The Impact of Financial Coaching on Older Adult Victims of Financial Exploitation: A Quasi-Experimental Research Study

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The financial exploitation (FE) of older adults affects not only victims' finances, but also their health. This preliminary study investigated the impacts of a financial coaching program on the financial, neurocognitive, physical, and emotional health of older adult victims of FE. Twenty older adults residing in a large urban area who had experienced FE were compared at baseline and follow-up with a group of 20 older adult of the same area who were making important financial decisions, but had not experienced FE and did not receive the intervention. At baseline, both groups were similar on demographic variables, but participants who had experienced FE had more health problems, poorer memory and executive functioning, less social support, and greater stress than the comparison group. Six months after financial coaching ended, program participants had significantly less anxiety. Overall, older adult victims of FE showed no significant declines and, in fact, showed some improvement.

Keywords: Financial coaching, Financial exploitation, Identity theft, Older adults, Scams

The financial exploitation (FE) of older adults is a growing problem. FE is defined as the misuse of another's money through fraud or theft for one's personal benefit (National Adult Protective Services Association, n.d.). 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 estimates of FE 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 financial institutions reported a fourfold increase in SARS from 2013 to 2017, with almost 70% of these reports being filed for individuals over age 60 and 33% for those over 80. Older adults experiencing FE often have difficulty managing the financial fallout of the experience and are unable to clear up their credit, make reports to the appropriate agencies and put protections in place to prevent future exploitation (Lichtenberg et al., 2019). There are, however, few specific financial coaching services for older victims of FE. This preliminary study examined the impact of a financial coaching program on older adult victims' financial, neurocognitive, physical, and mental health.

Literature Review and Hypotheses

FE of Older Adults

In addition to the prevalence rates of FE, epidemiological studies have also investigated the correlates of FE among older adults. Younger age (ages 55–65; Laumann et al., 2008), race (Beach et al., 2016; Laumann et al., 2008), and larger non-familial social networks (Beach et al., 2016) were noted to be correlates of FE. James et al. (2014) found susceptibility to scams was negatively associated with income,

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cognition, psychological well-being, social support, and literacy. Loneliness and social isolation were also identified as factors that motivate older adults to respond to or maintain involvement in scams (DeLiema, 2018; Fenge & Lee, 2018). These researchers found isolation and a lack of trustworthy friends or family members distinguished older adults who had been defrauded from those who had not.

Additional FE literature provides evidence that being a victim of exploitation negatively impacts the physical, cognitive, and mental health of older adults (Weissberger et al., 2019). Evidence of individuals who experience occurrences of negative financial events reporting poorer physical health has been previously provided (Kim et al., 2003; O'Neill et al., 2006) and older adult victims of FE have reported lower self-rated health and lack of sleep (Acierno et al., 2018; Weissberger et al., 2019). Older adult victims of FE have also been found to suffer from high rates of depression, anxiety, and symptoms of post-traumatic stress disorder as well (Acierno et al., 2018; Beach et al., 2010; Hasche et al., 2018; Lichtenberg et al., 2019; Weissberger et al., 2019). In addition, previous empirical studies have found FE victims have difficulty with at least one instrumental activity of daily living (IADL) (Beach et al., 2010), and victims of FE seeking services to restore their finances performed more poorly on cognitive and executive functioning measures than a demographically matched comparison group with no FE (Lichtenberg et al., 2019). The Successful Aging through Financial Empowerment (SAFE) program was created in 2017 to bring an evidence-based service model to older adults in an urban setting in the Midwest. The SAFE program is housed at Wayne State University's Institute of Gerontology (IOG).

H1: Although the SAFE participants were selected from the same community and at the same time as were control group participants, it is expected that the SAFE group will have significantly worse physical, cognitive, and mental health at baseline as compared to the control group.

FE Interventions

The study of FE and older adults has yielded many suggestions for interventions and supports. For example, Reeves and Wysong (2010) recommend education, outreach, universal screening, and legal interventions. Notably, the use of multidisciplinary teams—including physicians, nurses, mental health care providers, protective services, and professionals within the justice system—is a promising model for combating FE (Reeves & Wysong, 2010; Wang et al., 2015). Navarro et al. (2013) found that a multidisciplinary team's involvement was related to increased prosecution rates for FE. Financial services providers may have unique skills and abilities that might allow them to play a key role in FE interventions, but more research is needed. Renner (2018) explored the importance of financial planners' conducting incompetency planning with older adult clients as an intervention. No studies to date, however, have focused on the impact of interventions, such as financial coaching, that assist older adults in mediating the mental, physical, and financial outcomes of FE.

