016.1168333)

**To link to this article:** <http://dx.doi.org/10.1080/08946566.2016.1168333>



Accepted author version posted online: 24 Mar 2016.  
Published online: 24 Mar 2016.



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## The Lichtenberg Financial Decision Screening Scale (LFDSS): A new tool for assessing financial decision making and preventing financial exploitation

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### ABSTRACT

One of the challenges in preventing the financial exploitation of older adults is that neither criminal justice nor noncriminal justice professionals are equipped to detect capacity deficits. Because decision-making capacity is a cornerstone assessment in cases of financial exploitation, effective instruments for measuring this capacity are essential. We introduce a new screening scale for financial decision making that can be administered to older adults. To explore the scale's implementation and assess construct validity, we conducted a pilot study of 29 older adults seen by APS (Adult Protective Services) workers and 79 seen by other professionals. Case examples are included.

### KEYWORDS

Financial decision making;  
financial exploitation;  
financial judgment;  
protective services

An 82-year-old man with undiagnosed vascular dementia gets caught up in the “grandparent scam,” in which someone purporting to be a grandchild asks for money to get themselves out of legal trouble overseas, and over the course of 1 week he wires money from his bank account five times and loses \$100,000. An 84-year-old man with mild to moderate Alzheimer's disease can no longer manage his money or even shop at the local grocery store, but when taken to a bank he signs a notarized reverse mortgage and loses \$240,000 to his handyman—who, unbeknownst to the man's family, has secretly befriended him over the previous 6 months. And a 79-year-old man with undiagnosed dementia loses more than \$2 million over a 14-month-period to his late wife's former caregiver. In this case, Adult Protective Services (APS) visited him four times and took his word each time that he knew what he was doing—without taking any steps to

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assess his capacity for financial decision making. As these types of cases become increasingly common, the criminal justice system and financial services industry attempt to better detect financial incapacity and exploitation.

Did these older individuals understand their decisions and appreciate their impact? It appears that they did not. But more importantly, how would a banker or APS worker in the above scenarios know without having any way to assess the older adult's capacity? Until now, no assessment measures capable of being administered in the field by APS and other professionals have been available.

To address this critical gap, we have created a screening scale designed to assess decisional ability at the point at which an older adult is making a significant financial decision. This brief screen can be used by financial professionals and others (e.g., an APS worker called to investigate potential exploitation or a banker being asked to transfer large amounts of cash overseas). We will introduce the conceptual bases for our scale and provide empirical evidence for the scale's criterion-related and construct validity.

Before introducing our 10-item scale, however, it is important to place it within the context of current measurement approaches to financial exploitation and to describe the full-length, 77-item Lichtenberg Financial Decision Rating Scale (Lichtenberg, Stoltman, Ficker, Iris, & Mast, 2015) from which the screening questions were derived. In addition, we provide an overview of the cognitive factors, and particularly cognitive decline, associated with financial decision making.

The approach we use is novel in the field of financial exploitation, in that we examine the phenomenon by focusing on the older adult's decision-making process as it applies to a single financial decision the individual is considering (as opposed to a hypothetical scenario, which has traditionally been used to assess financial competency). It is not, however, without precedent. Dong (2014) argues that accurate assessment of financial capacity—and financial decision-making capacity in particular—is the cornerstone assessment in many cases of financial exploitation. We acknowledge that this focus on decisional capacity does not cover all forms of exploitation (e.g., identity or other theft), but in many cases of financial exploitation, examination of an older adult's financial decision-making process presents a unique opportunity for intervention and, ideally, prevention.

The dramatically increasing number of older adults in America underscores the fact that the cognitively impaired population will close to triple over the next 35 years (Hebert, Scherr, Bienias, Bennett, & Evans, 2003). The collision between an increasingly older population with high prevalence of cognitive impairment (Plassman et al., 2008) and frailty (Bandein-Roche et al., 2015) and those seeking to exploit them financially is rapidly increasing (Lichtenberg, Sugarman, Paulson, Ficker, & Rahman-Filipiak, *in press*). Pillemer, Connolly, Breckman, Spreng, and Lachs (2015) summarize data

that indicate that the presence of dementia or cognitive impairment is associated with increased prevalence of elder abuse, and Stiegel (2012) has found that financial capacity and financial exploitation are connected. Specifically, older adults' vulnerability is twofold: (a) the potential loss of financial skills and financial judgment, and (b) the inability to detect, and therefore prevent, financial exploitation. Money lost by older adults due to financial exploitation is rarely recovered, and if large amounts of money are involved, the older adult has few means to recover from the loss. Preventing financial exploitation, therefore, is a critical need.

## Literature Review

### *Financial exploitation and the measurement of decision-making capacity*

The most comprehensive measure to date for assessing financial exploitation is a self-report instrument, the Older Adult Financial Exploitation Measure (OAFEM; Conrad et al., 2011; Conrad, Iris, Ridings, Langley, & Wilber, 2010). Carefully constructed and later validated against cases substantiated by APS workers, Conrad and colleagues (2010, 2011) define the financial exploitation of older adults as the illegal or improper use of an older adult's funds or property for another person's profit or advantage. They propose six domains of financial exploitation: (a) theft and scams, (b) abuse of trust, (c) financial entitlement, (d) coercion, (e) signs of possible financial abuse, and (f) difficulty managing money.

