The Relationship Between Financial Decision-Making and Financial Exploitation in Older Black Adults

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Abstract

Objectives: This study examined the relationship between contextual measure of financial decision-making and the financial exploitation experiences of older Blacks, and the convergent validity of mental health measures of contextual decision-making items. **Methods:** This cross-sectional study of 104 older Black adults included 52 cases of confirmed financial exploitation. Participants were matched on age and gender. Bivariate and multivariate analyses were performed to examine these relationships. **Results:** The contextual measure of financial decision-making was significantly associated with financial exploitation, above and beyond the relationship of demographic measures. Further, there was strong evidence for convergent validity between the contextual measure and mental health measures. **Discussion:** Results underscore the significant relationship of the contextual factors involved in financial decision-making and financial exploitation. This study provides a conceptually driven approach to understanding the experiences of older Black adult victims of financial exploitation.

Keywords

Black older adults, financial exploitation, financial vulnerability

Introduction

Financial exploitation (FE), defined here as the "illegal or improper use of a vulnerable adult's funds or property for another person's profit or advantage" (Conrad et al., 2010, p.758), is the second most common type of senior mistreatment (Acierno et al., 2010). The Federal Trade Commission (2019) reported that although consumers 60 and older filed only about 8% of total scam reports in 2018, their reported losses-nearly \$400 million-accounted for 25% of all losses. Population-based surveys have shown that estimates of financial exploitation in the older adult population range from 5% to 11% (Acierno et al., 2010; Beach et al., 2016; Hasche et al., 2018; Laumann et al., 2008). Additional investigation of Suspicious Activity Reports (SARS) by the Consumer Financial Protection Bureau (2019) revealed that financial institutions reported a fourfold increase in Suspicious Activity Reports between 2013 and 2017, with almost 70% of these reports being filed for individuals over age 60 and 33% for those over 80. Older adults experiencing financial exploitation often have difficulty managing the financial fallout from the experience and are unable to repair their credit, file reports with the appropriate

agencies, and put protections in place to prevent future exploitation (Lichtenberg et al., 2019).

The financial exploitation literature provides evidence that older Blacks are at an increased risk of being victimized. Beach et al. (2010) and Laumann et al. (2008) reported increased risk of financial exploitation for older Black adults in their random population-based samples. Beach et al. examined racial differences in the prevalence of financial exploitation and psychological mistreatment, and found that African Americans reported significantly higher rates of being financially exploited since turning 60 and in the past 6 months than non-Blacks. The prevalence of financial exploitation since turning 60 for older Black adults was nearly three times higher than for non-older Black adults. Lichtenberg et al. (2016) also reported higher rates of

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financial exploitation for older Black adults in their community sample.

Although it is understood that the prevalence of financial exploitation may be greater in older Black adults, there continues to be a need to develop conceptual understanding of the links between older Blacks and financial exploitation and to test the correlates of financial exploitation that results in financial hardship for older Black adults. This study uses a sample of older Blacks to examine how contextual measures of financial decision-making are related to financial exploitation, which results in financial hardship and/or the need for economic advocacy. In addition, the study examines the relationship of mental health measures to contextual measures of financial decision-making.

Financial Decision-Making

Lichtenberg et al. (2015) proposed a new conceptual model to understand financial decision-making and a new financial decision-making rating scale: the Lichtenberg Financial Decision Rating Scale (LFDRS). The conceptual frameworks used in creating the Lichtenberg Financial Decision Rating Scale were the Whole Person Dementia Assessment model (Mast, 2011) and the decision-making model of Appelbaum and Grisso (1988). The Whole Person Dementia Assessment model, which is described in detail in Lichtenberg et al., applies person-centered principles of deep respect for individuality and personhood to the standardized psychological assessment process. This includes focusing on actual decisions instead of hypothetical vignettes.

The contextual subscales within the Lichtenberg Financial Decision Rating Scale include items related to financial situational awareness, psychological vulnerability, and susceptibility to undue influence and financial exploitation. The Lichtenberg Financial Decision Rating Scale and its contextual subscales were created to improve the ability to assess capacity in older adults as it relates to financial decisionmaking skills (Lichtenberg et al., 2015). A chief concern related to a decline in financial decision-making skills is whether this leads to increased vulnerability to financial exploitation. Declines in decision-making are linked to an increased risk of financial exploitation. Boyle et al. (2012) found that reduced decision-making is related to increased susceptibility to scams, and Lichtenberg et al. (2016, 2018) assert that impaired decision-making abilities differentiate those who have been victims of financial exploitation from those who have not.

To better understand how the financial decision-making context was related to financial exploitation, Lichtenberg et al. (2020a) used an empirical approach to identify the items most sensitive to financial exploitation. This results in a contextual scale of 17 items: the Financial Exploitation Vulnerability Scale (FEVS), which was derived from the Lichtenberg Financial Decision Rating Scale. Final items included financial awareness, psychological vulnerability, and relationship strain. These items demonstrated a clinically significant ability to differentiate confirmed financial exploitation cases from those who did not experience financial exploitation.