Financial Coaching

Financial coaching has been defined as "an ongoing process that involves setting goals, establishing a concrete plan of action, monitoring one's progress, and, ideally, forming new positive financial habits" (Collins et al., 2013, p.1). Financial coaching produces significant positive effects on perceptions of financial well-being (Thedos et al., 2015), which leads to better financial confidence, and more financial confidence has been linked to increased financial satisfaction (Atlas et al., 2019). Participation in financial interventions have also lead to improvements in financial self control (Tumataroa & O'Hare, 2019).

Evaluation of financial coaching's impact on clients provides evidence that clients of financial coaching services show improvement in financial attitudes, credit, debt management, and savings behaviors. Modestino et al. (2019) found the treatment group showed significant improvements in their credit scores relative to the control group. Individuals in the treatment group also reported being in better financial situations after the program ended, such as being less likely to need to leave deposits for utility companies, less likely to be involved in eviction processes, and less likely to be pursued by collection agencies. A study conducted by the Urban Institute found financial coaching clients had significantly improved credit ratings and had accumulated twice the savings when compared to a control group (Thedos et al., 2015). Moulton et al. (2015) found first-time homebuyers who received financial education modules and telephone coaching were less likely to default on mortgages, showed slightly lower installment and revolving debt balances, and were more likely to report saving money after the home purchase than a control group.

It is important to investigate the impact of financial coaching interventions and services on older adults because, as individuals age, although their perceptions of their own financial well may become more positive (Tenney & Kalenkoski, 2019), difficulties with financial management become more common. Bleijenberg et al. (2017) reported that 69% of individuals age 85 and older in their sample experienced difficulties in managing their finances. The concept of age-associated financial vulnerability (AAFV) suggests that even cognitively intact older adults display patterns of financial behavior that puts them at risk for a considerable loss of resources due to FE and financial mismanagement (Lachs & Han, 2015). Although many prior studies evaluated financial coaching services on younger individuals' financial well-being, this study, in contrast, focuses on the impact of financial coaching more broadly because the effects of FE on older adults can be quite far-reaching. With this study we sought to investigate the impact of SAFE's supportive financial coaching services on the well-being of older adults seeking assistance to address the effects of FE. Specifically, we investigated older adults' mental, physical, cognitive, and financial health and well-being after they received financial coaching services to address being the victim of a scam or identity theft.

H2: Given that FE impacts multiple physical, cognitive, and mental health abilities, it is expected that financial coaching will lead to significantly improved physical, cognitive, and mental health abilities in the SAFE group.

The SAFE Program

The SAFE program was created in 2017 to bring an evidence-based service model to older adults in an urban setting in the Midwest. The SAFE program is housed at Wayne State University's IOG. IOG staff coordinates all coaching and community education activities associated with the program. The SAFE program is an extension of the IOG's ongoing work on cognition and FE (see olderadultnestegg.com for more information). The SAFE program provides one-on-one financial coaching services to older adults over 55. The program has two major goals. First, the program seeks to prevent FE through community education initiatives. Second, the program provides financial and emotional recovery assistance and individual financial coaching to victims of scams or identity theft (see Lichtenberg et al., 2019). As stated earlier, previous coaching literature focuses heavily on the financial outcomes of younger adult coaching clients. To provide a greater understanding of the financial benefit of financial coaching for older adult victims of FE, we investigate the financial impact of SAFE's services to older adults seeking assistance to address the effects of FE.

H3:Given the focus on finances, it is expected that SAFE participants, those receiving financial coaching, will either save or recover monies in a significant percentage of cases.

Methods

Procedures

This 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. 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 FE. Pre- and post-assessments were done for the SAFE group by the coach and in the control group by a trained member of the research team. Assessments were conducted in the participant's homes, community libraries, or in the research offices.

