

# Financial Exploitation and Psychological Mistreatment Among Older Adults: Differences Between African Americans and Non-African Americans in a Population-Based Survey

Scott R. Beach, PhD,\*<sup>1</sup> Richard Schulz, PhD,<sup>2</sup> Nicholas G. Castle, PhD,<sup>3</sup>  
and Jules Rosen, MD<sup>4</sup>

<sup>1</sup>University Center for Social and Urban Research, University of Pittsburgh, Pennsylvania.

<sup>2</sup>Department of Psychiatry, University Center for Social and Urban Research, University of Pittsburgh, Pennsylvania.

<sup>3</sup>Department of Health Policy & Management, Graduate School of Public Health, University of Pittsburgh, Pennsylvania.

<sup>4</sup>Department of Psychiatry, University of Pittsburgh, Pennsylvania.

\*Address correspondence to Scott R. Beach, PhD, University Center for Social and Urban Research, University of Pittsburgh, Pittsburgh, PA 15260.  
E-mail: scottb@pitt.edu

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**Purpose:** To examine racial differences in (a) the prevalence of financial exploitation and psychological mistreatment since turning 60 and in the past 6 months and (b) the experience—perpetrator, frequency, and degree of upset—of psychological mistreatment in the past 6 months. **Design and methods:** Random digit dial telephone recruitment and population-based survey (telephone and in-person) of 903 adults aged 60 years and older in Allegheny County (Pittsburgh), Pennsylvania (693 non-African American and 210 African American). Covariates included sex, age, education, marital status, household composition, cognitive function, instrumental activities of daily living/activities of daily living difficulties, and depression symptoms. **Results:** Prevalence rates were significantly higher for African Americans than for non-African Americans for financial exploitation since turning 60 (23.0% vs. 8.4%) and in the past 6 months (12.9% vs. 2.4%) and for psychological mistreatment since turning 60 (24.4% vs. 13.2%) and in the past 6 months (16.1% vs. 7.2%). These differences remained once all covariates were controlled in logistic regression models. There were also racial differences in the experience of psychological mistreatment in the past 6 months. Risk for clinical depression was also a consistent predictor of financial exploitation and psy-

chological mistreatment. **Implications:** Although the results will need to be replicated in national surveys, the study suggests that racial differences in elder mistreatment are a potentially serious issue deserving of continued attention from researchers, health providers, and social service professionals.

*Key Words:* Elder mistreatment, Racial disparities, Risk factor models

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## Introduction

Elder mistreatment has been recognized as a significant social problem for several decades. The National Research Council (2003) issued a report summarizing the state of scientific knowledge in the area, noting a variety of fundamental deficits, and recommending a research agenda to move the field forward. Among the recommendations were population-based surveys of elders and studies of the risk and protective factors for different types of elder mistreatment. This research reports on data from a population-based survey of elders focusing on race as a risk factor for financial exploitation and psychological mistreatment.

The guiding framework for the research is the theoretical model of elder mistreatment proposed by the [National Research Council \(2003\)](#). The model lays out the sociocultural context within which elder mistreatment may occur and considers race to be a broad social status factor that may represent a generic risk factor for mistreatment. The model also includes other individual factors related to physical and mental health status, as well as social embeddedness in the form of ties to family and friends as potential risk factors. We include a range of these factors, along with our focal variable race, in the risk models. It should be noted that the model also includes the same factors for the “trusted other” or potential perpetrator of mistreatment, along with power and exchange dynamics between the elder and trusted other as risk factors.

There have been relatively few population-based surveys directly asking elders whether they have been victims of abuse, mistreatment, or exploitation. We identified three surveys conducted in the United States to date ([Acierno et al., 2010](#); [Laumann, Leitsch, & Waite, 2008](#); [Pillemer & Finkelhor, 1988](#)). A few other international population-based surveys of elders have also been conducted, including the United Kingdom ([Biggs, Manthorpe, Tinker, Doyle, & Erens, 2009](#)), Canada ([Podnieks, 1992](#)), The Netherlands ([Comijs, Pot, Smit, Bouter, & Jonker, 1998](#)), and Israel ([Lowenstein, Eisikovits, Band-Winterstein, & Enosh, 2009](#)). Generalizations from these studies are somewhat tenuous as they differed in the types of elder mistreatment examined, the definitions of what constituted a “case” of elder mistreatment, and the mode of data collection (telephone vs. in-person). The overall prevalence estimates of elder mistreatment, broadly defined as any type, ranged from 2.6% to 18.4%.

These population-based surveys have found a variety of risk factors for elder abuse, including gender ([Biggs et al., 2009](#); [Laumann et al., 2008](#); [Lowenstein et al., 2009](#)), living arrangements ([Laumann et al.](#); [Lowenstein et al.](#); [Pillemer & Finkelhor, 1988](#); [Podnieks, 1992](#)), socioeconomic status ([Biggs et al.](#)), physical health status ([Biggs et al.](#); [Laumann et al.](#)), social isolation and low social support ([Acierno et al., 2010](#); [Podnieks, 1992](#)), and experience of previous traumatic events ([Acierno et al., 2010](#)).

However, only the [Laumann and colleagues \(2008\)](#) national survey in the United States reported race as a risk factor for elder mistreatment. This

study found higher risk of financial exploitation for African American elders than for Whites and lower risk of verbal mistreatment for Hispanic or Latino elders compared with Whites. African Americans and Whites did not differ in the risk for verbal mistreatment. These racial differences suggest the possibility that cultural and social factors may play a role in elder mistreatment. For example, the greater risk of financial exploitation among African Americans may be the result of financial pressures that covary with race and/or larger extended family configurations more typical of African Americans ([Griffin & Williams, 1992](#)), which may provide increased opportunities for such exploitation. It should be noted that the [Laumann and colleagues](#) study measured both financial and verbal mistreatments with single questions, which were added to the existing National Social Life, Health, and Aging Project household survey. [Acierno and colleagues \(2010\)](#) reported higher prevalence of “potential neglect” (defined as unmet needs for activities of daily living [ADL]/instrumental activities of daily living [IADL] assistance) for African Americans but did not find significant race differences for emotional or financial mistreatment. The other U.S. population-based survey by [Pillemer and Finkelhor \(1988\)](#), conducted in the Boston Metropolitan area, did not identify any race differences, whereas the United Kingdom ([Biggs et al., 2009](#)), Canadian ([Podnieks, 1992](#)), Dutch ([Comijs et al., 1998](#)), and Israeli ([Lowenstein et al., 2009](#)) surveys did not examine race.

