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## **Introduction:**

Despite the growing prevalence and adverse impact of elder financial abuse, cases of financial exploitation are difficult to detect and to prosecute. Why? Although this problem is undoubtedly multifaceted, an important root cause is the distributed nature of case detection. That is, incidences of elder financial exploitation affect multiple professionals across multiple settings, including law enforcement, adult protective service, financial, health, social service, and legal professionals. In response to this problem, the Department of Justice, in 2003, initiated a federal program designed to strengthen collaborative responses to family violence. This led to the creation of 80 Family Justice Centers, multidisciplinary alliances that coordinate intervention, strengthen community access, and provide education regarding issues of family violence and elder abuse. Although Family Justice Centers have made a significant impact, they have noted case detection as the major impediment to the identification of elder financial abuse. Specifically, most criminal justice professionals coming in contact with financial exploitation are not formally trained in the assessment of key variables underling financial judgment and, currently, standardized tools to guide such assessments do not exist. In fact, during a recent National Adult Protective Services Association sponsored webinar by the leaders of an Elder Abuse Forensic Center, the lack of easily administered tools to assess for financial judgment (capacity) was noted as the chief weakness in the current identification and investigation process (Navarro & Wilber, January 2014).

The determining factor in understanding if older adults were victims of financial exploitation is the integrity of the older adult's financial judgment and decision making. Was the financial act of the older adult an authentic one, e.g. giving someone money, allowing them to

use their ATM card, buying a financial product, co-signing a new car lease, or signing a reverse mortgage? Authenticity here is differentiated from the quality of the decision. Older adults, like all adults, have the right to make poor financial choices and decisions, provided those decisions are done with integrity. From this perspective then, instruments designed to assess *authentic* financial judgment are sorely needed.

### **Purpose:**

In our research preliminary to this grant (2011-13 prior to NIJ funding) we did the following:

- Created a new conceptual model for financial decisional abilities
- Developed a set of three new financial decision making tools; a 10-item screening measure, a 68-item comprehensive measure and a 13-item measure for key informants
- Conducted preliminary testing of the comprehensive measure

The purpose of the NIJ grant was to establish the essential psychometric characteristics of our tools, including reliability, validity, and generalizability. Specifically, in these three project years, we proposed to do the following:

- Collect large amounts of data in order to ensure reliability, validity, generalizability of the three new decisional ability measures
- Assess efficiency and usefulness of the screening measure and its implementation into criminal justice investigations
- Examine how neurocognitive performance measures correlate with the new decisional ability measures

## **Project Participants (subjects):**

We recruited three separate samples: (1) The Lichtenberg Financial Decision Rating Scale (LFDRS) sample was a community based sample of older adults who were making or who had made a significant financial decision within a 6-month period from the interview. This sample consisted of 200 older adults. The demographic characteristics of this sample were as follows: 74% females, 52% African-American, and 48% Non-Hispanic White. The mean age was 71.5 ( $SD = 7.4$ ), ranging from 60 to 93; the mean education was 15 years ( $SD = 2.6$ ), ranging from 9 to 24. The full paper and the LFDRS (pp14-24) can be found in the link below:

[Conceptual and Empirical Approaches to Financial Decision-making by Older Adults: Results from a Financial Decision-making Rating Scale](#)  
*Clinical Gerontologist, 41(1), Aug. 2017*

(2) The Lichtenberg Financial Decision Screening Scale (LFDSS) sample. We trained Adult Protective Service (APS) workers, attorneys and financial services industry personnel to use our 10-item screening scale, which they completed with 213 participants. The mean age was 77 years ( $SD = 10.10$ ). Most respondents (56.8%) were female, with a mean education of 13.7 years ( $SD=2.87$ ). The full paper can be found in the link below and the LFDSS can be found in the supplementary material of the Innovation in Aging website:

[Reliability and Validity of the Lichtenberg Financial Decision Screening Scale](#)  
*The Gerontological Society of America, Innovation in Aging, Advance Access May 26, 2017*

(3) The Lichtenberg Financial Decision Rating Scale-Friends and Family (LFDRS-FF)

We collected self-report data from 150 informal caregivers to an older adult.

