

Elder Mistreatment in the United States: Prevalence Estimates From a Nationally Representative Study

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Objectives. The National Social Life, Health and Aging Project is the first population-based, nationally representative study to ask older adults about their recent experience of mistreatment. This article provides estimates of mistreatment by family members and examines the association of mistreatment with demographic and health characteristics.

Methods. We selected community-residing participants aged 57 to 85 using a multistage area probability design. Of those eligible, 3,005 participated in the study, for a weighted response rate of 75.5%. We asked respondents if in the past year they had experienced mistreatment in the following domains: verbal, financial, and physical. We asked those who reported mistreatment about their relationship to the person responsible.

Results. In all, 9% of older adults reported verbal mistreatment, 3.5% financial mistreatment, and 0.2% physical mistreatment by a family member. Odds of verbal mistreatment were higher for women and those with physical vulnerabilities and were lower for Latinos than for Whites. Odds of financial mistreatment were higher for African Americans and lower for Latinos than for Whites and were lower for those with a spouse or romantic partner than for those without partners.

Discussion. Few older adults report mistreatment by family members, with older adults quite insulated from physical mistreatment.

Key Words: Elder mistreatment—Abuse—Vulnerability.

THE National Research Council (NRC) report *Elder Mistreatment: Abuse, Neglect and Exploitation in an Aging America* (Bonnie & Wallace, 2003) defined *elder mistreatment* as “(a) intentional actions that cause harm or create a serious risk of harm, whether or not intended, to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder or (b) failure by a caregiver to satisfy the elder’s basic needs or to protect the elder from harm” (p. 39). Mistreatment has substantial consequences for the health and well-being of elders; older adults who experience mistreatment show increased levels of psychological distress (Comijs, Penninx, Knipscheer, & van Tilburg, 1999) and face increased mortality rates compared to others (Lachs, Williams, O’Brien, Pillemer, & Charlson, 1998). However, as the NRC report pointed out, researchers know very little about the prevalence of elder mistreatment for the population; most information has come from small, nonrepresentative samples; the criminal justice system; or agency or caregiver reports (Acierno, 2003).

Here, we attempt to fill this gap by implementing the recommendations of the NRC Panel to Review Risk and Prevalence of Elder Abuse and Neglect for measuring elder mistreatment. We asked a nationally representative sample of older adults directly about their recent experience of mistreatment, and for those who reported mistreatment, we asked about their relationship to the perpetrator. We assessed the cognitive function of respondents following an explicit recommendation of the NRC report, and we developed items on elder mistreatment from two screening instruments evaluated in the NRC report. Finally, we adopted the conceptual

approach put forward by the NRC panel, which integrates the sociocultural context, social embeddedness of institutional interveners, and individual-level factors affecting victims and trusted others.

Given the complexity of elder mistreatment and its relatively recent appearance in the research arena, it is perhaps unsurprising that no unifying theory or perspective dominates (Bonnie & Wallace, 2003). Researchers have applied theories to elder mistreatment from other bodies of literature, including sociology (e.g., situational theory, social exchange theory, social learning theory), economics (e.g., political economic theory), family violence (e.g., intraindividual dynamics theories, dependency exchange theories, and intergenerational exchange of violence; Gordon & Brill, 2001; Pillemer & Suitor, 1988; Wolf, 2003). Researchers in the field have come to recognize elder mistreatment as a complex phenomenon and propose the development of a unifying theoretical model through which discrete concepts can be explored (Gordon & Brill, 2001; Wolf, 2003). Models focus on the integration of characteristics of the caregiver or trusted other, characteristics of the mistreated older adult, features of the relationship, and the sociocultural context in which the mistreatment takes place.

The conceptual framework outlined in the NRC volume highlights the importance of status inequality created by the vulnerability and dependency that follow from physical or cognitive impairments. Older adults experiencing such impairments may be at increased risk for mistreatment. Impaired older adults are vulnerable to mistreatment due to their incapacity to seek help or stand up to their victimizer. Impairment can also cause caregiving strain, which may increase the likelihood that

the stressed caregiver commits mistreatment, particularly that of an emotional or physical nature. This is a common element of the stressed caregiver approach, a popular theme in independent and integrated models of mistreatment (Gordon & Brill, 2001; Sayles-Cross, 1988).