Financial Exploitation and Mental Health

In addition to the costs of financial exploitation, which is becoming more widespread, financial exploitation frequently results in reduced mental health for its victims. Weissberger et al. (2019) found that being a victim of exploitation has negative impacts on older adults' mental health. Financial exploitation victims reported significantly more symptoms of depression and anxiety than older adults without financial exploitation. Lichtenberg et al. (2013) also found a significant relationship between fraud victimization and higher levels of depression, and higher depression scores at baseline predicted fraud 4 years later. Lichtenberg et al. (2016) identified psychological vulnerability (PV), which is the combination of depression and low social needs fulfillment, as a significant risk factor for fraud in a follow-up study. Thus, reduced mental health may be both a cause and consequence when it comes to financial exploitation. Increased PV predicted more than twice the new incidence rate of fraud for financial exploitation victims than for those who were not vulnerable, and follow-up studies of financial exploitation victims report mental health consequences.

Acierno et al. (2018) used data from the National Elder Mistreatment Study (NEMS) Waves I and II to investigate the risk of financial exploitation for mental health outcomes. A longitudinal analysis found that participants who reported financial abuse at Wave I data collection (8 years prior) were more likely to have experienced a major depressive disorder at Wave II follow-up. Further analysis of the longitudinal data provided no evidence of increased risk for post-traumatic stress disorder (PTSD) or generalized anxiety disorder. However, a cross-sectional analysis of Wave II data revealed that participants who reported more recent financial exploitation experiences during Wave II data collection were at a significantly increased likelihood of developing a major depressive disorder, PTSD, or generalized anxiety disorder.

A more general body of work (population studies not specific to older adults) on financial fraud also provided evidence that being a victim of a financial crime or fraud leads to poor mental health outcomes. Ganzini et al. (1990) found that individuals who suffered catastrophic financial loss due to fraud had higher scores for major depression and generalized anxiety than a matched control group. Button et al. (2014) found that Fraud victims reported depression, suicidal ideation, attempts at suicide, and stress as severe mental health responses to victimization. Sarriá et al. (2019) found that the severity of the economic impact of fraud increases the risk of poor mental health outcomes. The authors used data from the 2017 Madrid Health Survey to assess the mental health needs of individuals exposed to financial fraud and demonstrated that exposure to financial fraud worsened mental health outcomes. The likelihood of having mental health problems increased with the severity of the economic impact of fraud.

The Successful Aging Through Financial Empowerment Program

The Successful Aging through Financial Empowerment (SAFE) program was created in 2017 to bring an evidencebased service model to older adults in an urban setting in the Midwest. The Successful Aging through Financial Empowerment program is housed at [Anonymize for review] and is an extension of the IOG's ongoing work on cognition and financial exploitation (see https://olderadultnestegg. com for more information). The Successful Aging through Financial Empowerment program provides one-onone financial coaching services to adults over 55 who are experiencing financial hardship as a result of financial exploitation. The program has two major goals: First, to prevent financial exploitation through community education initiatives, and second, to provide financial and emotional recovery assistance and individual financial coaching to victims of scams or identity theft (Lichtenberg et al., 2019).

Study Purpose

Older Black adults have unique experiences because of systemic racism. This is particularly true for urban older Black adults who were denied opportunities in employment and housing due to redlining and other systemic racism policies. Thus understanding the risks for financial exploitation in older Black adults is important and understudied. This study represents a step in filling the void. First, we will investigate whether contextual factors in financial decisionmaking are related to financial exploitation that caused financial hardship. Second, we will examine the convergent validity of contextual aspects of the financial decisionmaking framework by examining its relationship to general mental health measures.

The specific hypotheses for the study were as follows:

- The contextual measure of financial decision-making (Financial Exploitation Vulnerability Scale) will be significantly associated with financial exploitation that caused financial hardship above and beyond demographic measures.
- 2. Measures of depression, anxiety, and generalized stress will be significantly related to the contextual measure of financial decision-making (Financial Exploitation Vulnerability Scale) and will be uniquely associated with the Financial Exploitation Vulnerability Scale in a multiple regression analysis.

Methods

Procedures

To obtain the sample for this study, older Black participants were selected from the Successful aging through Financial Empowerment program and a community-based sample of Lichtenberg Financial Decision Rating Scale participants (see Lichtenberg et al., 2019). One hundred and four community-dwelling older adults were included. Participants were recruited through referrals from local senior agencies and professionals, flyers, or participation in community education programs. Flyers were distributed at community education seminars on financial exploitation. Participants were recruited from the same community, during the same time period, and matched on gender. The study was approved by the University's Human Subjects IRB, and each participant signed an informed consent document before any assessments to allow their data to be used in this study.