Two population-based studies of elder mistreatment not using direct victim surveys also deserve mention. The [National Center on Elder Abuse \(1998\)](#) conducted The National Elder Abuse Incidence Study (NEAIS). This study supplemented official Adult Protective Services (APS) statistics with observational reports of randomly selected “sentinels,” employees of law enforcement agencies, elder care providers, hospitals, and financial institutions likely to come into contact with older adults. The sentinels were trained to look for suspected cases of elder abuse over an 8-week period, to record the incident using data capture forms, and to forward them to NEAIS staff. The study estimated that approximately 450,000 elderly persons, aged 60 years and older, had been abused or neglected in domestic settings in 1996 for an overall incidence rate of 1.2%. The researchers did not report significant race differences in the incidence of abuse.

In another study linking the New Haven Established Population for Epidemiologic Study of the

Elderly cohort with APS records, Lachs and colleagues (Lachs, Berkman, Fulmer, & Horwitz, 1994; Lachs, Williams, O'Brien, Hurst, & Horwitz, 1997) found that African Americans were at greater risk than Whites of having elder abuse investigated by or reported to APS in Connecticut over a 9-year period. The authors noted that APS investigations and reports are known to capture only a small portion of elder abuse actually occurring in the population (National Research Council, 2003). Nevertheless, this work also suggests that social and cultural factors may play a role in elder mistreatment that comes to the attention of APS. This is consistent with other research showing that African Americans have higher rates of contact (in proportion to their population size) with police and other law enforcement agencies as both victims and perpetrators than do other racial groups (Bureau of Justice Statistics, 2010).

In sum, evidence for race as a risk factor for elder mistreatment is mixed at best from available population-based studies conducted in the United States, Canada, Europe, and Israel. Only one of seven population-based surveys of elders found race differences in the prevalence of abuse—African Americans were more likely to report financial exploitation—and that study used a single-item measure (Laumann et al., 2008). A population-based study of elder abuse investigations and reports by APS in Connecticut also reported higher risk for African Americans, although the authors acknowledged that APS reports represent only a small fraction of actual elder abuse. Nevertheless, these findings do suggest that social and cultural factors like family dynamics in confronting financial pressures may play a role in elder mistreatment among African Americans (Griffin & Williams, 1992).

Furthermore, it is important to examine potential racial disparities in elder mistreatment, given broad public health focus on reduction of such disparities as part of the Healthy People 2010 initiative (Keppel, Garcia, Hallquist, Ryskulova, & Agress, 2008). Although elder mistreatment per se is not one of the target objectives of Healthy People 2010, family violence is. In fact, disparities were reported to be increasing for African Americans in the area of “physical assault by intimate partners” in a recent report (Garcia, Hallquist, & Keppel, 2008). It should be noted that the National Research Council (2003) listed race as a “possible risk factor” based on the evidence at that time. Further elucidation of risk factors for elder mistreatment is required before effective preventive or ameliora-

tive interventions can be designed. Thus, more research is clearly called for on this issue.

This research reports on data from a population-based survey of 903 adults aged 60 years and older, including 210 African Americans, in Allegheny County (Pittsburgh), Pennsylvania. The focus of the analyses is on race as a risk factor for financial exploitation and psychological mistreatment, both in a bivariate and multivariate context. Multivariate analyses control for other demographic variables, household composition, cognitive function, physical disability, and depression symptoms. This research also reports data on race differences in the experience of psychological mistreatment—perpetrator, frequency, and degree of upset—experienced by older adults in the past 6 months.

## Methods

### *Sample Design*

The target population was adults aged 60 years and older residing in households with landline telephones in Allegheny County (Pittsburgh), Pennsylvania. Additional eligibility criteria included English speaking and no severe cognitive impairment (see subsequently). Random digit dialing telephone sampling with screening for age was used to obtain the sample. Telephone exchanges in Allegheny County with an estimated 25% or higher proportion of African Americans were oversampled in order to obtain sufficient numbers for analysis.

The study involved a randomized survey mode experiment in which half of the interviews were conducted by telephone and half in-person and within mode, half by an interviewer and half self-administered by computer or interactive voice response (four conditions). Results of the mode experiment are presented elsewhere (Beach et al., *in press*), and this article reports on results of the four methods combined. All the race differences reported here were present across the four experimental conditions. Furthermore, the multivariate analyses (see subsequently) include experimental condition as a control variable, although this is not reported in the article.

### *Procedures*

In the telephone conditions, once a household was determined to be eligible, an attempt was made to conduct the interview at that time. For the in-person conditions, once eligibility was

determined, an attempt was made to schedule an appointment for the interview. Interviews were conducted by 16 female interviewers at the University Center for Social and Urban Research at the University of Pittsburgh between May 2007 and January 2008. Across experimental conditions, up to 10 calls were made to each number on different days of the week at different times of the day to attempt a screening interview. In an attempt to maximize comfort level and rapport, race of interviewer (African American or not) was matched to race of respondent (collected at telephone screening) for the in-person survey conditions. The interviews took an average of 45 min to complete. Participants in the telephone interview conditions were offered a \$10 supermarket gift card as an incentive, whereas those in the in-person conditions were offered \$20 gift cards. We felt that asking respondents to either allow us into their homes or to travel to our offices or a neutral location justified the larger incentive for the in-person conditions. The institutional review board of the University of Pittsburgh approved the study. The consent form for the study contained a sentence advising participants that suspected cases of abuse may be reported to the proper agencies. No potential participants refused to be interviewed after receiving this information.