Acierno (2003) argued that among older adults who are cognitively intact, mistreatment or abuse is conceptually much like domestic abuse in its etiology, appropriate prevention strategies, and consequences, whereas among cognitively impaired older adults mistreatment is conceptually similar to child abuse. Thus, screening for impairment is key to modeling and understanding elder mistreatment.

Here, we focus on the increased vulnerability caused by diminished functional capacity, poor health, and cognitive deficits. First we describe the sample used in this study. Next we describe the relationship of the perpetrator to the mistreated elder. Finally we test the hypothesis that older adults who are vulnerable are more likely than others to have reported mistreatment in the past year, net of their other characteristics.

METHODS

We used data from the National Social Life, Health and Aging Project (NSHAP), a nationally representative probability sample of community-dwelling individuals aged 57 to 85 selected from households across the United States screened in 2004. The sample for NSHAP was generated by the same field operation as that for the Health and Retirement Study (HRS). Through an innovative collaboration between NSHAP and HRS (and between the National Opinion Research Center and the Institute for Social Research, the respective survey organizations), the screening for both surveys was carried out as a single operation. The sample designs for NSHAP and HRS are thus identical at the area stages; this is a multistage stratified area probability sample. So as not to overlap with the HRS sample, the age range of 57 to 85 was selected for the NSHAP investigation. African Americans, Latinos, men, and the older age group (75–84 years at the time of screening) were oversampled to provide adequate representation for researchers interested in group differences. For the present analysis, we used weights to provide population estimates regardless of this oversampling (see below). Professional interviewers conducted in-home interviews in English and Spanish between July 2005 and March 2006, yielding 3,005 respondents out of a possible 4,400 (1,455 men and 1,550 women). The weighted sample response rate was 75.5%.

The University of Chicago and the National Opinion Research Center institutional review boards approved the protocol; all respondents gave written informed consent. No formal cognitive screen was used prior to the interview to assess competence to provide consent. Field interviewers were trained to provide complete information about consent procedures and were instructed to assess competency to consent on a case-by-case basis. Older adults deemed by interviewers to be too impaired to give formal consent were excluded from the study. Consequently, as seen below, the vast majority of respondents were cognitively intact.

Particular attention was given to the sensitivity of the elder mistreatment questions. In the consent documentation, respondents were informed as follows: “In addition, you may be asked

about elder abuse. We are required to report any incidents of elder abuse learned as a result of this interview to your state reporting hotline. This report would include your name, contact information, and why we suspect potential abuse. You have the right to refuse to answer any question that may identify potential abuse.” As discussed below, positive answers to the mistreatment screening items did not constitute illegal behavior or substantiated mistreatment. Nonetheless, if, during the course of the interview, field interviewers came to suspect elder abuse, they were instructed to report the suspected abuse to their superiors, who investigated further. A list of human service and medical resources with toll-free numbers was provided to respondents who sought further assistance.

Given the sensitivity of the interview content, the protocol called for an attempt to conduct the interview in privacy. When this was not possible, completion of the interview was prioritized. Another adult was present during one third of the interviews conducted; 70% of these adults were spouses or romantic partners.

To decrease respondent burden, minimize in-home interview time, and maximize content, the interview used a modularized format. Respondents were randomly assigned to one of six paths. Respondents assigned to paths for which elder mistreatment questions were not asked in person were given a mail-in self-administered questionnaire with these items. Approximately 33% of respondents received the questions on mistreatment in the self-administered leave-behind instrument, thus affording us an opportunity to examine the impact of different modalities on respondent responses to these questions.

Measurement

The NSHAP study assessed prevalence of elder mistreatment through a set of questions specifically designed to meet the criteria laid out in the NRC report (Bonnie & Wallace, 2003). Accordingly, (a) we asked items directly of our older respondents, and (b) we asked separately about the major types of mistreatment.

We selected and modified items from two well-validated screens for elder mistreatment to assess respondent experiences of recent physical, verbal, and financial mistreatment: the Hwalek-Sengstock Elder Abuse Screening Test (Hwalek & Sengstock, 1986) and the Vulnerability to Abuse Screening Scale (Schofield & Mishra, 2003). Respondents were told to consider the past 12 months and were asked the following: “Is there anyone who insults you or puts you down?” (verbal mistreatment), “Is there anyone who has taken your money or belongings without your OK or prevented you from getting them even when you ask?” (financial mistreatment), “Is there anyone who hits, kicks, slaps, or throws things at you?” (physical mistreatment). For each item, respondents were asked to indicate their relationship to the mistreater.