The inclusion criteria were as follows for the Successful Aging through Financial Empowerment sample: age 55 or older, victim of financial exploitation (e.g., scam, identity theft), living independently in the community, and able to read on at least a basic level. The inclusion criteria for the community-based volunteer sample were the same, with the exception of having experienced financial exploitation.

Successful aging through Financial Empowerment participants were referred by area professionals who work with older adults and/or by self-referral after attending a Successful Aging through Financial Empowerment community education program and reporting having experienced financial exploitation. This report was further validated through bank records or online credit reports (for a complete description see Lichtenberg et al., 2019). Community comparison group participants were asked, during the Lichtenberg Financial Decision Rating Scale administration, "Have you ever lost money due to a financial scam, exploitation, or identity theft?," to which all community comparison group participants responded, "No" (Lichtenberg et al., 2017). Assessments were administered for the Successful Aging through Financial Empowerment group by the financial coach and for the community-based volunteer group by a trained member of the research team. Assessments were conducted in the participant's home, a community library, or our research office.

Participants

Fifty-two participants received services from the Successful Aging through Financial Empowerment financial coach after seeking services to address financial hardship caused by financial exploitation. The other 52 participants were from a sample of community-based volunteers from the same urban community as the Successful Aging through Financial Empowerment participants who were assessed during the

		No Financial Exploitation (n = 52)	Financial Exploitation (<i>n</i> = 52)
How worried are you about having enough money to pay for things?	Not at all worried Somewhat worried Very worried	26 (50%) 20 (38.5%) 6 (11.5%)	3 (25%) 24 (46.2%) 5 (28.8%)
Overall, how satisfied are you with your finances?	Satisfied Neither satisfied nor dissatisfied	26 (50%) 9 (17.3%)	14 (23.1%) 12 (26.9%)
	Dissatisfied	17 (32.7%)	25 (48.1%)
Who manages your money day to day?	I do, without any help I get help from someone	51 (98.1%) 1(1.9%)	49 (94.2%) 2 (3.9%)
	Someone else manages all my money	0(0%)	I (I. 9 %)
How satisfied are you with this (money management) arrangement?	Satisfied Neither satisfied nor dissatisfied	45 (86.6%) 5 (9.6%)	43 (82.7%) 6 (11.5%)
	Dissatisfied	2 (3.8%)	3(5.8%)
How confident are you in making big financial decisions?	Confident Unsure Not confident	38 (73.1%) 12 (23.1%) 2 (3.8%)	35 (67.3%) 9 (17.3%) 8 (15.4%)
How often do you worry about financial decisions you've recently made?		42 (80.8%) 4 (7.7%) 6 (11.5%)	26 (50%) 18 (34.6%) 8 (15.4%)
Have you noticed any money taken from your bank account without your permission?	No Yes	41 (78.8%) 11 (21.2%)	43 (82.7%) 9 (17.3%)
How often do your monthly expenses exceed your regular monthly income?	Rarely or never Some of the time Most of the time	37 (71.2%) 7 (13.4%) 8 (15.4%)	23 (44.2%) (21.2%) 8 (34.6%)
How often do you talk with or visit others on a regular basis?	Daily or weekly Monthly Less than monthly	49 (94.2%) 3 (5.8%) 0 (0%)	45 (86.6%) 5 (9.6%) 2 (3.8%)
How often do you wish you had someone to talk to about financial decisions, transactions, or plans?	None of the time Some of the time A lot of the time	27 (51.9%) 22 (42.3%) 3 (5.8%)	23 (44.2%) 17 (32.7%) 12 (23.1%)
How often do you feel anxious about your financial decisions and/ or transactions?	Never or rarely Sometimes Often	35 (67.3%) 14 (26.9%) 3 (5.8%)	20 (38.5%) 23 (44.2%) 9 (17.3%)
Do you have a confidante with whom you can discuss anything, including your financial situations and decisions?	Yes No	38 (73.1%) 14 (26.9%)	33 (63.5%) 19 (36.5%)
How often do you feel downhearted or blue about your financial situation or decisions?	None of the time Some of the time A lot of the time	29 (55.7%) 20 (38.5%) 3 (5.8%)	22 (42.3%) 22 (42.3%) 8 (15.4%)

Table I. Financial Exploitation Vulnerability Scale Frequencies (N = 104).