### *Sample Outcomes and Response Rates*

The goal was to complete 900 surveys (approximately 225 per condition). In order to achieve this, 35,162 telephone numbers were dialed. Among these telephone numbers, 15,791 were found to be nonworking or nonhouseholds and 6,374 were screened households not containing anyone aged 60 years or older (i.e., ineligible). Among the remaining 12,997 numbers, 2,040 refused to be screened and we were unable to complete screening interviews after 10 calls at 8,562 numbers due to noncontact (multiple no answers, answering devices, etc.). Among the 2,395 numbers, which screened eligible for the survey (at least one person aged 60 years or older in household), we completed 903 interviews (including 210 African Americans) for an interview completion rate of 37.7% (31.5% in-person conditions and 46.9% telephone conditions).

### *Measures*

This study focuses on financial exploitation and psychological mistreatment, both since turning 60

and in the 6 months prior to the interview. The age 60 cutoff was used to be consistent with the elder abuse statutes in the state of Pennsylvania, and the “since turning 60” approach was an attempt to estimate “lifetime” prevalence. We chose 6 months to capture more recently occurring events and to maximize recall of details. Neglect, physical, and sexual mistreatment were also measured, but the prevalence rates were quite low and are not the focus of this article.

*Financial Exploitation.*—Financial exploitation was measured with four items, adapted from work by [Quinn and Tomita \(1986\)](#): (a) Have you signed any forms or documents that you didn't quite understand?; (b) Has anyone asked you to sign anything without explaining what you were signing?; (c) Has anyone taken your checks without permission?; and (d) Have you suspected that anyone was tampering with your savings or other assets? The items were in a yes or no format and asked for occurrence since turning 60, and if yes, in the past 6 months. Those responding “yes” to any of the four questions were considered to have experienced financial exploitation. The individual items were also examined for race differences.

*Psychological Mistreatment.*—Psychological mistreatment was measured with eight yes or no items from the modified Conflict Tactics Scale ([Straus, 1979](#)). These were prefaced with the following: “Since you turned 60 (In the past 6 months) has your spouse, son, daughter, other family member or anyone else that you trust . . .” (a) screamed or yelled at you, (b) insulted you, called you names, or swore at you, (c) said something to deliberately hurt you, (d) stomped out of a room after an argument, (e) destroyed something that belonged to you, (f) threatened to hit you or throw something at you, (g) threatened to send you to a nursing home, and (g) threatened to abandon you or stop taking care of you. Those responding “yes” to three or more of the eight items or those responding yes to either threats to send to a nursing home (#7) or threats to abandon or stop taking care of (#8) were considered to have experienced psychological mistreatment. This “caseness” definition, although admittedly somewhat arbitrary, was an attempt to ensure a minimum level of severity or clinical significance in order to indicate psychological “mistreatment” had in fact occurred. The individual



psychological mistreatment items were also examined for race differences.

For those reporting psychological mistreatment in the past 6 months, follow-up questions were asked for each reported behavior about who did it, frequency of occurrence in the past 6 months, and how upsetting it was. The perpetrator questions asked if it was the spouse, son, daughter, another family member, or another trusted person (respondents could report multiple perpetrators). Frequency of occurrence was asked using the following categories: once, 2–5 times, 6–9 times, and 10 or more times. The upset questions were worded as follows: “In general, how upsetting has this been for you? Extremely upsetting, Somewhat upsetting, Only slightly upsetting, or Not at all upsetting.”

*Demographic Variables.*—In addition to race (categorized as African American, White, and other—which were combined for analyses; see subsequently), we collected standard demographic information including sex, age, education level, and marital status. Age was coded into four categories (60–64, 65–74, 75–84, and 85 or older), and the 65–74 category was used as the reference category in logistic regression models (see subsequently). Education was also coded into four categories (less than high school, high school graduate, some college or technical school, and college graduate), and high school graduate was used as the reference category. Marital status was categorized as married (reference category), widowed, divorced/separated, or never married.

*Household Composition.*—Household composition was assessed with two questions: (a) Excluding yourself, how many other people live in your home and (if one or more others live with the elder) (b) Who all lives in your home. The second question was coded for spouse, son, daughter, and other family members, and these were entered as separate indicator variables in the models.

*Cognitive Function.*—Cognitive function was assessed with the brief measure of cognitive status designed for administration over the telephone for the Asset and Health Dynamics Among the Oldest Old study described by Herzog and Wallace (1997). The measure taps memory (immediate and delayed free recall and working memory), knowledge, language, and orientation. A total score ranging from 0 to 25 is derived, and the authors suggest scores of 8

or less indicate severe cognitive impairment. If the respondent had made it to this point in the interview (which occurred fairly early), anyone scoring 8 or less was not interviewed further and considered to be ineligible. A total of nine respondents were screened ineligible due to cognitive impairment. Cognitive function is analyzed as a continuous variable.

*Physical Disability.*—Physical disability was assessed with six standard yes or no format IADL difficulty (heavy housework, light housework, shopping, preparing meals, managing money, and using phone) and six ADL difficulty (eating, dressing, bathing, using the toilet, walking around the home, and bed or chair transfers) items. The presence of any IADL and any ADL difficulties (entered separately) was used for statistical analysis.

*Depression Symptoms.*—Depression symptoms were assessed using the 10-item version of the Center for Epidemiological Studies–Depression Scale (CES-D; Shrout & Yager, 1989). Based on the traditional cutoff of 16 or higher suggested for the original 20-item CES-D (Radloff, 1977), scores of 8 or higher on the scale were used to indicate risk for clinical depression. The dichotomized variable was used for statistical analysis.

### *Statistical Analysis*

This article focuses on race differences in financial exploitation and psychological mistreatment. Bivariate comparisons for prevalence rates, including since turning 60 and in the past 6 months, are made between African Americans and non-African Americans using chi-square statistics. Race differences in the experience of psychological mistreatment in the past 6 months (perpetrator, frequency, and upset) are also tested with chi-square statistics. Race is explored as a risk factor in a multivariate context through logistic regression models, and odds ratios (ORs) and standard errors are reported. Other covariates in the models include gender, age, education level, marital status, household composition, cognitive function, any IADL or ADL difficulties, and risk for clinical depression (see Measures section for variable coding information). The models also control for mode of data collection from the randomized experiment (results not shown).