Participants

To evaluate the effects of the SAFE program on older adults, a quasi-experimental (non-randomized) design was used. SAFE participants were compared to a control group of older adults from the Metro Detroit area. Forty community-dwelling older adults participated in the study. Control group participants were recruited into a community-based study of financial decision making (Lichtenberg et al., 2017). The control group consisted of 20 community-dwelling older adults with no history of FE and who did not receive financial coaching services. Participants were asked during the Lichtenberg Financial Decision Rating Scale (LFDRS) administration, "Have you ever lost money due to a financial scam, exploitation, or identity theft?" to which all control group participants responded "No" (Lichtenberg et al., 2017). Control group participants were compensated $50 cash for their time.

The SAFE group consisted of 20 older adults seeking financial coaching services to restore their finances after experiencing FE within the last 6 months and still experiencing problems. These participants were referred to the program through self-referral and/or through area professionals.

SAFE program participants completed baseline assessments at intake before receiving services and follow-up assessments 6 months after the completion of services. Financial coaching duration and number of meetings is contingent upon the client's unique needs as they relate to the type of FE experienced. The range of duration of services have been from one visit to several visits and transactions over a 6-month period. The SAFE program coordinator administered all SAFE assessments through in-person interviews.

SAFE program participants included in this study were recruited within the first year of the SAFE program's existence, 2017. Control group members were recruited during the same period as SAFE participants and were from the same community as the treatment group. As with the treatment group, control group participants were administered the intake assessment upon entry into the project. Participants in both groups were administered 6-month follow-up assessments. The treatment group received follow up assessments 6 months after completing program services and the control group 6 months after the intake assessment.

The overall sample was primarily African American (81.8%) and mostly female (79%). The mean age of the sample was 69.73 years and the full sample had an average of 14.36 years of education. SAFE participants were 65% female, 70% African American, with a mean age of 67.2 years and an average of 14 years of education. LFDRS participants were 80% female, 85% African American, with a mean age of 69.45 years and an average of 15.35 years of education.

Measures

Neurocognitive Functioning. Three standard measures were used to assess participants' neurocognitive functioning. The measures were selected to assess neurocognitive functioning because of their wide use, ability to cover broad areas of cognitive functioning, and history of being well-validated for use with older adults. The Trail Making Test—Part B (TMT B) is an executive functioning measure that evaluates attention and task-switching skills. Participants are scored on the number of seconds it takes to complete the task, in which circles are connected in order while switching from numbers to letters (Reitan & Wolfson, 1985). Higher scores indicate poorer functioning. The Stroop Color and Word Test was used to measure inhibition, an aspect of executive functioning. Higher scores indicate higher levels of executive functioning (MacLeod, 1992). The Wide Range Achievement Test 4—Word Reading subtest was used to measure reading abilities and is often used as a quality of education measure (Wilkinson & Robinson, 2006).

Physical Health. Physical health was measured using a medical problems questionnaire and a self-rated health measure created for a research registry of older African American adults (see Hall et al., 2016). The questionnaire contained a list of possible medical problems, and participants were asked to indicate whether they were currently experiencing or had ever experienced any of them. Each medical condition the participant reported experiencing was assigned a value of 1, and responses were summed to calculate a total score. The internal consistency for the scale was good ($\alpha = .68$). For the self-rated health measure, participants were asked, "Would you say your general health is … ?" and given answer options of *Excellent, Very good, Good, Fair*, and *Poor*. Responses were coded on a 5-point Likert scale (1 = *Poor* to 5 = *Excellent*). Higher scores indicate better self-rated physical health.

Emotional Health. Three scales were used to gauge participants' emotional 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. Using Cronbach's alpha, the internal consistency for this scale in the present sample was excellent ($\alpha = .94$). The Geriatric Depression Scale (GDS) Short Form measures depressive symptoms (Burke et al., 1991). The maximum score for the GDS is 15, and higher scores indicate higher levels of depression. The internal consistency for this scale was good ($\alpha = .79$). The Perceived Stress Scale (PSS) measures the participant's stress level (Cohen et al., 1983), and higher scores indicate higher levels of perceived stress. For the self-rated mental health measure, participants were asked, "Would you say your mental health is … ?" and given answer options of *Excellent, Very good, Good, Fair*, and *Poor*. Responses were coded on a 5-point Likert scale (1 = *Poor* to 5 = *Excellent*). Higher scores indicate better self-rated mental health. In the present sample, the internal consistency for this scale was excellent ($\alpha = .83$).