(continued)

Table I.	(continued)
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		No Financial Exploitation (n = 52)	Financial Exploitation (n = 52)
Are your memory, thinking skills, or ability to reason with regard to	No	48 (92.3%)	42 (80.8%)
financial decisions or financial transactions worse than a year ago?	Yes	4 (7.7%)	10 (19.2%)
Has a relationship with a family member or friend become strained	No	35 (67.3%)	39 (75%)
due to finances as you have gotten older?	Yes	17 (32.7%)	13 (25%)
Did anyone ever tell you that someone else you know wants to take	No	50 (96.2%)	47 (90.4%)
your money?	Yes	2 (3.8%)	5 (9.6%)
How likely is it that anyone now wants to take or use your money	Unlikely	50 (96.2%)	47 (90.4%)
without your permission?	, Somewhat likely	0 (0%)	3 (5.8%)
	Very likely	2 (3.8%)	l (1.9%)

same time period as the Successful Aging Through Financial Empowerment clients but had never experienced financial exploitation. All participants self-identified as Black and the groups were matched on age and gender. Of the individuals seeking financial coaching services to address financial hardships experienced due to financial exploitation, 25 had been victims of identity theft, 19 were scam victims, and eight reported shady business practices.

Measures

Financial Exploitation Vulnerability Scale. Participants in the Lichtenberg Financial Decision Rating Scale validation study and the Successful Aging after Financial Exploitation program completed the 17 item Financial Exploitation Vulnerability Scale (FEVS; Lichtenberg et al., 2020a). These self-report items ask about the context in which an older adult is making a financial decision, including their financial circumstances (e.g., "How often do your monthly expenses exceed your regular monthly income?") and the impact of their finances on their social and psychological health (e.g., "Has your relationship with a family member or friend become strained due to finances?" and "How often do you worry about financial decisions you have recently made?"). The 17 items on the Financial Exploitation Vulnerability Scale have a risk score that ranges from 0 to 2 points or 0 to 3 points, depending on the number of response options. The total score range is 0-46, with higher scores related to a higher risk of financial exploitation. Table 1 outlines the questions included in this scale and the responses of the study's sample. The scale's internal consistency was in the good range (Cronbach's alpha = 0.78).

Mental Health and Stress. Three scales were used to gauge participants' mental health. The Geriatric Anxiety Inventory (GAI) was designed to assess general anxiety symptom endorsement (Pachana et al., 2007). The range of scores for

this measure is 0-20, and higher scores indicate higher levels of anxiety. The Geriatric Anxiety Inventory demonstrated good internal consistency (Cronbach's alpha = 0.92). The Geriatric Depression Scale (GDS) Short Form measures depressive symptoms (Burke et al., 1991). The maximum score for the Geriatric Depression Scale is 15, and higher scores indicate higher levels of depression. Cronbach's alpha was 0.67 indicating a fair internal consistency score. The Perceived Stress Scale (PSS) measures the participant's stress level (Cohen et al., 1983), and higher scores indicate higher levels of perceived stress. The Perceived Stress Scale was also found to have good internal consistency (Cronbach's alpha = .87).

Statistical Analysis

IBM SPSS Statistics 26 software was used to analyze the data. Baseline data on Successful Aging through Financial Empowerment and comparison group participants were used to complete the analysis. Two sets of analyses were completed to address the hypotheses. The first set investigated the association between the Financial Exploitation Vulnerability Scale and financial exploitation outcomes. Chi-square analyses and *t*-tests were performed to compare the financial exploitation group with the community volunteer group based on demographics and the financial decision-making contextual measure. A correlation matrix was created to assess the strength and direction of the relationships between all variables. Finally, a logistic regression model was used to assess the relationship between demographic measures and the contextual financial decision-making factor on the outcome of an individual who was experiencing financial exploitation.

The second analysis was conducted to assess the relationship between mental health measures and the contextual aspects of financial decision-making. First, a correlation matrix was created to assess the strength and direction of the

	FE History $(n = 52)$	No FE History ($n = 52$)	Overall Sample ($n = 104$)	t or X ²
Marital status N (%)				7.39**
Married	3 (5.8%)	13 (25%)	16 (15.4%)	
Unmarried	49 (94.2%)	39 (75%)	88 (84.6%)	
Age M (SD)	68.35 (7.81)	69.71 (5.79)	69.03 (6.87)	1.01
Education M (SD)	13.72 (2.05)	14.88 (2.56)	14.33 (2.40)	2.47 *
FEVS	8.41 (4.43)	5.27 (4.45)	6.81 (4.69)	-3.53 ^{**}

Table 2. Sample Demographics and Psychological Measures (N = 104).

*< 0.05, ** <0.01. FEVS—Financial Exploitation Vulnerability Scale.

relationships between stress, depression, anxiety, and the Financial Exploitation Vulnerability Scale. In the final step of the analysis, a second regression model was created to investigate the relationship between the mental health measures and participants' Financial Exploitation Vulnerability Scale scores.