Because these analyses focused on estimating race differences in prevalence of financial exploitation and psychological mistreatment in the population of

Table 1. Descriptive Statistics for Total Sample and by Race

	Total sample ( <i>n</i> = 903)	Non-African American ( <i>n</i> = 693)	African American ( <i>n</i> = 210)	<i>p</i> Value
Sex				
Male	241 (26.7)	192 (27.7)	49 (23.3)	
Female	662 (73.3)	501 (72.3)	161 (76.7)	.210
Age ( <i>n</i> = 901), years				
M ( <i>SD</i> )	72.5 (8.1)	72.9 (8.3)	71.5 (7.3)	.001
60—64	179 (19.9)	143 (20.7)	36 (17.1)	
65—74	364 (40.4)	252 (36.5)	112 (53.3)	
75—84	281 (31.2)	234 (33.9)	47 (22.4)	
85 and older	77 (8.5)	62 (9.0)	15 (7.1)	<.001
Race ( <i>n</i> = 902)				
White	657 (72.8)	657 (94.9)	—	
Black	210 (23.3)	—	210 (100)	
Other	35 (3.9)	35 (5.1)	—	<.001
Education ( <i>n</i> = 901)				
Less than high school	108 (12.0)	64 (9.2)	44 (21.2)	
High school graduate	313 (34.7)	244 (35.2)	69 (33.2)	
Some college	266 (29.5)	200 (28.9)	66 (31.7)	
College graduate	214 (23.8)	185 (26.7)	29 (13.9)	<.001
Marital status ( <i>n</i> = 902)				
Married	329 (36.5)	298 (43.1)	31 (14.8)	
Widowed	323 (35.8)	237 (34.2)	86 (41.0)	
Divorced/separated	178 (19.8)	103 (14.8)	75 (35.7)	
Never married	72 (8.0)	54 (7.8)	18 (8.6)	<.001
Household composition				
Live alone	436 (51.6)	321 (46.3)	115 (55.3)	.023
Live with spouse	325 (36.0)	294 (42.4)	31 (14.8)	<.001
Live with son	77 (8.5)	55 (7.9)	22 (10.5)	.248
Live with daughter	62 (6.9)	41 (5.9)	21 (10.0)	.040
Live with other family	96 (10.6)	51 (7.4)	45 (21.4)	<.001
Cognitive function				
M ( <i>SD</i> )	22.0 (4.7)	22.6 (4.5)	19.9 (4.9)	<.001
Physical disability				
IADL difficulty	394 (43.6)	288 (41.6)	106 (50.5)	.022
ADL difficulty	124 (13.7)	85 (12.3)	39 (18.6)	.020
Risk for depression				
≥8 on CES-D	264 (29.2)	193 (27.8)	71 (33.8)	.096

Note: Entries are *n* (%) unless otherwise noted. ADL = activities of daily living; CES-D = Center for Epidemiological Studies—Depression Scale; IADL = instrumental activities of daily living.

adults aged 60 years and older residing in Allegheny County (Pittsburgh), Pennsylvania with oversampling of African Americans, statistical weights were applied. The weight contained two components: (a) a base design weight—an adjustment for the probability of selection of the phone number for the two sampling strata; and (b) a poststratification adjustment based on six Gender × Age Cells (60–64, 65–74, and 75 and older) using the most recent American Community Survey estimates for the county. The poststratification weight adjusted for differential nonresponse across the gender/age cells. Analyses were performed using the complex survey module in STATA version 10.0.

## Results

### Sample Characteristics

Unweighted descriptive statistics for the total sample, for the 210 African Americans, and for the 693 non-African Americans are shown in Table 1. There were several bivariate race differences on the study measures. African Americans were slightly younger, less educated, and much less likely to be married and more likely to be divorced or separated than the non-African American sample. In terms of household composition, African American elders were more likely to live with their adult daughter and with other family members (besides

**Table 2. Prevalence of Financial Exploitation and Psychological Mistreatment Since Turning 60 and in the Past 6 Months Overall and by Race**

	Overall since 60 (n = 902)	Non-AA since 60 (n = 692)	AA since 60 (n = 210)	p Value	Overall past 6 months	Non-AA past 6 months	AA past 6 months	p Value
Financial exploitation (any) <sup>a</sup>	9.7	8.4	23.0	<.001	3.5	2.4	12.9**	<.001
Sign documents didn't understand	6.3	5.5	13.1	.003	2.7	2.1	8.6	<.001
Sign something without explanation	2.3	1.7	6.9	<.001	0.4	0.0	3.7	<.001
Someone taken checks without permission	1.4	1.1	4.2	.009	0.2	0.0	1.7	<.001
Suspected someone tampering with money	2.3	1.7	8.1	<.001	2.7	0.3	3.9	<.001
Psychological mistreatment (any) <sup>b</sup>	14.3	13.2	24.4	.004	8.2	7.2	16.1	.004
Screamed or yelled at	30.0	29.3	35.9	.182	20.7	20.2	25.0	.278
Insulted, called names, swore at	16.5	15.9	21.5	.148	9.3	8.6	15.9	.023
Said something to deliberately hurt	17.3	16.3	25.3	.020	10.8	10.2	15.9	.075
Stomped out of room after argument	21.2	20.5	26.7	.180	11.5	10.6	19.4	.018
Destroyed something that belonged to you	5.7	4.8	13.8	<.001	2.5	1.9	7.7	<.001
Threat to hit or throw something at you	3.5	2.8	9.0	.004	2.1	1.5	7.0	.002
Threat to send to nursing home	1.1	0.8	3.0	.058	0.4	0.5	0.2	.557
Threat to stop taking care of you	1.0	0.9	2.0	.182	0.7	0.7	1.4	.288

Notes: Table entries are percentages. AA = African American.

<sup>a</sup>Any financial exploitation defined as “yes” to any of the four items.

<sup>b</sup>Any psychological mistreatment defined as “yes” to greater than or equal to three of the eight items or “yes” to either threat to send to nursing home or threat to stop taking care of.

spouse and children) and were also more likely to live alone. In addition, African Americans in the sample had lower cognitive function scores and were more likely to report at least one IADL and one ADL difficulty than were non-African Americans. African Americans were also more likely to be at risk for clinical depression, although the difference did not reach conventional levels of statistical significance.