We include here reports of each type of mistreatment for which the respondent identified the perpetrator as being a family member. This approach gives us a conservative estimate of the prevalence of elder mistreatment, has the advantage of conceptual clarity, and allows us to compare reports of abuse of older adults to reports of abuse by younger domestic partners. The in-person interview allowed a person reporting mistreatment to identify the mistreater’s relationship in a great deal of detail. The leave-behind booklet presented an abbreviated set of

family relationship categories to avoid overwhelming the respondent. We created a number of measures of mistreatment by family members using this information and evaluated the robustness of the results to the measure used.

Both the NRC panel (Bonnie & Wallace, 2003) and research on mistreatment in younger populations (e.g., Straus, 1999) have emphasized the effects on respondent answers of priming participants through instructions to the questions or the overall study introduction. Straus suggested that contextualizing questions around social relationships, rather than mistreatment or abuse, results in higher estimates of mistreatment because respondents are less likely to restrict their answers to criminal behavior. As our goal for the mistreatment assessment was to capture all of those who experienced this behavior, we aimed to contextualize the questions in such a manner as to include noncriminalized behavior, especially because behaviors that fall under the legal rubric of abuse vary considerably from state to state. Thus, we defined mistreatment broadly by focusing on negative social behaviors, including those that are not life threatening. To accomplish this, we (a) placed the items after a long series of questions on both positive and negative social relationships and (b) kept the explanation of the questions as broad as possible. The introduction to the series stated simply "Now, we would like to discuss ways that people behave towards you that bother you. We would like you to think of people and your relationships with them just in the past year or so. That is, when I ask you the next few questions, think specifically about the past 12 months." We included the 12-month time frame to capture prevalence of mistreatment rather than involvement in past abusive relationships.

Demographic variables in the analyses included age, gender, high school graduation status, and race/ethnicity. Respondents self-selected from a list of racial categories, including White/Caucasian, Black/African American, American Indian or Alaskan Native, Asian or Pacific Islander, or other. Respondents also reported if they considered themselves Hispanic or Latino. We also measured whether the respondent had a spouse or romantic partner.

Measures of physical health included cognition, self-rated health, and an index of physical vulnerability. Cognitive status was assessed through the Short Portable Mental Status Questionnaire (SPMSQ; Pfeiffer, 1975). The SPMSQ assesses knowledge of general and personal information, including space/time orientation (e.g., date, address), maiden name, current president, and digit subtraction. The SPMSQ has 10 individual items and is scored by adding the number of correct answers (range = 0–10). In all, 90% of respondents with scores less than 6 meet criteria for moderate cognitive impairment (Fillenbaum, Heyman, Williams, Prosnitz, & Burchett, 1990). For these analyses, we dichotomized the score as having no cognitive impairment or any cognitive impairment, as defined by Pfeiffer (1975).

Self-rated physical health was assessed with the question "Would you say your health is excellent, very good, good, fair, or poor?" Scores ranged from 1 to 5, with higher scores indicating better self-rated health.

The physical vulnerability score was created using reported difficulties in three domains: (a) activities of daily living (dressing, eating, toileting, and bathing), (b) mobility (walking one block and walking across the room), and (c) sensory

function (vision and hearing). Activity of daily living and mobility response categories ranged from 0 (no difficulty) to 3 (unable to do). Eyesight and hearing questions used a 5-point response scale ranging from poor to excellent. The index for physical vulnerability was created by summing the number of items for which the respondent had difficulty (i.e., reporting some difficulty, much difficulty, or unable to do in the case of activity of daily living and mobility items; and reporting fair or poor vision/hearing). Scores ranged from 0 to 9.

Two important considerations in reports of mistreatment are (a) the effect of another person in the room during question administration and (b) the effect of mode of response (i.e., whether the respondent answers the questions in person or in the self-administered instrument). Although we do not know if another person was present when the respondent filled out the leave-behind instrument, another person was present during the in-person interview in one third of the cases; 70% of these were spouses or romantic partners. We saw no differences in reports of verbal or financial mistreatment between those respondents with another person present and those who were alone with the interviewer. Only 6 respondents reported physical mistreatment in the in-person interview, for 5 of whom another person was present.

