

Health Implications of Elder Abuse:

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Health Implications of Elder Abuse:



Dong et al, JAMA 2009

Mosqueda & Dong, JAMA 2011

Dong et al JAMA Int Med 2013

Halliday et al, Lancet 2000

Lach et al, JAMA 1998

Baker et al. Jr Geri Soc Work 2009

Dong & Simon JAMA 2011

Dong et al, JGMS 2011

Dong & Simon, AJEM 2013

Begal et al, Jr Interper Vio 2011

Lach et al, Gerontologist 2002

Mouton et al, Ann Fam Med 2010

Dong et al, AJEM, 2011

Dong, Cln Geriatric Med, 2005

Dong et al. Gerontology 2013

Schonfield Gerontologist 2006

Shield et al, Jr Forensic Sci 2004

Fisher et al, Gerontologist 2006

Dong et al, JAGS 2011

Dong et al Gerontology 2010

Fisher, Jr Int Per Vio 2011

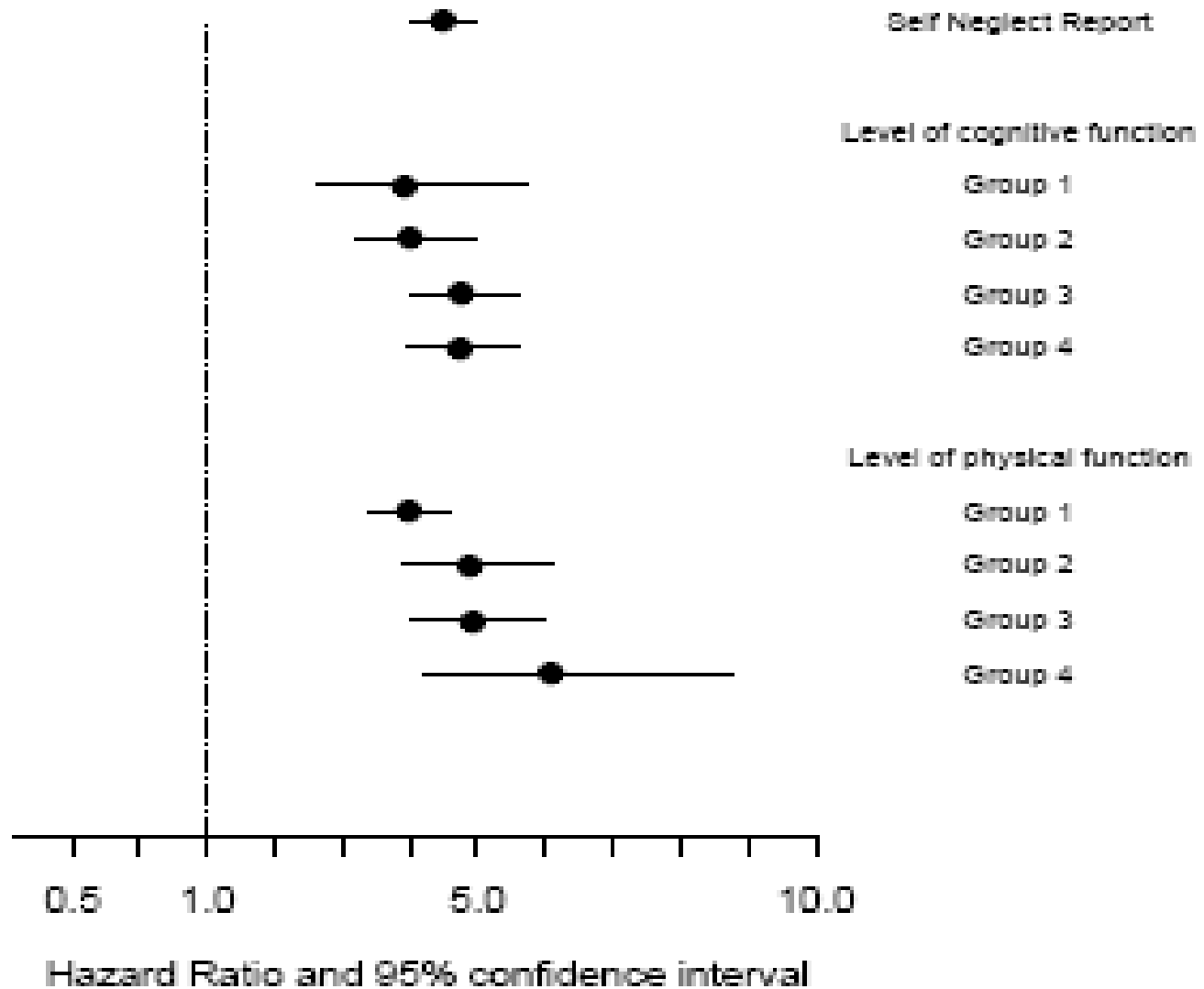
Smith et al, Jr Nutrition 2006

Franzini et al, JAGS 2008

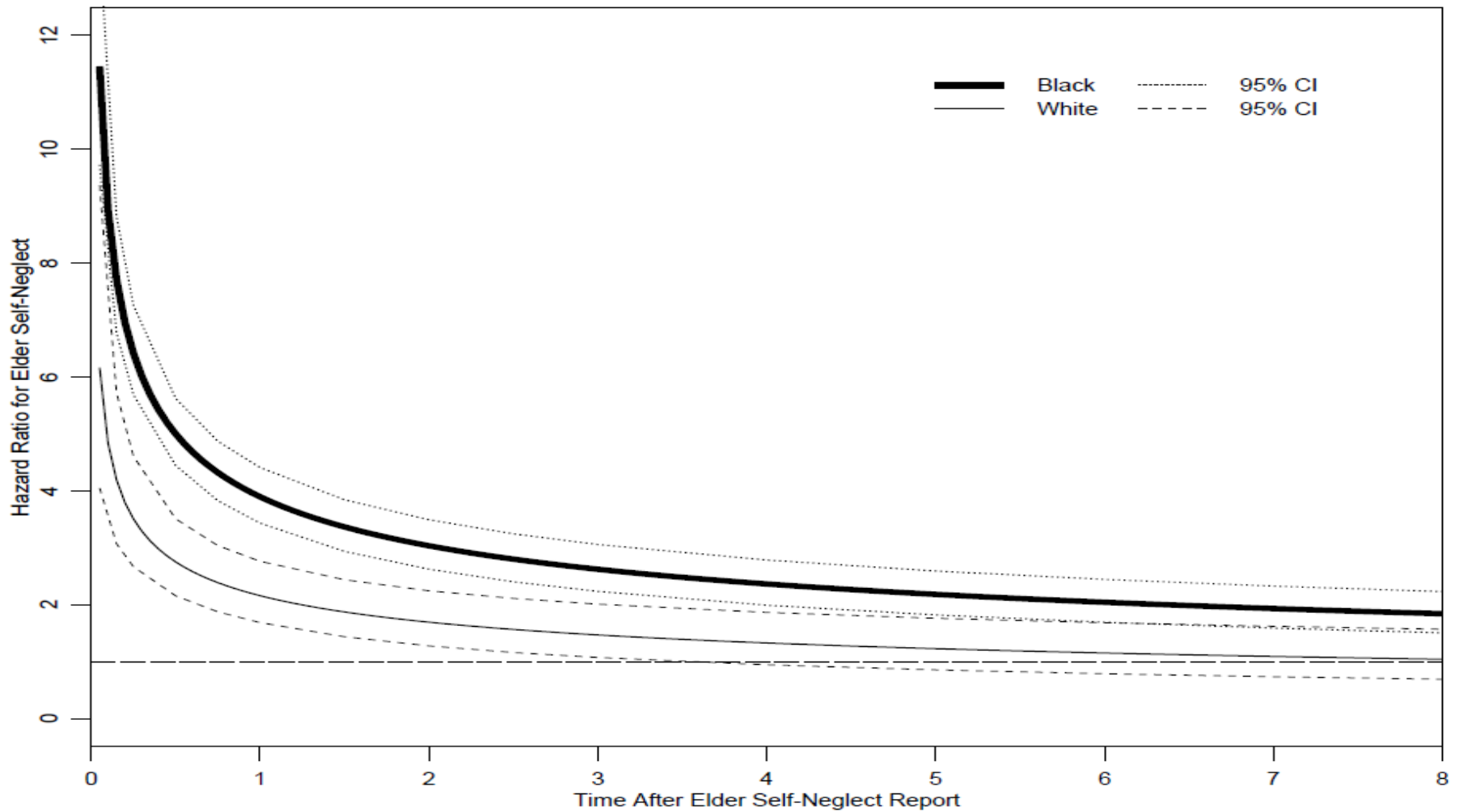
Elder Abuse & Mortality

| 14 years of Follow-Up | | |
|--|-------------|------------------|
| 5.9 Death / 100 Person Years VS. 18.3 Death /100 Person Years | | |
| | HR | 95% CI |
| Elder Abuse – All Cause | 2.06 | 1.48-2.88 |
| Elder Abuse – CV Specific | 3.86 | 2.04-7.29 |
| Elder Abuse MMSE <20 | 2.38 | 1.23-4.62 |
| Elder Abuse: Chair Stand Ability= 0-1 | 2.35 | 1.45-3.81 |

