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Executive Summary

This exploratory, hypothesis-generating study provided evidence that adults aged 60 and older may be victims of sexual abuse in their own homes, in nursing homes, and in the community and implies that age is no protection against sexual victimization. Record data from 284 cases were analyzed on elders referred to law enforcement or to adult protective services for investigation of suspected sexual abuse. Information on four elements - victim, offender, crime and case disposition. were entered into a specially designed measurement tool, the Comprehensive Sexual Assault Assessment Tool – Elder. A separate data set of 77 cases of convicted sex offenders of elderly women was analyzed. Twenty-five of these inmates were interviewed in prison. Univariate statistics, Pearson's correlations, and chi square were used to examine significant relationships. SPSS was the software used for the analysis.

The mean age of the 284 victims in this study was 78.8 years with the ages spanning four decades. The majority of elders (82.3%) were Caucasian with 17.7% members of visible minorities. The majority of the victims were female (93.2%) and 6.8% were male. Age did not prevent an offender from perpetrating a sexual act on an elder. Age of offenders of these elder victims ranged from 13 to 90 years.

Several aspects of elder sexual abuse were examined by route of report and by disability. There were fairly equal numbers of elders who were reported to adult protective services (53.9%) or reported to the criminal justice system through law enforcement (46.1). The consequence of a known relationship between victim and offender, when evaluated through APS, resulted in less investigation for a crime, less physical examination for the elder, and less referral to the prosecutor's office

When comparing groups by presence of a disability, there were no significant differences in elders with physical limitations; however, a dementia diagnosis was greater in the APS group (70.5% vs. 43.3%). Elders with dementia, compared to those without a diagnosis, were abused more often by persons known to them (family member, caregiver or another nursing home resident) than a stranger, presented behavior cues of distress rather than verbal disclosures, were easily confused and verbally manipulated, and pressured into sex by the mere presence of the offender. Suspects, who were identified as abusing elders with dementia, had less chance of being arrested, indicted or having the case plea-bargained

Out of 226 cases with data, there were 180 offenders identified, 99 referred to the prosecutor, 17 convicted, 8 acquitted, and 11 plea-bargained. CJS cases were cleared by conviction or plea in 22 out of 56 cases (39.3%). APS cases were cleared by conviction or plea in 6 out of 124 (4.8%) of their cases.

Suspects reported through law enforcement (CJS) had a lower chance than those in the APS group of being identified, but once identified, they had a higher chance of police being notified, being arrested, and of being referred to the prosecutor. One hundred percent of CJS cases were reported to law enforcement compared to 45.2% of APS cases. In APS cases the offender was indicted in 20% of the cases, convicted in 33.3% of the cases or plea-bargained in 20% of the cases.

There was higher success in CJS court outcome compared to the APS cases. The role this plays in the routing of services might be explained in several ways. First, the CJS views sexual abuse as a criminal matter. Second, APS takes a wider view of elder mistreatment by investigating indirect as well as direct sexual acts. Third, the nature

of the sexual act and a spousal relationship may have a bearing on court outcome as no spousal cases were indicted or taken to trial. Fourth, APS investigates cases in which the victim is dependent on the abuser for care and this may prevent referral to CJS.

A separate sample of 77 convicted sex offenders of elderly victims was classified by severity of crime and motivation for the crime. The opportunistic and non-sadistic rapists committed the lowest level crimes of no penetration. The sadistic type, pervasive anger and vindictive offender had the highest severity of crime scores and committed the full range of crimes from no penetration to multiple rapes and murders.

Although the sample and power were small for this study, a profile of these 77 rapists suggest they plan the offense, do not bring a weapon, have a flat or excited affect but not one of anger. Trends suggest they are not employed or married, restrain the victim, commit more than rape on the victim, and had committed juvenile crimes.

One policy recommendation is to increase case detection of elder sexual abuse. Primary care health and home health care providers need to be aware of the signs and symptoms of elder sexual abuse. This knowledge could help identify at-risk elders and provide early intervention. Behavioral signs of distress in elders who are physically and/or cognitively compromised may often be the first clue of sexual abuse. All suspected elders of sexual abuse need an immediate report to those in charge of their care, to the physician or nurse practitioner (if an institution case) and a complete physical examination by a qualified sexual assault forensic examiner. Within the care-providing role, observations of the dependent and vulnerable elder are important in verifying acutet, chronic or on-going abuse. Although obtaining specific biological evidence may be

difficult, home care providers can increase their visits and observations as a strategy to increase a pattern of behavioral evidence.

It is recommended that APS and CJS staff work together to design guidelines and protocols on strategies to assess safety of dependent elders who are in highly sexualized environments. The successful strategies used by prosecutors in CJS cases need to be evaluated for application in APS cases especially in cases where the victim and offener have an existing relationship. A familial relationship places the safety of the elder in jeopardy if the victim and offender remain in the same setting without an intervention plan. When the offender is a resident or staff member in an institution, failure to notify law enforcement puts other residents at risk for the perpetrator's repetitive offending behavior. Failure of a medical referral for examination puts the elder at risk for continuing abuse and for mental health issues resulting from living in a highly sexualized, if not abusive, environment.

In the service of interprofessional cooperation, APS, CJS and health care providers need to develop productive working relationships to manage elder sexual abuse cases. Additionally, it is recommended that rape crisis and domestic violence staff work with mental health staff to understand the dynamics of elder sexual abuse and to strengthen services to elder victims. Treatment interventions need to be tailored and adapted to techniques to accommodate elder victims with cognitive and physical disabilities.

A recommendation is made to continue study on gerontophilia to discern if this behavior constitutes a paraphilia. Both APS and CJS need access to professionals

who evaluate sex offenders to better understand the sexually aggressive behavior and its propensity to escalate.

This study makes clear that elder sexual abuse is a very complex problem that remains not well understood. Resolution of cases will require a multidisciplinary approach whereby administrators from adult protective services and the criminal justice system work together to address cases that involve abuse by family or partner relationships. Legal strategies used in successful domestic violence cases to protect the elder should be considered and examination of offenders for repetitive and escalation of sexually aggressive behavior needs to be part of the case record.

Introduction

Two key agencies have responsibilities for investigating sexual abuse. The first is local law enforcement that has jurisdiction to investigate any complaint of sexual abuse or rape across all aged victims. Sexual abuse is not a legal term but is used to describe sexual behavior that is considered criminal by state or federal law. Elements of criminal sexual behavior such as rape usually require that the act was nonconsensual, forced, with penetration and under force or threat of force. State or federal law defines additional criminal sexual acts.

The second investigative agency is adult protective services (APS) and is typically the agency of first report for elder mistreatment of vulnerable and older adults (NCEA, 1998; Teaster & Colleagues, 2003). Elder sexual abuse for APS staff is usually defined as "non-consenting sexual contact of any kind" and includes unwanted touching; sexual assault or battery, such as rape, sodomy, and coerced nudity; sexually explicit photographing, and sexual contact with any person incapable of giving consent (National Center on Elder Abuse, 1998). This type of elder abuse constitutes less than 1% of all cases reported and substantiated by APS. Despite the small number of substantiated cases, however, researchers and practitioners acknowledge that these estimates represent only the most overt cases. All statistics on elder sexual abuse are believed to be serious underestimates of this type of abuse in women who are vulnerable, frail and dependent on care as a result of a physical or cognitive disability (Roberto & Teaster, 2005).

Statistics are not only believed to be underreported from agencies that specialize in evaluating elders for abuse, but are also reported in studies of rape and sexual assault. Beginning with the American Psychological Association's first Task Force on Male Violence Against Women in 1991, the 1990s witnessed increasing attention to the scope, the magnitude, and the effects of crimes involving sexual victimization of women (e.g., Crowell & Burgess, 1996; Goodman, Koss, & Russo, 1993a, 1993b; Goodman, Koss, Fitzgerald, Russo, & Keita, 1993c; Koss, 1990, 1993; Prentky & Burgess, 2000). Over a decade later, results from the National Violence Against Women Survey revealed that 17.7 million women and 2.8 million men in the United States

were forcibly raped at some time in their lives (Tjaden & Thoennes, 2006). Sexual abuse of men and women is not only considered pandemic, but heralded as a socio-politically and epidemiologically major health problem with significant consequences for its victims (U.S. Department of Health and Human Services [USDHHS], 2000; Centers for Disease Control [CDC], 2006; U.S. Department of Justice [D0J], 2006). Although sexual assault of elders has likely been ongoing throughout time, it is clearly recognized as both a contemporary and emergent public health issue requiring increased awareness, comprehensive and sensitive assessment and foundational approaches for effective intervention to promote adaptive coping and mental health (Vierthaler, 2004).

Elder Abuse Definition Controversy

Lachs & Pillemar (1995) observed that a major impediment to epidemiological research in elder abuse is the differing definitions of elder abuse itself. There have been major demographic changes in Western societies over the last century and a large element is of public perception of the term. Clearly, an age range considered "elderly" a century ago might now be considered "middle-aged". Many research reports do not address the issue but do describe their samples in terms of the age range of victims studied.

In addition to the problem of defining the term elder is the controversy previously described over the route of reporting a suspected abuse and the relationship between the victim and perpetrator. The National Elder Abuse Incidence Study (NEAIS) reported on a national estimate of 449,924 persons aged 60 and over who experienced abuse and/or neglect in domestic settings in 1996 (National Center on Elder Abuse, 1998). Of this total, 16% were reported to and substantiated by APS and 84% were not reported to APS (National Center on Elder Abuse, 1998). These results confirmed the "tip of the iceberg" theory of elder abuse. According to this theory, official reporting agencies such as APS are alerted to the most visible cases of abuse and neglect, however, large numbers of incidents remain unfounded, unidentified, and unreported (National Center on Elder Abuse, 1998). And as previously mentioned, elder sexual abuse is a very small fraction of these overall reported statistics.

A second issue in the definitional controversy is the relationship between the victim and the perpetrator.

A panel of scientists from the National Research Council addressed the definition of elder abuse in their report, *Elder Mistreatment: Abuse, Neglect and Exploitation to an Aging America* (2002). The panel defined the term elder mistreatment by two dimensions. First, elder mistreatment could be intentional actions that cause harm or create a serious risk of harm (whether or not harm was intended) to a vulnerable elder by a caregiver or other person who stands in a relationship of trust. Second, elder mistreatment could be failure of the caregiver to satisfy the elder's basic needs or to protect the elder from harm. This definition excluded victimization by a stranger. The panel's rational was that ordinary predatory victimization of elders was important as a type of criminal behavior, but was not felt to be regarded as a component of this special domain of elder mistreatment. The panel further explained that the nature of the relationship between elder and offender was basic to understanding the concept of mistreatment and therefore should guide the definitions used in empirical research.

For this study, the definition of elder sexual abuse included criminal acts and non-consenting sexual contact. Cases included persons' aged 60 and older that were reported to APS or CJS, whereby there was a physical sexual relationship without the elder's informed consent and including sexual abuse by those in a position of trust and/or authority as well as strangers. A physical sexual relationship referred to not only intercourse but to other forms of intimate sexual contact, such as coerced nudity, unwanted touching, sexually explicit photographing, sexual contact with any person unable to give consent, and touching the genital area or breasts when not associated with a defined nursing care plan. This is an arbitrary definition but is similar to the Benbow and Haddad 1993 study and the National Center on Elder Abuse (NCEA, 1998).

Study One and Study Two

This study of Elder Sexual Abuse Victims and their Offenders is the second of two studies funded by the National Institute of Justice to Boston College. The findings from a first study of 125 elder victims of sexual abuse (e.g., the Forensic Marker study) made clear that more research was needed with this population of not only the elder victim but the perpetrator of the sexual assault. This research is in an area of sexual assault neglected almost entirely by science – the sexual victimization of the elderly. As a subgroup of sexual

assault victims, the elderly have been "hidden" from view, rarely, if ever, the subject of media attention, generally excluded from public policy designed to manage sex offenders, and, as noted, neglected by scientists. Although researchers have been working in the general area of sexual violence for thirty years, the apparent gravity of this "new" subgroup of victims emerged somewhat serendipitously. In our first study and subsequent analysis of data obtained on 125 cases, we discovered not only an unexpectedly high incidence of such victimization but serious medical and psychiatric sequelae, including an alarmingly high number of deaths proximal to the assault. It was against this backdrop that formed the impetus for a multidisciplinary project that a second study was funded by the National Institute of Justice to Boston College.

One of the original goals for this second study was to collect follow-up data on the 125 elders from the first study; however, this was not possible. Although the proposed study was reviewed by Boston College Institutional Review Board (IRB) to assess human subjects' protection issues, the attempt to collect follow-up data encountered IRB obstacles at many sites. As a forensic nurse had usually performed each sexual assault examination of the elder, hospitals required the forensic nurse to submit a proposal for hospital IRB approval for the follow-up information. Although supporting the study, hospital officials were obligated to maintain the requirements of the Health Insurance Portability and Accountability Act of 1996 (HIPPA) that provides extensive privacy rights to patients' medical information and records. To pursue this would have been cost prohibitive. In addition, finding person's knowledable of information relevant to follow up was difficult. Thus, because of missing data for follow-up of the elderly victims, we did not use the prior 125 sample of elder victims, but rather entered 284 new cases.

It is important to note that this project focused on studying elder sexual abuse of victim cases through a record review. The study also sought a separate sample of sex offenders of the elderly through record review and individual interviews of convicted offenders in order to classify them using a motivation-based typology. Given the challenges of this hidden population, the research team believed that using multiple methodologies was critical to complete the goal. As such, cases involving elderly victims were obtained through contact with specially trained forensic nurses who kept their own database and could access it by age of victim:

Other methods were necessary for identifying the rapist group since age of victim is often not reported on any convicted offender database. This methodology used to find rapists was media surveillance for newspaper accounts of convictions, locating the prison number and prison setting of the inmate, and contacting the state prison system for permission to interview. As will be discussed in the following sections, the research team collected data that did not allow controlling for selection bias. This was a hypothesis-generating study. The data comprised a convenience sample that is reported on for pilot or exploratory purposes. It is hoped that future elder sexual abuse studies will be hypothesis-testing projects.

Project goals

Four goals guided this research project and represent the four chapters to this report.

Goal 1: Examine, test, and analyze psychometric characteristics of the Comprehensive Sexual Abuse Assessment Tool-Elder (CSAAT-E).

Goal 2: Analyze 284 cases of elder sexual abuse victims for characteristics of victims and their offenders

Goal 3: Analyze data from records and interviews with convicted sex offenders for motivational intent in the rape and sexual assault of the elderly

Goal 4: Identify institutional responses to allegations of sexual abuse with particular attention to barriers and impediments to rapid, efficient, and effective responses to treatment, investigation and prosecution of elder sexual abuse.

Institutional Review Board (IRB) IRB approval was granted by Boston College for record reviews of elder victims of sexual abuse and their offenders and for interviews with convicted offenders of elder victims. Separate IRB approvals and consent of the inmate were obtained from the prison systems where interviews were conducted. These state prisons included New Jersey, New York, Montana, Utah, and Wisconsin.

Working Group

The Working Group, formed as part of the methodology for the first study on forensic markers, was reconvened for the second study. The majority of Working Group participants (see list in Appendix) were

selected for expertise in sexual abuse, elder abuse, analysis or forensic evidence in the elderly, medical evaluation of trauma in the elderly, law enforcement and for their access to confirmed cases of elder sexual abuse. The group also provided the cases for analysis for Chapter 2 of analyzing characteristics of elder victims of sexual abuse and their offenders.

Pilot Forensic Bruising Study

A major barrier in detecting intentional elder abuse is the assessing of contusions or bruises. A forensic pathologist from the Working Group described the need in his autopsy work of being able to more clearly determine the data of a bruise though color analysis and suggested some pilot work in this area. His team at the Allegheny County Medical Examiner's Office developed a color ruler to be piloted when photographing bruises in both living and deceased persons. Approval was given for pilot work. The Working Group provided photographs of bruises. These photographs were then transferred to a working file for development of computer software to determine dolor of the bruises. The result of the pilot work is found in the Appendix.

Chapter 1

Measuring Elder Sexual Abuse: CSAAT-E

Over the past three decades, a national source of data on incidences of sexual abuse against women and children has helped to improve problem recognition and the development of successful programs of prevention and treatment (Crowell & Burgess, 1996). However, large gaps exist in our knowledge about elder sexual abuse. A first step to identifying and tracking the barriers in the detection and management of elder sexual abuse was instrument development to measure the criteria upon which to base conclusions.