The OAFEM is a yes/no questionnaire designed to assess whether the older adult has been victimized by any of the forms of financial exploitation named above. For example, question #47 asks whether the older adult has been the victim of a scam that involved giving to a bogus charity. These and other questions are excellent for identifying the areas to investigate, and with a nondefensive and reflective older adult, the answers are likely to be valuable for substantiating past or ongoing abuse. Because the scale is designed to measure how much exploitation has taken place in the past, however, it does not assess current performance-based financial judgment or decision-making capacity, such as understanding the consequences of a pending financial decision. As a result, older adults who are not aware that they are being victimized, due to emotional manipulation and/or cognitive impairment, may not give an accurate self-report.

These deficits in financial decision-making abilities are often the hidden element in financial exploitation cases. Other researchers have measured aspects of elders' financial decision-making ability through assessment of financial literacy and hypothetical scenarios (Boyle et al., 2012; James, Boyle, Bennett, & Bennett, 2012). Financial literacy is interpreted as the ability to perform simple calculations (e.g., add up purchases and interest

rates), and knowledge of financial concepts such as stocks, bonds, and compound interest, which the authors acknowledge may not apply to seniors with limited education (Boyle et al., 2012). Hypothetical financial situations are designed to simulate (a) the resources and documents used in real-world financial settings (e.g., checkbook management) and (b) making an investment decision based on a scenario (James et al., 2012; Marson et al., 2000). The above tools are useful when conducting a comprehensive assessment but would not be practical when the older adult is weighing an actual financial decision. In contrast, the brief screen we propose combines evaluation for potential financial exploitation and assessment of decisional abilities, and it is intended for use in the context of a significant real-life financial decision.

Marson (2001) conceives of financial capacity as relating to three things: (a) specific financial abilities, (b) broad domains of financial activity, and (c) overall financial capacity. In his 2001 study, for example, financial capacity was strongly linked to stages of Alzheimer's disease. In subsequent studies, Marson and colleagues have employed the eight-domain Financial Capacity Instrument (FCI; see Martin et al., 2008 as an example), including assessments of basic monetary skills, financial knowledge, cash transactions, checkbook management, bank-statement management, financial judgment, bill payment, and knowledge of personal assets and estate arrangements.

One significant weakness of the FCI is that it uses neutral or hypothetical stimuli (e.g., "How could you be sure the price of a car is fair?"). Yet valid and reliable tools are essential if we are to adequately assess financial decision-making abilities specific to the individual at risk, especially regarding sentinel financial transactions, which are defined as transactions that may result in significant losses or harmful consequences.

### ***Cognitive decline and financial decision making***

Several recent studies have investigated financial decision making in couples in which one person shows cognitive decline. Study findings demonstrate the value of an assessment tool that offers protection where needed, but also supports autonomy whenever possible. Over a 10-year period, Hsu and Willis (2013) examined financial management in couples in which one party had cognitive deficits, and found that cognitive impairment, rather than cognitive change, was related to greater financial difficulties. Indeed, difficulties with money often preceded the turning over of financial control from the cognitively impaired spouse to the unimpaired spouse, which was usually related to pending decisions about self-directed financial investments. Even so, 33% of financial respondents in the study continued to be the primary financial decision maker, despite having cognitive scores in the dementia range. These data underscore the heterogeneity in how couples cope when the primary financial decision maker becomes cognitively impaired, and demonstrate that

is not unusual for older adults with cognitive impairment to be placed in a decision-making role, even when other options are available.

Boyle and colleagues (2012) examined how cognitive abilities before dementia onset predicted financial decision making 5 years later, and found (using hypothetical mutual fund options) that more rapid cognitive decline led to poorer decision-making abilities, even in participants with mild cognitive impairment. These results are consistent with Marson et al.'s (2009) research on financial capacity. Marson (2001) (also see Marson et al., 2009) argues that the impact of age-related dementia (e.g., Alzheimer's disease) on financial capacity is one of the biggest challenges to financial autonomy.

Although cognitive functioning is an important predictor of decisional capacity, other factors may also influence these abilities. Boyle (2013) points out that financial decision-making capacity differs from executional capacity (e.g., the ability to manipulate money, pay bills, and understand and maintain an accurate checkbook). In nearly 25% of the couples studied, the person with dementia retained decisional capacity, even in the absence of executional capacity. Boyle's findings of individual differences underscore the inherent ethical tensions. First and foremost, one must always be aware of the fundamental tension between autonomy (self-determination) and protection (beneficence; Moberg & Kniele, 2006; Moye & Marson, 2007). It can be tempting to use generalized findings—such as the fact that older adults are at risk for financial scams and theft—and apply them to an individual case, no matter the circumstances, to protect the older adult. This would be a mistake, because autonomy remains a strong need across the adult lifespan, and mental health professions have a duty to protect it whenever possible.