Functional Status. The Instrumental Activities of Daily Living Scale (IADLS), which was used to assess the functional status of all participants, is a 10-item scale

designed to measure independent living skills. Scores for this instrument can range from 10 to 40, with lower scores indicating greater impairment in performing the tasks associated with independent living. The internal consistency for this scale in the present sample was excellent (α = .88).

Financial Capability. Participants' financial health was measured using four scales. The Financial Self-Efficacy Scale (FSES) is a six-item measure of self-efficacy specific to finances. The six statements concerned how participants managed financial problems and setbacks. Participants were asked to choose one option from a Likert scale: 1 = *Not true at all* to 4 = *Exactly true* (Lown, 2011). The internal consistency for this scale was good (α = .77). Lower scores indicate less confidence in one's ability to manage financial matters. The Inventory of Socially Supportive Behaviors (ISSB) was an adaptation of Krause and Markides (1990) scale. The scale used in this study was modified to assess the self-reported frequency of helping behaviors provided by others with regard to finances. Participants were presented with 10 items related to financial support and asked to report their frequency in the past year. Higher scores show higher levels of social support. The internal consistency for this scale was adequate (α = .66). The Susceptibility to Scams (STS) scale is a five-item measure in which participants rate their agreement with items using a 7-point Likert scale, ranging from 1 = *Strongly agree* to 7 = *Strongly disagree* (James et al., 2014). Internal consistency for this scale was less than ideal (α = .59). The Financial Hassles scale was adapted from Kanner et al. (1981) Hassles Scale. The financial items (20) on the scale were used, and participants were asked whether they had experienced those specific financial situations in the last month. Participants who affirmed having any of the stated financial hassles were asked to rate their severity as *Somewhat, Moderate*, or *Extreme*. Higher scores indicate more financial hassles. Internal consistency for this scale in the present sample was excellent (α = .87).

Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) was administered to measure subjective social support in the sample (Zimet, 1988). The 24-item scale was revised to contain only four items from the scale's Significant Other subscale. The following items from the larger scale was used: (1) There is a special person who is around when I am in need. (2) There is a special person with whom I can share my joys and sorrows. (3) I have a special person who is a real source of comfort to me. (4) There is a special person in my life who cares about my feelings. Participants were asked to rate each item on a 7-point Likert scale, ranging from 1 = *Very strongly disagree* to 7 = *Very strongly agree.* The significant other only subscale was used because previous research shows that while large social networks may be a risk factor for FE, the type of relationship is important and older adults who are married are at a lower risk of FE (Beach et al., 2016). Internal consistency for this scale in the present sample was excellent (α = .91).

Economic Impact. The economic impact was measured using information collected from treatment group clients at the time of coaching and was measured in two ways:

(1) The first measure of economic impact was amounts lost.This value was calculated by adding all of the amounts lost or slated to be lost to scams or identity theft by all treatment group participants.
(2) The second measure of economic impact was amount saved or recovered.This value included any money returned to treatment group clients or any fund that creditors dissolved for clients due to them being the result of a scam or identity theft. All of the funds included in the second measure of economic impact were recovered due to the participant working with the SAFE financial coach.

The measures were chosen based on previous literature in the area of study using the amount of money older adults lose to FE each year as an indicator of the seriousness of the issue (Federal Trade Commission, 2019; U.S. Securities and Exchange Commission, 2019). The amount saved or recovered was added as a variable to demonstrate the programs' impact on the problem of FE and older adults.

Statistical Analysis

IBM SPSS Statistical software 26 was used to analyze the data. Descriptive data on participant outcomes was used to assess the financial recovery and savings of participants. Chi-Square analyses were used to compare the two groups on gender and racial composition at baseline. *t*-Tests were

used at baseline to compare the SAFE group with the control group on physical and mental health, as well as financial well-being. Based on the parameters of an alpha level of .05, 20 participants in each group, and power level of .80, the required effect size to detect significant a group difference in an independent samples *t*-test was *d* =.91 (G*Power 3.1.9.7). Given the significant group differences at baseline and relatively small sample size, pre-post *t*-tests were conducted for each group separately.