As for mode of response, 33% of respondents answered the screening questions in the leave-behind instrument. These respondents were more likely to have missing data; 5.8% of respondents using the self-administered questionnaire had missing data versus 0.2% of those who were asked the questions during the in-person interview ($p < .01$). There was no difference between the respondents who answered the questions in person versus those who answered the leave-behind questionnaire in age, race/ethnicity, education status, or physical vulnerability scores. Respondents answering via the self-administered instrument were more likely to report verbal mistreatment (11.8% vs 8.0%). We saw no group differences in reports of financial or physical mistreatment by mode of question administration.

Analyses

We carried out data analysis using STATA Version 10.0 (StataCorp, College Station, TX). We used logistic regression models to determine the relationship between reports of each type of elder mistreatment and covariates. As discussed below, only 12 respondents reported physical mistreatment, so we did no multivariate analyses of this outcome. In each model, independent variables included gender, race/ethnicity, age, education (high school graduation), presence of another person during the interview, in-person versus leave-behind mode, partner status, cognition, self-rated health, and physical vulnerability.

We adjusted all results for the complex design of the survey. The design of the NSHAP sample required that the data be weighted in the analysis in order to provide unbiased estimates of population characteristics. We based weights in the NSHAP data on the probabilities of selection and adjusted these for nonresponse. We calculated response rates for the major subclasses of the population (age, gender, race/ethnicity, and urban residence). Of these variables, age and race/ethnicity provided the greatest discrimination in response rates. We increased weights for responding cases by the reciprocal of the

Table 1. Sample Characteristics of the National Social Life, Health and Aging Project

Characteristic	Estimated <i>M</i> (<i>SD</i>) or %
Demographics	
Race/ethnicity	
White	80.7
African American	10.0
Latino	6.8
Other	2.5
Age	68.0 (0.19)
Interview characteristics	
Mode (leave-behind)	32.8
Other person present	33.3
Vulnerability	
Partner status (married or cohabitating)	68.5
Education (high school diploma or above)	79.7
Cognition (any impairment)	14.8
Perceived health	3.3 (0.04)
Physical vulnerability	1.2 (0.05)
Mistreatment reported^a	
Verbal	9.0
Financial	3.5
Physical	0.2

Notes: Percentages are weighted to account for the complex survey design.

^aIncludes only cases for which mistreater was a family member (i.e., parent, child, or spouse/romantic partner; or additionally, in the case of the in-person interview, ex-spouse, sibling, stepchild, in-law, or other relative).

response rate such that the responding cases took on the additional weight of the nonresponding cases (O'Muircheartaigh, Eckman, & Smith, 2008).

RESULTS

Of eligible respondents, 3,005 participated, for a weighted response rate of 75.5%. Table 1 summarizes the demographic and health characteristics of the survey respondents. These characteristics closely match those of respondents in the 2002 Current Population Survey (Smith, 2003) and recent national studies of health such as the HRS (Fisher, Faul, Weir, & Wallace, 2005). Respondents most frequently reported verbal mistreatment; 9% of the sample reported that a family member insults them or puts them down. Three and a half percent reported financial mistreatment; physical mistreatment by family members was the least frequently reported mistreatment, at less than 1%.

Table 2 shows the relationship of the mistreater to the respondent separately for those who reported verbal, financial, and physical mistreatment. The upper panel shows the relationship to the mistreater for the total sample, which combined responses given during the in-person interview and those given in the leave-behind interview. The lower panel gives responses for the two thirds of respondents who were asked the mistreatment questions in person. Note that the leave-behind interview booklet was given to the respondent after the completion of the in-person interview. This paper-and-pencil administration of the mistreatment questions offered respondents fewer categories by which to identify their relationship to the person who mistreated them than the extensive set coded during the in-person interview. Thus, for the one third of the sample who answered mistreatment questions in the leave-behind question-

Table 2. Relationship of Mistreater (%)