### ***Conceptual underpinnings for a new screening instrument***

The development of our instrument was guided by two conceptual frameworks: (a) person-centeredness and (b) decisional abilities. These frameworks affirm the importance of assessing the older adult's understanding of the actual financial decision in question, with the requirement that the older adult communicate four important elements of his or her decision: choice, understanding, appreciation, and reasoning.

### ***A person-centered approach to financial decision making***

In working with older adults who suffer from neurocognitive disorders, the person-centered approach seeks to support autonomy by building on the individual's strengths and honoring his or her values, choices, and preferences (Fazio, 2013). Some of the underlying assumptions (Mast, 2011) are that (a) people are more than the sum of their cognitive abilities, (b) traditional approaches overemphasize deficits and underemphasize strengths, and

(3) it is important to understand the person's subjective experience, particularly in relation to his or her positive and negative reactions to others' behavior. Whitlatch (2013), who emphasizes the importance of persons with neurocognitive impairment continuing to have choice, found that even people scoring well into the impaired range on the Mini Mental State Examination (MMSE) can provide valid and reliable responses. Mast (2011) describes a new approach to assessment of persons with neurocognitive impairment, the Whole Person Dementia Assessment, which seeks to integrate person-centered principles with standardized assessment techniques.

### **Decisional abilities framework**

Our second conceptual approach is based on Appelbaum and Grisso's (1988) decisional abilities framework. In 1988, Appelbaum and Grisso examined the legal standards used by states to determine incapacity and identified the abilities or intellectual factors necessary to make informed decisions: choice, understanding, appreciation, and reasoning. These have since been reiterated as fundamental aspects of decisional abilities (American Bar Association [ABA] Commission on Law and Aging & American Psychological Association [APA], 2008). Indeed, the ABA/APA's *Assessing Diminished Capacity in Older Adults: A Handbook for Attorneys* (2008) urges attorneys to assess the older adult's underlying decision-making abilities, whenever diminished financial judgment is suspected.

According to the decisional abilities framework, an older adult must be able to communicate choice, understanding, appreciation, and reasoning around the choice. An individual must be able to communicate his or her choice and understand the nature of the proposed decision and its risks and benefits. Appreciation is the ability to grasp the situation and its potential consequences—which may affect not only the older adult, but family members and others as well. Appelbaum and Grisso (1988) contend that the most common causes of impaired appreciation are lack of awareness of deficits and/or delusions or distortions. Reasoning includes the ability to compare options—for instance, treatment alternatives in medical decision making—and provide a rationale for the decision or explain the communicated choice.

We aimed to build on the conceptual model of decision-making abilities described by Appelbaum and Grisso (1988) and incorporate the Whole Person Dementia Assessment approach by using both person-centered principles and standardized assessment methods. Person-centered principles allow for the fact that even in the context of dementia or other mental or functional impairments, the individual may still possess important areas of reserve or strength, such as financial judgment. The value of standardization is that it allows a domain to be assessed across time and across practitioners, with the assurance that the same areas will be evaluated.

However, only when an assessment is rooted in a specific sentinel financial transaction or decision can a third party render an opinion on the presence or absence of financial exploitation, since financial decision-making capacity in high-risk older adults is rarely completely present or completely absent (Dong, 2014). Our 10-item screening scale, which is designed to assess capacity to make a real-life financial decision or transaction—rather than one in a hypothetical vignette—is an outgrowth of our work on a longer, more comprehensive financial decision-making scale (see below).

### ***Development of the Financial Decision-Making Rating Scale***

The comprehensive scale will be described briefly and tied to our creation of the shorter screening scale. Until now, medical and mental health professionals have not had a scale that assesses financial judgment by evaluating both the context in which a decision is being made and the person's underlying decision-making abilities. To close this gap, we created the 77-item Lichtenberg Financial Decision-making Rating Scale (LFDRS; Lichtenberg et al., 2015). Our first article on the LFDRS described the methods used for its creation and initial reliability (Lichtenberg et al., 2015).

The LFDRS consists of four subscales: Financial Situational Awareness, Psychological Vulnerability, Susceptibility to Undue Influence, and Intellectual Factors (i.e., decisional-ability factors). Videotaped LFDRS interviews were conducted with five older adults. Following Marson et al.'s (2009) methods, interrater reliability was established across 10 independent raters by having multiple raters view the videotapes and score the LFDRS. In our second article (Lichtenberg, Ficker, & Rahman-Filipiak, 2016), we presented preliminary criterion validity results for the LFDRS. Due to its length, however, the LFDRS is impractical for use by criminal justice, financial, or social service professionals.