Results

Financial Decision-Making Factors in Financial Exploitation

The sample consisted of 104 community-dwelling older adult participants. The sample was 100% Black and predominately female (78.8%). Participants were predominately unmarried (84.6%). The mean age for the entire sample was 69.03 years, and the mean years of education was 14.33. Table 1 reports the frequencies of item responses. Three of the items have data from a subsample of the Health and Retirement Survey and can be compared for generalizability to a national sample (see Lichtenberg et al., 2020b). While the HRS data found that 35% of the sample was unsure or not confident in making big decisions, the financial exploitation and non-financial exploitation groups in this sample were 32% and 27%, respectively. Fifty-five percent of the HRS sample expressed a wish to have someone to talk with about finances, whereas 56% of the financial exploitation group and 48% of the nonfinancial exploitation group did so. Finally, while 64% of the HRS sample reported being anxious about financial decisions, 61% of the financial exploitation group and 33% of the non-financial exploitation group did so. Overall, these data indicate that this sample reflects patterns of responses similar to the national sample. Other items that stood out were worry about recent financial decisions (financial exploitation 50% vs. non-financial exploitation 19%); expenses exceeding income (financial exploitation 56% vs. non-financial exploitation 29%); and memory problems that interfere with finances (financial exploitation 19% vs. non-financial exploitation 8%).

Bivariate analyses (*t*-tests and chi-square) were performed to assess group differences in demographics and the contextual aspects of financial decision-making. Results of the bivariate comparisons are presented in Table 2. In terms of

Table 3. Correlation: Demographic and Financial Exploitation Risk Measures (N = 104).

			Marital	
	Age	Education	Status	FEVS
Education	.009			
Marital status	127	180		
FEVS	248^{*}	153	351**	
FE/No FE	100	-243 *	.267**	.336**

*< 0.05, ** <0.01. FEVS—Financial Exploitation Vulnerability Scale; FE— Financial Exploitation.

demographics, the financial exploitation and comparison group had significant differences in marital status ($X^2(1) =$ 7.39, p<.01) and educational attainment (t = 2.47, p<.05). Those who experienced financial exploitation were more likely to be unmarried and (on average) completed fewer years of education. The effect size for education was moderate (d = .48). The strongest relationship between the measures and financial exploitation status was the Financial Exploitation Vulnerability Scale score. Participants in the financial exploitation group had significantly higher Financial Exploitation Vulnerability Scale scores, (t = 3.53, $p \le .001$.). The effect size for Financial Exploitation Vulnerability Scale was moderate to strong (d = .67).

A correlation matrix was calculated to determine the strength and direction of the relationships among demographics, the Financial Exploitation Vulnerability Scale, and financial exploitation history. Results are presented in Table 3. A negative correlation was found between the Financial Exploitation Vulnerability Scale and age (r = -.248, p < .05), indicating increased Financial Exploitation Vulnerability Scale scores in younger participants in the sample. The Financial Exploitation Vulnerability Scale had a moderately negative and significant correlation with marriage (coded 0 for single and 1 for married) and a significant and positive correlation with financial exploitation history: the Financial Exploitation Vulnerability Scale and marriage (r = -.351, $p \leq .000$); the Financial Exploitation Vulnerability Scale and financial exploitation history (r = .336, p < .01). Unmarried individuals had higher Financial Exploitation Vulnerability Scale scores, as did those who were being financially

Table 4. Logistic Regression: Demographic and Financial Exploitation Risk Measures on Scam and Id Theft outcome (N = 104).

В	SE	Wald	df	Sig	Exp(B)
030	.035	.704	Ι	.401	.971
230	.109	4.452	I	.035*	.795
.919	.742	1.533	I	.216	2.507
.123	.056	4.787	I	.029*	1.131
3.870	3.202	1.460	Ι	.227	47.928
	030 230 .919 .123	030 .035 230 .109 .919 .742 .123 .056	030 .035 .704 230 .109 4.452 .919 .742 1.533 .123 .056 4.787	030 .035 .704 I 230 .109 4.452 I .919 .742 I.533 I .123 .056 4.787 I	030 .035 .704 I .401 230 .109 4.452 I .035* .919 .742 I.533 I .216 .123 .056 4.787 I .029*

*< 0.05. FEVS—Financial Exploitation Vulnerability Scale.

exploited. In addition, financial exploitation scores had a significant negative relationship with education (r = -.243, p < .05) and a significant positive relationship with marital status (r = .267, p < .01).

Multivariate Analysis. A logistic regression model was created to assess how well the demographics and the Financial Exploitation Vulnerability Scale related to financial exploitation victimization outcomes. The logistic regression model was statistically significant, $\chi 2 = 18.300$, p < .01; explained 23.9% (Nagelkerke R2) of the variance in financial exploitation victimization among older Black adults; and correctly classified 68.8% of cases. Higher Financial Exploitation Vulnerability Scale scores predicted a higher likelihood of financial exploitation victimization, while having more years of education decreased the likelihood of the event (see Table 4 for more details). No other predictors included in the model were significantly related to financial exploitation. The bivariate and regression analyses provided support for hypothesis 1 and showed that the Financial Exploitation Vulnerability Scale and contextual issues were significantly related to financial exploitation victimization that caused financial hardship.