One hundred fifty informants were recruited to participate in the study; of these, 83% of all informants and 73% of older adult informants were female. Informants' mean age was 62.6 ( $SD=11.7$ ), ranging from 18 to 88; the mean age of the older adults being rated by the informants was 72.7 ( $SD=9.4$ ), ranging from 60 to 95. Informants' mean education was 15 years ( $SD=2.3$ ), ranging from 10 to 22; the older adults' mean education was 13 years ( $SD=2.3$ ), ranging from 5 to 18. The mean number of years the informant had known the senior was 42.7 ( $SD=19.7$ ), ranging from 1 to 80. We did not collect data on informants' race, but of the older adults, 84% were African-American and 16% non-Hispanic White.

This paper was submitted to the Journal of Elder Abuse and Neglect on May 1, 2018. It is still under review. The LFDRS-FF will be available as of 10-1-18 on [www.olderadultnestegg.com](http://www.olderadultnestegg.com)

Note: All 3 scales are freely available at [www.olderadultnestegg.com](http://www.olderadultnestegg.com)

### **Project Design and Methods :**

(1) LFDRS: *Participant Recruitment Procedures*: Two hundred community participants were recruited for the study. Inclusion criteria were being age 60 or older, living independently in the community, reporting the ability to be independent in independent activities of daily life and activities of daily life, being a native English speaker, and having the ability to do some basic word reading. After receiving approval from the Institutional Review Board, three methods were used to recruit participants. First, more than 100 participants were directly recruited from the Healthier Black Elders Participant Registry, which is part of the University of Michigan-Wayne State University NIA P30 Resource Center for Minority Aging Research. This required additional approval from the Healthier Black Elders Community Advisory Board (see Hall et al.,

2016, for details on recruitment and retention of registry members). Second, the first author gave a number of presentations to groups of older adults across a wide variety of locations and settings, and participants were recruited at these events. And third, a snowballing technique was used.

When older adults were approached to participate in the study, either by phone or in person, they were asked to participate in an interview and a cognitive and financial testing session that would last approximately 2 hours. Financial decisions were considered significant if they fell into one of the following categories: (a) investment planning (retirement, insurance, portfolio balancing); (b) estate planning (changes in a will or beneficiaries, allowing someone access to a bank/investment account); (c) major purchase (home, car, renovations, etc.); or (d) giving a gift.

(2) LFDSS: Adults age 60 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) and if they were being interviewed by an APS worker or other professional trained in administration of the LFDSS. After gaining the older adult's permission, the APS worker or other professional proceeded to collect the LFDSS information through an interview. There was no overlap of participants between APS and non-APS cases. Non-APS professionals administering the scale included elder law attorneys, financial planners, certified public accountants, social workers, and physicians. For all participants, age, education, and gender were collected, but personal or identifying information was not. 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.

(3) LFDRS-FF: The purpose of this study was to examine the psychometric properties of a new informant-report scale of financial decision-making ability, the FF. This informant-report scale was adapted from the Rating Scale, which was administered as a structured interview with multiple-choice response options to assess decisional abilities for a significant financial transaction.

### **Data Analysis:**

(1) LFDRS: Our general approach to the analyses was to use factor analysis. The first step of the analyses presented here was to determine whether sets of items had formed unidimensional constructs, according to the conceptual map. Unidimensionality was examined by merged exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The CFA of the unidimensional model and evaluation of the comparative fit index (CFI) were performed in the context of invariance testing and model fit. Reliability was evaluated by decomposing the scale score into the sum of the item scores and identifying the contribution of the common term or communality. McDonald's Omega Total is a reliability estimate based on the proportion of total common variance explained.

The convergent validity of the subscales and Long Form were examined by Pearson correlations in order to examine the relationship between cognitive test scores and the scale, as well as between financial management skills and the scale. Hierarchical regression analyses were conducted to determine whether cognitive and financial management tests contributed to the

prediction of risk scores above and beyond the demographic variables.

(2) LFDSS: Internal consistency estimates for both scales were computed using the *psych* package in R. Internal consistency estimates and McDonald's omega total for the dichotomous variables were computed based on tetrachoric correlations, while polychoric correlations were used for the ordinal variables. The explained common variance (ECV), a measure of essential unidimensionality was computed based on a bifactor model. Internal consistency estimates were examined for the total sample by gender, education, age, and referral source.