Literature Review

Although elder sexual abuse has been discussed in the clinical literature since 1974 (Burgess & Holmstrom, 1974), measuring elder sexual abuse is difficult for several important reasons. First, elders usually do not seek psychological services following sexual abuse and if they do, symptoms are often underreported by the victims or under-diagnosed by clinicians (Gray & Acierno, 2002; Burgess, Hanrahan & Baker, 2005). Second, older adult victims are also reluctant to report emotional or psychological difficulties in general but particularly if concerned about credibility or shame associated with sexual assault (Bachman, Dillaway, & Lachs, 1998; Falk, Hasselt, & Hersen, 1997) (Comijs, Pennix, Knipscheer, & van Tilburg, 1999). Third, clinicians' under-recognize sexual victimization of older adults (Falk et al., 1997; Gray & Acierno, 2002). And fourth, physical manifestations or post trauma response of sexual abuse are ascribed to normal frailties and maladies of old age or difficult to diagnose because of medical problems common to aging (Gray & Acierno, 2002).

Part of the difficulty in the field has been that of measurement and instrument development in order to address the barriers to detecting elder sexual abuse. There have been few

screening tools available to identify potential victims or perpetrators. Reis and Nahmiash (1998) designed and validated the 29-item Indicators of Abuse Screen to identify elder abuse cases based on previous risk factors (Bonnie & Wallace, 2003). The 41-item Likert scale called the Elder Assessment Instrument has been used in clinical practice since 1984 (Fulmer, 2003). The Caregiver Abuse Screen is an 8-item tool that assesses abuse and neglect (Bonnie & Wallace, 2003). Of the available tools, however, none specifically measure sexual abuse.

History of Project to Measure Elder Sexual Abuse

On October 18, 2000, The Department of Justice sponsored a roundtable discussion on the topic of "Elder Justice: Medical Forensic Issues Concerning Abuse and Neglect." Staff at the Department of Justice expressed concern with (1) the number of requests they receive for efforts to protect older Americans from being victimized, and (2) the fact that 13% of the nation's population is over the age of 65 and this figure will rise to almost 20% by 2020.

In our first study, Forensic Markers in Elder Sexual Abuse, we collected cases for analysis from a Working Group of experts. The instrument chosen to measure data from sexual abuse cases was the Comprehensive Sexual Assault Assessment Tool (CSAAT). This tool (Burgess & Fawcett, 1992) was developed to help standardize the collection of data about the victim and offender in cases of rape and sexual assault. The CSAAT provided a systematic guide for victim assessment, evidence documentation, and initial treatment. Use of the CSAAT facilitated collection of investigative data about the victim and the offender that were critical components of victim interviews and crime investigations, as well as forensic data.

Phase 1 Experts in the area of sexual victimization of older adults gathered for a meeting in 2002. They represented major stakeholders in the identification, assessment, treatment, and legal processing of elder sexual abuse crimes. Prior to the meeting, the experts were required to

submit cases of elder sexual abuse that they had examined, supervised, investigated or prosecuted.

Using a convenience sampling method, 125 female elder sexual abuse cases, aged 60 and older were submitted by the experts. The data was collected using the Comprehensive Sexual Assault Assessment Tool (CSAAT). The researchers were aware that the CSAAT instrument lacked specificity for the cohort being studied and the data was not collected using a single source of data. Specifically, the sources of the data varied (expert recall, clinical records, court records, prosecutor records, etc), as did the person filling out the CSAAT. However, given the dearth of existing information about elder sexual abuse, sampling options were restricted. To counterbalance this obvious sampling and data collection limitation, we carefully selected experts with direct clinical, administrative, investigative and/or prosecutorial experience. There were attorneys, forensic nurses, investigators (police, detective, FBI), administrators (Adult Protective Services), clinicians (social worker, physician, nurse practitioner, and nurses), and three older adult consumers advocates. The experts and the cases submitted represented the New England, Middle Atlantic, Southwest, and West Coast regions of the United States.

The original CSAAT identified four domains: 1) victim data, 2) offender data, 3) investigative data, and 4) case disposition data. An expert panel determined content validity for the CSAAT; however, no psychometric properties were available (Burgess & Fawcett, 1996). The tool has been used widely as an instrument for collecting clinical and forensic data when investigating sexual assault crimes. Additionally, the instrument is used to train sexual assault nurse examiners and other health and investigator professionals.

Method

The second step, and objective for this study, was to design an instrument to measure elder sexual abuse. A critical objective of this step was the adaptation of the CSAAT to include questions relevant to elder victims and their offenders. The CSAAT provided a base from which to build an instrument that would address unique physical and mental characteristics of the older adult victims, perpetrators, and issues with processing the case through the legal system. At a two-day meeting, discussion focused on 1) the unique characteristics of sexually victimized older adults, 2) a conceptual framework that would provide a foundation for an instrument, and 3) core elements for development of questions specific to elders.

Following the meeting, the CSAAT was revised and mailed to experts for content validity. The content validity expert panel included four forensic nurses, two criminal investigators from the state police and FBI, three attorneys from sex crime units in California, New York, and Massachusetts, a geriatric researcher, a clinical social worker, and a geriatric physician and nurse practitioner. The expert panel was provided a working definition of the CSAAT items and asked to rate the relevance of each item noting the item as ‘not relevant', 'relevant', or 'highly relevant'. Reviewers were asked to a) comment on the wording, vocabulary, sentence structure, and formatting of the item; b) evaluate the clarity and conciseness of the items and suggest alternative wording; and c) evaluate the capacity of the instrument to tap vital information about the victim, the offender, the crime, and the disposition of the case. Content revisions accrued until there was 100% agreement that all items were either relevant or highly relevant. The final product was named the Comprehensive Sexual Assault Assessment Tool-Elder (CSAAT-E).

Resulting Product

Conceptual Framework and Core Elements

There were seven barriers identified in the detection and investigation of elder sexual abuse that the CSAAT-E addressed through its conceptual framework. These barriers for elder victims include: delay in reporting, delay in evidence collection, impaired mental and/or physical functioning, assessing intentional bruising and injury, sensory deficits, psychological response of the victim and relationship of victim to offender.

The conceptual framework explains the pre- and post-assault association between the victim, offender, and assault factors. Core elements are subsumed under the following domains: 1) victim, 2) offender, 3) crime information, and 4) case disposition (see Figure 1-1). Defining risk factors depends on an accurate assessment of the temporal and contextual dimension to provide safe environments and prevent these crimes. Major changes to the original CSAAT focused on 1) temporality, 2) older adults physical and mental status, 3) severity of injury, 4) setting of the crime, and 5) documentation of outcomes associated with the assault. Factoring in the temporal dimension of pre- and post-assault is perhaps the most significant revision of the CSAAT. For instance, the time of the forensic exam relative to disclosure and police involvement, and outcomes of the event were identified as important components to factor into the revised CSAAT.

The original CSAAT instrument did not account for pre-assault and post-assault biopsychosocial characteristics of the victim or the victims' physical, psychological and cognitive functioning before the crime to be compared to their functioning after the crime. The temporal dimension established a baseline pattern that can be compared with the post-assault phase. Many older adult victims are physically or mentally impaired prior to the assault that

makes it very difficult to causally relate physical or mental injuries after the assault. These patterns are essential data for documenting changes in functional patterns or the emergence of physical or mental symptoms that are behaviors potentially associated with the crime.

The first barrier in detecting elder sexual abuse was the time dimension and delay in reporting. An important aspect of the temporal dimension is the sequencing of events from assault to disclosure including information about the time lapse from the incident to a physical examination where forensic evidence is collected. Clarity about who performed the interview and filled out the data collection instrument as well as the time lapse from victimization to interview and examination is necessary for adequate evidence and prosecution of the case.

A second barrier is time delay in evidence collection. In many cases of elder sexual abuse, there is long time lapse between the assault and disclosure of the assault, and the collection of forensic evidence. The time lapse may be due to impaired expressive or receptive communication of the elder that delays the recognition of the crime by providers. Providers may not recognize the physical or mental injuries as a consequence of a sexual assault. In any case, delays in recognizing sexual assault may place the elder in jeopardy for further assaults. Furthermore, delays can impede the legal process, as evidence is lost with time. Delays in the sequencing of collecting forensic evidence are important to the integrity of a case. Thus, the CSAAT-E clarifies the date, time of day of the assault, time lapse from assault to disclosure, time lapse from assault to evidence kit collection and exam, who the disclosure was made to, and the elder's behavioral and physical indicators that led to the discovery of the assault.

Victim Core Elements

In addition to the items used in the original CSAAT (see Figure 1-2), the revised CSAAT added questions about physical and/or mental limitations to show the existence of these

conditions prior to the assault. The critical elements subsumed under the victim construct, pre-assault, are the following biopsychosocial characteristics: physical and mental condition, race, ethnicity, gender, age, living situation, relationship to offender and history of abuse. These factors generate detailed information about patterns of functioning before and after the assault. The post-assault biopsychosocial characteristics include: mental and physical functional status, disclosure of abuse, examination, response to examination, severity of injury and post-trauma response.

A third barrier that can affect an investigation is mental and/or physical impairment. Many elders have some type of baseline physical or mental disability that can obscure disclosure or the investigation of a sexual assault. As individuals age, they experience an increase in medical problems including cognitive and sensory impairment.

A fourth barrier in clinical practice is assessing intentional bruising and injury. Clinical and investigative experts' report that intentional injury and bruising can mimic changes of aging and make the assessment and prosecutions of elder sexual abuse more complicated. For example, in several cases in our study, the women had extensive bruising in the perineal area that was initially attributed to perineum care. Further investigation showed the bruising was in fact due to sexual abuse. To compound matters in these cases, dementia and impaired communication from a stroke prevented early detection of the sexual abuse.

Causal relationships are obscured between injuries from sexual assault and injuries from a fall or other type of common procedure such a perineum care for a dependent elder. Both sources of the injury can cause bruising. However, because the cause of bruising can be attributed to a change in function of clotting mechanisms resulting in an increased susceptibility to bruising, doubt exists and consequently, it is difficult to establish objective relationships

necessary for a successful prosecution. The CSAAT-E improves documentation of existing physical and mental conditions for both the victim and the offender if only to show that certain conditions are risk factors or predispose victims to being vulnerable to attach or offenders to committing such crimes.

A fifth barrier involves sensory deficits in the elder. Special considerations are required for the frail elder with difficulty with sight and hearing. For example, an elder who cannot see or hear clearly might not be able to give a description of details related to the incident. Documentation of the functional sensory status of victims was improved in the CSAAT-E and was considered an important core element for the database.

A reliable and valid measurement of trauma severity is essential to document outcomes from the assault. The original CSAAT did not have a scoring system to derive an injury severity score nor did the instrument measure the psychological impact of the trauma. While the original instrument provided the necessary detail of the trauma to the sexual organs, there was less detail on other parts of the body. Severity scoring and estimating the probability of survival have potential applications for clinical and forensic practice. Determining the risk for injury and measurement of the physical impact on frail elders who were sexually assaulted are important revisions of the CSAAT-E.

The Abbreviated Injury Scale (AIS) and its derived injury severity scale quantify anatomical injury (Garthe, States, & Mango, 1999). The AIS was incorporated into the revision of the CSAAT. The AIS is well established and has been used for many years to study the epidemiology and management of trauma (Garthe et al., 1999). The AIS was originally developed in 1971 by the American Association for Automotive Medicine, the Society of Automotive Engineers and the American Medical Association to measure the extent of

automobile accident injury (Wyatt, Beard, & Busuttil, 1998). The AIS uses specific codes for injuries and then attributes a score between 1 and 6 to each injury classifying the injury as minor, moderate, serious, severe, critical or fatal. An injury severity score can be computed from the sum of the squares of the AIS scores of three most severe injuries. The computation has tested reliability for predicting survival in various populations (Osler, Baker, & Long, 1997). The AIS and injury severity scoring system is a reliable and valid method for quantifying anatomic injury for the older adult population (Boroos, A, & Vanderschot, 1993; Kilaru, Garb, & Emhoff, 1996; Zietlow, Capizzi, & Bannon, 1994). In one research study, 38,707 seriously injured older adults were characterized using the AIS system in a retrospective secondary analysis of a statewide trauma data set from 1988 through 1997 (Richmond, Kauder, Strumpf, & Meredith, 2002). The AIS was used to categorize injuries and compute an injury severity score.

A sixth barrier in the management of elder sexual abuse is the psychological response of the victim to the abuse. The CSAAT-E includes a method for measuring the prevalence and patterns of posttraumatic stress symptomatology. Most of the victims studied did not have documentation of posttraumatic stress symptomatology. There is evidence that individuals experiencing traumatic events share similar patterns of responses (Burgess & Holmstrom, 1974; Campbell, 1990; Foa, Riggs, & Gershuny, 1995). However, little is known about the response of older adults to the trauma of sexual abuse. To document the psychological trauma of sexual assault, we sought an instrument that was easy to use and sensitive to psychological changes over time.

We added the SPAN scale to the CSAAT-E. The SPAN scale is a four item self-rated scale used in the diagnosis of posttraumatic stress disorder. SPAN is named for the four items: Startle, Physiological arousal, Anger, and Numbness. The scale has correlated significantly with

other accepted instruments of posttraumatic stress with a diagnostic accuracy of 88% (Metzer-Brody, Churchill, & Davidson, 1999). While there are many instruments to choose from to measure post traumatic stress, the appeal of incorporating SPAN into the CSAAT-E was the parsimony of the four-item scale.

SPAN was developed from the Davidson Trauma Scale (DTS) that is a valid 17 item self-rating scale sensitive to measuring the effects of treatment (Davidson et al., 1997). Meltzer-Brody et al, the authors of SPAN, believed a much shorter version of the DTS was possible as the DTS demonstrated a high level of item intercorrelation with a Cronbach's alpha coefficient of 0.90. SPAN evaluates startle, physiological arousal, anger and numbness that are symptoms specific to a posttraumatic stress diagnosis. Using SPAN in the CSAAT-E offers brevity, diagnostic accuracy, and the ability to distinguish between treatments of differing effectiveness. A limitation of SPAN is that it has not been psychometrically tested in the older adult population.

Finally, the revised CSAAT-E includes questions about the disposition of the victim following the exam. From this question, researchers will be able to determine if a higher level of care was required following the assault. The question reads "Following the exam, the victim is discharged to: home, nursing home, medical admission, psychiatric admission, safe house/shelter, or other.

Offender Core Elements

Few revisions were made to the offender core elements except to add information about a history of drug abuse, a previous criminal history, and a history of interpersonal violence, sexual abuse, physical abuse or the presence of physical and/or mental limitations.

The seventh barrier in the investigation of elder sexual abuse is the relationship of the elder to the perpetrator. Questions in the CSAAT-E included multiple categories for identifying the relationship including familial, partner, caregiver, resident, stranger and other.

The location of the assault is an important dimension of evaluating risk factors for the victim. In the forensic marker study, 43% of victims lived alone at home and 38% of victims lived in nursing homes. Both domestic and nursing home vulnerability to sexual assault for the older adult population is documented in the literature (Burgess, Hanrahan & Baker, 2005; Teaster et al., 2000). In both settings, the victim requires some level of assistance with physical or mental functioning. The type of living situation, functional status requiring aid from another person, and the relationship of the perpetrator to the victim were explicated in the CSAAT-E.

The Forensic Marker study revealed that of the 125 elder sexual abuse cases, nursing home residents were more likely than non-nursing home residents to be older and physically and mentally disabled. Also, the offenders for nursing home victims were more likely to be known to the victim or the victim's caretaker. Both these factors can change the approach to planning interventions that better protect vulnerable elders from perpetrators. In a study by the California Department of Justice, Certified Nursing Assistants (111,367) and Home Health Aids (36,314) criminal background checks were performed (Robison, 2002). The study showed that 4.8% (10,130) of those employed had criminal histories. Certified Nursing Assistants and Home Health Aids predominantly care for the elderly in nursing homes and individual's homes. The Working Group suggested a question be added to the CSAAT-E regarding a criminal record for the offender. Criminal background checks for all employees may be necessary to ensure safe environments for vulnerable elders.

Crime and Case Disposition Core Elements

The date, time, and day of the week as well as the location, type and sequence of sexual acts were important elements in the original CSAAT along with the maintenance of the integrity of the evidence (i.e.; victim bathes or removes clothes before an evidentiary exam or the offender takes evidence from the scene of the crime). The CSAAT-E core data elements include essential crime information and information about the case disposition. Outcome measurement is essential for defining risk factors that, in turn, informs appropriate treatment and preventative interventions. Not only are mortality and other adverse outcome measures important, but also outcomes related to case disposition are required to determine the sensitivity of public systems to sexual assault crimes against older adults. The CSAAT-E includes greater detail about forensic evidence (i.e.; was the evidence tampered with? What the clinician performing the physical exam following the assault trained in the collection of forensic evidence?)