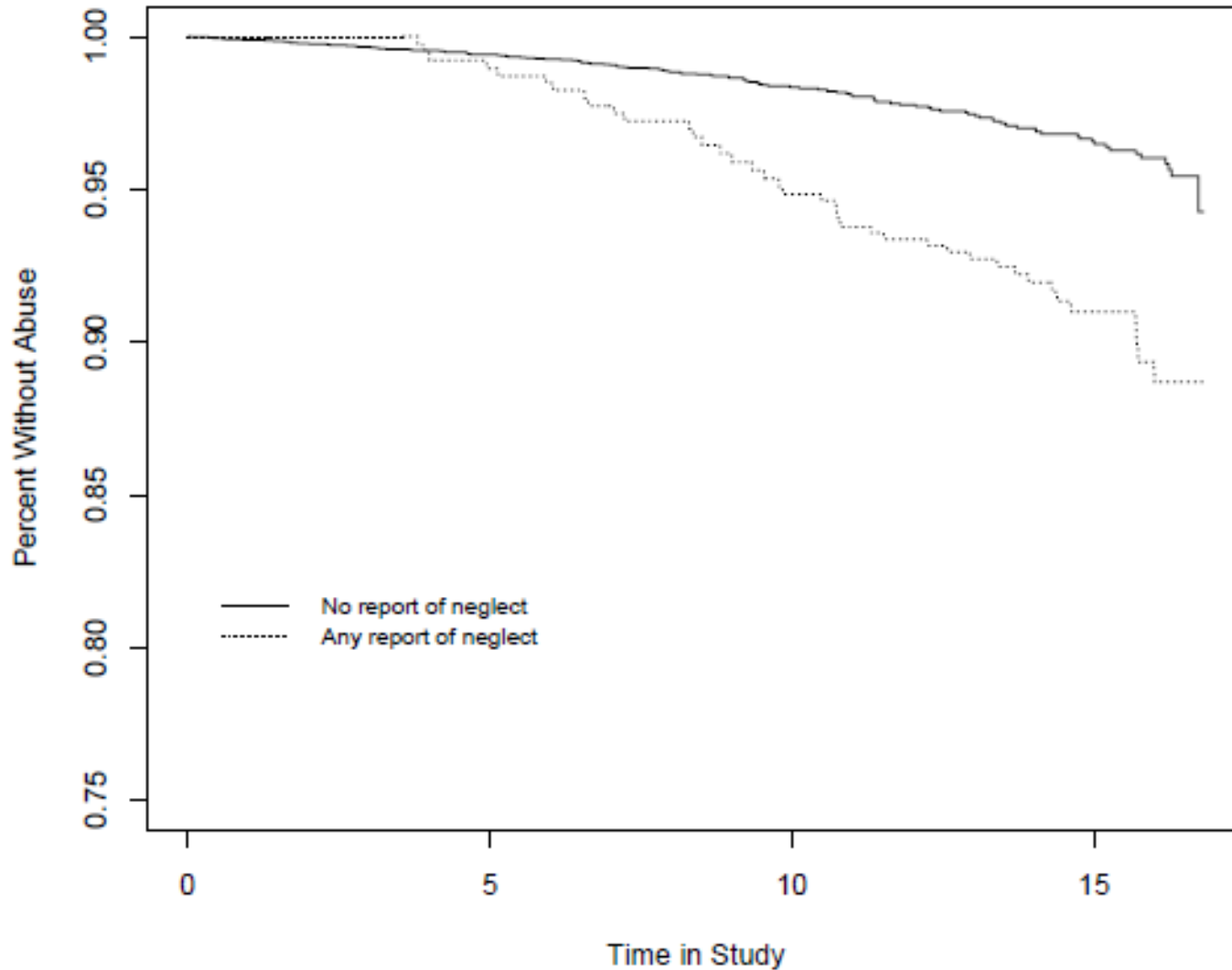
Elder Self-Neglect & Mortality



Black/White Differences in Mortality



Association Between Self-Neglect and Elder Abuse



Elder Abuse and ED Use

| | Mean |
|--|-------------|
| No Elder Abuse | 0.74 |
| Reported Elder Abuse | 2.11 |
| Confirmed Elder Abuse | 2.22 |
| Specific Elder Abuse Subtypes | |
| Caregiver Neglect | 2.89 |
| Psychological Abuse | 2.01 |
| Physical Abuse | 2.27 |
| Financial Exploitation | 1.67 |
| Number of Subtypes of Elder Abuse | |
| 1 type | 2.04 |
| 2 or more types | 2.19 |