Survey Mode	Verbal	Financial	Physical
Whole sample			
<i>n</i> ^a	398	152	12
Spouse or romantic partner	26.2	9.6	19.6
Parent	2.0	0.0	0.0
Child	14.5	34.0	24.8
Other	57.3	56.4	55.6
In-person^b			
<i>n</i> ^a	249	104	10
Spouse	21.4	5.8	18.5
Ex-spouse	3.1	2.5	7.4
Romantic/sexual partner	1.6	1.6	4.7
Parent	1.8	0.0	0.0
Parent-in-law	0.3	0.0	0.0
Child	13.3	34.9	21.3
Stepchild	0.4	0.8	0.0
Brother or sister	7.6	12.3	0.0
Other relative	4.7	9.9	29.4
Other in-law	5.1	2.0	12.5
Friend	12.1	9.7	0.0
Neighbor	5.5	2.2	0.0
Coworker or boss	15.7	5.6	0.0
Housekeeper/home health care provider	0.0	2.0	0.0
Other	7.3	10.7	6.2

Notes: Percentages are weighted to account for the complex survey design.

^aSample sizes are unweighted and do not include mistreatment cases for which no relationship was reported.

^bCategories offered but not used include minister, priest, or other clergy; psychiatrist, psychologist, counselor, or therapist; and caseworker/social worker.

naire, we can identify only the spouse or romantic partner, a parent, or a child as the family member who was the mistreater. For those who were assigned to receive these questions during the in-person interview, we have detailed information about the respondent's relationship to the mistreater.

Note that most mistreatment was perpetrated by someone other than a member of the respondent's immediate family. Of those who reported verbal mistreatment, 26% identified their spouse or romantic partner as the person responsible; 15% said that their child verbally mistreated them; and 57% said that the mistreater was someone other than a spouse, parent, or child. A total of 56% of those who reported financial mistreatment said that someone other than a member of their immediate family was responsible; of family members, children were mentioned most often and spouses rarely. However, these results raise questions about the identity of the "other" persons identified as mistreaters.

The lower panel of Table 2 provides information on these other mistreaters and suggests that many of them are more distant family members and many are unrelated. Ex-spouses, in-laws, and siblings were all identified by some respondents as those responsible for mistreatment. Note that siblings were the second most commonly mentioned family members responsible for financial mistreatment after children. Much of the verbal mistreatment happened at the hands of a friend, neighbor, or coworker or boss, with friends identified by 10% of those reporting financial mistreatment. Also, although NSHAP separately coded minister, priest, or other clergy; psychiatrist, psychologist, counselor, or therapist; and caseworker/social worker, no respondent reporting any type of mistreatment identified people with these relationships to them as responsible.

In the analyses that follow, we coded as mistreated only those who reported mistreatment and identified a family member as the person responsible. We did not consider further cases in which the person identified as the mistreater was a friend, neighbor, coworker, boss, or other nonrelative. This allowed us to define mistreatment among these older adults using guidelines similar to those used to identify domestic abuse or child abuse.

Table 3 presents adjusted odds ratios from logistic regression analyses of reports of verbal mistreatment and financial mistreatment. For each type of mistreatment, Model A presents analyses based on data from both the in-person interview and the leave-behind interview ($N = 3,005$), in which family mistreatment included cases for which the mistreater was a spouse/partner, parent, or child of the respondent or additionally, in the case of the in-person interview, an ex-spouse, a sibling, stepchild, in-law, or other relative. Model B presents analyses based on data from the in-person interview only ($n = 2,024$), in which the mistreater could have had any of the relationships listed above. Model A included almost 1,000 more respondents, which provides power to detect small effects, which is especially important when the variable of interest occurs relatively infrequently. Model B allowed us to assess the effects of interest for the subgroup of cases for which detail on family relationships was available and family mistreatment could be defined broadly. Consistent findings across the two models increase confidence in the results.

We focus in these analyses on the increased vulnerability to mistreatment caused by the absence of a partner, diminished functional capacity, poor health, and cognitive deficits. We hypothesized that those with higher levels of vulnerability would be more likely than others to report mistreatment, net demographic characteristics. Table 3 shows some support for this hypothesis. Those with any physical vulnerabilities were about 13% more likely than those with none to report verbal mistreatment, but they were not more likely to report financial mistreatment. The better respondents' self-rated health, the lower their odds of financial mistreatment, but their odds of verbal mistreatment were not affected. And those with a spouse or partner faced much lower odds of financial mistreatment than older adults who were alone, but not lower (or higher) odds of verbal mistreatment. Cognitive function was not related to reports of either type of mistreatment.