### ***Tradeoffs between comprehensive and screening scale***

There is always a tension between doing comprehensive assessments and using screening scales. The benefits of screening scales are threefold (MacNeill & Lichtenberg, 1999); (a) brevity; (b) sensitivity, and (c) level of training required. Precisely because screening scales are brief, they can be used across more settings by more professionals. A second advantage of screening scales is that although they are brief, they can have substantial validity. Finally, the level of training required to use a screening scale is much less than comprehensive measures. In the field of cognitive testing, for example, a comprehensive cognitive evaluation takes a minimum of 90 to 120 minutes and requires a high level of training in the administration of psychometric testing. A screening scale



such as the Mini Mental State Exam (Folstein, 1975), for example, takes 5 to 10 minutes to administer. The level of training required to administer the MMSE is much lower than that of comprehensive cognitive testing. The MMSE, like all screening tests, has significant limitations too, with higher rates of false positives and/or false negatives than a comprehensive assessment (see Mast et al., 2001). In the present situation the LFDRS requires a high level of training, advanced interviewing and rating techniques, and an ability to integrate the findings from all subscales into a clinical judgment. Only highly trained professionals are likely to use it, thus limiting its impact. Our screening scale provides a vehicle where the strength of our approach can be utilized by criminal justice and noncriminal justice professionals alike.

### ***Conceptual underpinnings of our screening scale***

The fundamental frameworks of person centeredness and decisional abilities were retained in the screening scale. Person centeredness is adhered to in the screening scale in two important ways; (a) the scale directly assesses the older person's experience, and (b) the questions are directly related to the financial decision at hand and not an artificial one that they may not relate to. Even more fundamentally, there is a deep respect for the individual, a core concept of person centeredness, in any approach that elicits the individual's perspectives through questions that require the individual to communicate informed decision making and does not merely seek assent. The inclusion of items related to susceptibility to undue influence are in keeping with the respect of the individual and the individual's agency.

Decisional abilities framework, the most often cited aspects of decision-making capacity across a broad array of decisions, is highlighted in the screening scale. Questions related to choice, appreciation, understanding, and rationale were all included in the screening scale. To enable significantly more practitioners to elicit decisional abilities of older adults, we created a significantly shorter instrument that focuses on the decision-making abilities subscale, which assesses intellectual factors. These are the functional abilities required for financial decision-making capacity, and include an older adult's ability to (a) express a choice, (b) communicate the rationale for the choice, (c) demonstrate understanding of the choice, and (d) communicate appreciation of the relevant factors involved. We also chose several items from the Susceptibility to Undue Influence subscale. The result was the 10-item Lichtenberg Financial Decision Making Screening Scale (LFDSS). The first empirical article to examine LFDRS and LFDSS criterion-related validity was recently published (Lichtenberg et al., 2016), and we will now discuss the results of that study in terms of the screening scale.

### **Criterion-related validity**

We examined criterion-related validity in 69 older African Americans (Lichtenberg et al., 2016) and found that the LFDSS risk score was significantly related to both the MMSE ( $r = -.26; p < .05$ ) and the money management subscale of the Independent Living Scale (ILS), which is a performance-based measure of executional skills and financial knowledge ( $r = -.20; p < .05$ ). The LFDSS risk score was increased for those with poorer cognition, poorer financial executional skills, and lower financial knowledge. Other evidence for criterion validity was that the LFDSS risk score differentiated between those who had been financially exploited in the past 18 months and those who had not ( $t = 3.83; p < .001$ ), whereas the ILS money management subscale did not ( $t = 1.5; p > .05$ ). Finally, the LFDSS risk score differentiated those with decisional capacity from those who lacked decisional capacity ( $t = 3.1; p < .05$ ). Taken together, these initial results provided positive criterion-related validity of the LFDSS. Nevertheless, future work will need to derive criterion validity from administration of the LFDSS alone.

### **Purpose of the study**

Using this sample to investigate several aspects of construct validity, we sought to examine the normative data to determine whether age or education effects were present. We also evaluated the scale's ability to differentiate (a) those who had been financially exploited from those who had not, and (b) those who had decisional ability deficits from those who did not. To accomplish these aims, we collected data from two separate sources, APS workers and other professionals who work with elders (see Methods section for details).

Three hypotheses related to the LFDSS were generated:

- Hypothesis 1: Age, gender, and education will be unrelated to the LFDSS risk score in older adults who are not being financially exploited and for whom there are no concerns about financial decision-making capacity. This is a critical determination, because identifying whether scale interpretation requires correction based on age, gender, or education is essential for accurate scale development.
- Hypothesis 2: The LFDSS risk score will be significantly higher for older adults whose financial decision-making capacity has been rated as questionable (some or major concerns) by non-APS professionals than for older adults whose financial decision-making capacity has been rated as intact (no concerns).
- Hypothesis 3: The LFDSS risk score will be significantly higher for older adults whose financial exploitation has been substantiated by APS professionals than for older adults whose financial exploitation has not been substantiated.

## Methods

### Participants

Adults age 59 or older were eligible for the study if they were making, or had made in the previous 6 months, a significant financial decision (or group of related decisions, e.g., multiple gifts to the same person). In addition, the older adult had to be evaluated by one of the participating professionals and agree to administration of the LFDSS. There was no overlap of participants between APS and non-APS cases.