Results

The results of the baseline comparisons are presented in Table 1. Overall, the demographics of the groups were similar at baseline. The SAFE participants and control group were not significantly different with respect to age ($t = -.9$; $p = .36$), gender (X 2 = 1.29; $p = .26$), or race (X 2 = 1.13; $p = .29$). In contrast, significant differences were observed across multiple neurocognitive, emotional, and physical health domains at baseline. These differences between SAFE and control group participants support hypothesis 1. In each domain, SAFE participants demonstrated poorer functioning than the control group. Regarding health and physical functioning, the groups reported similar self-rated physical health and daily functioning abilities. However, SAFE participants reported a significantly greater number of chronic physical health conditions ($t = 2.565$, $p < .015$, $d = .82$). Cognitively, SAFE participants performed similarly on the Wide Range Achievement Test (WRAT) to the control group, a measure of word reading ability. However, they had lower scores on memory and executive functioning tests, such as the Ray Auditory Verbal Learning Test (RAVLT) ($t = -2.947$, $p < .001$, $d = -.93$) and TMT B ($t = 4.008$, $p < .001$, $d = 1.30$). TMT B should be Trails B. On psychological variables, the groups were not different with respect to self-rated mental health or symptoms of depression and anxiety. However, the SAFE participants did report more stress on the PSS ($t = 3.969$, $p < .001$, $d = 1.33$) than the control group. SAFE participants also reported less social support on the MSPSS ($t = -2.187$, $p < .05$, $d = -.70$) than the control group.

Regarding financial variables, the groups reported similar levels of self-efficacy for finances on the FSES, similar socially supportive financial behaviors on the ISSB, and comparable beliefs related to susceptibility to scams. However, the SAFE group reported experiencing many more financial hassles ($t = 2.094$, $p < .05$, $d = .72$).

As shown in Table 2, a comparison of SAFE participants' baseline and follow-up assessments reveal that SAFE participants showed no significant improvements in cognitive, physical, or emotional health. These findings do not fully support our second hypothesis. No significant improvements were found in physical or cognitive health measures, however SAFE participants significantly improved in some mental health measures. Specifically, SAFE participants had significantly lower anxiety scores on follow-up assessments ($t = 2.89$, $p < .01$, $d = .65$). No other significant differences were found between SAFE participant's baseline and follow-up assessment measures.

Baseline versus follow-up analysis for the control group also found no significant decline in neurocognitive, physical, or mental health measures. However, control group participants showed a significant increase in FSES scores ($t = -3.481$, $p < .003$, $d = .80$). No other significant differences were found for control group measures (see Table 3 for more details).

Economic outcomes were calculated for SAFE participants. SAFE participants experienced the following forms of FE: identity theft ($n = 8$), phone scams ($n = 7$), business disputes ($n = 3$), and exploitation by family members ($n = 2$).Twelve of the SAFE program participants had favorable resolutions (e.g., money saved or returned, the prosecutor pursued a case against the scammer, etc.).The total amount lost was $141,800 (ranging from $238 to $40,000) for the SAFE group. Of the SAFE group, 11, more than half, had money either saved or returned, totaling approximately $44,500 (ranging from $200 to $23,900). In addition, one participant had her case picked up by the local prosecutor's office. Thus, hypothesis 3 was supported.

Discussion, Limitations, and Implications

Discussion

This preliminary study provides some important insight into this financial coaching intervention's ability to provide much-needed assistance to older adults to alleviate stress levels associated with FE and the program's ability to save or recover funds when older adults are partnered with a financial coach. The exploratory nature of the research fills an important gap in financial coaching and FE literature. To date, there have been no studies on financial coaching interventions being used to address the physical, cognitive, mental, and financial burdens of older adults experiencing

TABLE 1. Independent Sample *t*-Tests for Baseline Comparisons-SAFE vs. Comparison Group