Other CSAAT changes included the need for better information about the closure of the assault case as often these victims are not believed or the cases are not substantiated or prosecuted. Furthermore, the experts hypothesized that early deaths were associated with a sexual assault but not identified as caused by injuries from the assault. Data correlating mortality and adverse outcomes among victims of elder sexual abuse are essential for identifying the consequences of this crime. Even if death is not a consequence of the sexual assault, worsening of physical and mental functioning can be a devastating outcome. The CSAAT-E includes questions about the circumstances of the case closure, the status of the victim, and prosecution detail.

For criminal justice statistics on legal outcome of the case, elements of how the case was processed through the justice system were important. Data can then be accumulated on the

number of cases that proceed to the prosecutor, whether or not there was an indictment and whether there was a plea-bargain, conviction or acquittal.

Policy and Practice Implications

In order to advance our understanding of the dynamics and issues of elder sexual abuse, a measurement tool specific to this population of victims was needed. The CSAAT-E was adapted from a tool that measured four domains of victimization in adult and younger victims of sexual assault. This tool, now adapted for elder victims, seeks to expand the understanding of the impact of elder sexual abuse on highly vulnerable victims, thereby improving the protocols for evaluating and treating these victims and their offenders. One policy recommendation is for programs such as sexual assault nurse examiner programs (SANE) and sexual assault response teams (SART) to consider adopting a uniform data collection tool, especially one that reports the age of the offender and the age of the victim. Uniform reporting tools would assist programs in comparing aggregate data.

This study provided the beginning of a data collection tool for an elder offender database. Expansion of the database could come from surveying the 50 state correctional facilities for age of victim and age of offender to provide additional data on numbers and circumstances of the crime. The Bureau of Prisons, National Institute of Corrections and NIJ might be able to examine recidivism rate by age of victim. A secured Web site could provide rapid data to investigators and prosecutors. Also, prosecutors could use the database as a resource to contact other prosecutors who may have similar cases.

Figure 1-1. A Conceptual Framework of Elder Vulnerability Associated with Sexual Abuse

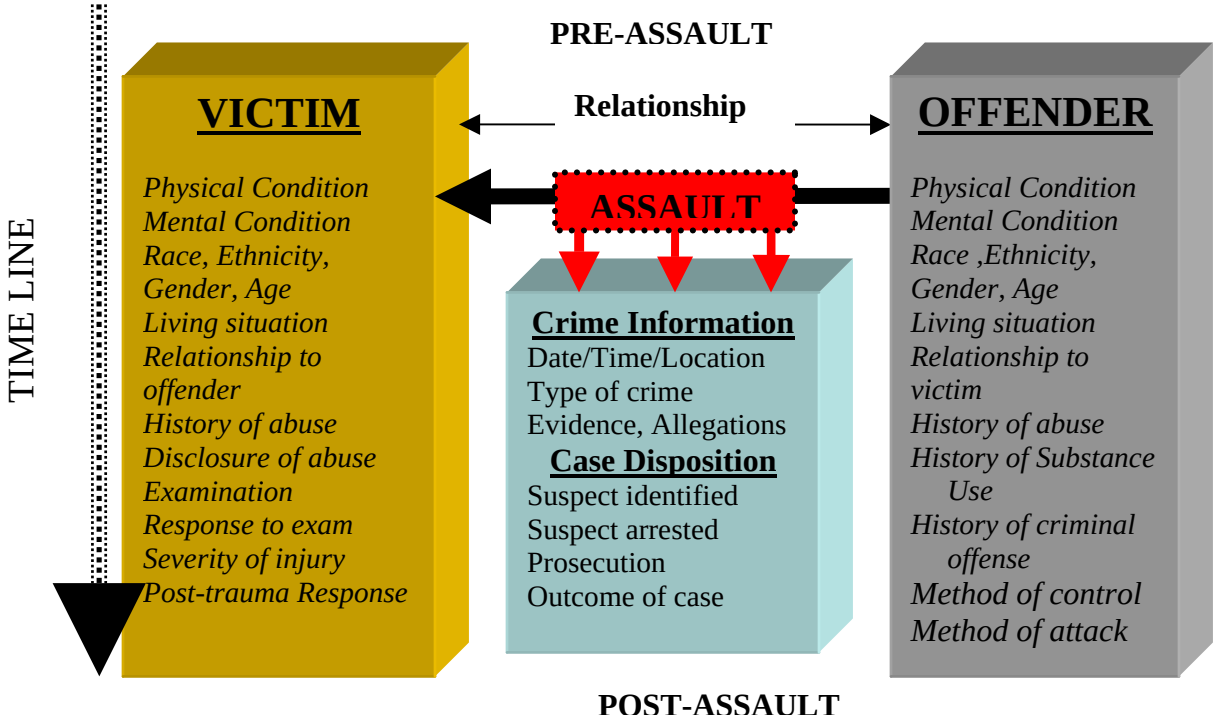

Figure 1-2 Summary of Revisions: Comprehensive Sexual Assault Assessment Tool
Note: Variables from the original CSAAT are contained in the CSAAT-E, only additions are listed.

Original Comprehensive Sexual Assault Assessment Tool (CSAAT)	Revised Comprehensive Sexual Assault Assessment Tool for Elders (CSAAT-E)
Victim Core Elements Characteristics: age, gender, race, marital status, education, occupation, primary language. Forensic data: 1. Physical: Height, weight, and vital signs; date and time of last consensual sex; condom used; urinated, defecated, vomited after assault; type of exam (direct visualization, bimanual exam speculum exam, colposcopic exam); photographs taken, evidence kit collected; tests for STD, sperm presence; Genital trauma, physical trauma; treatment provided (STD, urinary tract infection, other) 2. Psychological: Victim's behavior during the exam and interview (controlled or expressive demeanor); seen by a counselor for Post Trauma assessment.	Victim Core Elements: Characteristics: Existence (yes/no) of the condition prior to the assault for 2-5) 1. History of interpersonal violence, sexual abuse, physical abuse 2. Presence of physical and mental disabilities 3. Self Performance with activities of daily living 4. Mental status: memory, sleep cycle, mood 5. Diagnoses (Medical/Mental) Forensic Data 1. Physical: Severity of injury determined using the Abbreviated Injury Score (AIS). 2. Psychological: Measure of SPAN instrument to measure startle, physiology, anger, numbness. Existence (yes/no) of the condition prior to the assault. 3. Disposition following the exam: home, nursing home, medical admission, psychiatric admission, safe house /shelter, other
Offender Core Elements Characteristics: age, gender, race, marital status, education, unique features (i.e.; tattoos, facial/body hair), primary language, previous criminal record, number of offenders, use of drugs or alcohol; offender relationship to the victim Method of approach, attack, and control: weapons (type), con, subterfuge, ploy, or blitz; use of gloves, bindings, telephone disabled, weapons; threatening methods of control (psychological coercion or physical force).	Offender Core Elements 1. Characteristics: History of interpersonal violence, sexual abuse, physical abuse, presence of physical and/or mental limitations. 2. Relationship of the offender to the victim (stranger/acquaintance, unrelated care provider, incestuous, marital/partner, resident-to-resident, other 3. Offender history of crime and drug abuse
Crime Core Elements 1. Date, time, and day of the week; location, type and sequence of sexual acts; number of offenders; single or multiple crimes; Victims response to the offender (resistance and offenders reaction); presence of offender sexual dysfunction	Crime Core Elements 1. Time lapse from a) assault to disclosure b) assault to exam, c) assault to investigation by police. 2. Location of the assault is specified as personal residence, nursing home, assisted living, other 3. Was an Evidence Kit collected (yes/no)? 4. Protective service involvement?

2. Integrity of evidence (Offender took evidence from the scene; victim evidence not complete due to bathing, removal of cloths, etc.

Case Disposition Core Elements

1. Notification of police; offender (identified, arrested, charged, tried), plea bargain, guilty/not guilty

Case Disposition Core Elements

1. What was substantiated as a result of the investigation? (Sexual abuse, physical abuse, neglect, financial exploitation, self-neglect, emotional abuse, nothing was substantiated, other).
2. Outcomes: (death, physical/mental problems)
3. Current status of the case (date): police notified, report filed, case closed, victim recanted, beyond statute of limitations, DA rejected, out of jurisdiction, false report, leads exhausted, pending DA review
4. Case inactivated: indicted, charged, convicted (plea, trial), and sentenced.

Chapter 2

Elderly Victims of Sexual Abuse and their Offenders

Attention to sex crimes against the elderly is slowly increasing despite the fact that sexual victimization in all age groups is underreported. Elder abuse is a complex problem with causes attributed to multiple factors (Wolf, 2000). Most elder abuse is believed to occur in the home and by family, household members and paid caregivers (Smith, 2002). This chapter reports the analysis of characteristics of a study of elder victims and their offenders.

Literature Review

Although the incidence of elder sexual assault is difficult to estimate with any degree of confidence, there are over 30 years of reported elder cases from various studies that can be cited. In 1971, MacDonald published on 200 consecutive cases in Denver of sexual assault and reported 7% of the victims were aged 50 and older. Amir in 1971 studied Philadelphia records of rape victims over aged 50 and reported 3.6% of the total. In 1978, Fletcher reported 5.2% of victims referred to a Syracuse rape crisis center were over 55 years of age. And in the 1970s when rape treatment centers were evolving, Hicks reported on 1162 cases evaluated for the first 19 months of operation of the Miami rape crisis center. Hicks (1978) noted victims over 61 years comprised 2.1% of the sample and those in the 41-60 ages range comprised 5.8% and concluded that a significant number of victims were elderly women. In 1989, Cartwright & Moore (1989) reported on a 760 inner city hospital victim study noting that 2.7% of the sexually assaulted victims were 60 years and older. In a 1992 Texas study, 2.2% (n=109) of the reported sexual assault victims involved women over 50 (Ramin, Satin, Stone & Wendel, 1992). In the

time period of 1971 to 1992, the percentage of victims aged 50 and older ranged from 2.1% to 7%.

Although there are no reliable estimates of the incidence or prevalence of elder sexual abuse in the general community (Lachs, Williams, O'Brien, Pillemar, and Charlson 1998), the National Citizens' Coalition for Nursing Home Reform (NCCNHR) identified 1,749 cases of such abuse in the institutionalized elderly in its first three years of keeping records starting in 1996. Data from the National Crime Victimization Survey of 2000 identified 3,270 of 261,000 rapes and sexual assaults were victims' age 65 or older (Maston & Klaus, 2002). However, Rennison (2002) estimates serious underreporting occurs with an estimate of only 30% reported to police.

Risk factors for sexual abuse There are several factors that place elders at-risk for sexual abuse. The typically inherent nature of dependence on others such as family members, caretakers, agency staff, (Anetzberger, 2000; Marshall, Benton & Brazier, 2000; Wyandt, 2004) often combines with physical frailty and/or alterations in mental status (Swagerty, Takahashi & Evans, 1999). These dependency factors are barriers to detecting elder sexual abuse and can provide for increased risk of abuse with continued low rates of reporting (Nerenberg, 2002).

Bruises may be attributed to the aging process rather than to an assault. Medical personnel typically are not trained to evaluate elderly victims for sexual abuse. One of the critical problems in the observation of genital injury in the elderly, for instance, is an understanding of the mechanism of injury. The most common explanation of genital bruising (and bleeding) in institutionalized elderly is either a "botched catheterization" or "rough perineal care". Bruising to the abdominal area is often attributed to tight restraints Burgess, Hanrahan & Baker, 2005).

There are a number of reasons to support the inherent vulnerability of elder women when compared to younger women as a factor to place the elder at risk for crime occurring at her residence. First, if elderly women are not dependent upon care, they are more likely to live alone due in large part to a longer life expectancy and higher risk for widowhood. Second, vulnerability is related to physical size and strength and elder women are perceived to be less capable than younger women to flee or resist a physical attack. Third, as women age, there are changes in skeletal, neuromuscular, and other systemic changes that restrict mobility and thus reduce their abilities to defend themselves. Elderly women are less likely than younger counterparts to have guardianship of a younger male or partner and more likely to be perceived by motivated offenders as suitable targets (Safarik, 2006).

Memory

An elder's memory is often a barrier in the investigation of a suspected sexual abuse. Elderly victims of sexual abuse may be unable to communicate clearly, particularly those with varying degrees of dementia (cf. Gambassi, Landi, Peng, Brostrup-Jensen, Calore, Hiris, Lipsitz, Mor, & Bernabei, 1998; Hawes, Morris, Phillips, Mor, Fries, & Nonemaker, 1995; Phillips, Chu, Morris, & Hawes, 1993). Investigators may not know techniques to assist elders with their memory and they may not know how to discern if it is a memory problem or that the elder can not hear the questions being asked.

Memory, however, becomes a problem for adults when it fails, sometimes noticed beginning in the fifth or sixth decade of life. A term such as "benign senescent forgetfulness" characterizes a person's inability to recall, on occasion, relatively unimportant experiences of the past. Memory failure in everyday activities may be a symptom of either age-associated memory impairment or a pre-dementia condition.

Dementia Dementia is a psychiatric clinical syndrome, classified in the Diagnostic and Statistical Manual (DSM), and characterized by progressive impairments in cognitive functioning, memory, performance of daily tasks, language, judgment, orientation, abstract thinking, mood, and behavior (Hansberry & Gorbien, 2005). There are a variety of etiologies that include vascular, degenerative, traumatic, neoplastic, toxic, metabolic, or psychiatric disorders (Geldmacher and Whithouse, 1996). Each cause of dementia has certain clinical presentations and progressions. Cummings (2004) notes that Alzheimer's disease (AD) is the most prevalent form of dementia, accounting for about 50% of progressive dementia. Using 2000 census data, over 4.5 million Americans were affected by AD, and AD is projected to affect about 13 million Americans by 2050.

Trauma and the brain Both the neurosciences and the mental health field have contributed to our understanding of the effects of trauma on the brain. The brain is shaped by experience and emotional, cognitive, social and biological forces shape human development. Certain experiences can set psychological expectations and biological selectivity. Extreme experiences throughout life can have a profound effect on memory and can affect regulation of memory recall, biological stress modulation and interpersonal relations.

Current research in neurobiology focuses on how sexual trauma impacts the limbic system, especially the key regulatory processes affecting attachment, emotion, sleep, appetite, sex, aggression, and memory. Known as the brain's alarm system, the limbic system alerts the individual to danger as it gathers and encodes sensory information. A traumatic event triggers a series of transmissions from the sensory receivers to the limbic system to the neurohormonal system that releases catecholamines, specifically epinephrine, which mediates learning during times of stress.

One responsibility of the endocrine system is the secretion from the adrenal medulla of epinephrine and norepinephrine in response to stress and trauma. Circulating hormones have the same, but longer lasting, effects on target organs as direct stimulation by the sympathetic nerves. Additionally circulating hormones can cause effects in cells and tissues that are not directly innervated. The two hormones- epinephrine and norepinephrine- work complementarily to ready the body to react to attack, stress, and trauma—the fight-or-flight syndrome. In most cases, dementia has no debilitating effect or involvement on the functions of the endocrine system or the physiologic stimuli and responses that the endocrine system produces. However, very little attention has been paid to the physiological impact of sexual abuse or trauma on the elder.

Psychological Trauma

Post Traumatic Stress Disorder (PTSD) is a formal psychiatric entity that first appeared in the third edition of the Diagnostic and Statistical Manual of Mental Disorders in 1980. Until that time, it was not well recognized that traumatic events could leave a distinct collection of symptoms. The clinical literature described post trauma symptoms to include manifestations of shell shock, combat fatigue, war neurosis, and railroad shock. The majority of persons studied represented young adults in contrast to person's aged 60 and older.

There is very little literature on the impact of sexual abuse on the elderly. PTSD in older adults has been studied in three trauma areas: combat, natural and man-made disasters, and the Holocaust (Falk, Hersen & Van Hasselt, 1994). The review of over 50 studies in these three trauma-related areas revealed several general findings that remained constant across trauma type. First, the impact of the trauma on elders tended to be long lasting, defined as 12 months to 40 years post-trauma. Second, the long lasting effects were noted to wax and wane over the years.

Third, there was failure to identify a single assessment strategy as psychometrically adequate; and fourth, PTSD can either be delayed or a cyclic disorder in long-term follow-up (Green et al, 1990).