Front-line professionals from APS and a variety of other fields assessed 108 participants for financial capacity and/or financial exploitation and administered the LFDSS to each. Seventy-nine cases were evaluated by non-APS professionals across a 12-month period: 55 by one of six elder law attorneys, 10 by one financial planner, 3 by one sheriff, and 11 by two physicians. Twenty-nine cases were seen by APS workers across a 6-month period and eight Michigan counties. The only inclusion criteria were that a financial decision was present, and that the adult was over the age of 60 and willing to participate. Scales were administered to consecutive older adults ages 60 and over when the inclusion criteria were met. In all cases, participants' age, education, and gender were collected, but personal or identifying information was not (Table 1). Mean age was 75 years, mean educational level was more than 13 years, and 58% were female. Because the data were anonymous, the Wayne State University Institutional Review Board issued a concurrence of exemption. Although written informed consent was not required, the individuals being assessed received an information sheet that included the elements of a consent form.

**Table 1.** Demographic percentages for elders screened at APS (substantiated cases vs. not) and by professionals (decision making concerns vs. ok).

Demographic values	APS* cases (n = 29) financial exploitation vs. not		Professional** cases (n = 79) decision-making concerns vs. ok		Total sample (n = 108) (Mean or %)
	Case substantiated	Case unsubstantiated	Decisional concerns	No decisional concerns	
Age (mean/SD)	71.1 (10.3)	74.6 (14.8)	75.5 (10.1)	80.8 (9.8)	75.3 (10.7)
Gender (%)					
Female	61.1	38.9	58.3	61.2	58.3
Male	38.9	63.6	41.7	38.8	41.7
Education (mean/SD)					
Years of education	12.4 (2.2)	12.8 (2.0)	14.2 (2.9)	14.2 (3.0)	13.8 (2.9)

APS\* = Adult Protective Services; Professionals \*\* = Lawyers, financial planners, MD/medical professionals, law enforcement.

Note: No significant differences in age, gender, or education within the APS cases (substantiated vs. not) or professional cases (decision-making concerns vs. OK).

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## Procedures

The APS and other professionals, all of whom were volunteers, were trained as follows. First, the person received in-person or webinar-based training that addressed cognition, cognitive decline, and dementia in older adults; financial exploitation; financial capacity and financial decision making; and the linkages between financial decision making and financial exploitation and specific applications of the LFDSS. Second, videos of four administrations of the LFDSS, as well as a video that gave an overview of the instrument's conceptual approach, were provided. Lastly, the LFDSS creator contacted each professional within 2 weeks to answer any questions about how to administer the scale and use its rating system.

## Measures

### Demographic measures

Age, gender, and education were collected by self-report. It is important to know whether LFDSS scores are significantly related to any of these variables, because this could bias the scale if it is highly related to demographic measures.

### Lichtenberg Financial Decision-Making Screening Scale (LFDSS)

The LFDSS contains 10 items—7 from the LFDRS (2015) Intellectual Factors subscale and three from the LFDRS Susceptibility to Undue Influence subscale. Two scores were calculated for the non-APS professional. First, the administering professional assigned an overall decision-making score that ranged from 0 (*Major concerns*) to 2 (*No concerns*). This is the same type of scoring for which Lichtenberg et al. (2015) demonstrated interrater reliability and criterion-related validity (Lichtenberg et al., 2016). Second, an overall risk score was assigned using 5 of the 10 items. For these 5 items, the literature supports the use of an ordinal risk score. For example, if the financial decision poses high risk or significant changes to previously established bequests, a higher risk score would be assigned than in cases of minimal financial risk or no changes to bequests. The other five LFDSS items are descriptive and neutral—for instance, there is no way of determining whether a new will is riskier than a new investment or gift. For each of the five items, however, the highest risk score is assigned when the administrator rates the older adult's response as inaccurate or the older adult does not know the correct answer. Two scores were also derived for APS professionals: (a) whether financial exploitation was substantiated or unsubstantiated and (b) an overall risk score.

Specific information on scoring is available from the corresponding author.

### **Administration**

The LFDSS is a structured, multiple-choice interview intended to be administered in a standardized fashion. In introducing the LFDSS to the older adult, the administrator is instructed to read a one-sentence explanation aloud to the older adult:

“I am going to ask you a set of questions to better understand the financial transaction/decision you are making or have already made. Please answer these as best you can and feel free to elaborate on any of your answers.”

Questions are to be read aloud as they are written. If the older adult responds before the choices are offered and a rating can be made, the interviewer can make the rating without reading all of the choices. If necessary, however, the interviewer should read all of them aloud and ask the person to choose one.

The interviewer is encouraged to allow the older adult to expand on any answers and to write down what the person says. The interviewer can ask the older adult to elaborate, or the person may do this spontaneously. The interviewer is also encouraged to ask follow-up questions and record the person's answers.

### **Scoring each item**

The LFDSS is a rating scale, and therefore the interviewer's judgment is critical. Scoring involves two steps and should be done as follows:

1. On each item, the older adult's response should be recorded by circling the person's answer(s).

2. On each item, the interviewer should place an X next to the answer that the interviewer believes is most nearly correct. For example, if the response given is not accurate or it appears the older adult does not know the answer, the interviewer should place an X in the box next to “Don't know/inaccurate response.”