	SAFE		Comparison group		*t*-Test	*p* values	Effect size
	M or %	*SD*	*M* or %	*SD*			
Female	65%		80%				
African American	70%		85%				
Age	67.20	8.98	69.45	6.07	−.928	.359	
Years of education	14.00	2.16	15.35	2.08	−1.986	.054	
Physical health							
Total health conditions	6.32	3.06	4.20	2.02	2.565*	.015*	.82
Self-rated physical health	2.90	1.02	3.35	.81	−1.542	.131	
Neurocognitive functioning							
IADL total	36.15	6.49	38.47	1.74	−1.543	.137	
WRAT total	57.45	8.95	55.60	7.58	.705	.485	
RAVLT learning total	37.85	8.12	45.30	7.87	−2.947**	.005**	−.93
Trails B	157.76	62.78	93.20	32.24	4.008***	<.001***	1.30
Stroop CW	26.47	9.05	32.90	11.12	−1.974	.056	
Financial health							
FSES	13.50	3.75	15.21	4.76	−1.068	.292	
Hassles	16.72	12.00	9.12	8.64	2.094*	.044*	.72
STS	12.05	5.07	11.16	4.07	.659	.514	
Social support							
MSPSS	18.12	6.66	22.75	6.60	−2.187*	.035*	−.70
ISSB total score	18.37	4.34	17.80	4.74	.390	.699	
Emotional health							
Self-rated mental health	3.30	1.08	3.75	1.07	−1.323	.194	
GDS	3.25	3.04	1.85	2.32	1.636	.110	
GAI	4.30	4.85	1.84	4.60	1.623	.113	
PSS	14.68	6.04	7.41	4.80	3.969***	<.001***	1.33

Note. IADL = Instrumental Activities of Daily Living; WRAT4 = Wide Range Achievement Test; RAVLT = Rev Auditory Verbal Learning Test; FSES = Financial Self Efficacy Scale; STS = Susceptibility to Scams; MSPSS = Multidimensional Scale of Perceived Social Support; ISSB = Inventory of Socially Supportive Behaviors; GDS = Geriatric Depression Scale; GAI = Geriatric Anxiety Scale; PSS = Perceived Stress Scale.
*$p < .05$. **$p < .01$. ***$p < .001$.

FE. Following the financial coaching intervention, these data indicate that financial coaching was associated with no decline in health and even some notable improvements.

The SAFE program has been instrumental in addressing the financial burdens associated with FE. Due to the complicated nature of FE reporting and resolution, it is very helpful for older adults to work with a coach throughout the process of resolving scams and identity theft. SAFE participants and the financial coach were able to recover funds in more than half of the cases presented in the study. It should be noted, however, all SAFE clients (even those who did not recover or save money) received other important supports, such as reporting cases to the proper authorities and establishing financial plans (e.g., budgets and savings plans) to address financial concerns.

The study provides evidence that older adults who are seeking services after being victims of FE present with vulnerabilities in cognitive, mental, and physical health beyond what was found in the control group. The treatment and control groups were recruited consecutively from the same

TABLE 2. Paired Sample *t*-Test—SAFE Baseline Versus Follow Up

	Baseline		Follow up		*t*-Test	*p* values	Effect size
	M	*SD*	*M*	*SD*			
Physical health							
Total health conditions	6.32	3.06	5.35	3.0	2.050	.056	
Self-rated physical health	2.90	1.02	2.85	.88	.326	.748	
Neurocognitive functioning							
IADL total	36.15	6.49	37.55	4.33	−1.871	.077	
WRAT total	57.45	8.95	58.25	7.36	−.219	.830	
RAVLT learning total	37.85	8.12	38.35	8.70	−.443	.663	
Trails B	157.76	62.78	160.28	86.48	.488	.632	
Stroop CW	26.47	9.05	27.06	9.08	−1.833	.083	
Financial health							
FSES	13.50	3.75	14.10	4.06	−.686	.501	
Hassles	16.72	12.00	14.37	11.43	1.443	.168	
STS	12.05	5.07	12.72	3.60	−.714	.484	
Social support							
MSPSS	18.12	6.66	19.95	5.53	−1.093	.289	
ISSB total score	18.37	4.34	18.10	4.80	.798	.435	
Emotional health							
Self-rated mental health	3.30	1.08	3.35	1.04	−.252	.804	
GDS	3.25	3.04	2.60	2.50	1.395	.179	
GAI	4.30	4.85	2.40	3.45	2.894**	.009**	.65
PSS	14.68	6.04	14.6	6.64	−.359	.724	