Averill & Beck (2000) observe there is no prevalence data on PTSD among victims of crime, including elder abuse. The impact of rape and sexual assault on victims was introduced as rape trauma syndrome in 1974 (Burgess & Holmstrom, 1974) and was based on 92 adult women, two of who were over age 60. However, the literature suggests elder victims may meet the diagnostic criteria for PTSD and, of note, Falk, Van Hasselt and Hersen (1997) suggest older victims of rape may be particularly likely to experience PTSD. Delayed onset of PTSD is an infrequently diagnosed variant of the disorder and is receiving attention among older combat veterans (Sleek, 1998). One explanation is that older adults may experience a reduction in physical and mental resilience over time that reduces their ability to "ward off" trauma-related memories and feelings (Aarts & Op Den Velde, 1996). Another explanation is that older adults have more time to reflect on events that occurred earlier in their life after the demands of job and families are lessened, especially with retirement (Averill & Beck, 2000; Kahana, 1981; Kuilam & Suttorp. 1989).

Co-morbid disorders in older adults can compound the impact of psychological trauma. Elders, because of their age, are more likely than younger victims to have physical illnesses including cardiac, respiratory, and cognitive problems. They may also have psychiatric diagnoses including depression, substance misuse and personality disorders that may mimic diagnoses on the anxiety continuum, including PTSD (Iancu, et. al, 1998; Morrison, 1997).

Routes of Reporting Elder Sexual Abuse

The clandestine nature of elder abuse has been a major barrier in detecting and developing interventions for both the victim and the perpetrator. As described in the Introduction, there are two routes for reporting and managing a suspected elder sexual abuse, APS and CJS. The legislative history of elder abuse management notes that in the mid 1970s, testimony was presented to a U.S. congressional subcommittee hearing on family violence on "parent battering" (Wolf, 2000). Linked to family violence, elder abuse was picked up by the media when serious case reports were presented to a U.S. House of Representatives Select Committee on Aging. Subsequently, state policy makers were charged with pressing for special elder abuse legislation (Wolf, 2000).

In 1962, Congress passed the Public Welfare Amendment to the Social Security Act, which authorized payments to the states to establish protective services for individuals with physical and/or mental limitations who were unable to manage their own affairs or who were neglected or exploited (Wolf, 2000). Title XX amendment to the 1974 Social Security Act, was adopted twelve years later and APS became a state-mandated program covering all adults 18 years and older (Wolf, 2000).

The APS system for reporting and investigating cases was in place by the time elder abuse became a public concern. In time, most states passed elder abuse laws or made amendments to existing adult protective services legislation to address this concern (Wolf, 2000). Congressional hearings in the 1980s led to the establishment of an Elder Abuse Task Force and in 1990 the US Department of Health and Human Services established the National Institute on Elder Abuse (Weiland, 2000). Child abuse laws became the prototype for legislation in many of the states, as a model statute on elder abuse did not exist. However, the inadequacies of this

legislation to elder abuse legislation soon became apparent (Wolf, 2000). The potential for violating civil rights by infantalizing elders along with new findings on spouse abuse suggested the domestic violence model might be a more appropriate model. Policy makers were encouraged to expand interventions and treatment possibilities to include methods and instruments of the public health and criminal justice systems (Wolf, 2000).

Forty-four states including the District of Columbia mandate reporting of elder abuse by specific categories of persons. The states of Colorado, New Jersey, New York, North Dakota, South Dakota and Wisconsin do not have a mandate. State law mandates a report to APS when "any person" has reasonable cause to suspect abuse, neglect or financial exploitation. This includes health care and social service staff, neighbors, friends, relatives, dentists, caregivers, and agency personnel.

APS staff investigates reports of abuse, neglect (including self-neglect) or financial exploitation of adults who are unable to protect themselves due to a physical or mental limitation. They also assess the need for protective services and provide services to reduce the identified risk to the adult. APS operates under a mandate to protect safety, health, and civil liberties (Office of Justice Programs, 2000). When APS receives a report of abuse, workers go into the home to investigate and address the situation with referrals for medical, psychological, legal and social services (Roberto & Teaster 2005). In nonemergency cases, APS workers cannot enter private residences to investigate alleged abuse without consent from the individual, his or her caregiver or legal guardian, a court order or a search warrant (Robey & Sullivan, 2000). Although all state APS programs have the authority to investigate in domestic settings, only 68.5% have the authority to investigate in institutional settings (Teaster & Colleagues, 2003).

CJS Elder sexual abuse cases can be reported to the criminal justice system through a local law enforcement agency in much the same route as a younger victim report. The elder can self-report to law enforcement, to a rape crisis center, or to a hospital for examination. In the cases of reporting to rape crisis or a hospital, the elder will be offered the choice to report the crime to the police and thus enter the criminal justice system. Also, a third-party such as friend, family member or associate can observe and suspect an elder is being sexually abused and report the case to law enforcement.

Method

Research Questions

The objective for this part of the study was to analyze characteristics in a sample of elder sexual abuse victims and their offenders who were initially reported either to APS or CJS routes. The research questions addressed include the following:

1. What are the characteristics of elder sexual abuse victims?
2. What are the markers of elder sexual abuse?
3. Who are the perpetrators of elder sexual abuse?
4. What is the nature of the elder sexual abuse?
5. What are the similarities and differences between elder victims route of report (APS v CJS) and their mental status?

Sample

Data came from members of the Working Group who were asked to review their files for cases involving elders age 60 and older collected during a 2 year time period from July 1, 2002 through June 30, 2004

Sources of Information. Data were coded on the CSAAT-E for 284 cases. Eight possible sources of information were charts, medical records, mental health records, social service records, investigative information, court records, administrative records, and sexual assault nurse examiner (SANE) reports. The most frequently used source was mental health and social service records with 154 cases (121 cases the only source) and the SANE reports were second most frequently used source with 65 cases. A single source was used in 189 cases and more than one source was used in 80 cases while 15 cases were missing their source. We relied on one primary data acquisition technique, the careful coding of archival information using a structured format - the CSAAT-E. (See Chapter 1).

Analysis

To address the first four research questions (characteristics, markers and nature of elder sexual abuse and characteristics of the victim's offender), we compared the circumstances and outcomes of the reported sexual abuse cases by age, gender, disability, location of abuse, route of reporting of abuse, markers of abuse, and offender demographics and characteristics, and the criminal justice process using nonparametric statistics. The acceptance of small sample sizes, use of categorical data, and the ability to accommodate irregular sampling distributions make nonparametric statistics plausible alternatives to more stringent parametric tests. Because the data for this chapter are at the nominal level measurement, we used the chi-square test for two independent samples and an alpha set at .05 to compare the characteristics of cases reported to APS compared to those reported to CJS. To address the final research question (i.e., comparison of APS cases to CJS cases and disability), we used SPSS cross tabulations and Pearson's chi square.

Results

Characteristics of Elder Sexual Abuse Victims

Of the 284 cases entered in this study, 261 (93.5%) were female elders and 19 (6.5%) were male elders (no gender on 4). Of 251 cases with data, elders involved in this investigation ranged in age from 60 to 100. The largest age group was 86 elders in their 80s (34.3%), 76 elders were in their 70s (30.3%), 55 elders were in their 60s (21.9%), 32 elders were in their 90s (12.7%), and 2 elders (.8%) were 100. The mean age was 78.4 Of 181 elders with data, 149 (82.3%) were Caucasian and 32 (17.7%) were were classified as visible minorities..

Location of assault Of 250 cases with data, the majority of victims (180 or 70%) resided in domicile locations. Institutional locations accounted for 58 elders (23.2%) and assaults occurred in 12 (4.8%) locations other than domicile or institution.

Markers of Sexual Abuse

Elder sexual abuse is an elusive type of abuse and so it was important to investigate how it was disclosed and how it came to the attention of authorities. In 238 cases with data, there was self-report by the elder in 79 cases (33.2%). In 49 cases (20.8%) a health professional (nurse, physician) reported, and in 29 cases (12.1%) a social worker or mental health staff reported the abuse. In 52 cases (21.8%) someone else reported the case and in 29 cases (12.1%) a family member reported the abuse. Abuse was reported through many persons who had access to the elder, with one-third coming from the elders themselves.

Observable markers The report on markers was evidence based on observations or information provided through the reporting person as noted above. There were 43 (39.4%) eyewitness reports to sexual victimization. In 149 cases with data, 84 (56.4%) elders were observed with physical trauma and there were 6 (6.7%) cases of sexually transmitted disease

diagnosed. Out of 98 cases with data, there was evidence of forcible restraint (e.g., being tied or held down) in 19 (19.4%) cases and out of 96 cases with data severe physical abuse was observed in 19 (19.8 %) cases.

Behavioral markers Behavioral markers of sexual abuse could be an indirect statement ("Don't let that man near me") or a sudden behavioral change such as withdrawing to fetal position or repeatedly refusing personal care. The victim displayed shame or guarded response when asked about abuse in 19 (21.1%) out of 90 cases. The victim displayed fear or strong ambivalent feelings toward suspected offender in 49 out of 110 (44.5%) cases. The victim was upset in receiving personal care in 25 (25.5%) out of 98 cases. Out of 93 cases there were 18 (19.4%)incidents of inappropriate boundaries observed and out of 94 cases there were 16 (17%) incidents where the suspected offender was overly intrusive regarding provision of personal care. There were 29 (29.6%) out of 98 cases where the suspected offender made symptomatic (sexual) statements and in 30 out of 101 cases (29.7%) symptomatic (sexual) behavior was displayed by the offender.

Control of the Elder An offender requires compliance by his victim in order to complete an assault. The mechanism for control could be verbal threats, his mere presence or physical beating. Control of the elder was documented by evidence of verbal report or observation of the elder being beaten of threatened. The most common method of control of the victim was the mere presence of the offender in almost half of the cases (43.3%).

Visible Injuries There were 102 (77.3%) cases with visible injuries and 30 (22.7%) cases without in 132 cases with data. There were 68 elders with 1 or 2 visible injuries and 35 elders with 3 –7 visible injuries.

Characteristics of the Offenders of the Elder Victims

There were 210 male offenders and 20 female offenders in cases with data. Offenders ranged in age from 13 to 90 years of age with 8 under 20 years. The largest age decade was the 30 to 39 groups with 40 or 27.0%. The 40 to 49 decade had 29 offenders (19.6%). The 70 and older group included 20 offenders' aged 70 to 79, 12 offenders aged 80 to 89, and 4 offenders over 90 years of age.

Relationship of victim and offender Offenders were placed into five groups based on their relationship to the victim. In 74 cases (26.1%) the suspect was not known to the victim. e.g., the stranger category. In 66 cases (23.2%) the offender had a familial relationship with the victim, e.g., the incestuous category. In 44 cases (15.5%) the offender was a marital or common-law partner. In 31 cases (10.9%), the offender was an unrelated care provider. In 17 cases (6%) the offender and victim were residents in a nursing home and in 21 cases (7.4%) the offender was known but had no familial or care providing relationship.

Offender relationship and gender of offender In 58 of the 59 stranger cases where gender was known, the offenders were male. The one female was an unrelated care provider. The incestuous offender group had 60 or 92.3% male offenders and five or 7.7% female offenders. The spouse/partner group of offender had 39 males and two females. The resident-to-resident offender group was all male. In the "other" offender group, 10 of the 15 were male and 5 were females.

Nature of the Elder Abuse

The allegations of elder abuse were reported as 140 (61.4%) cases of sexual abuse, 15 (6.6%) of physical abuse, 62 (27.2%) cases of physical and sexual abuse, 7 (3%) cases of neglect, and 4 (1.8%) cases of other abuse The types of non-contact acts included

exhibitionism, unwelcome sexual discussions, sexual jokes or comments, and unwelcome sexual interests. Case examples include male observed exposing himself, sex toy found in elder's bed, forcing pornography on elder, exposing victim's genitals, found in bed with victim, gyrating pelvis in front of victim, leaving elder naked from the waist down to "dry", and giving a sexually explicit birthday card to the elder. The direct contact acts included sexualized kissing, fondling of breasts and genitals, and penetration of vagina, mouth or anus. Case examples included: sexual aggression toward women, elder fondled during peri-care, and son sharing bed with mother. Health care workers observations included: obsession with elder's bowels, elder found bleeding on toilet, elder's pubic hair dyed, elder indicated being abused "down there", redness in genital area, semen odor detected, sperm found in urine, and elder asking questions about sexually transmitted diseases.

Post-Abuse Response in Elders

There were a small number of cases in which nursing home records were available or there were notes of interviews with family members. This information provided anecdotal comments recorded by caregivers of the elder's response and behavior following the abuse. There were also SPAN symptoms (startle, psychological response, anger and numbness) that were recorded.

Anecdotal observations Following a sexual abuse, family members reported the daily realities for the elders that differed from their behavior before the abuse and that became enduring reactions. These included fears of going to sleep, nightmares, suffering from incontinence following the assault, fear of acquiring a sexually transmitted disease, anxieties about leaving their residence, decreased enjoyment of social activities such as visiting friends or shopping. Memories of the perpetrator surfaced as unwanted thoughts. Some elders clothed

themselves with layers of clothing or refused to put on nightclothes. Several residents in nursing homes made escape attempts after the abuse.

SPAN Symptoms

Numbness (n=27). The most frequently reported and observed symptom was numbness, sometimes described by family members as "shock". Elder victims would be described as lying in fetal position, under their bed, or on the floor. They would be difficult to awake and would sleep for long periods. The elder would stare blankly and appeared withdrawn and depressed.

Physiological upset (n=25). Symptoms of physiological upset included changes in appetite, eating, sleep patterns, and mood levels. Elders were observed to have new behavior of uncontrollable crying spells.

Startle (n=14). The startle reflex is noted frequently in children and adults after a traumatic victimization. With this particular sample of elders, the startle symptom was less prominent. This finding is congruent with recent research that after acute exposure to sexual assault, startle response decreases over time (Morgan, Grillon, Lubin & Southwick, 1997) and additionally, that age differences suggest that older adults have differential reactivity to affective exposure to ongoing stress and crises, particularly related to altered neuropsychological and sociocognitive abilities due to aging (Blanchard-Fields, Stein& Watson, 2004; Phillips, Maclean & Allen, 2002; Smith, Hillman & Duley, 2005).

Anger (n=12). Elder victims were less likely to verbalize anger. Rather, their behavior was described as agitated, restless, or oppositional. Elders were described as distraught or behave by slamming doors, yelling loudly in the hallway, getting out of bed and pacing the floor. Although the resident may have had a history of displaying

disruptive behaviors, the behaviors displayed after disclosure of the abuse was described as out of character and with the elder being unable to calm herself. Oppositional behavior was described of the elder refusing to comply with directions or requests such as bathing, eating, and sleeping.

Route of Reporting Elder Sexual Abuse

APS and CJS

There were 153 (53.9%) elders reported to APS and 131 (46.1%) CJS cases reported to law enforcement. In the APS group, the median age was 77.8 while in the CJS group the median age was 79.1. The two groups did not differ significantly by age; in fact, they were more alike in age distribution. In the APS group, there were 13 male victims and 138 females and in the CJS there were 6 male victims and 123 female victims. Again there was no significant difference between the two groups as to male and female victims (p= .141).

Significant differences emerged between APS and CJS routes of report as follows.

Fewer APS elders made a self-report (11 out of 133 or 8.3%) compared to 68 out of 105 or 64.8% in the CJS group (p= .000).

Older offenders (age range 40-89) comprised the APS group while younger offenders comprised the CJS group (p=. 000). The 30 to 39 age group for offenders was a majority offender age for CJS victims (53.7% of the offenders) and 11.0% of the APS victims

More spouse/partner and incestuous offenders comprised the APS group compared to more stranger offenders in the CJS group (p= .000). In the APS group, 11 offenders were strangers compared to 65 stranger offenders in the CJS group. In the APS group, there were 62 cases of incest, 41 cases of spouse/partner abuse, 14 cases of unrelated care provider abuse, 8 cases of resident to resident abuse and 15 cases of a known but other relationship. In the CJS

group, 15 offenders were unrelated care providers, 4 offenders had an incestuous relationship, 2 offenders were spouse/partner, 9 offenders were residents, and 6 offenders had an other type of relationship.

In terms of location of abuse, there were 41 (38.3%) CJS elders compared to 17 (11.9%) of APS elders (p= .000) residing in institutions. APS elders were more likely than CJS to be abused within the home with CJS elders more likely to be abused in institutions.

There were no significant differences in terms of physical injuries. There were visible physical injuries in 21 APS cases and 10 cases with no visible injury. In the CJS there were 81 cases visible injuries and 20 without (p=. 116). However, when analyzing the number of visible injuries, there were more visible injuries in the CJS group.

Criminal Justice Process

Evidentiary and Rape Exam When a sexual abuse report is made to law enforcement, the individual is usually referred for a physical and rape examination and for biological evidence to be collected. Of 273 cases with data, 117 (42.9%) of the elders were referred for a rape and evidentiary examination and 156 (57.1%) were not referred. As part of the evidence collection task, 38 (36.5%) elders had their clothing collected and 29 (34.1%) had their underwear collected. An evidence kit was collected in 86 (30.3%) of cases and not collected in 177 (67.3%). Photographs of a crime scene were taken in 32 (14.3%) of cases and not taken in 192 (85.7%) of the cases. In 20 out of 205 (9.8%) cases with data, there was an attempt to destroy evidence by such actions as washing the elder and/or his or her clothing or bed linens.