Note that those who completed the in-person interview in the presence of another person, usually their spouse, were *more* likely to report financial mistreatment. Recall that spouses were rarely named as financial mistreaters. We speculate that the spouse sometimes reminded the respondent of such mistreatment.

The odds of mistreatment varied by demographic characteristics. Women were about twice as likely as men to report verbal mistreatment but did not differ in the odds of reporting financial mistreatment. Compared to their White counterparts, African Americans were much more likely to report financial mistreatment but no more likely to report verbal mistreatment, and Latinos were less likely to report both verbal and financial mistreatment. Age was negatively associated with the odds of reporting both verbal mistreatment and financial mistreatment. Note that the coefficient for age was identical in Models A and B but statistically significant only in Model A; this was clearly due

Table 3. Odds Ratios for Verbal and Financial Mistreatment by Demographic, Interview, and Vulnerability Characteristics

Variable	Weighted Odds Ratios			
	Verbal		Financial	
	Model A	Model B	Model A	Model B
Demographics				
Gender (female)	2.14*	1.86*	0.84	0.84
Race/ethnicity				
White (ref)	1.00	1.00	1.00	1.00
African American	1.07	1.03	1.77*	1.49
Latino	0.51*	0.56	0.22*	0.19
Other	0.59	0.55	1.22	0.19
Age	0.98*	0.98	0.95*	0.95*
Interview				
Mode (leave-behind)	1.36		0.95	
Other person present	0.94	0.79	2.09*	2.14*
Vulnerability				
Partner status (with partner)	0.93	0.79	0.31*	0.31*
Education (high school diploma or higher)	1.70*	1.54	1.71	1.33
Cognition (any impairment)	0.67	0.64	0.60	0.50
Perceived health	1.05	1.02	0.89	0.75*
Physical vulnerability (1+ vulnerabilities)	1.13*	1.15*	1.08	1.07

Notes: Model A: Entire sample used for the analysis ($N = 3,005$). Mistreatment includes only cases for which mistreater was a family member (i.e., parent, child, or spouse/romantic partner; or additionally, in the case of the in-person interview, ex-spouse, sibling, stepchild, in-law, or other relative). Model A, Verbal: $F(12, 39) = 3.87$, $\text{prob} > F = 0.0006$. Model A, Financial: $F(12, 39) = 3.79$, $\text{prob} > F = 0.0008$.

Model B: Only in-person sample included ($n = 2,024$). Mistreatment includes only cases for which mistreater was a family member (i.e., parent, child, spouse/romantic partner, sibling, stepchild, in-law, or other relative). Model B, Verbal: $F(11, 40) = 3.00$, $\text{prob} > F = 0.0054$. Model B, Financial: $F(11, 40) = 3.18$, $\text{prob} > F = 0.0035$.

* $p < .05$.

to the smaller sample and reduced power in Model B. We saw significantly higher odds of reporting verbal but not financial mistreatment for those with at least a high school diploma. Comparison of Models A and B led to virtually identical conclusions, strengthening our confidence in the results.

DISCUSSION

Wave I of NSHAP was the first U.S. population-based, nationally representative study to ask older adults about their recent experience with mistreatment. NSHAP used questions designed to implement the suggestions for doing so developed in *Elder Mistreatment: Abuse, Neglect and Exploitation in an Aging America* (Bonnie & Wallace, 2003). Following the NRC's broad approach to mistreatment, NSHAP asked respondents about physical, verbal, and financial mistreatment and about their relationship to the person responsible for that mistreatment. About 1 in 10 NSHAP respondents answered positively to questions on verbal mistreatment, and 3.5% said that they had suffered financial mistreatment. This is quite similar to previous estimates that have suggested that about 0.5% to 10% of Americans older than age 65 have suffered

mistreatment by a caregiver or close contact (Bonnie & Wallace, 2003; *National Elder Abuse Incidence Study*, 1998). We note especially the very low number of respondents who reported that they had experienced physical mistreatment.