Note. IADL = Instrumental Activities of Daily Living; WRAT4 = Wide Range Achievement Test; RAVLT = Rev Auditory Verbal Learning Test; FSES = Financial Self Efficacy Scale; STS = Susceptibility to Scams; MSPSS = Multidimensional Scale of Perceived Social Support; ISSB = Inventory of Socially Supportive Behaviors; GDS = Geriatric Depression Scale; GAI = Geriatric Anxiety Scale; PSS = Perceived Stress Scale.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

communities, and although they were demographically equivalent, they were found to have many differences at the baseline comparison. The SAFE group reported more physical health conditions, lower cognitive functioning (RAVLT & Trails), more financial hassles, and higher stress levels than the control group. Notably, the effect sizes for these comparisons were quite large, as to be detected in this small sample, and highlights the importance of these factors for individuals seeking assistance follow an experience of FE.

Differences in memory and cognitive functioning measures suggest the SAFE participants may be experiencing more cognitive problems. Alternatively, weaker cognitive performance might reflect the secondary effects of FE. These differences may be indicators of vulnerability to FE and/or consequences of FE. For example, lower levels of cognitive functioning may put older individuals at higher FE risk or may be an outcome due to experiencing FE. Further study is needed to determine if the cognitive differences are a predictor or outcome of FE.

In addition, findings of higher stress scores in SAFE participants is consistent with earlier literature showing older adult victims of FE have higher stress levels (Lichtenberg et al., 2019) and more internalized stress, which in some cases may lead to PTSD (Weissberger et al., 2019). SAFE participants had similar psychological functioning to the control group with the exception of current stress. This difference seems most likely related to FE. The general pattern of findings is highly consistent with the research literature

TABLE 3. Paired Sample *t*-Test—Comparison Group Baseline Versus Follow Up

	Baseline		Follow up		*t*-Test	*p* values	Effect size
	M	*SD*	*M*	*SD*			
Physical health							
Total health conditions	4.20	2.02	3.65	1.93	1.330	.199	
Self-rated physical health	3.35	.81	3.50	.76	−1.143	.267	
Neurocognitive functioning							
IADL total	38.47	1.74	38.63	1.61	−.497	.625	
WRAT total	55.60	7.58	56.70	7.33	−1.517	.146	
RAVLT learning total	45.30	7.87	46.45	7.44	−.874	.393	
Trails B	93.20	32.24	101.60	39.59	−1.105	.283	
Stroop CW	32.90	11.12	33.35	8.93	−.443	.663	
Financial health							
FSES	15.21	4.76	17.26	4.39	3.48**	.003**	.80
Hassles	9.12	8.64	9.81	6.82	−.406	.690	
Social support							
STS	11.16	4.07	11.42	3.55	−.323	.751	
MSPSS	22.75	6.60	22.15	6.88	.464	.648	
ISSB total score	17.80	4.74	17.45	4.87	.390	.701	
Emotional health							
Self-rated mental health	3.75	1.07	3.85	.88	−.418	.681	
GDS	1.85	2.32	1.50	1.57	.924	.367	
GAI	1.84	4.60	1.16	2.27	.705	.490	
PSS	7.41	4.80	9.18	4.82	−1.386	.185	

Note. IADL = Instrumental Activities of Daily Living; WRAT4 = Wide Range Achievement Test; RAVLT = Rev Auditory Verbal Learning Test; FSES = Financial Self Efficacy Scale; STS = Susceptibility to Scams; MSPSS = Multidimensional Scale of Perceived Social Support; ISSB = Inventory of Socially Supportive Behaviors; GDS = Geriatric Depression Scale; GAI = Geriatric Anxiety Scale; PSS = Perceived Stress Scale.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

on risk factors and consequences of FE. Similarly, issues of disability and depression/anxiety have been associated with higher FE in older adults (Acierno et al., 2010; Beach et al., 2010; DeLiema, 2018).