Convergent Validity of Mental Health Measures with the Financial Exploitation Vulnerability Scale

To test hypothesis 2, regarding the convergent validity of the Financial Exploitation Vulnerability Scale with mental health measures, a correlation matrix was created to assess the direction and strength of the relationships between the Financial Exploitation Vulnerability Scale and mental health measures. Significant correlations were found between mental health variables and the Financial Exploitation Vulnerability Scale and the Geriatric Depression Scale ($r = .600, p \le .000$); the Financial Exploitation Vulnerability Scale and the Geriatric Anxiety Inventory ($r = .642, p \le .000$); and the Financial Exploitation Vulnerability Scale ($r = .720, p \le .000$). See Table 5 for more details.

In the final step of the analysis, a linear regression was performed to address hypothesis two. The multiple regression

	GDS	GAI	PSS
GAI	.769**		
PSS	.612**	.596**	
FEVS	.600**	.642**	.720**

*< 0.05, ** <0.01, *** ≤.001. GDS—Geriatric Depression Scale. GAI— Geriatric Anxiety Inventory; PSS—Perceived Stress Scale; FEVS—Financial Exploitation Vulnerability Scale.

Table 6. Multiple Regression: Demographic and Mental Health Measures on FEVS Score (N = 104).

	В	SE	Beta	t	Sig
Age	119	.049	161	-2.444	.017*
Education	.049	.129	.025	.379	.706
Marital status	-2.338	.843	.189	2.773	.007**
PSS	.311	.062	.441	5.048	.000***
GAI	.354	.119	.300	2.963	.004**
GDS	.175	.174	.105	1.010	.316
Constant	3.870	3.202	1.460	I	.227

*< 0.05, ** <0.01, *** ≤.001. GDS—Geriatric Depression Scale; GAI— Geriatric Anxiety Inventory; PSS—Perceived Stress Scale.

model was statistically significant, F (6, 99) = 27.623, $p \le$.000, and explained 64.2% (adjusted R^2) of the variance in the relationship between mental health measures and the financial decision-making factor, the Financial Exploitation Vulnerability Scale. Higher Geriatric Anxiety Inventory and Perceived Stress Scale scores were associated with increases in Financial Exploitation Vulnerability Scale scores, while older age and being married were associated with lower Financial Exploitation Vulnerability Scale scores. Education and Geriatric Depression Scale scores had no significant association with Financial Exploitation Vulnerability Scale scores in the model. See Table 6 for more details.

Discussion

This study yielded two major findings. First, the contextual aspects of financial decision-making are significantly related to the experience of financial exploitation in older Black adults. Contextual aspects of financial decision-making were measured by the Financial Exploitation Vulnerability Scale. The scale had a good internal consistency in this study and was significantly related to financial exploitation status above and beyond demographic variables. Significant convergent validity between the Financial Exploitation Vulnerability Scale and mental health measures (especially between the Financial Exploitation Vulnerability and masures of anxiety and stress) was the second major finding of this study. Taken together, study results provide a conceptually driven

and novel approach to understanding the experience of financial exploitation in older Black adults.

The support for both hypotheses extends our understanding of older Black adults and the experience of financial exploitation. We chose to investigate the relationship between the contextual aspects of financial decision-making instead of considering all mental health variables, because we wanted to test the conceptual framework of context in financial decision-making. Since so many financial exploitation cases involve at least some financial decision-making, it is important that we better understand these connectionsand our findings shed valuable light on these connections. The context of a financial situation captures financial confidence and strain, as well as psychological and social difficulties with financial decision-making. These contextual factors may overpower logical or analytical thinking and render one more susceptible to financial exploitation, or perhaps being a victim of financial exploitation with financial hardship causes more contextual vulnerability. Such contextual matters may be both a cause and a consequence of exploitation.

The convergent validity analyses are important for documenting anxiety and stress; in particular, they are significantly related to the contextual aspects of financial decision-making. These two measures, although significantly correlated with one another, were both uniquely related to Financial Exploitation Vulnerability Scale scores in a multiple regression analysis. The relationship between the Financial Exploitation Vulnerability Scale and anxiety and stress is quite high. This is not surprising, given that a number of the items included in the scale inquire about worry and feeling anxious, downhearted, or strained. The convergent validity findings support previous research in which mental health symptoms were related to increased risk for exploitation. General measures of anxiety, depression, and stress are not tied to financial decision-making or finances in any way, and so it is difficult to use those scales to examine an individual's finances and risk for exploitation. In contrast, Financial Exploitation Vulnerability Scale items are directly related to aspects of financial decision-making.