We restricted the definition of elder mistreatment here to verbal, financial, or physical mistreatment by a family member. This provides a conservative estimate of mistreatment and allows us to compare rates of mistreatment reported by older adults to rates of child mistreatment and domestic violence. A recent nationally representative sample of children aged 2 to 17 found that 13.6% had experienced some form of mistreatment in the past year (Finkelhor, Ormrod, Turner, & Hamby, 2005). This is broadly similar to the results reported here for elder mistreatment. Studies of domestic violence suggest rates of physical assault of 4% to 8% annually, substantially higher than rates we see here for older adults (Mirrless-Black, 1999; Waite & Gallagher, 2000).

The method and context of assessments of this screen for elder mistreatment may alter reporting patterns and, consequently, prevalence estimates (MacMillan et al., 2006; Straus, 1999). In the NSHAP study, respondents' likelihood of reporting on violent or negative relationships was facilitated by the intimacy of the in-person, in-home interview; the development of rapport between interviewer and respondent; and the contextualization of questions on mistreatment within other questions about social support, social networks, and close relationships. Straus suggested that contextualizing questions around social relationships, rather than mistreatment or abuse, results in higher estimates of mistreatment, as respondents are less likely to narrow their answers to criminal behavior. We believe this is a strength of the measurement scheme used in NSHAP. We captured a wider variety of mistreatments by focusing on negative, non-life-threatening, social behaviors rather than focusing on behaviors that fall under the legal rubric of abuse (which varies considerably from state to state). The measure reported here also asked specifically about mistreatment by any other person, thus widening the net through which we captured this experience.

The finding that adults in their late 50s and 60s are more likely to report verbal mistreatment or financial mistreatment than older adults is counterintuitive but suggests to us that respondents are including fairly routine arguments (perhaps about money) with their spouse, sibling, or child in their reports. Alternatively, older adults could be more reticent to report this type of negative behavior. Nonetheless, these results cast doubt on the assumption that the frailest of older adults are the most vulnerable to mistreatment, although the NSHAP sample does not include those who are seriously ill or living in nursing homes, those with the highest levels of physical vulnerability. Longitudinal studies will allow researchers to assess the extent to which the risk of mistreatment changes with age and the roles that increasing physical frailty or cognitive impairment play in reports of mistreatment.

In studies examining formal reports of mistreatment to adult protective services, Blacks were significantly more likely than Whites to be represented (Lachs, Berkman, Fulmer, & Horwitz, 1994; Lachs, Williams, O'Brien, Hurst, & Horwitz, 1997). In this analysis of community-living adults, reports of financial mistreatment were significantly higher for African American than for White older adults, but Latinos were less likely than

others to report either financial or verbal mistreatment. Qualitative exploration of question interpretation and exploration of financial resources may shed light on these disparities.

NSHAP captured a variety of relationship categories between the respondent and the perpetrator; the respondent could select 1 of 17 relationship descriptors or describe an alternative relationship (i.e., the "other" category). Categories offered but not used by any respondent reporting verbal, financial, or physical mistreatment included minister, priest, or other clergy; psychiatrist, psychologist, counselor, or therapist; and caseworker/social worker. Design considerations limit the extent to which these relationships can be explored. First, the leave-behind instrument restricted the response options to four categories. Second, the NRC panel defined mistreatment as being perpetrated by an individual in a "trust relationship" with the victim. Additional information on the perceived quality of the relationship with the perpetrator would shed light on whether the respondent considered it to be a "trust relationship."

Finally, our hypothesis that older adults with physical vulnerabilities would be more likely than those less vulnerable to report mistreatment was supported for verbal but not financial mistreatment. Older adults with physical and cognitive impairments may be more vulnerable to mistreatment because of their inability to seek help or protect themselves from the abuse. Also, impairments can increase the stress experienced by the caregiver and may increase the likelihood of these negative interactions. We saw no differences in the likelihood of reporting verbal or financial mistreatment for those with cognitive impairment. This may be the case as cognitive ability was not included in our index of physical vulnerability, and few adults with any cognitive impairment were represented in our sample. Those respondents who are cognitively intact may be more able to protect themselves from verbal or financial mistreatment but, due to physical disability, still require daily monitoring of their activities.

In sum, reports by older individuals of verbal, financial, or physical mistreatment by others were quite uncommon in this study. Despite this, the link between mistreatment and the health of older individuals points to the need for sensitivity on the part of physicians and other medical personnel to the possibility, although infrequent, of mistreatment of their patients.

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All authors had full access to the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. E. O.

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