#### *Bivariate Race Differences in the Prevalence of Financial Exploitation and Psychological Mistreatment*

Weighted prevalence rates for financial exploitation and psychological mistreatment since turning 60 and in the past 6 months are presented in Table 2. Rates are presented both for “any” exploitation or mistreatment (see definitions in

Table 2 footnote) and for each individual item. Looking first at financial exploitation, although the overall prevalence rate in the sample since turning 60 was 9.7%, the rate among African Americans (23.0%) was nearly three times that for non-African Americans (8.4%). Furthermore, there were significant race differences on all four of the individual items for financial exploitation since turning 60. Although the overall 6-month prevalence rate of financial exploitation was 3.5%, the rate for African Americans (12.9%) was more than five times the rate for non-African Americans (2.4%). Again, there were significant race differences on all four of the individual items for 6-month financial exploitation.

Turning to psychological mistreatment since turning 60, the overall prevalence rate was 14.3%. Once again, African Americans had a significantly higher prevalence rate (24.4%) than non-African Americans (13.2%). In this domain, only three of the eight individual items revealed significantly higher African American prevalence rates: saying something to deliberately hurt you, destroyed something belonging to you, and threatening to hit or throw something at you. The overall 6-month prevalence rate for psychological mistreatment was 8.2%, but the rate for African Americans (16.1%) was more than twice the rate for non-African Americans (7.2%). There were also significant race differences on four of the eight individual items for the past 6 months: insulted, called names, and swore at; stomped out of a room after an argument; destroyed something belonging to you; and threaten to hit or throw something at you.

#### *Multivariate Analyses of Race as a Risk Factor for Financial Exploitation and Psychological Mistreatment*

The bivariate results just presented show race differences in prevalence rates for financial exploitation and psychological mistreatment—African American elders were at greater risk for both types of mistreatment. However, Table 1 also shows that there were race differences on sociodemographic variables, household composition, cognitive function, and physical disability. These differences could explain or account for the race differences in financial exploitation and/or psychological mistreatment; therefore, multivariate analyses were conducted. Table 3 presents results from logistic regression models of any financial exploitation and psychological mistreatment (both since turning 60

and in the past 6 months) onto race, gender, age, education, marital status, household composition, cognitive function, any IADL/ADL difficulties, and risk for clinical depression.

The model for financial exploitation since turning 60 reveals a significant race difference after controlling for all covariates. African Americans' risk for financial exploitation since turning 60 was nearly four times that of non-African Americans (OR = 3.91,  $p < .001$ ). Other significant risk factors included living with family members other than spouse or children, reporting at least one IADL difficulty, and being at risk for clinical depression. The model for financial exploitation in the past 6 months shows an even larger race difference after controlling for all of the covariates. African Americans' risk for financial exploitation in the past 6 months was over eight times that of non-African Americans (OR = 8.57,  $p < .01$ ). The other significant risk factor in this model was risk for clinical depression. In addition, those reporting at least one ADL difficulty had lower risk of financial exploitation in the past 6 months.

Turning to psychological mistreatment since turning 60, race is once again a significant risk factor. African Americans' risk for psychological mistreatment since turning 60 was more than two times that of non-African Americans (OR = 2.30,  $p < .01$ ). Those at risk for clinical depression had a risk for psychological mistreatment since turning 60 that was more than three times that of those not at risk for depression. Respondents with some college or technical school were at higher risk than high school graduates. In addition, older participants (75 years and older) and those who were widowed or never married were at reduced risk (i.e., married were at higher risk). African Americans' risk for psychological mistreatment in the past 6 months was more than two times that of non-African Americans but the results did not reach conventional levels of statistical significance (OR = 2.18,  $p = .062$ ). In this model, the best predictor is risk for clinical depression (OR = 6.17,  $p < .01$ ). In addition, participants aged 75–84 years were at lower risk of recent psychological mistreatment than aged 65- to 74-year-olds.

#### *Supplemental Multivariate Analyses of Individual Financial Exploitation Items*

Given that our measure of financial exploitation “caseness” has not been validated, we conducted



**Table 3. Logistic Regression Analyses of Financial Exploitation and Psychological Mistreatment Since Turning 60 and in the Past 6 Months onto Race, Other Sociodemographic Variables, Household Composition, Cognitive Function, Physical Disability, and Risk for Depression**

	Financial exploitation since turning 60 ( <i>n</i> = 878)		Financial exploitation past 6 months ( <i>n</i> = 878)		Psychological mistreatment since turning 60 ( <i>n</i> = 880)		Psychological mistreatment past 6 months ( <i>n</i> = 880)	
	OR (SE)	<i>p</i> Value	OR (SE)	<i>p</i> Value	OR (SE)	<i>p</i> Value	OR (SE)	<i>p</i> Value
African American	3.91 (1.22)	<.001	8.57 (3.79)	<.001	2.30 (0.73)	.009	2.18 (0.91)	.062
Male	1.18 (0.39)	.612	0.86 (0.43)	.768	0.85 (0.23)	.552	0.84 (0.29)	.607
Age (years)								
60–64 <sup>a</sup>	0.63 (0.25)	.239	0.48 (0.31)	.253	0.54 (0.18)	.060	0.79 (0.31)	.547
75–84 <sup>a</sup>	1.27 (0.43)	.472	1.26 (0.62)	.643	0.38 (0.13)	.005	0.24 (0.14)	.012
85 and older <sup>a</sup>	0.40 (0.22)	.093	0.31 (0.23)	.114	0.18 (0.14)	.031	0.25 (0.21)	.098
Less than high school <sup>b</sup>	1.03 (0.49)	.947	1.44 (1.08)	.629	1.67 (0.81)	.288	2.23 (1.19)	.135
Some college <sup>b</sup>	0.81 (0.29)	.550	0.70 (0.39)	.522	1.88 (0.59)	.044	1.77 (0.72)	.160
College graduate <sup>b</sup>	1.19 (0.47)	.663	2.13 (1.31)	.218	1.57 (0.59)	.225	0.71 (0.39)	.535
Widowed <sup>c</sup>	2.36 (1.79)	.257	3.03 (4.29)	.434	0.18 (0.16)	.049	0.30 (0.20)	.070
Divorced/separated <sup>c</sup>	1.48 (1.14)	.614	4.58 (6.52)	.284	0.34 (0.30)	.227	0.43 (0.29)	.209
Never married <sup>c</sup>	0.99 (0.92)	.995	1.01 (1.68)	.994	0.12 (0.12)	.037	0.40 (0.32)	.248
Live with/spouse	2.13 (1.60)	.312	7.53 (10.11)	.133	0.33 (0.29)	.205	0.88 (0.55)	.842
Live with/son	0.68 (0.44)	.550	0.82 (0.52)	.751	1.64 (0.62)	.188	1.74 (0.77)	.208
Live with/daughter	1.56 (0.62)	.259	0.59 (0.36)	.384	0.70 (0.32)	.432	1.01 (0.57)	.986
Live with/other family	2.20 (0.88)	.049	1.54 (0.97)	.496	1.40 (0.50)	.343	1.69 (0.81)	.276
Cognitive function	1.01 (0.04)	.695	0.98 (0.05)	.708	1.05 (0.04)	.224	0.96 (0.04)	.276
Any IADL difficulty	1.97 (0.60)	.027	1.71 (0.84)	.273	1.29 (0.35)	.342	0.95 (0.35)	.890
Any ADL difficulty	0.67 (0.24)	.273	0.24 (0.14)	.013	0.67 (0.29)	.343	0.80 (0.41)	.659
Risk for depression <sup>d</sup>	2.56 (0.75)	.001	4.28 (2.08)	.003	3.14 (0.88)	<.001	6.17 (2.23)	<.001