Genital, Anal, and Oral Injury Genital trauma included documented signs of bruising, abrasions, redness, swelling, tears in the perianal area. In 100 cases with data, there were 59 (59%) elders with genital injury and 18 (18%) with anal injury. In 83 cases with data,

there were 13 (15.7%) elders with oral or throat injury. In the APS group, there were 5 elders with noted genital injuries compared to 9 elders with no genital injuries. In the CJS group, there were 54 elders with genital injuries and 33 elders without (p=. 096). While not significant, there is a trend of CJS elders to have more genital injuries.

Other injury In 11 cases (3.9%) the victim was choked or strangled. In 4 cases, the victim died during the sexual assault. A weapon was used in 11 cases (3.9%). There were 17 elders with injuries so severe they were admitted to the Intensive Care Unit of a hospital after being assaulted.

In the APS group, 27 (out of 150) did receive an exam or 18.0% and in the CJS group, 90 received an exam (73.2%) and 33 (26.8%) did not (p=. 000). CJS victims were more likely than APS victims to be sent for an evidentiary and rape examination.

Other crimes were more likely to be committed by offenders of CJS elders than elders who were reported to APS. Out of 205 cases with data, other crimes, such as burglary and robbery, were committed in 111 (54%) cases of CJS victims while other crimes were committed in only 20 (15.3%) APS cases (p= .000). More crimes are reported to be committed in domestic settings and where the victim and offender do not have a known relationship.

Dementia and Elder Sexual Abuse

Did the presence or absence of dementia make a difference in self-reporting or behavioral disclosure? Of the 48 elders without dementia 76.2% made a self-report compared to 15 (12.8%) of the 117 elders with dementia who made a self-report. That is, 5 out of 8 of elders without dementia reported abuse compared to 1 out of 8 of elders with dementia. Of cases with data, 81 behavioral cues of distress were present in elders with dementia despite their difficulties

verbalizing than behavioral cues present in 33 elders without dementia. Thus, even without self-disclosure, the elders presented behaviors that were consistent with the sexual abuse complaints.

For the markers of eyewitness, genital trauma, severe physical abuse, elders with dementia comprised the majority of cases. The opposite finding was true for the use of restraints whereby more elders without dementia were restrained. This suggests restraints were not necessary with the demented elder due, perhaps, to physical weakness or being easily confused and verbally manipulated.

In testing for differences between physical and mental limitations in the two groups, there was no significant difference in physical limitations with 88 (65.7%) in the APS group and 43 (44.2%) in the CJS sample (p= .10). When the groups were compared on mental impairment the APS group had 93 (70.5%) with impairment and 39 (43.3%) without impairment while in the CJS group, 39 (43.3%) elders had mental impairment and 51 (56.7%) did not have mental impairment (p=. 000). The amount of dementia was greater in the APS group.

Criminal justice outcome How does the criminal justice system manage the elder with or without dementia? There were148 cases with data that were followed through the system. Despite their advanced age, in cases with data, most elders were interviewed (72.2%) and were able to disclose sexual behavior by an alleged offender in almost half (48.2%) of the cases.

Offender relationship and dementia There were 205 cases with data for both relationship to victim and dementia present in the victim. A higher percentage of the stranger group had elders without dementia than with dementia. The unrelated caregiver was evenly divided for elders with and without dementia. All other offender groups had at least 68.5% of their victims with dementia. In resident-to-resident abuse the overwhelming number of elders had dementia. Out of 39 elders with dementia, 27 were in the spouse/partner category. Out of 54 elders with

dementia, 37 were in the incest category. Of the "other" group of 16 elders, 12 had dementia (p = .000). The data suggest that when the victim and offender have a known relationship, there are more likely a higher percentage of victims with dementia.

Criminal Justice Outcome

There were 180 identified offenders out of 226 cases with data. There were 63 arrested out of 210 cases with data. In 35 cases with data, 19 victims refused to prosecute including 9 spouse cases, 6 incest cases, 2 stranger cases, and 1 each of unrelated caregiver and resident offender. Out of 39 marital/partner cases, 20 were referred to the prosecutor but were never charged.

Suspects who used weapons or physical force had a higher chance of being arrested versus those suspects who conned, manipulated or used their relationship (relative, institutional staff, etc.) with assault the victim (p = .034). Nineteen of the 34 suspects (55.9%) who used weapons or physical force were arrested while suspects who did not use a weapon or physical force only had a 31% chance of being arrested.

There were 99 suspects reported to the prosecutor out of 216 cases with data. Police were notified in 41 cases out of 58 with data. The offender was indicted in 12 out of 20 cases with data. The offender was convicted in 17 out of 25 cases with data and there was a plea bargain in 11 out of 19 cases with data.

For those cases reported through APS, in 124 out of 148 cases, the suspect was identified. In 20 cases out of 135 cases, the offender was arrested. In 57 out of 137 cases, the case was referred to the prosecutor. The police were notified in 14 of 31 cases. The offender was indicted in 2 of 10 (20%) cases. The offender was convicted in 4 of 12 (33.3%) cases and there were plea bargains in 2 out of 10 (20%) cases.

A suspect was arrested in 43 out of 75 cases in the CJS group. There were 42 of 78 cases referred to the prosecutor. The police were notified in 27 out of 27 cases. The offender was indicted in 10 out of 10 cases with data and convicted in 13 out of 13 casesand there was a plea bargain in 9 out of 9 cases.

A suspect being identified in cases reported through law enforcement (CJS) had a lower chance than those in the APS of being identified (p= .027). But once identified, they had is a higher chance of being arrested (p= .000) and referral to the prosecutor was also higher than APS reported cases (p= .01). The probability of the police being notified for CJS cases compared to APS cases was significantly higher (p= .000) and 100% of the CJS cases were reported to law enforcement compared to only 45.2% of the 31 APS cases.

The offender was convicted in 33.3% of APS cases compared to 100% in CJS cases (p= .000). The offenders plead in 20% of APS cases and 100% in CJS cases (p= .001). The prosecution of the CJS cases were far more successful than APS cases.

Policy and Practice Implications

What are the policy and practice implications for the criminal justice system from this study of elder sexual abuse victims and their offenders? First, our study suggests that age is no defense against rape. The ages of the victims in this study spanned four decades from elders in their 60's to age 100. Both young aged offenders and senior aged offenders perpetrated secual acts on an elder. Offenders ranged in age from 13 to 90. Age of victim and age of offender is no barrier to sexual abuse. A policy recommendation would be to include elder sexual abuse statistics by APS and CJS cases in criminal justice reporting. This, in turn, would encourage

elder sexual abuse information to be integrated into continuing education programs for CJS and APS staff.

Second, there were fairly equal numbers of cases reported to APS or CJS. However, the known relationship between victim and offender tended to prevent the referral to the criminal justice system. The consequence of this relationship barrier results in less investigation for a crime, less physical examination for the elder, and less referral to the prosecutor's office. This barrier puts the safety of the elder in jeopardy as the offender remains in his or her setting without sanctions. When the offender is a resident or staff member in an institution, failure to notify law enforcement can put other residents at risk for the perpetrator's repetitive offending behavior.

Known Perpetrators

Elders reported to APS were most at risk from family members, a finding supported by Nelson (2002). Additionally, the National Center on Elder Abuse (1998) reported statistics on the perpetrator being a family member in two-thirds of known cases of abuse and neglect and being identified as spouses or adult children. There is a beginning research on older women in both domestic settings (Roberto & Teaster, 2005). Ramsey-Klawsnik (1991) surveyed APS social workers in Massachusetts as to suspected elder sexual abuse cases and identified 28 cases of women assaulted in the home primarily by family members (often adult sons and husbands).

In a similar study drawing on Ramsey-Klawsnik's work and having access to a larger sample, Holt (1993) examined 90 sexual assault victims in England, most of who were over the age of 85. In this study, most of the abuse occurred in the victim's domicile, most offenders were males upon whom the victim was dependent (90%), most of the cases involved women

(86%), most had dementia (77%), were frail (67%), and confirmed (57%).

Categories used for our elder study were derived from Ramsey-Klawsnik (1991), Holt (1993) and Roberto and Teaster's (2003) work with APS cases. Ramsey-Klawsnik (1998) identified 5 types of elder sexual abuse by relationship as: stranger or acquaintanc, unrelated care provider, incest, marital or partner, and resident-to-resident in elder care settings. She further delineated subtypes under the marital sexual abuse and incestuous abuse. Three patterns of marital abuse include: (1) long-term domestic abuse, (2) recent onset within a long-term marriage, and (3) sexual victimization within a new marriage. Incestuous elder abuse involves cases perpetrated by adult children, other relatives, and quasi-relatives (Ramsey-Klawsnik, 2003). These discrete categories are essential in identifying barriers in the care and safety of dependent elders who live in their own homes. A practice recommendation for investigating domestic elder abuse is that APS and CJS categorize their cases by this typology. The category would indicate the nature and length of relationship as to whether or not it was an acute, on-going or chronic situation. This assessment would provide direction for removal of the abuser, new caregiver, treatment intervention or CJS intervention.

Nursing homes were not immune from elder sexual abuse as both staff and other residents were identified as perpetrators. In a study of 42 cases of sexual abuse in both domestic and institutional settings, Teaster, Roberto, Duke & Kim (2003) reviewed APS records and noted that the offender was often the resident in the same nursing home as the victim or a facility staff person. The most common sexual abuse acts involved sexualized kissing and fondling and unwelcome sexual interest in the woman's body. The researchers also noted that women between the ages of 80 and 89 were more likely to experience multiple types of abuse than those

between 70 and 79 and those who required assistance to incur more than one type of sexual abuse than those who did not need assistance (Teaster, Roberto, Duke & Kim, 2003).

There was less court involvement and outcome in APS cases compared to CJS cases. The role this plays in the routing of services to the criminal justice system has several explanations. First, the CJS views sexual abuse as a criminal act. Second, APS takes a wider view of elder mistreatment by investigating indirect as well as direct sexual acts. Third, the nature of the sexual behavior and a spousal relationship may have a bearing on court outcome as no APS spousal cases were taken to trial in this sample. Fourth, APS investigates cases in which the victim is dependent upon the abuser for care and this may prevent referral to CJS.

Dementia, Sexual Abuse and Trauma

More elders had cognitive impairment in the APS group than in the CJS group. The argument is often made that because Alzheimer patients have memory problems, they lack the ability to suffer trauma. Our finding that offenders did not need to forcibly restrain the patient with dementia similarly does not negate that the victim did not experience trauma. Many elders in this study were controlled by the mere presence of the offender regardless of a trusted, family or stranger relationship. Abused elders respond not only physiologically to trauma but also respond to pain stimuli. Dementia has no correlation to whether one is capable of suffering from a painful event or from a traumatic event. Also the distorted logic that, because a patient has no memory of a traumatic event and accordingly could not have suffered trauma, is entirely faulty. A traumatically induced brain injury, for example, may leave one with amnesia and without memory of the event, but the person nevertheless suffered the trauma even though the patient is not able to recall the event. Behavioral and observed markers in this study give basis for trauma impact whether or not there is recall. In fact, on the behavioral markers there was no significant

difference between the groups. Thus, prosecutors might consider whether an eyewitness observer of either the abuse or the response of the elder as fact testimony at trial.

Criminal Justice Outcome

Prosecutors were successful in court outcome of the CJS cases compared to the APS referred cases. One of the barriers to prosecution involves the known or family relationship. Prosecutors might consider legal strategies in domestic violence cases to protect the elder such as orders of protection and they might work closely with APS to identify other strategies in family cases.

Comparison of the Elder Victim/Offender Study with Other Studies of Elders

How does the Elder Victim and Offender study compare to other studies? It is difficult to find studies for comparison of elder sexual abuse for several reasons. First, the categories may not separate out sexual abuse. For example, Kleinschmidt (1997) reviewed 21 studies, identified 4 categories of abuse as physical, psychological, financial and neglect and noted that some researchers would include sexual abuse in the physical abuse category. Second, the national statistics need to be weighted given the small numbers of cases.

There are two studies, however, for comparison of the two NIJ studies, Forensic Markers and Elder Victims of Sexual Abuse and their Offenders. The first was the National Women's Study (NWS). The NWS was a large epidemiological research project that was funded by the National Institute on Drug Abuse. It was a longitudinal survey with a probability sample of 4,009 American women of which 549 were 55 years or older and its purpose was to identify risk factors for rape, physical assault, and PTSD. The basic design involved identification and assessment of two national household probability samples of adult women: 1) a sample of all women age 18 or older (n=2,008) and 2) an oversample of younger women (n=2,000) between

the ages of 18 and 34. Participants were assessed about a variety of topics including history of physical and sexual assault, other traumatic events, posttraumatic stress disorder, alcohol and drug use/abuse/dependence, major depression, suicidal ideation and attempts, sexual harassment, eating disorders, and tobacco use

The second study to be compared was the National Crime Victimization Study (NCVS). The NCVS data from 1992-2002 was used to study female sexual assault victims over 55 (n=8,642, weighted) using the National Archive of Criminal Justice on-line access forum. The NCVS is the most commonly referenced database on the prevalence of rates and types of violent crime in the United States.

The Forensic Marker (FM) study (n=125) was a convenience sample of elder cases from the files of 15 forensic nurses, law enforcement, prosecutors and clinicians. The majority of cases were reported to law enforcement. It included an older sample of elders and higher percentages in terms of recorded intentional injury, forced sex acts, use of weapons, perpetrator known to victim, rape reported to authority and prosecution success (Burgess, Hanrahan & Baker, 2005). While the average age of subjects in the FM was slightly older than the other studies, basic demographic information is comparable with the NWS and NCVS.

Our current study, the Elder Victims and their Offenders (EVO) includes 284 cases of the majority of female elders with a small number of male victims. The cases were compared by route of report to APS (53.9%) or to CJS (46.1%).

In comparing the statistics from the four studies, the victim demographics are consistent across studies. There were more domestic cases in the EVO compared to the FM study.. The perpetrators were predominantly male and there was a lower percent of offenders being charged in the EVO study.

One most important observation, however, is the lack of detail data available at the national level on the sexual victimization of elders. While these differences may be due to sampling bias in the FM and EVO studies and/or the under sampling of the NCVS and NWS, we make a policy recommendation to expand the national database to include details of forced intentional sexual injury of elders. Such a policy would address the underreporting issue and help to encourage practitioners to become educated on the signs and symptoms of elder sexual abuse. Figure 1 compares the four studies.

Figure 1. Comparison of Studies of Older Women Sexually Victimized

	Forensic Markers Study[a]	NCVS 1992-2002 rape victims >60 years old[b]	The National Women's Study (15)[c]	Elder Victim/Offender Study (cases with data)
	N=125	N=8,642	N=549	N = 284
Victims:				
Mean/SD age	78.4	72.2	67	78.8
%Female	100	100	100	93.2
% Caucasians	83.1	73.0	83	82.3
% Black	11.9	12.3	8.5	12.2
Setting				
%Domestic	42.5	40	ND	72.0
%Institutional	38	ND	ND	23.2
% Other	19.5	ND	ND	4.8
Perpetrators % Male	92.4	100	ND	90.9
Forced vaginal rape	78	ND	5.3	59.0
Forced oral rape	13.4	ND	.5	15.7
Forced anal rape	23.9	ND	.2	18.0
Forced digital rape	11.6	ND	2.2	ND
Physical assault with weapon	15.7	0	3.5	10.0
Physical assault w/o a weapon	84.3	100	2.6	90.0
Perpetrator known to the Victim	58.3	52.3	9.1	70.8
Rape reported to authorities	96.7	44	9.1	100
Charges/ refer to DA	55.2	50	ND	45.8

a. Forensic Marker Study based on contributed cases by experts.
b. National Crime Victimization Study (NCVS) is a weighted sample from 1992-2002 of women 60 years and older who were sexually abused or assaulted.
c. The National Women's Study (NSW) is a subgroup of 549 women over 55 from the larger sample of 4,009.
d. Elder Victim/Offender Study based on contributed cases by experts; % by cases with data.

Chapter 3

Sex Offenders of the Elderly and Classification by Motive

The rape of an elder is a felony crime investigated by law enforcement. One question often asked is why would someone want to rape an elderly woman? This question is rooted in ageism and in the perception of elders as asexual. The answer to the question should not focus on the victim, but on an inquiry as to the dynamics and psychology of the offender. The issue is the motivational intent of rapists who have a preference for elderly women.