Elder Abuse & Hospitalization

| | RR | 95% CI | P value |
|---------------------------------------|-------------|---------------|----------------|
| Elder Abuse | 2.72 | 1.84-4.03 | <0.001 |
| Psychological Abuse | 2.22 | 1.44-3.43 | <0.001 |
| Physical Abuse | 1.57 | 0.83-2.98 | 0.167 |
| Financial Exploitation | 1.75 | 1.06-2.90 | 0.029 |
| Caregiver Neglect | 2.43 | 1.60-3.69 | <0.001 |
| 1 Type of Elder Abuse | 1.41 | 0.75-2.65 | 0.286 |
| 2 or More Types of Elder Abuse | 2.59 | 1.82-3.66 | <0.001 |

Elder Abuse & SNF

| | RR | 95% CI | P value |
|---------------------------------------|-------------|---------------|----------------|
| Elder Abuse | 4.60 | 2.85-7.42 | <0.001 |
| Psychological Abuse | 2.31 | 1.17-4.56 | 0.016 |
| Physical Abuse | 2.36 | 1.19-4.66 | 0.013 |
| Financial Exploitation | 2.81 | 1.53-5.17 | <0.001 |
| Caregiver Neglect | 4.73 | 3.03-7.40 | <0.001 |
| 1 Type of Elder Abuse | 2.75 | 1.60-4.74 | <0.001 |
| 2 or More Types of Elder Abuse | 3.43 | 2.04-5.77 | <0.001 |

Elder Abuse Vulnerability Index

| | Reported Elder Abuse | Confirmed Elder Abuse |
|--|-----------------------------|------------------------------|
| | OR (95% CI) | OR (95% CI) |
| Age > 80 | 3.01 (2.16-4.19) | 3.34 (2.13-5.24) |
| Female | 1.76 (1.27-2.45) | 1.76 (1.13-2.75) |
| Black | 5.76 (3.69-8.99) | 10.10 (4.78-21.34) |
| Income \geq \$15,000 | 1.31 (0.91-1.89) | 1.87 (1.10-3.18) |
| Medical Condition \geq 3 | 2.26 (1.53-3.35) | 2.67 (1.60-4.47) |
| MMSE \leq 23 | 1.88 (1.35-2.62) | 1.94 (1.24-3.04) |
| Difficulty w/ Stairs: 1 Flight | 2.20 (1.56-3.11) | 1.78 (1.10-2.89) |
| CESD \geq 4 | 1.68 (1.22-2.29) | 1.82 (1.19-2.79) |
| Social Network < 2 | 1.61 (1.10-2.36) | 1.84 (1.11-3.04) |