Notes: Outcome variable is any financial exploitation or psychological mistreatment; see Table 2 footnote for definitions.

Models also control for method of data collection (Computer-Assisted Telephone Interview, Interactive Voice Response, Computer-Assisted Personal Interview, Audio Computer-Assisted Self Interview; not shown). ADL = activities of daily living; IADL = instrumental activities of daily living.

<sup>a</sup>Age 65–74 reference category.

<sup>b</sup>High school graduate reference category

<sup>c</sup>Married reference category

<sup>d</sup>8+ Center for Epidemiological Studies–Depression Scale.

supplemental logistic regression analyses examining race as a risk factor for saying “yes” to each of the four individual financial exploitation items, both since turning 60 and in the past 6 months. All covariates entered into the models just discussed (Table 3) were included. These analyses revealed that race was a significant risk factor in seven of the eight models, controlling all covariates. The only model where race was not significant was for someone taking checks without permission in the past 6 months.

### *Supplemental Multivariate Analyses of Individual Psychological Mistreatment Items*

For the same reason—“caseness” definition not previously validated—similar analyses were performed on the eight individual items measuring psychological mistreatment. Results of these analyses were not as strong, with African Americans being at higher risk of psychological mistreatment

in only 3 of the 16 models tested. African Americans were at higher risk for someone saying something to deliberately hurt them since turning 60 and destroying something that belonged to them, both since turning 60 and in the past 6 months. There were three other models where race was a marginally significant ( $p < .10$ ) risk factor for 6 month psychological mistreatment: insulted, called names, and swore at; stomped out of room after an argument; and threats to hit or throw something at you.

### *Race Differences in the Experience of Psychological Mistreatment in the Past 6 Months*

For those reporting psychological mistreatment in the past 6 months, follow-up questions for each reported behavior were asked about the perpetrator(s), frequency of occurrence, and degree of upset caused by the behavior. Race differences in

**Table 4. Race Differences in the Experience of Psychological Mistreatment in the Past 6 Months: Perpetrator, Frequency, and Degree of Upset**

	Perpetrator <sup>a</sup>					Frequency			Degree of upset		
	Spouse	Son	Daughter	Other family	Other trusted	1 time	2–9 times	10+ times	Not at all	Some/ slightly	Extreme
Scream/yelled											
Non-AA (136)	37.8	18.5	30.0	14.6	8.8	24.5	64.5	11.0	14.1	65.7	20.2
AA (47)	3.8**	18.4	37.2	45.2**	22.2	13.4	79.8	6.8	34.6	50.4	15.0*
Insulted, called names, swore at											
Non-AA (60)	25.2	24.2	17.5	29.9	21.5	23.8	59.0	17.2	4.3	64.4	31.3
AA (27)	9.1	27.1	19.4	47.7	39.4	21.6	56.5	21.9	15.7	60.1	24.2
Said something deliberately hurt											
Non-AA (72)	20.8	24.0	18.5	22.9	25.1	27.2	60.3	12.5	0.4	68.5	31.1
AA (32)	16.6	12.0	15.6	47.2	37.2	40.5	55.6	3.9	9.2	52.4	38.4**
Stomped out of room											
Non-AA (76)	17.1	28.5	19.3	27.3	5.4	51.9	45.7	2.4	17.3	56.3	26.4
AA (31)	9.4	34.6	45.6*	27.2	28.4*	27.2	66.7	6.1	36.4	57.1	6.5
Destroyed something											
Non-AA (15)	12.6	8.4	23.1	76.4	24.0	86.2	12.9	0.9	0	76.2	23.8
AA (13)	0	19.4	5.6	18.4**	50.8	30.4	68.4	1.2*	28.2	18.4	53.4*
Threat to hit or throw											
Non-AA (9)	22.4	52.2	3.9	21.5	0	35.7	36.6	27.7	0	50.5	49.5
AA (11)	1.7*	5.5**	13.2	63.2**	0	21.5	75.1	3.4*	46.9	38.0	15.1*

Notes: Table entries are percentages. Number in parentheses after non-AA and AA is number reporting that form of abuse in past 6 months, which serves as the base *n*. AA = African American.

\* $p < .05$  and \*\* $p < .01$  non-AA versus AA within column for perpetrator, overall chi-square test for frequency and degree of upset.

<sup>a</sup>Respondents could name multiple perpetrators for each behavior.

response to these questions are shown in Table 4. Two items—threats to send to a nursing home, and threats to abandon or stop taking care of—had too few cases in the past 6 months for analyses.