**Criterion Validity:** To obtain an optimal cutoff point for both scales, receiver operating characteristic (ROC) curves were created. Sensitivity, specificity, positive predictive value, negative predictive value, and overall correct classification were calculated at each potential cutoff point.

(3) LFDRS-FF: Dimensionality was examined by merged exploratory factor analysis (EFA) and confirmatory factor analysis with polychoric correlations using MPlus. Confirmatory analyses of a unidimensional model and evaluation of the comparative fit index (CFI) were performed in the context of model fit for unidimensional—rather than multidimensional—models.

Reliability was evaluated by decomposing the scale score into the sum of the item scores and the contribution of the common term or communality. McDonald's Omega Total ( $\omega_t$ ) is a reliability estimate based on the proportion of total common variance explained.

Independent samples *t*-tests were used to evaluate possible group differences between older adults whose informants reported that they were concerned about possible financial exploitation and those whose informants did not. Group mean differences were examined on age of the informant, age of the senior, informant years of education, senior years of education, and

length of the relationship between the informant and the senior. Pearson chi-square analyses were used to examine potential group differences in gender of the informant and gender of the senior between informants who had concerns about financial exploitation and those who did not. To examine sensitivity and specificity of the FF to detect informant concerns about financial exploitation, a receiver operator characteristic (ROC) curve analysis was conducted using the summed score of all 14 scale items.

### **Findings:**

(1) LFDRS: Results confirmed the scale's reliability and supported the conceptual model.

Convergent validity analyses indicate that as hypothesized, cognition is a significant predictor of risk scores. Financial management scores, however, were not predictive of decision-making risk scores.

Conclusions: The psychometric properties of the LFDRS support the scale's use as it was proposed.

Clinical Implications: A full scale and short form of the LFDRS are provided for clinicians to use in financial capacity assessments.

(2) LFDSS: Results demonstrate that the LFDSS has excellent internal consistency and clinical utility properties. The published paper on the LFDSS provides support for use of the LFDSS as a reliable and valid instrument.

(3) LFDRS-FF: A factor analysis identified two sub-scales. The full scale was found to have adequate sensitivity and specificity to detect an informant's current concerns regarding financial exploitation. The FF is a useful tool for collecting informant-report regarding an older adult's ability to make a sentinel financial transaction.

### **Publications to Date from this NIJ grant:**

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2. Lichtenberg, P.A. Teresi, J.A., Ocepek-Welikson, K & Eimick, J. Reliability and validity of the Lichtenberg Financial Decision Screening Scale (2017). *Innovation in Aging*, 00, 0 1-9 doi:10.1093/geroni/igx003
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4. Lichtenberg, P., Stoltman, J., Ficker, L., Iris, M., & Mast, B. (2015). A person-centered approach to financial capacity assessment: Preliminary development of a new rating scale. *Clinical Gerontologist.*, 38, 49-67. **PMCID: [PMC4392714](#)**
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adults: Results from a financial decision-making rating scale. *Clinical Gerontologist*,

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10. Wood, S. & Lichtenberg, P.A. (2016). Financial capacity and financial exploitation of older adults: Research findings, policy recommendations and clinical implications. *Clinical Gerontologist*. doi.ORG/10.1080/07317115.2016.1203382
11. Lichtenberg, P.A. (2017). New approaches in determining financial capacity and risk of exploitation; *Journal of Mental Health Care*, 1, 1-3.
12. Lichtenberg, P.A. Financial Exploitation (In press) In Jennifer Moyer Assessment of Capacity in Older Adults. American Psychological Association: Washington D.C.

### **Implications for criminal justice policy and practice in the United States.**

In 2018, the following occurred and have implications for criminal justice practice: (1) Dr. Lichtenberg was sought out by two Michigan prosecutors for unjust enrichment cases and the LFDRS and LFDSS scale were utilized (work completed was pro bono). One party pled guilty and Dr. Lichtenberg testified in the second case (still under review).

The Final Summary Overview

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Integrating Improved Assessments of Financial Judgment: Conceptual and Measurement  
Advance

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From 2017-present APS workers from counties in New York, Virginia, Michigan, California and  
Minnesota were trained in the use of the 10-item LFDSS. It was implemented successfully in 5  
counties. All three scales and narrated e-learning training is now available on

[www.olderadultnestegg.com](http://www.olderadultnestegg.com).