Elder Abuse Vulnerability Index

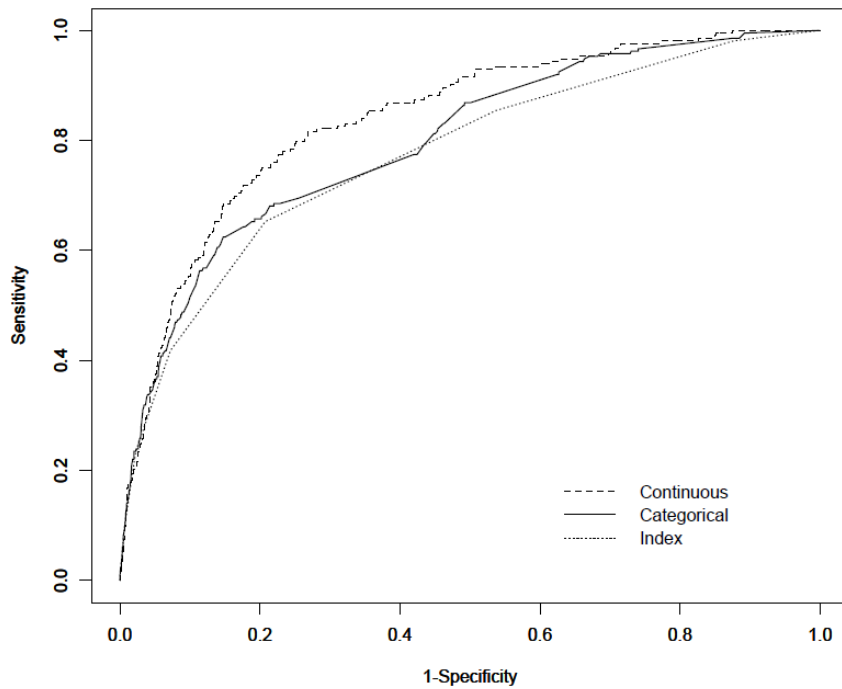
| Number of Risk Factor Index | Total Cohort Participants with Risk Factors | No Abuse with Risk Factors | Reported Abuse with Risk Factors | Confirmed Abuse with Risk Factors | Prevalence of Reported Elder Abuse (%) | Prevalence of Confirmed Elder Abuse (%) |
|------------------------------------|---|----------------------------|----------------------------------|-----------------------------------|---|--|
| 0 | 16 | 16 | 0 | 0 | 0% | 0% |
| 1 | 966 | 962 | 4 | 0 | 0.4% | 0% |
| 2 | 2727 | 2700 | 27 | 12 | 0.9% | 0.4% |
| 3 | 2660 | 2617 | 43 | 24 | 1.6% | 0.9% |
| 4 | 1127 | 1077 | 50 | 23 | 4.4% | 2.1% |
| 5 | 431 | 392 | 39 | 25 | 9.0% | 6.0% |
| 6 | 162 | 132 | 30 | 17 | 18.5% | 11.4% |
| 7 | 60 | 43 | 17 | 7 | 28.3% | 14.0% |
| 8 | 8 | 5 | 3 | 1 | 37.5% | 16.7% |

Association Between Elder Abuse Index and Risk for Elder Abuse

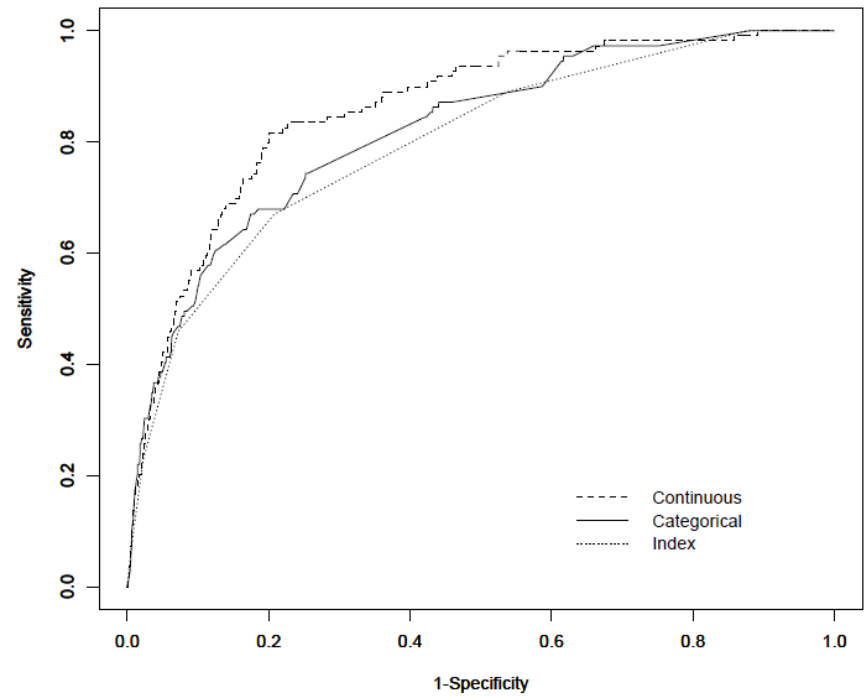
| | Reported Elder Abuse | Confirmed Elder Abuse |
|----------------------------|----------------------------|----------------------------|
| | OR (95% CI) | OR (95% CI) |
| All Variables Index | | |
| Continuous Index (0-9) | 2.19 (2.00-2.40) | 2.27 (2.01-2.57) |
| Categorical Index (0-9) | | |
| 0-2 (Reference) | 1.0 | 1.0 |
| 3-4 | 2.98 (1.98-4.49) | 3.90 (2.07-7.36) |
| 5 or more | 18.46 (12.15-28.04) | 26.79 (14.18-50.61) |

Accuracy of the Elder Abuse Vulnerability Index

Reported Abuse



Confirmed Abuse





THE PINE STUDY