Looking first at perpetrator, non-African Americans were more likely to report the spouse as a source of screaming and yelling, whereas African Americans more often reported such behavior by other (nonspouse and non-child) family members. This same pattern emerged for threats to hit or throw something at you. These results reflect the reported household composition differences reported in Table 1. However, non-African Americans were more likely to report other family members as destroying something belonging to them in the past 6 months. Other findings included African American elders being more likely to report daughters and other trusted persons (nonfamily) stomped out of a room after an argument. In addition, non-African Americans were more likely to report sons as threatening to hit or throw something at them.

There were relatively few differences in the frequency of occurrence of the psychological mistreatment behaviors in the past 6 months. African American elders did report higher frequencies of the two least prevalent behaviors—someone

destroying something of theirs and threats to hit or throw something at them.

Finally, looking at the degree of upset caused by recent psychological mistreatment, African American elders reported less upset with screaming and yelling and threats to hit or throw something at them than non-African Americans. In addition, African Americans showed more variable levels of upset than non-African Americans with having something said to deliberately hurt them or having property destroyed. That is, they were more likely to report both being “not at all” and “extremely” upset with these behaviors.

## Discussion

This research reports data on race differences in the prevalence of financial exploitation and psychological mistreatment in a population-based sample in Allegheny County (Pittsburgh), Pennsylvania. We found consistent differences in which African American elders were at greater risk for both financial exploitation and psychological mistreatment than non-African American elders, since turning 60 and in the 6 months prior to the interview. These findings remained once sex, age, education,

marital status, household composition, cognitive function, ADL/IADL disability, and risk for clinical depression were statistically controlled. This is only the second population-based victim survey to report race differences in elder mistreatment. There were also some race differences in the experience (perpetrator, frequency, and degree of upset) of psychological mistreatment in the past 6 months. African Americans were more likely to report other family members as screaming and yelling at them and threatening to hit or throw something at them, whereas non-African Americans more often reported the spouse as perpetrators of these types of mistreatment. In addition, African Americans were more likely to report daughters stomping out of a room after an argument, whereas non-African Americans more often reported sons as threatening to hit or throw something at them. African Americans reported higher frequencies of someone destroying something of theirs and threats to hit or throw something at them in the past 6 months. Finally, African Americans reported being less upset than non-African Americans with screaming and yelling and threats to hit or throw something at them and had more variable or extreme levels of upset with someone having said something to deliberately hurt them and having property destroyed.

The results were particularly strong for financial exploitation for which African Americans had nearly four times greater risk since turning 60, adjusting for all other covariates. Even more striking, African Americans' risk for financial exploitation in the past 6 months was an adjusted 8.5 times greater than non-African American elders. Although consistent with the U.S. national survey results reported by [Laumann and colleagues \(2008\)](#), they are stronger in magnitude. It is interesting that race differences in age, education, marital status, household composition, cognitive function, and physical disability do not explain these findings. One might speculate, for example, that having less education, living alone or with adult children or other family members—all more prevalent for African Americans—may make them more vulnerable to financial exploitation. Other data from the study (not reported due to low absolute numbers of cases) show that the majority of the financial exploitation occurring in the past 6 months was perpetrated not by family members or other trusted persons but by “someone else,” which suggests that African Americans may be more vulnerable to stranger-initiated scams or

other financial-related deceptions than non-African Americans. More detailed follow-up studies exploring the causes, precise nature, and consequences of financial exploitation in different racial groups are warranted. This is important as public awareness campaigns could be effectively targeted to predominantly African American neighborhoods (e.g., with flyers in shopping areas; on public transportation).

African Americans were also at greater risk for psychological mistreatment, although the differences were smaller than for financial exploitation. The racial difference was found in the context of several other significant risk factors, including age (younger at greater risk), education (some college at higher risk), marital status (married at higher risk), and risk for clinical depression, the strongest predictor of psychological mistreatment (discussed further subsequently). Looking at the individual items measuring psychological mistreatment, two items had higher prevalence for African Americans both since turning 60 and in the past 6 months: Someone destroying something that belonged to you and someone threatening to hit you or throw something at you. In addition, among elders reporting such behaviors, African Americans reported higher frequency of occurrence of these behaviors in the past 6 months than non-African Americans. The perpetrator patterns for the behaviors also varied by race, with reports of spouses and sons for non-African Americans and other trusted persons (nonfamily) for African Americans. Perhaps most interesting, there were racial differences in the degree of elder upset as a result of these behaviors. African Americans reported lower levels of upset about threats to be hit or have something thrown at them than non-African Americans and more extreme levels of upset about property destruction (i.e., were more likely to be both “not at all” or “extremely” upset). It should be recalled that the sample sizes for these follow-up experience questions about psychological mistreatment were very small ( $\leq 15$ ) and results are preliminary. Nonetheless, these results suggest that psychological mistreatment with elements of physical violence and intimidation should be an area of focus in future studies of racial differences in elder mistreatment. The results point to the potential role of family dynamics and other social and cultural factors in the resolution of family conflicts, which are likely to differ by race. The findings may have implications for ongoing social service interventions for African American families.

It is also interesting that there were not statistically significant differences on the most prevalent psychological mistreatment item about someone screaming and yelling. However, there were differences in perpetrator—spouse more likely for non-African Americans and other family for African Americans—but again, these are likely a function of marital status and household composition differences. Also, African Americans reported less upset as a result of screaming and yelling by family and trusted others than did non-African Americans. These results (along with the findings for threats of being hit or having something thrown at you reported previously) may suggest slightly greater acceptance of or habituation to some forms of psychological mistreatment among African American elders. In combination with the other results showing more extreme reactions by African Americans to someone saying something to deliberately hurt them and property destruction, this area appears ripe for further study. Perhaps, the emotional reaction to psychological mistreatment depends on who the perpetrator is and that this dependence also differs by race. It is possible that reactions to a spouse, son, or daughter perpetrating mistreatment may be more extreme than reactions to mistreatment at the hands of a more distant relative or other unrelated individual.