This chapter will report on the characteristics of convicted sex offenders of the elderly and their crime, classify them using the Prentky & Knight (1991)MTC-3R typology that is motivational-based, and provide case examples of the subtypes.

Literature Review

One of the few studies published on elder sexual abuse victims was a British study. The project was sponsored in 2000 by the Nuffield Foundation to Professors Olive Stevenson and Katherine Jeary at the Nottingham University School of Sociology and Social Policy. The researchers, over 20 months and using a qualitative research design, studied 52 cases of 54 elder victims and 52 abusers (not of the 54 victims). Two major findings included minimal, if any, services offered to elderly victims with respect to coming to terms with their traumatic experiences, and little information on understanding the motivations of offenders and in identifying interventions to reduce the possibility of their re-offending.

Theories of offending Groth (1979) reviewed his clinical files of convicted sex offenders for sexual offenses where the victim was substantially older than the offender. He noted many offenders had difficulties in early adolescent adjustment, came from families with unstable

parental relationships, and were included to show a lack of respect to the mother. The mothers were perceived (by the offenders) as highly-strung, overprotective, domineering or provocative.

Pollack's study in 1988 reported just the opposite findings from Groth. Pollack (1988), using study and control groups, observed no discernable differences in demographic details of marital, employment, psychiatric or criminal history or in childhood behavior problems or adjustment. However, both Groth and Pollack commented on the offender of an elderly victim being more likely to use brutality or a weapon in the offense.

This view of brutality, however, is not supported in the early descriptive studies on genital trauma of victims. Muram and colleagues (1992) reviewed 53 elder cases compared to 53 younger victim cases. More injuries were found in the elder group (51%) compared with 13% of the younger group ($p<0.003$). There was no observed significant difference found between the two groups in regard to type of neither assault nor violence used during the assault. The authors concluded that the genital injury that was greater in the elderly women was due to the post-menopausal status of the genital anatomy rather than any offender associated factors.

Genital trauma is stated to be more evident in the postmenopausal sexually assaulted woman than it is in their younger counterparts (Cartwright, 1987). However, as with those 65 and younger, rape may occur without obvious injury (Cartwright and Moore, 1989; Tyra, 1993). In one comparative study, medical and forensic records were reviewed between 1986-1991 from 129 women 50 years or older and 129 women from a comparison group ages 14-49 (Ramin, Satin, Stone and Wender, 1992). Trauma, in general, occurred in 67% of the older group and 71% in the younger group. Genital trauma was more common in older than younger victims (66 vs. 49%). Although forensic findings were similar in both groups, in the older group motile spermatozoa were seen only in those examined within 6 hours of the assault.

Ball (2005) identifies two conceptual models emerging from the literature attempting to explain the motivation behind sexual abuse of the elderly. The first theory is based on sexual intent. In essence, the perpetrator is viewed as sexually deviant and the term "gerontophilia" is suggested. However, there has been no empirical study to support the view that most – or even a significant number of offenders have a sexual preference for elders. Neither the studies by Groth (1978) nor Pollack (1988) reported on the sexual preferences of their samples. Nevertheless, two of the six cases presented by Ball et al (1992) did demonstrate gerontophilic tendencies.

A second model of sexual offending of the elderly is a variation of a psychodynamic interpretation of rape. Groth referred to this variation as "anger rape". In this type of rape, the offender offends as a way to direct feelings of rage onto the victim. The offense is not primarily a sexual act but one that occurs within a sexual context but that emotions of anger and control are exerted onto the victim. Groth continued to suggest that the object of the rage, the victim, represented an authority person who needed to be controlled, hurt and degraded. Pollack's (1988) study supports this view in that the offender is acting out motives of rage and sadistic intent rather than motives of sexual desire. Lanyon (1991) has suggested that the victim becomes a substitute for the original source of the offender's anger, often noted to be the offender's mother.

As reported in Chapter 2, clinical studies of elder sexual abuse cases range between 2-7% of all reported sexual assaults. It is not uncommon for a woman over 60 to become a victim. Sexual offending against the elderly is not a new phenomenon as it has been recognized in psychiatry since Kraft-Ebring's writings. However, any link with a specific paraphilia remains unclear and poorly understood. A substantial amount of work is necessary to provide theoretical explanations for offender motivation.

Classification – An Overview

Science has traditionally proceeded by simplifying complex, diverse domains of information. Simplification is typically achieved through a methodological process of assigning members of a large heterogeneous group to subgroups that possess common characteristics, thereby bringing some degree of order to diversity. The science of classification ("taxonomy") is fundamental to all science. The task is to uncover the laws and principles that underlie the optimal differentiation and reduce the domains into subgroups that have theoretically important similarities. The more heterogeneous the area of inquiry, the more critical classification is. The resulting subgroups or subtypes are not simply notational; they connect the content of science to the real world. One might argue, in fact, that classification reflects a normal cognitive process of integration and reduction. Through such a process of classification we make sense of our experiences. The process that helps us to apprehend our world at the sensory level is the same process that scientists use to order and simplify their world at the empirical level.

One of the few indisputable conclusions about sexual offenders is that they constitute a markedly heterogeneous group (Knight, Rosenberg & Schneider, 1985). The childhood and developmental histories, adult competencies, and criminal histories of sexual offenders differ considerably. The motives and patterns, moreover, that characterize their criminal offenses also differ considerably. As such, it would be misleading, at the very least, to suggest that sex offenders have a single "profile," or that we can pronounce judgments about all sex offenders with any degree of accuracy (e.g., "sex offenders cannot be treated," or for that matter, "sex offenders can be treated"). Indeed, it would be equally misleading, not to mention erroneous, to suggest that there is a profile for all rapists or for all child molesters. Classification research

reveals that rapists and child molesters are very heterogeneous and that each offender group may include a half dozen to a dozen discrete subtypes.

Usefulness of classification There are a variety of potential areas of usefulness for valid taxonomic models of sexual offenders.

A) Criminal Investigative Analysis. In temporal order, the first relevant "event" is the crime itself. Thus, the first possible benefit of a classification system would be in aiding the apprehension of the offender through investigative profiling. Profiling, in its general application, involves the use of crime scene data to draw inferences about the offender in order to aid with apprehension. The use of a classification system introduces two stages into this process. Victim statements (assuming that there is a live victim) and crime scene data were used to bootstrap a classification of the offender. Assuming that it is possible to estimate, with reasonable confidence, the offender's subtype, the profile of that subtype is then used to assist with apprehension.

B) Informing Decisions within the Criminal Justice System. The second relevant "event," after the offender has been apprehended, involves the discretionary and dispositional decisions made by the criminal justice system. In this capacity, a valid classification system can indeed inform the many •players" within the criminal justice system about issues such as reoffense risk, risk of violence, appropriateness for probation, custody level (i.e., security risk), etc. At point of consideration for parole or discharge from community-based treatment, risk decisions once again become important. This clearly is an area where classification could serve a very useful purpose. Although there has been relatively little research on validating a classification system for this specific purpose, recent predictive validity studies on two empirically derived taxonomies are promising.

C) Treatment Planning. The third relevant "event" occurs either during incarceration or when the offender has been returned to the community via probation or parole. This event is treatment. Thus, the third possible benefit of a classification system would be to inform treatment planning and clinical decision-making (e.g., increasing the specificity and accuracy of treatment plans) . To the extent that rehabilitation within the criminal justice system remains a goal and to the extent that limited resources require strict allocation, classification systems that can shed light on treatment planning will be very important.

D) Etiology. One of the most important aspects to understand about sexual offending is etiology Classification systems can tell us something about the course of life events that led to the onset of sexual offenses. Indeed, it may be possible to discern the unique roots of each subtype (i.e., the path that led from childhood or adolescence to becoming a particular type of sexual offender) . For example, the pattern of life events that led to an outcome of becoming a type 2 rapist might be, hypothetically. quite different from the pattern of life events that led to an outcome of becoming a type 4 rapist. Most empirical work to date has focused on the development of "path models" that predict taxonomic outcome from familial, childhood, and adolescent variables (e.g., Prentky et al., 1989; Rosenberg et al., 1988). These concurrent validity studies of current classification models have begun to shed light on the different life experiences that lead to different taxonomic outcomes (i.e., different subtypes

Although classification of sexual offenders has a long history (Knight, Rosenberg, & Schneider, 1985), it has been, essentially, a non-empirical, one. The only validated classification system for rapists' emerging from lengthy, programmatic research is MTC:R3 (Knight & Prentky, 1990). Although there is no strong theoretical basis for hypothesizing the taxonomic structure of rapists with elderly victims, there is some basis for speculation (Prentky, Cohen, &

Seghorn, 1985). The nine subtypes on MTC:R3 are grouped according to five primary motivational dimensions that comprise the model: opportunistic [types 1 & 2]; pervasive anger [types 3]; sadistic [Types 4 & 5]; non-sadistic sexual [types 6 & 7]; and vindictive [types 8 & 9].

Method

Sample

The methodology used to identify convicted offenders for interview was through national media surveillance of elder abuse cases. As cases were identified, press releases issued by the jurisdiction's district attorney via the Internet were reviewed whenever available. A convenience sample of 112 cases of elder sexual abuse was located in public domain newspaper and media reports. The prison locations of inmates were obtained and matched to the state inmate locator for the inmate's number. The state central prison office verified the prison location and obtained the inmate's consent to be interviewed. IRB approval was secured through Boston College and the state prison systems of Montana, New Jersey, New York, Utah, and Wisconsin.

Analysis

Out of 112 cases, 77 files had sufficient data for coding on the convicted offenders and 25 offenders were interviewed in prison. All 77 offenders were classified using MTC-R3 subtypes. The files were reviewed by two independent raters and classified by consensus using the MTC-R3 typology.

ANOVA was used to evaluate the different means for offenders age, expressive aggressive, unsocialized behavior for both juvenile and adult, social competence, mood state, offense planning, use of weapon, victim's age, number of victims, and severity of crimes. Statistically significant differences were identified and SPSS cross tabulation was performed.

Results

Offender and Victim Characteristics.

The offender age at time of offense included 10 teenagers (13%), 31 men in their 20's (40.3%) , 22 men in their 30s (28.5%), 12 men in their 40s (15.6%) and one each in their 50s and 60s. Most of the assaults occurred in the home (54 or 70.1%). There were 17 (22.4%) assaults in a nursing home, and 5 (6.6%) in other locations. One missing case of location.

In 47 (61.0%) of the cases, the victim did not know the offender (e.g., stranger category). However, on interview many of these offenders said they knew the victim from the neighborhood, the elder's daily pattern and that she lived alone suggesting the victim was kept under surveillance prior to the assault.. In 14 (18.2%) cases the offender was a caregiver, in 14 (18.2%) case the offender was an acquaintance of the elder and 2 (2.6%) the offender was a family member

Fifty-three (68.8%) of these men victimized only elderly women while 24 (31.2%) had victimized elders and younger aged women. There were 25 (32.5%) of the men who were incarcerated for one elder victim while 52 (67.5%) had two or more elderly victims.

The victims ages ranged from 60 to their 90s. There were 24 (31.2%) in their 60, 24 (31.2%) of victims in their 70s, 21 (27.3%) of victims in their 80s and 8 (10.4%) of victims in their 90s. The victim was restrained in 9 (11.7%) of the cases with data. The victim was injured or murdered in 48 (62.3%) of the cases. The offender used a weapon in 15 (19.5%) of the cases with data.

Over half of the offenders were under 30, targeted and committed the rape in the victim's home, seriously injured their victim, and were convicted of sex crimes against two or more victims

MTC:R3 Subtypes

The sample of offenders were grouped into 5 subtypes. There were 31 (40.3%) in the sexualization (types 6,7) class, 17 (22.1%) in the vindictive (type 8, 9) class, 15 (19.5%) in the anger class, 11 (14.3%) in the opportunistic (type 1,2) class, and 3 (3.9%) in the sadistic class.

As expected the non-sadistic offender was low in expressive aggression while the pervasive anger, sadistic, and vindictive offenders were high (Table 3.2). Offenders classified as opportunistic were represented about equally as low and high in expressive aggression.

Unsocialized behaviors as a juvenile and as an adult are shown in Tables 3..3 and 3.4. The majority of the opportunistic, pervasive anger, and vindictive classified offenders had unsocialized behavior as a juvenile (90.0%, 93.3%, and 76.9% respectively). Non-sadistic classified offenders were equally split between those with and without (50/50). and only 1 of the 3 sadistic classified offenders had unsocialized behavior as a juvenile. A very high percentage of pervasive anger and vindictive classified offenders had unsocialized behavior as an adult 100% and 92.9% respectively. Seventy-five percent of the opportunistic offenders had unsocialized behavior as an adult and surprisingly only 1 of the 3 sadistic offenders were reported to have unsocialized behavior as an adult. Non-sadistic offenders were 52.4% with and 47.6% without unsocialized behavior as an adult.

Table 3.5 shows the cross tabulation of mood state –anger with motivational classification of offenders. As expected the pervasive anger and sadistic offenders had the majority of offenders with an angry mood state 80.0% and 66.7% respectively. Opportunistic and vindictive were about evenly spread between those with an angry mood state and those without, 54.5% with 45.5% without, 47.1% with and 52.9% without, respectively.

Table 3.6 shows opportunistic, sadistic and non-sadistic rapist types do not murder their victims. They also committed the lowest level crimes of no penetration. The sadistic type committed rape and aggravated rape for the 3 offenders in the study. The pervasive anger offender committed the full range of crimes from no penetration to multiple rapes and murders. The vindictive offenders committed crimes from a single rape to multiple rapes and murder. The data also suggest the mood state of the offender typed pervasive anger and vindictive triggers the impulse and behavior to commit rape and murder. These offenders have the highest severity of crime scores.

The sexualization variable is dominant in non-sadistic offenders (types 6 & 7). The data suggest these offenders are low in expressive aggression, have an absence of anger, rape only and are equally distributed between absent or present juvenile and/or adult unsocialized behaviors.

Predictor Tables

Table 3.7 contains the coefficients for a regression model with the five offender motivational classifications as the dependent variable. The independent variable with the largest beta coefficient is offense planning (+1.152). The most negative coefficient is for the variable unsocialized behavior - juvenile (-.585). The second largest positive coefficient is for unsocialized behavior - adult (+.469).

A profile of these 77 rapists suggest they plan the offense, do not bring a weapon, have a flat or excited affect but not one of anger. Trends suggest they are not employed or married, restrain the victim, and commit more than rape on the victim, and had committed juvenile crimes.

Typology and Examples

Opportunistic Opportunistic motive refers to an impulsive rapist type who shows little planning or preparation. He usually has a history of unsocialized behavior and the rape serves as an example of the degree to which he lacks interpersonal awareness. These rapists show no concern for the welfare or comfort of their victims. The rape is for immediate sexual gratification rather than the enactment of a highly developed fantasy or sexualized ritual. The rape is in the service of dominance and power. There were 10 offenders classified as opportunistic. The opportunistic offender in this elder sample differed from other rapists with this classification in that 8 of the 10 offenders claimed not to have penetrated the elder, but rather committed acts of fondling, kissing and molestation. This classification is similar in the nature of the sexual act to some child molester acts.

Case example Mike has been convicted of sexually assaulting 4 women ages 74, 83, 50 and 77. He had a juvenile history and was sent to a state home for boys at age 9 where he said he learned to fight and protect himself. He began using alcohol, cough syrup and glue as a teenager and after setting a house on fire was admitted to a psychiatric unit. There was a long history of sexual acts committed on him and by him as a youth. He joined the service at age 17 but continued his drug use and was discharged for going AWOL. At age 23 he married, moved away and was drug-free for 4-5 years. His wife became pregnant and they returned to their original neighborhood after the wife told him her mother had a heart attack and needed her. When Mike found out the heart attack was not true, he became angry and began using drugs again. This is when he claimed the crimes against the elderly began.

Mike said all the elderly women either looked like or reminded him of his mother-in-law. For his first rape, he was at a store parking lot and saw a woman with a flat tire. He said, “Something clicked, especially the hair”. She was heavy set like his mother-in-law. He changed her tire and conned a ride intending to rob her. The woman asked him not to hurt her and this, he said, sexually aroused him. He

forced her to perform oral sex while he was driving. He tried to force her a second time but she resisted and tried to jump out of the car. He stopped, put her in the trunk because he saw a police car. After the crime he felt "gloom and doom" and did more drugs to relieve the feeling. He felt no empathy. He learned from the first rape. The second rape he flattened a tire and kidnapped the elderly woman. Oral assault was forced after anal sodomy. He used a weapon and threatened her. He broke into the house of a third victim and tried to force oral sex but she was unable so he anally penetrated her. The 4th victim was a neighbor that he planned to scare. He wore a ski mask but she kept pulling on it so he hit and punched her before forcing her to do oral sex after sodomizing her. He also tied up his victims.