### **Data Analysis**

To test Hypothesis 1, age, gender, and education level were correlated with the LFDSS risk scores using Pearson correlations (and with gender point-biserial correlations) to determine whether those individuals who were not being exploited and for whom there were no decision-making concerns had LFDSS risk scores that were significantly related to the person's age, gender, or education. Fisher's exact tests were then used to determine whether the LFDSS risk score differentiated those who were rated as having financial decision-making capacity concerns from those who were not (Hypothesis 2). Fisher's exact tests were then used to determine whether the LFDSS risk score differentiated those who were being financially exploited, as determined by APS, from who were not (Hypothesis 3).

## Results

Of the 29 APS cases, 18 (62%) were judged to be substantiated for financial exploitation and 11 to be unsubstantiated. Of the 79 non-APS professional cases, 10 (12%) were judged to have deficits in decision-making capacity and 69 to have full financial decision-making capacity. A summary of the groups' characteristics can be found in Table 1.

The correlational results used to test Hypothesis 1 are shown in Table 2. The analyses used to test Hypotheses 2 and 3 are shown in Table 3; as can be seen, LFDSS risk scores for individuals for whom APS workers had substantiated financial exploitation were compared to those for whom there was no APS substantiation. These groups differed significantly in LFDSS risk scores ( $t = 3.06$ ;  $p < .005$ ). Additionally, cases in which non-APS professionals raised concerns about decision-making abilities were compared to cases in which they had no concerns, and LFDSS risk scores differed significantly between groups ( $t = -4.41$ ;  $p < .01$ ). Taken together, LFDSS risk scores significantly differentiated older adults who were rated as (a) being exploited from those who were not and (b) raising concerns about financial decision-making deficits from those who were not. These results support both hypotheses 2 and 3, and demonstrate aspects of construct validity of the LFDSS. Criminal-justice cases involving older adults with substantiated financial exploitation demonstrated the same financial decision-making incapacity as did cases of older adults with financial decision-making incapacity who, with a non-APS professional, were attempting to complete a significant financial transaction. Therefore, financial decision-making deficits were a key component of exploitation in one set of cases and incapacity in the other set.

**Table 2.** Correlations for the normative group (no financial exploitation and no decision making concerns;  $n = 78$ ).

	Age	Education	LFDSS total risk
1. Gender (1 = female; 2 = male)	-.06	.15	-.07
2. Age		-.30**	.29**
3. Education			-.07
4. LFDSS total risk score (range 5–30)			

\*\* $p \leq .01$

**Table 3.** Independent samples  $t$ -tests for the LFDSS total risk score for current financial decision.

		$M$ ( $SD$ )	$t$	df	$p$
LFDSS total risk score	APS case substantiated	14.50 (6.3)	3.06	26	.005
	APS case not substantiated	8.20 (2.0)			
LFDSS total risk score	Professional case: Decisional concerns	17.42 (6.8)	-4.41	77	.001
	Professional case: No decisional concerns	8.63 (2.1)			

Significant differences were found on most answers to the LFDSS screen based on the context (APS vs. non-APS professional). The most common type of financial decision for the non-APS cases was estate planning (wills and decisions about beneficiaries and powers of attorney), and, for APS cases, giving a gift(s)—although more than one third (37.9%) of APS cases could not accurately communicate the type of financial decision they were attempting to make. In the majority of non-APS cases (83.5%), the financial decision was rated as posing no or low risk, while this was the case in only one third of the APS cases. Almost one half (41.4%) of APS cases acknowledged that the decision would impact them negatively or put them in debt, while none of the non-APS cases rated the impact as negative (although 10% of these answers were judged to be inaccurate). More than twice the number of APS cases rated family members as being negatively affected by the current decision (41.4% vs. 19% for non-APS cases). Approximately one half of the APS cases (48.3%) had not discussed the financial decision with anyone, while a similar proportion of non-APS cases (49.4%) had discussed the decision in depth.

### **Case example #1**

A 68-year-old woman reported to her social worker that she was considering purchasing a house for her unemployed grandson. The grandmother lived on a fixed income and had very little wealth or cash resources. When the LFDSS was administered, she correctly stated the choice she wanted to make (buy a house for her grandson) and said that although it was his idea, she had come around to liking it. She also stated that this would pose no financial risk for her and that she would benefit the most. She failed to recognize, however, that if her grandson failed to make the mortgage payments, she would be held responsible—thereby demonstrating lack of understanding—and because he was unemployed, she would be putting herself at great financial risk, thereby demonstrating lack of appreciation. The social worker concluded that the woman had major decisional-ability deficits and helped her refrain from buying the house. In this case, the woman wanted to give her grandson something that would show her love and support for him. When she was helped to understand the transaction's financial risk and its potential consequences, however, she was open to being dissuaded.