Financial coaching interventions such as those provided by the SAFE program are unique in that they target economic aspects of FE and also aim to improve health and mental health. The cognitive, mental and physical health of SAFE participants were investigated through baseline versus follow-up comparisons of SAFE participants' assessment measures. As predicted by researchers, the comparison of SAFE participants' baseline and follow-up assessments show no significant decline in cognitive, physical, or emotional health. Although there was no significant decline in these three health domains, there was a significant improvement in one emotional health measure. In terms of emotional health, GAI scale scores improved in the SAFE group between baseline and follow-up, and the effect of this difference was in the moderate range. Past studies have identified increased levels of anxiety as a negative impact of FE (Acierno et al., 2018; Lichtenberg et al., 2019; Weissberger et al., 2019). SAFE participants' lower anxiety levels at follow-up provide evidence that one-on-one financial coaching services can mitigate this negative impact of FE. While these findings provide evidence of the SAFE program's one-on-one services serving as an effective resource for older adults experiencing hardship or other negative effects as a result of FE, more research needs to be done in this area with larger sample sizes to further validate these findings.

As expected, no significant differences in cognitive, mental or physical health measures were found in the baseline versus follow up comparisons of the control group's assessment measures. The difference of improvement in FSES scores of control group participants was an interesting development in this study. It is possible that since control group participants were involved in a financial decision making study (Lichtenberg et al., 2017) their involvement engendered some improvement in their perceptions of their financial self-efficacy. Further investigation of this improvement would be needed by future study to understand the reasons behind this improvement.

Limitations

The study has the limitations of being cross sectional in its design and having a small sample size. Due to the lack of longitudinal data, it is hard to know if the treatment group had more problems that made them more vulnerable to FE or if being exploited caused these problems. While our research design does not allow us to rule out other confounding factors completely, we believe our results provide uniquely valuable information about the characteristics of older adult victims of FE. Needless to say, randomized assignment to a FE condition is impossible, but even a wait-list control study design would be unethical because it would prolong the financial suffering of vulnerable older adults. However, the level of vulnerabilities found in the treatment group makes attention to the problem of older adult victims of FE extremely important for further study and understanding. Future studies will allow researchers to differentiate between which findings were causes and which were effects.

In addition to the exploratory study being unable to distinguish between our measures' ability to determine vulnerabilities or predictors of FE, the small sample size limits the ability of our analysis. For example, no differences were found in race between the two groups that previous literature on FE and older adults has provided being African American is a predictor (Lichtenberg et al., 2016) and correlate (Beach et al., 2016; Laumann et al., 2008) of fraud. It is believed that this predictor and correlate of FE was not identified in this studies analysis due to the small sample size. Our power analysis found that we would most reliably find significance for large effect size findings. Future studies with larger sample sizes would have more power and could detect smaller effect size significant improvements between pre and post assessment item scores that measure physical and neurocognitive health. Larger sample sizes will be obtained over time through enrolling more individuals with FE complaints into financial coaching programs of this nature.

A further limitation of this study is this sample is largely female and African American. The study's results may not represent that of the larger population because the percentage of the African American and female participants are not representative of the entire population. Future studies with more diverse participant populations may correct this limitation.

Implications for Practitioners

This preliminary study provides evidence that a financial coaching intervention can be of benefit to older adults in addressing financial, mental, cognitive, and physical outcomes resulting from being a victim of FE. This study has important implications for financial coaches and other financial services professionals. Although FE is a crime and many consider legal intervention, financial coaches and other professionals can be of service to FE victims. Financial coaches and other financial professionals have the skill base and knowledge to assist individuals in addressing the financial fallout encountered as a result of being a victim of FE. Services to address financial restoration alleviate much of the anxiety around the financial loss imposed upon FE victims. SAFE clients who received services were able to recover or save monies in more than half of the investigated cases and exhibited lower levels of stress after being provided with coaching services. This supports the SAFE program's benefits not only as an effective resource for aiding in FE recovery, but also as an intervention for improved mental health after FE. This preliminary, exploratory study is only the beginning in the necessary body of empirical work aimed at understanding the benefits of financial coaching as a clinical intervention when addressing FE. The focus of future study should testing the efficacy of financial coaching interventions with larger sample sizes to delineate the efficacy of such programs dependent on the method of FE (e.g., scams, family members).

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