The offenses listed in Mike's chart included contributing to the delinquency of a minor, 3 charges of possession, terroristic threats, 3 counts of kidnapping, 3 counts of aggravated assault. His psychiatric diagnoses included Axis I Amphetamine Dependency in Remission, Axis II History of Antisocial Personality and Paraphilia NOS.

Pervasive Anger A second classification in the MTC:R3 typology is termed pervasively anger. The degree of force used in this type of assault is excessive and gratuitous. The violence is an integrated component of the behavior even when the victim is compliant. Resistance from the victim is likely to increase the aggression and serious injury or death may occur. The rage is not sexualized suggesting that the assault is not fantasy-driven. The violence is a life-style characteristic that is directed toward males and females alike. The rape is but one feature in a history of unsocialized aggressive behavior noted across various social settings. There were 17 cases classified as pervasive anger type,

Case example At age 22, Garth attended a party, met a girl and raped her that night. She was 13 although he said he thought she was older. He served 5 years and registered as a sex offender. When released he felt angry and resentful toward the community that ostracized him. At age 27, after release from prison, he was playing ball in a field and someone said, "You aren't supposed to have any contact

with kids". He felt embarrassed and angry. Later that evening he was getting drunk and suggested to a woman they have sex. She rejected him. He hitched a ride home thinking that he was going to rape and kill an old lady. He decided to do it to get the death penalty. He did not want the burden of killing himself but wanted to be dead. He saw an elderly woman (age 83) and was introduced to her by his cousin. He had worked odd jobs for her and knew her door was unlocked since her daughter lived close by. He tried to rape her, but was unsuccessful because he could not maintain an erection. She scratched, pushed and pulled his hair; he punched her in the ribs. He put a pillow over her face but during the process felt guilty and stopped. In the dark, he stayed with her, apologized to her and asked her not to report it. She asked his name and he gave one of a fellow inmate. She said she would not report, but she did. The police indicated they had hair and fiber evidence, so he confessed. He pled guilty to attempted aggravated assault and robbery and was sentenced 1-15 years. He said the rape was very dissatisfying, that he was just feeling angry.

Sexualization in the MTC:R3 typology essentially refers to a high degree of preoccupation with gratifying one's sexual needs. Sexual preoccupation is typically evidenced by highly intrusive, recurrent sexual and rape fantasies, frequent use of pornography, reports of frequent uncontrollable sexual urges, use of a variety of "alternative" outlets for gratifying sexual needs (e.g., massage parlors, X-rated movies, sex clubs, strip bars), and engaging in other deviant sexual behaviors (paraphilias), such as voyeurism, exhibitionism, or fetishism. The sexual assaults of these offenders are often well planned, as evidenced by a clear, scripted sequence of events, possession of assault-related paraphernalia, and an apparent plan to procure the victim and elude apprehension after the assault. There were 31 cases classified as sexualized type.

Case example A 67 year old grandmother was found face down on her bed with legs spread. Her face was wrapped with duct tape and had been severely beaten. There were signs of forced entry and a

violent struggle. A scream mask was found on the floor with the victim's blood. There was no offender DNA found. Cause of death was strangulation.

Detectives narrowed their suspect list to a young employee at the store where the victim worked. He was said to have a sexual obsession with the victim, that he would talk to other employees about her "backside" saying that he liked it. A search of his apartment revealed her panties under his sofa, a large collection of pornography and videotapes of himself spliced into the scenes. He also had placed a hidden camera at work and had the films of many "backsides" and persons bending over. The 24-year-old man confessed to the murder, saying "it was an accident". The prosecutor's theory was that the victim pulled off the mask and could identify him so she was strangled. The offender had no prior juvenile or adult record.

The sexualization type is further subdivided into sadistic and nonsadistic subtypes Both of the sadistic types show evidence of poor differentiation between sexual and aggressive drives, and a frequent co-occurrence of sexual and aggressive thoughts and fantasies. To be classified as an overt sadistic rapist, an offender's behavior must reflect his intention to inflict fear or pain on the victim and to manifest a high level of aggression. Moreover, since the defining feature of sadism is the synergistic relationship between sexual arousal and feelings of anger, there must be some evidence that the aggression either contributed to sexual arousal, or at least did not inhibit such arousal. Since the two feelings (sexual arousal and anger) have equal ability to enhance or increase the other, the sexual acts may precede aggression or the aggression may precede the sexual acts. The cardinal feature, in either case, is the intertwining or "fusing" of the two feelings such that increases in one lead to increases in the other. As a group, overt sadistic rapists appear to be angry, belligerent people, who, except for their sadism and the greater planning of their sexual assaults, look very similar to the pervasive anger rapists. There were 3 cases classified as sadistic types

Case example Joe, at age 19, broke into a woman's house (that he had been watching). The 62-year-old woman awoke to a light turned on, a small pocketknife placed to her throat and a hand covering her mouth. Joe pulled down her pajamas and "shoved his hand into her vagina in a violent way". He grabbed her breasts and pinched the nipples telling her they were nice titties. He hit her on the right breast and she cried. He then raped her vaginally, anally and then orally. He also inserted the barrel of a gun into her rectum. He was arrested after fingerprints were linked to him. This was his first arrest for a sexual offense. As a juvenile, he had a record for shoplifting, theft, robbery and assault. He admitted to sadistic rape fantasies to both men and women. He described feeling "over-sexed". He was aroused by watching people urinate and by being around children. He was sentenced to 15 years.

To be classified as a muted sadistic rapist, there must be evidence that the victim's fear or discomfort, or the fantasy of violence, contributed to the offender's sexual arousal (or did not inhibit such arousal), and that the amount of physical force in the sexual assault did not exceed what was necessary to gain victim compliance. Symbolic expressions of sadistic fantasy characterize these offenders, who may employ various forms of bondage or restraint, noninjurious insertion of foreign objects, and other sexual "aids," such as vaseline or shaving cream. What is absent is the high level of expressive aggression that is clearly manifest in overt sadism. In general, muted sadistic offenders, except for their sadistic fantasies and their slightly higher lifestyle impulsivity, resemble the high social competence, nonsadistic rapists.

Case example Pat, age 33, entered this country on a work visa and was employed at a local nursing home as a certified nursing assistant. He voluntarily confessed to police to sexually assaulting 11 women in the nursing home although the sexual abuse was never discovered before his confession.. He said the victims all had dementia and were "not aware of what was

happening". However, a daughter of a 98-year-old victim said that looking back there were signs that something was wrong. Whenever the daughter was in the room and the aide came in, her mother looked frightened and as though she did not like him. The daughter believes her mother was threatened that she would be taken away. The offender worked at the nursing home for 2 years and nine of the 11 women died before he was arrested.

Nonsadistic Types. For the nonsadistic sexualized rapists, the thoughts and fantasies that are associated with their sexual assaults are devoid of the synergistic relationship between sex and aggression that characterizes the sadistic types. Indeed, these two rapist types are hypothesized to manifest less aggression than any of the other rapist types. If confronted with victim resistance, these offenders may flee rather than force the victim to comply. Their fantasies and behaviors are hypothesized to reflect sexual arousal, distorted "male" cognitions about women and sexuality, feelings of social and sexual inadequacy, and masculine self-image concerns. Compared to the other rapist types, these offenders have relatively few problems with impulse control in domains outside of sexual aggression.

Case example A 45-year-old man, dubbed the "Naked Burglar" wore a mask and no clothes when breaking into the homes of elderly women. He would cut the screen, cut the phone wires and unlock the door. He forced oral and vaginal penetration on his victims. One 91-year-old victim testified that he asked her if she was "enjoying it" and that he bet she " hadn't had it for a while". Before he left, the man took the bed sheets, but the elder took a washcloth, scrubbed her face and vaginal area and went to a nearby store to phone the police. The man had been previously arrested for peeping on a couple in their hot tub. Evidence on the man included a mask, gloves, a video camera and house and car keys. His earlier victim was 89. He was sentenced to life.

Vindictive Motivation

The core feature and primary driving force for the vindictive types is anger at women. Unlike the pervasive anger rapist, women are the central and exclusive focus of the vindictive rapist's anger. Their sexual assaults are marked by behaviors that are physically injurious and appear to be intended to degrade, demean, and humiliate their victims. The misogynistic anger evident in these assaults runs the gamut from verbal abuse to brutal murder. As noted, these offenders differ from pervasive anger rapists in that they show little or no evidence of anger at men (e.g., instigating fights with or assaulting men).

Although there is a sexual component to their assaults, there is no evidence that their aggression is eroticized, as it is for the sadistic types, and no evidence that they are preoccupied with sadistic fantasies. Indeed, the aggression in the sexual assault is often instrumental in achieving the primary aim of demeaning or humiliating the victim (e.g., forcing the victim to fellate the offender). Vindictive rapists also differ from both the pervasive anger and overt sadistic offenders in their relatively lower level of lifestyle impulsivity (i.e., they have relatively fewer problems with impulse control in other areas of their lives). There were 16 cases of vindictive type offenders.

Case example A police artist's sketch and tips from residents of a city housing project led to the arrest of Sam for the rape and murder of an 89-year-old woman. The woman was found badly beaten and tied to a bed; she had choked on a scarf used to gag her. There were multiple fractured ribs, fractured vertebrae and contusions to the head; it was unclear to the forensic pathologist if the death was intentional. In his first attack, the offender, posing as an electrician, entered a 55-year-old woman's apartment and raped her. On Valentine's Day a 62-year-old woman was raped after she opened her door to the offender who said he was a florist. The rapist carried flowers. Another victim said the man followed her to her apartment from the elevator and he followed her in when she unlocked her door.

Sam had been paroled 10 years earlier for similar crimes. All victims were frail; Sam was 6 feet tall and weighed 220 pound. He was sentenced 112 years.

Policy and Investigative Implications

A practical question is how can this classification of rapists of elders be useful to investigators and policy makers in the criminal justice field? There are two answers to discuss: (1) motive in the escalation of rapists to sexual homicide and (2) the forensic utility of classification of rapists of the elderly.

Motive and Escalation in Serial Sexual Homicide

FBI agents at the Behavioral Science Unit have conducted further work on serial sexual murderers, in particular on elderly women. Myers, Husted, Safarik, & O'Toole (2006) argue that authors who attribute the actions of serial sexual murderers to "anger" actually may have meant to use the terms "aggression" or "violence." These two terms are not synonymous with anger. Certainly the behaviors of serial sexual murderers toward their victims can be considered aggressive or violent. However, the commission of aggressive acts does not mean the offender was "angry".

Controversy exists in the literature and society regarding what motivates serial sexual killers to commit their crimes. Hypotheses range from the seeking of sexual gratification to the achievement of power and control to the expression of anger. Myers et al (2006) argue that serial sexual murderers commit their crimes in pursuit of sadistic pleasure. The seeking of power and control over victims is believed to serve the two secondary purposes of heightening sexual arousal and ensuring victim presence for the crime. Anger is not considered a key component of these offenders' motivation due to its inhibitory physiological effect on sexual functioning. On the contrary, criminal investigations into serial sexual killings consistently reveal erotically

charged crimes, with sexual motivation expressed either overtly or symbolically. While anger may be correlated with serial sexual homicide offenders, as it is with criminal offenders in general, it is not causative.

An offender's motive is the purpose or intent for his committing the crime. The motive of a crime, including a violent crime or series of crimes, is more objective and may be inferred from a crime scene. Offenders can have multiple motives for a single offense and in serial offenses motive(s) can evolve over time. (Myers, Husted, Safarik, & O'Toole, 2005; Safarik, Jarvis, & Nussbaum, 2000). Motive, however, is not synonymous with the offender's affective or emotional state. Affective state–what the offender is feeling at the time of the crime–is much more difficult to discern. Despite this significant distinction, emotions are frequently identified as motives for crimes, particularly in violent crimes in which there is a great deal of violence and physical damage to the victim. In crimes involving extreme reactive violence, strong emotions, such as anger, rage, hatred, and hurt, likely underpin or fuel the offender's behavior.

Investigative Profiling and Risk Assessment

The utility of classification for forensic examiners are in two important domains:: (a) investigative profiling, and (b) risk assessment.

Investigative Criminal Analysis. The taxonomic "profiling" of sex offenders essentially started with a deductive methodology using the systems first developed by Cohen and Groth in the 1960's and 1970's. The rapist system developed by Cohen and Seghom, which was conceptually very similar to Groth's system, was put to empirical test by researchers at the Massachusetts Treatment Center in the 1980's. The current system for classifying rapists (MTC:R3) is the second major revision of the original Cohen/Seghom system (cf. Knight and

Prentky, 1990) . MTC:R3 is the only known system to date that has been examined empirically with regard to efficacy in crime scene analysis.

One empirical study that applied a classification system (MTC:R3) to crime scene data used an FBI dataset on 116 rapists and a second dataset on 254 repetitive rapists incarcerated at the Massachusetts Treatment Center to predict MTC:R3 subtypes (Knight, Warren, Reboussin, & Soley, 1998) . If we are to profile repetitive offenders with any degree of accuracy, we must demonstrate that the evidence and behaviors are more-or-less consistently observed across crimes. Knight and his colleagues looked at across-crime consistency, finding that a few variables, such as gun or rifle present, victim's clothing cut or slashed, excessive response to victim resistance, victim bound, how restraints were obtained, what the restraints were, how the victim was bound, and planning of the rape, had high consistency, while most of the other variables (31 of the 54 examined) had low to no consistency. In general, however, the composite scales had greater consistency than the individual items that comprised them.

Knight et al. (1998) also attempted to predict rapist classifications (MTC:R3) using crime scene variables that were determined to be very similar to those dimensions that had shown the greatest consistency in the FBI sample. The dimension of expressive aggression yielded the best overall predictive accuracy, followed by the dimensions of adult antisocial behavior and sadism, which were moderately accurate. The remaining dimensions of sexualization, compensatory/pseudoselfish behavior, pervasive anger and vindictiveness, were marginal or did not predict at all. In sum, the study by Knight and his colleagues suggested that crime scene variables were good predictors of expressive aggression and adult antisocial behavior (two dimensions in MTC:R3) . Other dimensions (sadism, offense planning, and relationship with victim) had high internal consistency within individual offences and good

across-crime consistency, but did not work well at predicting classification. The necessary task is to identify better crime-scene indicators for those dimensions.

Informing CJS Decisions. A parallel in elder abuse may exist between research findings in assessing child molesters and the strength of sexual preoccupation with children. On interview, many of the offenders described their sexual interest in an elder. Although there are various non-actuarial ways of assessing this variable (e.g., using penile plethysmography [PPG]), the most common method is to examine the strength or intensity of an offender's preoccupation with an specific age group as sexual objects (i.e., "fixation"). Strength of sexual preoccupation with children is repeatedly identified as a critical predictor of sexual recidivism (e.g., Hanson and Bussiere, 1998; Proulx et al., 1997). As noted, an offender's degree of preoccupation with children as sexual objects has often been measured using phallometry [PPG] to assess behaviorally the offender's sexual arousal to depictions of children of various ages. Although such a direct measure is appealing and sexual arousal patterns have been shown to predict sexual recidivism, it has its drawbacks, including the logistical problems of obtaining phallometric data, the cost of the assessment procedure, the invasiveness of the procedure, and the increased likelihood in forensic contexts that dissimulation may compromise the validity of the assessment.

Knight, Carter, & Prentky (1989 developed an archival measure of fixation for use the classification of child molesters (MTC:CM3) that could serve as a reliable proxy for phallometric assessment. We suggest a parallel of this construct of fixation to assesses the strength of an offender's gerentophilic interest (i.e., the extent to which elders are a major focus of the offender's thoughts and attention) from archivally documented preoccupation with older adults as sexual interest or from the report of specific patterns of behaviors from which such preoccupation can be inferred

Antisocial Behavior & Psychopathy. A second key taxonomic variable, both for child molesters and rapists, is impulsive, antisocial behavior. Abel et al. (1981) found that child molesters with a high Pedophilic Aggression Index (psychophysiologically-assessed degree of arousal to scenes depicting aggressive sexual acts compared to scenes depicting nonaggressive sexual acts) were in fact the most dangerous (in terms of their actual behavior) . In the risk factors study with child molesters, Prentky et al (1997) noted that non-sexual, victim-involved offenses and violent offenses (of any sort) were best predicted by a history of impulsive, antisocial behavior. This factor of impulsive, antisocial behavior should be noted as a red flag in rapists of elders..