### **Case example #2**

An older couple visited their attorney with the desire to change their individual wills, dividing their monies to their grandchildren and not their children, as they believed their children had accumulated significant wealth

already. Although the couple both appeared to agree with the plan, the attorney was worried that the 93-year-old husband had significant memory problems that might interfere with his testamentary capacity. The attorney had the wife leave the room and administered the screening scale to the husband. The husband described his choice as leaving his money to his children equally (the current will) and did not independently recall wanting to change his will. The attorney changed the will for the wife but left the husband's will alone and did not change it.

## Discussion

Most notably, our results strongly support Dong's (2014) assertion that decision-making capacity is the cornerstone assessment in cases of financial exploitation. Even so, most financial-exploitation scales (e.g., Conrad et al., 2010) do not include measurement of the older adult's financial decision-making abilities. Instead, financial-capacity scales primarily focus on executional skills and are based on hypothetical scenarios (e.g., Marson, 2001). This renders such instruments impractical for use by front-line professionals, because the measures fail to assess whether the older adult's decision-making skills for a specific transaction are also compromised. As a result, there is a dearth of assessment instruments that can be used by APS workers or other professionals who assist older adults in making significant financial decisions. Our study provides evidence for the first financial decision-making screening scale that, in addition to being efficient, is person-centered (i.e., based on the actual decision being considered) and operationalizes Appelbaum and Grisso's (1988) model for decision-making abilities into a multiple-choice rating scale.

Preliminary evidence is ample for the construct validity of the LFDSS. The risk score operates in a similar fashion for those who have been financially exploited and those who have financial decision-making deficits. It also differs significantly for (a) those who have been exploited financially compared to those who have not and (b) those whose financial transaction was not carried out due to the professional's concerns about capacity compared to those with no capacity concerns.

The question of what are the best practices when a positive screen (i.e., major concerns about a decision) occurs has yet to be answered. It would be a best practice to follow up a positive screen with a referral to a professional who could perform a more comprehensive decision-making capacity assessment. It is rare that this occurs in actual practice; both the lack of professionals trained in this type of geriatric capacity assessment and the lack of funds to pay them play a major role in this scarcity. Still, it is important for the professionals using the screening scale to understand that like any



screening scale, this is a gross measure, a guide and certainly not a definitive assessment. Nevertheless, a screening measure such as this can help improve the decision-making processes already faced by professionals working with older adults.

It must be noted that our results are preliminary; a larger sample size will be required to perform factors analysis and item analyses on the scale. In addition, the number of APS cases was relatively small. No test–retest reliability was determined in this study, nor were cognitive data collected. Nevertheless, the study yields two important findings. First, the LFDSS can be easily taught to professionals, and second, it can differentiate cases in which concerns about decision-making capacity are present from those in which they are not. We anticipate that the LFDSS will prove to be useful for a wide range of professionals who either investigate financial exploitation or, when decisional capacity is impaired, seek to prevent it.

## Funding

Funding for this project was provided in part by the following grants: the National Institute of Justice MU-CX-0001, National Institutes of Health P30 AG015281, Michigan Center for Urban African American Aging Research, Retirement Research Foundation, American House Foundation, and Robert and Martha Sachs.

## References

- American Bar Association Commission on Law and Aging & American Psychological Association. (2008). *Assessment of older adults with diminished capacity: A handbook for psychologists*. Washington, DC: Authors.
- Appelbaum, P. S., & Grisso, T. (1988). Assessing patients' capacities to consent to treatment. *New England Journal of Medicine*, 319, 1635–1638. doi:10.1056/NEJM19881223192504
- Bandeem-Roche, K., Seplaki, C. L., Huang, J., Buta, B., Kalyani, R. R., Varadhan, R., & Kasper, J. D. (2015). Frailty in older adults: A nationally representative profile in the United States. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 70(11), 1427–1434. doi:10.1093/gerona/glv133
- Boyle, G. (2013). “She’s usually quicker than the calculator”: Financial management and decision-making in couples living with dementia. *Health & Social Care in the Community*, 21(5), 554–562. doi:10.1111/hsc.12044
- Boyle, P. A., Yu, L., Wilson, R. S., Gamble, K., Buchman, A. S., & Bennett, D. A. (2012). Poor decision making is a consequence of cognitive decline among older persons without Alzheimer’s disease or mild cognitive impairment. *PLoS One*, 7(8), e43647. doi:10.1371/journal.pone.0043647
- Conrad, K. J., Iris, M., Ridings, J. W., Fairman, K. P., Rosen, A., & Wilber, K. H. (2011). Conceptual model and map of financial exploitation of older adults. *Journal of Elder Abuse & Neglect*, 23(4), 304–325. doi:10.1080/08946566.2011.584045
- Conrad, K. J., Iris, M., Ridings, J. W., Langley, K., & Wilber, K. H. (2010). Self-report measure of financial exploitation of older adults. *The Gerontologist*, 50(6), 758–773. doi:10.1093/geront/gnq054