One strength of the study is our sample of those who were financially exploited; this group suffered from some financial hardship as the result of confirmed financial exploitation. These two elements are important in two crucial respects. First, studies that use random surveys (e.g., Acierno et al., 2010; Beach et al., 2010) rely on self-report of financial exploitation. While this can be useful, there is no way to distinguish financial exploitation from what might be financial confusion (e.g., signing a contract or having to pay taxes they did not fully understand). In our Lichtenberg Financial Decision Rating Scale validity studies, we used a consensus conference method after collecting self-report information and identified a number of instances in which self-reported exploitation was more a matter of financial confusion (Lichtenberg et al., 2016). In this study, older adults shared financial records that confirmed exploitation. The second element of our sampling was that all of the Successful Aging Through Financial Empowerment participants needed help to address financial hardship as a result of financial exploitation. Specifically, they needed assistance with the following activities: ordering and reviewing credit reports, placing fraud alerts on credit reports, filing local police reports, creating FTC identity theft affidavits, reporting scam victimization to the FTC, reporting fraud to banks and financial institutions, reporting breaches to the Social Security Administration, filing reports of internet crimes with the FBI, filing complaints with the Better Business Bureau, and reporting contractor fraud to the State of Michigan's Licensing and Regulatory Affairs department. Few of the Successful Aging Through Financial Empowerment cases involved such significant dollar amounts that law enforcement or prosecutors would follow-up on these cases, yet the hardship caused was significant. For instance, having one's credit ruined or liens posted against accounts can be extremely difficult, both financially and emotionally. Indeed, our experience with Successful Aging through Financial Empowerment clients leads us to conclude that a further delineation of financial exploitation categories is necessary; creating distinctive classifications of the financial experience would be a significant step forward. For instance, in geriatrics, falls are classified as injurious or non-injurious, and the former are clearly more significant to the health of the individual. In the same way, financial exploitation with financial hardship is more damaging for an older adult than financial exploitation without hardship.

The study has several limitations. First, it was crosssectional, so we were not able to predict new onset exploitation, since we could only investigate relationships that exist at one time point. Second, although we consider the use of cases in which there was financial hardship to be a strength, study results are not generalizable because most financial exploitation does not cause financial hardship. Also, the financial exploitation group consisted of victims who sought services to address financial hardship as a result of financial exploitation, and thus these results may not be generalizable since a large portion of victims do not seek assistance. In addition, the noexploitation group was not randomly drawn, even though it was from the same community as the exploited group. These limitations are lessened, however, by the pattern of responses in the financial exploitation group compared with national data. The financial exploitation group's responses across the three items we have national data for were quite similar to the HRS sample. Despite these limitations, this study advances our understanding of financial exploitation in older Black adults and how these mental health measures relate to contextual aspects of financial decision-making.

Declaration of Conflicting Interests

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References

- Acierno, R., Hernandaz, M. A., Amstadter, A. B., Resnick, H. S., Steve, K., Muzzy, W, & Kilpatrick, D. G. (2010). Prevalence and correlates of emotional, physical, sexual and financial abuse and potential neglect in the United States: The national elder mistreatment study. *American Journal of Public Health*, 100(2), 292–297. https://doi.org/10.2105/AJPH.2009.163089
- Acierno, R., Watkins, J., Hernandez-Tejada, M. A., Muzzy, W., Frook, G., Steedley, M., & Anetzberger, G. (2018). Mental health correlates of financial mistreatment in the National Elder Mistreatment Study Wave II. *Journal of Health and Aging*, 31(7), 1067–1084. https://doi.org/10.1177/0898264318767037
- Appelbaum, P. S., & Grisso, T. (1988). Assessing patients' capacities to consent to treatment. *New England Journal of Medicine*, 319, 1635–1638. https://doi.org/10.1056/NEJM198812223192504
- Beach, S.R., Schulz, R., Castle, N.G., & Rosen, J. (2010). Financial exploitation and psychological mistreatment among older adults: Differences between African Americans and Non-African Americans in a population-based survey. *Gerontologist*, 50(6), 744–757. https://doi.org/10.1093/geront/gnq053
- Beach, S. R., Schulz, R., & Sneed, R. (2016). Associations between social support, social networks and financial exploitation in older adults. *Journal of Applied Gerontology*, 37(8), 990–1011. https://doi.org/10.1177/0733464816642584
- 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. https://doi.org/10.1371/journal.pone.0043647
- Burke, W. J., Roccaforte, W. H., & Wengel, S. P. (1991). The short form of the Geriatric Depression Scale: A comparison with the 30-item form. *Journal of Geriatric Psychiatry*, 4(3), 173. https:// doi.org/10.1177/089198879100400310
- Button, M., Lewis, C., & Tapley, J. (2014). Not a victimless crime: The impact of fraud on individual victims and their families. *Security Journal*, 27(1), 36–54. https://doi.org/10.1057/sj.2012.11
- Cohen, S., Karmark, R., & Mermelstein, H. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385. https://doi.org/10.2307/2136404
- Conrad, K.J., Iris, M., Ridings, J. W., Langley, K., & Wilber, K. (2010). Self-report measure of financial exploitation of older adults. *Gerontologist*, 50(6), 758–773. https://doi.org/10.1093/ geront/gnq054