Turning briefly to other significant risk factors, the most consistent finding was that those at risk for clinical depression, as indicated by scores of 8 or higher on the 10-item CES-D (Shrout & Yager, 1989), were also at greater risk for financial exploitation and, particularly, psychological mistreatment. Of course, it is unclear in the context of cross-sectional data whether depression is a “cause” or “consequence” of elder mistreatment. It may be that depression makes the elderly person more vulnerable to mistreatment or exploitation. For example, depressed older adults may be more likely to perceive interactions with family members as negative or the depressed elder may cause increasing frustration among family members that eventually results in psychological mistreatment. The decreased motivation associated with depression may make an elder particularly susceptible to financial exploitation. On the other hand, depression may be a consequence or result of elder mistreatment. It is also possible that mistreatment and depression are reciprocal causes of one another over time, a “downward spiral” effect where increases in one lead to increases in the other over time. This study

is the first population-based survey of elders to provide evidence for a clear association between depression symptoms and increased risk for financial exploitation and psychological mistreatment, but longitudinal studies are required to provide a clearer picture of the nature of the relationship.

Turning to physical disability, elders reporting at least one IADL difficulty were at greater risk for financial exploitation since turning 60. Deficits in IADL activities like housework, shopping, preparing meals, and using the phone may signal the beginning of cognitive declines, which could place elders at greater risk of financial exploitation. Recall also that difficulty managing money was one of the IADL items. The finding that those with ADL difficulties were at lower risk for financial exploitation in the past 6 months is difficult to explain. It may be that these individuals are more likely to be in dependent relationships with relatives or health care professionals who serve as caregivers. These caregivers may reduce isolation and provide protection against potential financial exploitation. That is, the current health care system may be effective in this area. If so, it is worth identifying what “protective” influences are used.

Turning to other demographics besides race, the oldest old (aged 75 years and older) were less likely to report psychological mistreatment since turning 60 than were 65- to 74-year-olds. This finding, not reported in any previous population-based survey of elders, is not explained by fewer in this age group being married, which was also an independent predictor (see subsequently). Perhaps, these results represent cohort effects. Another explanation may be that this older group is less likely to report psychological mistreatment in a survey interview or memory or recall bias may be greater in this group for more distant events. These findings may also reflect an age-related positivity bias consistent with Socioemotional Selectivity Theory (Mather & Carstensen, 2005). According to this theory, age is associated with a relatively stronger preference for positive over negative information, which affects both what they attend to and remember. Marital status was also a significant predictor of psychological mistreatment since turning 60—widowed and never married elders were less likely to report such abuse. In other words, married elders were at greater risk for psychological mistreatment, a finding also reported by Pillemer and Finkelhor (1988) in the United States and Podnieks (1992) in Canada. This is likely a simple reflection of greater opportunity for psychological mistreatment among married couples.



However, it is interesting that this did not protect African Americans, who were much less likely to be married but still reported higher levels of psychological mistreatment by other family members. Finally, the general lack of findings for household composition or living arrangements was somewhat surprising. The only significant finding was that living with family members besides spouse and children was a risk factor for financial exploitation since turning 60. It is interesting that living with adult children was not a risk factor for financial exploitation or psychological mistreatment.

This study has various limitations that should be acknowledged. First, the sample was drawn from a single urban county in Pennsylvania that contains the city of Pittsburgh and is thus not national in scope. Some of our findings may be unique to this or other urban areas, and a detailed national population-based study of elder mistreatment in the United States should be a priority. The risk profiles for rural elder mistreatment may differ from the urban profiles reported in this article. Second, the response rate among eligible households (37.7%) was quite low and may have produced somewhat biased results. Perhaps, elders refusing to participate were more likely to have been abused. Future work should use area probability sampling with face-to-face methodology to obtain higher response rates. Third, our measures of financial exploitation and psychological mistreatment have not been previously validated, although similar items have been used in previous studies of elder mistreatment. Our assessment of financial exploitation is certainly not comprehensive, and the findings may be better characterized as indicating potential risk for more serious issues in this domain, which would need to be verified through further investigation.

Our definition of “caseness” for psychological mistreatment is also novel and will need to be validated in future work, although we also presented findings at the individual item level. The issue of measurement development is a critical one for the elder mistreatment field, as noted by the [National Research Council \(2003\)](#), and our findings should be replicated once agreed upon reliable and valid measures have been developed. In addition, this study collected self-report data only from older adults as potential victims of mistreatment and thus dyadic analyses involving the perpetrator(s) were not possible. Furthermore, we should acknowledge that self-reports about elder mistreatment may be biased due to social desirability or fear of reprisals, and these results should be replicated using other approaches such as

the “sentinel” approach used in the NEAIS conducted by the [National Center on Elder Abuse \(1998\)](#). The use of retrospective recall (e.g., since turning 60 or in past 6 months) likely resulted in some measurement error due to memory or recall biases. Lastly, as already noted, the cross-sectional design of the survey limits the ability to make definitive causal statements about some risk factors like depression, although this is not the case for race. Also noted above, the number of sample cases of abuse in the past 6 months was small, limiting the ability to generalize the findings on the experience of psychological mistreatment, which will require replication.

## Conclusion and Implications

This study is the second population-based study to report higher prevalence of financial exploitation for African American elders (see also [Laumann et al., 2008](#)) and the first such study to report African Americans at higher risk for psychological mistreatment. The financial exploitation findings were particularly striking, occurring both at the overall level and across the four items used as measures. The findings suggest that both informal caregivers and family members of African American elders as well as health care and other professionals who interface with older African Americans on a regular basis should be vigilant for signs of financial exploitation among this and any population. Clearly, this knowledge is of great public health relevance. Outreach, training, and prevention activities can be modified based on the risk profiles we present in this research. The findings on psychological mistreatment suggest that elements of indirect physical violence and threats or intimidation should be an area of focus in future studies of racial differences. In addition, further work into the experience of psychological mistreatment and other forms of elder mistreatment should be undertaken. One intriguing area suggested by our results is that of differential degrees of upset and perhaps other consequences for African American elders relative to non-African Americans.

Racial differences in elder mistreatment are a potentially serious public health issue deserving of continued attention from researchers, health care providers, and social service professionals. They suggest possible cultural influences related to family configuration, dynamics, and strategies for dealing with financial and other strains that should be the focus of more detailed study. Racial disparities in elder mistreatment are highly relevant to

efforts like Healthy People 2010 aimed at their reduction and suggest another potential target objective for future efforts if these results can be replicated. Finally, the results have clear implications for health care and social service professionals interested in the prevention, detection, and reduction of this troubling social phenomenon in the context of a rapidly aging society.

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