- Dong, X. (2014). Elder abuse: Research, practice, and health policy. The 2012 GSA Maxwell Pollack award lecture. *The Gerontologist*, *54*(2), 153–162. doi:10.1093/geront/gnt139
- Fazio, S. (2013). The individual is the core—and key—to person-centered care. *Generations*, *37*(3), 16–22.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state: A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, *12*, 189–198.
- Hebert, L. E., Scherr, P. A., Bienias, J. L., Bennett, D. A., & Evans, D. A. (2003). Alzheimer disease in the US population: Prevalence estimates using the 2000 census. *Archives of Neurology*, *60*, 1119–1122. doi:10.1001/archneur.60.8.1119
- Hsu, J. W., & Willis, R. (2013). Dementia risk and financial decision making by older households: The impact of information. *Dementia*, *7*(4), 45.
- James, B. D., Boyle, P. A., Bennett, J. S., & Bennett, D. A. (2012). The impact of health and financial literacy on decision making in community-based older adults. *Gerontology*, *58*, 531–539. doi:10.1159/000339094
- Lichtenberg, P. A., Ficker, L. J., & Rahman-Filipiak, A. (2016). Financial decision-making abilities and financial exploitation in older African Americans: Preliminary validity evidence for the Lichtenberg Financial Decision Rating Scale (LFDERS). *Journal of Elder Abuse and Neglect*, *28*, 14–33. doi:10.1080/08946566.2015.1078760
- Lichtenberg, P. A., Stoltman, J., Ficker, L. J., Iris, M., & Mast, B. T. (2015). A person-centered approach to financial capacity assessment: Preliminary development of a new rating scale. *Clinical Gerontologist*, *38*, 49–67. doi:10.1080/07317115.2014.970318
- Lichtenberg, P. A., Sugarman, M., Paulson, D., Ficker, L., & Rahman-Filipiak, A. (in press). Psychological and functional vulnerability predicts fraud cases in older adults: Results of a longitudinal study. *Clinical Gerontologist*, *39*, 48–63. doi:10.1080/07317115.2015.1101632
- MacNeill, S. E., & Lichtenberg, P. A. (1999). Screening instruments and brief batteries for assessment of dementia. In P. A. Lichtenberg (Ed.), *Handbook of Assessment in Clinical Gerontology* (pp. 417–441). New York, NY: Wiley.
- Marson, D. C. (2001). Loss of financial competency in dementia: Conceptual and empirical approaches. *Aging, Neuropsychology, and Cognition*, *8*, 164–181. doi:10.1076/anec.8.3.164.827
- Marson, D. C., Martin, R. C., Wadley, V., Griffith, H. R., Snyder, S., Goode, P. S., & Harrell, L. E. (2009). Clinical interview assessment of financial capacity in older adults with mild cognitive impairment and Alzheimer's disease. *Journal of the American Geriatrics Society*, *57*(5), 806–814. doi:10.1111/j.1532-5415.2009.02202.x
- Marson, D. C., Sawrie, S. M., Snyder, S., McInturff, B., Stalvey, T., Boothe, A., ... Harrell, L. E. (2000). Assessing financial capacity in patients with Alzheimer disease: A conceptual model and prototype instrument. *Archives of Neurology*, *57*, 877–884. doi:10.1001/archneur.57.6.877
- Martin, R., Griffith, H. R., Belue, K., Harrell, L., Zamrini, E., Anderson, B. ... Marson, D. (2008). Declining financial capacity in patients with mild Alzheimer disease: A one-year longitudinal study. *The American Journal of Geriatric Psychiatry*, *16*, 209–219. doi:10.1097/JGP.0b013e318157cb00
- Mast, B. T. (2011). *Whole person dementia assessment*. Baltimore, MD: Health Professions Press, Inc.
- Mast, B. T., Fitzgerald, J., Steinberg, J., MacNeill, S. E., & Lichtenberg, P. A. (2001). Effective screening for Alzheimer's disease among older African Americans. *The Clinical Neuropsychologist*, *15*, 196–202.

- Moberg, P. J., & Kniele, K. (2006). Evaluation of competency: Ethical considerations for neuropsychologists. *Applied Neuropsychology: Adult*, 13, 101–114. doi:10.1207/s15324826an1302\_5
- Moye, J., & Marson, D. C. (2007). Assessment of decision-making capacity in older adults: An emerging area of practice and research. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 62, PP3–P11. doi:10.1093/geronb/62.1.P3
- Pillemer, K., Connolly, M.-T., Breckman, R., Spreng, N., & Lachs, M. S. (2015). Elder mistreatment: Priorities for consideration by the White House Conference on Aging. *The Gerontologist*, 55, 320–327. doi:10.1093/geront/gnu180
- Plassman, B. L., Langa, K. M., Fisher, G., Heeringa, S. G., Weir, D. R., Ofstedal, M. B., & Wallace, R. B. (2008). Prevalence of cognitive impairment without dementia in the United States. *Annals of Internal Medicine*, 148, 427–434. doi:10.7326/0003-4819-148-6-200803180-00005
- Stiegel, L. A. (2012). An overview of elder financial exploitation. *Generations*, 36(2), 73–80.
- Whitlatch, C. J. (2013). Person-centered care in the early stages of dementia: Honoring individuals and their choices. *Generations*, 37(3), 30–36.