- Consumer Financial Protection Bureau (2019). Suspicious activity reports on elder financial exploitation: Issues and trends. https://files.consumerfinance.gov/f/documents/cfpb_suspicious-activityreports-elder-financial-exploitation report.pdf
- Federal Trade Commission (2019). Protecting older consumers 2018-2019. https://www.ftc.gov/system/files/documents/reports/ protecting-older-consumers-2018-2019-report-federaltrade-commission/p144401_protecting_older_consumers_2019_1.pdf
- Ganzini, L., McFarland, B.H., & Cutler, D. (1990). Prevalence of mental disorders after catastrophic financial loss. *Journal of Nervous and Mental Disease*, 178(11), 680–685. https://doi.org/ 10.1097/00005053-199011000-00002
- Hasche, L., DePrince, A., Lavery, A., Srinivas, T., & Gagnon, K. (2018). Service needs among older adults at risk for financial elder abuse. *Innovation in Aging*, 2(1), 527. https://doi.org/10. 1093/geroni/igy023.1948
- Laumann, E. O., Leitsch, S. A., & Waite, L. J. (2008). Elder mistreatment in the United States: Prevalence estimates from a nationally representative study. *Journals of Gerontology*, 63(4), S248–S254. https://doi.org/10.1093/geronb/63.4.s248
- Lichtenberg, P., Campbell, R., Hall, L., & Gross, E. Z. (2020a). Context matters: Financial, psychological and relationship insecurity around personal finance is associated with financial exploitation. *Gerontologist*, 60(6), 1–10. https://doi.org/10. 1093/geront/gnaa020
- Lichtenberg, P. A., Ficker, L. J., & Rahman-Filipak, A. (2016). Financial decision-making abilities and financial exploitation in older African Americans: Preliminary validity evidence for the Lichtenberg Financial Decision Rating Scale (LFDRS). *Journal* of Elder Abuse & Neglect, 28(1), 14–33. https://doi.org/10. 1080/08946566.2015.1078760
- Lichtenberg, P. A., Hall, L., Gross, E., & Campbell, R. (2019). Providing assistance for older adult financial exploitation victims: Implications for the clinical gerontologist. *Clinical Gerontologist*, 42(4), 435–443. https://doi.org/10.1080/07317115. 2019.1569190.
- Lichtenberg, P. A., Ocepek-Welikson, K., Ficker, L. J., Gross, E., Rahman-Filipiak, A., & Teresi, J. A. (2018). Conceptual and empirical approaches to financial decision-making by older adults: Results from a financial decision-making rating scale. *Clinical Gerontologist*, 41(1), 42–65. https://doi.org/10.1080/ 07317115.2017.1367748
- Lichtenberg, P. A., Paulson, D., & Han, D. (2020b). Examining health and wealth correlates of perceived financial vulnerability: A normative study. *Innovation in Aging*, 4(4), 1–10. https://doi. org/10.1093/geroni/igaa039
- Lichtenberg, P. A., Stickney, L., & Paulson, D. (2013). Is psychological vulnerability related to the experience of fraud in older adults?. *Clinical Gerontologist*, 36(2), 132–146. https:// doi.org/10.1080/07317115.2012.749323
- Lichtenberg, P. A., Stoltman, J., Ficker, L. J., Iris, M., & Mast, B. (2015). A person-centered approach to financial capacity assessment: Preliminary development of a new rating scale. *Clinical Gerontologist*, 38(1), 49–67. https://doi.org/10.1080/ 07317115.2014.970318
- Lichtenberg, P. A., Teresi, J. A., Ocepek-Welikson, K., & Eimicke, J. P. (2017). Reliability and vailidity of the Lichtenberg Financial Decision Screening Scale. *Innovation in Aging*, 1(1), 1–9. https://doi.org/10.1093/geroni/igx003

- Mast, B. T. (2011). *Whole person dementia assessment*. Health Professions Press, Inc.
- Pachana, N. A., Byrne, G. J., Siddle, H., Koloski, N., Harley, E., & Arnold, E. (2007). Development and validation of the geriatric anxiety inventory. *International Psychogeriatrics*, 19(1), 103–114. https://doi.org/10.1017/S1041610206003504
- Sarriá, E., Recio, P., Rico, A., Diaz-Olalla, M., Sanz-Barbero, B., Ayala, A., & Zunzunegui, M.V (2019). Financial fraud, mental health and quality of life: A study on the population of the city of

Madrid, Spain. International Journal of Environmental Research on Public Health, 16(18), 3276. https://doi.org/10.3390/ ijerph16183276

Weissberger, G. H., Mosqueda, L., Nguyen, A.L., Samek, A., Boyle, P. A., Nguyen, C. P., & Han, S. D. (2019). Physical and mental health correlates of perceived financial exploitation of older adults: Preliminary findings from the Finance, Cognition and Health in Elders Study (FINCHES). *Aging and Mental Health*, 25(5), 740–746. https://doi.org/10.1080/13607863.2019.1571020