Although a high level of psychopathy is most certainly a marker for interpersonal violence, the relation between psychopathy and sexual deviance is less certain. Serin, Malcolm, Khanna, and Barbaree (1994) examined 65 sexual offenders, half rapists and half child molesters. The correlation between deviant sexual arousal, assessed using the PPG, as psychopathy was significant although low ($r = .28$) . The relation between deviant arousal and psychopathy was most apparent for extrafamilial child molesters. As Serin et al. (1994) pointed out, however, the mean scores on the PCL-R for all groups was quite low, well below the cutoff for psychopathy. It may well be the case that a clearer relationship between psychopathy and deviant sexual arousal becomes apparent at a higher level of psychopathy.

Brown and Forth (1997) divided 60 rapists into those with PCL-R scores of 30 or greater (21, 35% of the sample) and those with PCL-R scores of 29 or less (39, 65% of the sample) . Brown and Forth found that psychopathy was not related to sexual offense history, age of onset of sexual offending, or victim injury. Psychopathy was positively (and strongly) related to prior nonsexual offenses, and negatively related to age of onset of general criminal activity,

number of sexual victims, and the intensity of negative emotions experienced prior to sexual offenses. Nonpsychopaths were significantly more likely to report feeling alienated and stressed, whereas psychopaths were more likely to report feeling positive emotions

Brown & Forth (1997), looked at the role of fantasy and other motivational precursors to committing violent sexual assault and compared 60 psychopathic and non-psychopathic rapists on personality and behavioral motivational forerunners to sexual assault. Notably, fantasy and prior imagined visualization of the crime played a function in the offender's ultimate decision to act out the violent sexual offense. Researchers concluded that the reoccurrence of deviant sexual fantasies, interpersonal stress, feelings of inadequacy, loneliness, and rejection were risk factors for sexual recidivism in a sample of sexually motivated rapists," (p. 855). The team was careful to point out that emotional precursors vary significantly among different types of sexual offenders and required different treatment approaches for various types of rapists. The team tempered their findings with a caution that it may not be possible to sufficiently address the varied nature of offenders through categorization by psychopathic tendencies or criminal history.

Brown and Forth classified their rapists using the taxonomy (MTC:R3, Knight and Prentky, 1990). From a taxonomic perspective, psychopaths were twice as likely to have been classified as opportunistic (types 1/2) and pervasive anger (type 3) while. sexual, nonsadistic rapists (types 6/7) were much more likely to be classified as nonpsychopathic. What Brown and Forth (1997) found was quite consistent with what Knight (1999) found.

Knight (1999) reviewed existing validity data on MTC:R3. The strongest support for predictive validity (I.e., recidivism) came from 4 dimensions: juvenile antisocial behavior, adult antisocial behavior, pervasive anger, and offense planning. We can reasonably infer that these four dimensions are critical risk predictors for rapists. Pervasive anger captures a long-standing

pattern of undifferentiated, nonsexualized, gratuitous anger that often results in serious physical to the victims. All three dimensions -- juvenile and adult antisocial behavior and pervasive anger --reflect chronic problems controlling aggression, and general problems controlling impulsivity in most domains of the offender's lives. Thus, these results are entirely consistent with many other studies supporting the robust predictive importance of impulsive antisocial lifestyle.

Again, from a taxonomic perspective, it is clear that rapists classified on MTC:R3 as opportunistic [types 1/2] and pervasive anger [type 3] would be at highest risk for reoffense, though not necessarily sexual reoffense. The role of offense planning broadens the scope of prediction from generic violence to include sexual crimes, and, once again, increases the potential utility of the taxonomy. We would infer that those subtypes with the highest degree of offense planning. sadists [types 3/ 4] and sexual, non-sadistic [types 6/7], would be at highest risk for sexual recidivism.

In conclusion, classification is a rather odd tool. When applied properly, it can help to reveal profound insights into intractable problems. When applied improperly or misused, it can wreak havoc. In an article over three decades old on the "care and feeding of typologies," Hans Toch (1970) warned that, "Classifying people in life is a grim business which channelizes destinies and determines fate. A man becomes a category, is processed as a category, plays his assigned role, and lives up to the implications. Labeled irrational, he acts crazy. Catalogued dangerous, he becomes dangerous, or he stays behind bars," (p. 15). Hans Toch, who has spent much of his professional life attempting to classify violent people, reminds us that, "the game of labeling has consequences," and that, "Individuals can be jailed as representatives of a probable category," (p. 18). Toch's message, which is as true today as it was thirty years ago, is a sobering

one. We must not turn back from the task of classification, because it is potentially a very powerful tool. However, we must adhere to rigor in development and utmost care in application. In a word, casual or careless assignment of individuals to categories is far worse than no assignment at all. And improper use of a system is far worse than no use at all.

Chapter 4

Institutional Responses to Elder Sexual Abuse

A series of institutions, including law enforcement agencies, adult protective services, hospitals and courts, deal with elder victims of sexual abuse and their offender. When a case is reported, these institutions are put into motion, and both victim and offender may be processed through them.

This report has identified a number of barriers to the effective management of elder sexual abuse cases. These barriers include the following: problems in identifying elders at-risk for sexual abuse, delays in reporting and in evidence collection, impaired cognitive status of the elder, assessing intentional vs. accidental bruising, sensory deficits in the elder, psychological response of the elder to sexual abuse, dependence on others to report, relationship between victim and offender, physical and mental health status, clandestine nature of elder sexual abuse, ageism, denial of elder sexual abuse and memory deficits.

This chapter contains recommendations from the literature and Working Group for strategies to improve the institutional response to elder victims.

Elders at-Risk for Sexual Abuse

Elder sexual abuse is stated to be under reported and under diagnosed (Bonnie & Wallace, 2003). One strategy in the detection of elder sexual abuse is to identify at-risk elders and concentrate case-finding efforts with this population.

Social isolation of the elder may account for a barrier in detecting sexual abuse. However, even the most isolated elder may come into contact with the health care system at some point. Elders visit their health care providers an average of five times per year, yet primary

care providers comprise only a small percentage of cases reported. In our sample, 49 (20%) of health care providers reported suspect abuse and Harrell et al. (2002) noted only a small number of cases reported by health care providers to Adult Protective Services.

For a frail, dependent elder, the primary care provider may be the only opportunity for abuse detection and yet, as previously noted, many primary care providers attribute the medical findings, which may in fact signal abuse, to aging, underlying disease, or poor nursing care (Hirsch et al., 1999; Burgess, Hanrahan & Baker, 2005). Researchers analyzed a set of State of Michigan records of reported cases of elder abuse for the years 1989-1993 and noted that physicians reported an average of only 2% of all cases reported (Rosenblatt, Cho & Durance, 1996). It was suggested, and the Working Group concurred, that increasing physicians and nurses awareness of the problem of elder sexual abuse could increase the number of cases screened for potential abuse and as such increase the number of elder sexual abuse reports to responsible agencies (Rosenblatt et al., 1996).

Reporting Elder Sexual Abuse

All suspected cases of elder sexual abuse should to be reported for two reasons. The first reason is to provide for the safety and protection of the elder and the second reason is to prevent further victimization by the perpetrator. Cases need a rapid and immediate report to those in charge of their care, to the physician (if an institution case) and a complete physical examination by a qualified sexual assault forensic examiner. The absence of such reporting and documentation in a nursing home places the facility at risk for negligent protocol.

Within the care providing role, observations of the vulnerable elder are very important in verifying on going abuse. Although specific evidence may be difficult, home care providers can increase their visits and observations as a strategy to increase the body of evidence.

Elder abuse reporting controversy There is a reporting barrier noted in family cases of elder abuse. Elder abuse laws are designed and intended to protect vulnerable citizens and to punish violators. However, they may raise doubts among clinical professionals about appropriateness and feasibility of reporting (Hirsch et al, 1999). The issue involves potentially violating provider-patient trust and confidentiality and may threaten the therapeutic alliance between provider and the caregiver/abuser (Hirsch et al, 1999). Reporting is the most common yet controversial intervention among health care providers (Bonnie & Wallace, 2003). Supporters of mandatory reporting argue that by legally requiring reporting, those individuals who may initially be hesitant to report elder abuse fearing error or the fear of interference in another family's personal affairs may be more forthcoming in identification (Smith, 2002). Opponents to mandatory reporting stress that an involuntary intervention into an elder's life will only act to encourage ageism in society and deter elders from confiding in clinicians or seek medical assistance for fear they will be a subject of investigation (Smith, 2002). As Bonnie & Wallace (2003) point out, the concept of mandatory reporting was borrowed from child abuse laws without benefit of research data to demonstrate applicability to an elder population.

Barriers identified in the literature to detecting elder abuse include: families/patients resistance to intervention once elder abuse is identified, families/patients denial of abuse, fear of reprisal by the abuser towards the elder, lack of professional protocols for responding to elder abuse, lack of clear guidelines about confidentiality in elder abuse situations, difficulty in determining what constitutes elder abuse, and the lack of knowledge about the prevalence of elder abuse (Pearsall, 2006). The strategies identified to assist nurses and other health care providers in the management of elder abuse include the following: one agency to call regarding elder abuse, a list of resource people to advise on elder abuse, directory of services for seniors,

an elder abuse resource package for practice, professional guidelines or protocols for detection and management of elder abuse, education on elder abuse, a web site for elder abuse resources (Pearsall, 2006).

Prosecuting Case of Elder Sexual Abuse

Our study suggests that the relationship between victim and offender sets up a variety of psychological and legal dilemmas on the part of investigators that does not secure the safety of the victim. There is a systems conflict when dealing with a family member as offender in contrast to a stranger or non-family member caregiver as offender. These cases raise issues of victim vulnerability, credibility, mobility, size, energy, strength and the ability to be subjugated and controlled.

Dependent elders are at-risk from persons they know including family members. The amount of incest noted in these homebound cases raise questions about family relationships over time. It is important from the standpoint of justice that the partner as well as the incest perpetrator be considered from a criminal and psychological standpoint. In cases of an adult child abusing an elderly parent, the adult child needs to be evaluated to determine the nature and quality of the relationship and whether the abuse has been long-standing or is new behavior. Similarly, domestic abuse between marital partners needs evaluation.

Ramsey-Klawsnik (2003) notes that the interdependency of victims on their abusers for care and assistance makes victim self-protection via separation from the offender quite difficult. She makes clear that without separation continued sexual abuse is likely. Separation, on the other hand, is more likely if the victim has other, non-violent relatives available to provide support and assistance.

Elders with Disabilities

The importance of behavioral signs of distress in elders who are cognitively or physically disabled may often be the first clue of sexual abuse. Patterns of physical and mental status are not only critical to the understanding of the impact of a sexual assault on the elder victim but can be used in court to support an allegation of sexual abuse. Our study and studies by Taler & Ansells (1985) and Benbow & Haddad (1993) emphasize this observation.

Teitelman and Copolillo (2002) provide guidelines for the recognition and intervention of sexual abuse among persons with a dementia. They identified four avenues for screening for the presence of possible sexual abuse: being sensitive to the observable signs and symptoms associated with sexual abuse, determining the elder's capacity to consent to sexual activity, using appropriate interviewing techniques and questions, and using more formal assessment tools when needed to determine the likelihood that sexual abuse occurred.

Elder Victim Treatment

Considerable research has focused on developmental trauma, specifically of children and adolescents. Our study findings suggest developmental trauma needs to extend to persons over 60, as both the literature and this study suggest there is a pattern of trauma following a sexual abuse. Until relatively recently, it has been widely beyond comprehension and belief that elders could be victims of sexual assault, and, subsequently, the posttraumatic sequelae were conceivably overlooked or ruled-away as medical or psychiatric variants associated with the aging process. There has been a double bias in healthcare that (1) the elderly are at low risk for sexual abuse, and (2) for elders with significant cognitive disruption, that it was not even possible for them to remember such an event, let alone be affected by it. However, clinical experience and evolving research has now been validated with a significant expansion in the

extant scientific and anecdotal literature that acknowledges this significant risk for this vulnerable population. Traumatic events, by virtue of the sudden imposition of loss of control and inequity of power, inherently represent a loss to the victim, and, the sequelae do ensue (even if without a clear expression and explication toward understanding of the sexual assault).

Many elders do not receive treatment following sexual assault often because referrals are not made and interventions are not available. When a sexually assaulted elder remains troubled by intrusive thoughts of the assault, there is no resolution or integration, and the underlying fear persists. This leads to an inability to utilize new experiences to maintain an adaptive and on time trajectory of mental health developmental tasks. Instead, the flexibility of the person to discriminate new information may be lost and the person is either numb to the new information, hyperalert, or may perceive the environment as dangerous.

At a minimum, there is a need to treat the symptoms of the elderly especially when there is cognitive impairment. A first step is assessment using the acronym SPAN for symptoms of startle, physiological alteration in appetite and sleep, anger as in oppositional behavior, and numbness or withdrawal. Treatment depends on having an assessment or consultation by an expert who knows about elder abuse trauma. Spending time with the elder surfaces the symptoms as the therapist builds a safety and trusting relationship. Information that the elder is refusing to cooperate or avoiding usual activities may indicate the trauma response. Part of the oppositional behavior indicates the elder's anger that no one tries to communicate and subsequently, often in institutional cases, elders go into a numb state, retreat, loose connection with others, and die.

Special mental health services are needed for the sexually abused elder with and without dementia. As evident in the myriad symptoms that can occur after a traumatic event, the elder

victim is at-risk for a muted presentation of PTSD that is typically expressed by withdrawal, confused thinking, disturbed sleep, agitation and fearful behaviors For elders with dementia, talking about the abuse may be impossible. But the need for safety, security and trust remain paramount. Routine therapeutic visits become the mode of treatment with the use of expressive therapies such as music.

For the non-cognitively impaired elder, victims will benefit from concrete and clear explanations of the sexual assault and practitioners finding unique ways for encouraging them to tell their account about what happened. The goal is to promote adaptive coping, and to achieve a sense of safety, well-being, and connection to the world. Treatment components include a supportive safe environment, physical health assessment and care, stress reduction/stress management techniques, facilitation to return to living as normal as life as possible, opportunity to reinvest in lasting relationships, and to have meaningful use of the day. These coupled with the opportunity to tell the trauma story safely with acceptance can begin the process to rebuild a sense of self.

Sex Offenders of the Elderly

Investigation and Prosecution

Investigation and prosecution of an elder sexual crime present unique challenges to victim, the providers, and the criminal justice system. When criminal conduct occurs, rapid detection, sufficient documentation, and referral are critical to permit effective development of cases. After an occurrence of the crime, all necessary elements, including perpetrator identification, must be proven. Finally, the competency of the victim to provide evidence must be determined. These issues are very important with the older adult victim who has physical or mental impairment. It is recommended that a reliable and valid national source of data about the

sexual abuse of elders be available to set standards from which prosecutors can base assumptions to secure the prosecution of offenders.

This study suggests that there is some disparity in how the criminal justice process responds to elderly sexual abuse victims as determined by the presence or absence of dementia. The elder with dementia does communicate his or her distress through behavior but there is limited legal action against the perpetrator. The reasons for this disparity are unclear and require further clarification. Possibly the presence of dementia reduces the likelihood of a fair and impartial assessment and application of the law by the current judicial system. The implications are significant with the expansion of the aging population and associated dementia process.

Victim-offender relationship emerges as a critical component for both the victim and prosecutor in the decision to file charges. Many elder victims knew their assailant. When the offender is known and/or has (or had) a close relationship with the victim or is a caregiver, there are multiple conflicts for the victim to resolve. First, the conflicts may include fear of retaliation or additional physical injury to a dependent elder. Mere presence as well as force was used by offenders in this sample to gain compliance

A second issue is that of divided loyalty to resolve where a prior relationship between the elder and the offender has existed. Psychologically, to face the decision of having to side with one of two parties is experienced as a sense of divided loyalty. When the assailant has a known relationship, victims can be caught between two conflicting expectations. The first is to treat the offender, as they would treat an unknown assailant --thinking of their duty as citizens to bring such an offender before the law. The second is to make an exception for him because he has (or had) a relationship with them and let their duty to him as a particular individual prevail. They or a family member must choose, and the choice may be a difficult one.

One recommendation would be for additional counseling resources to assist the victim wherein (1) there is a current or prior relationship or (2) threats are a barrier to participating in the process. This intervening step could assist victim, law enforcement, and prosecutors in making a decision that would benefit the victim as well as justice and public safety.

We also suggest that APS staff work with law enforcement to design alternative disposition in cases where the offender has a relationship with the victim. The victim could file an order of protection such as that is available in domestic violence cases where a partner or ex-partner is involved. This option would be within the jurisdiction of law enforcement and not advance to the prosecutor's office unless there was a violation of the order.

Offenders and Combating Recidivism

Although 39.3%% of the CJS cases with data had a positive criminal justice outcome, the majority of perpetrators in the APS group were neither arrested nor convicted of any crime. The APS statistics of 6 out of 124 (4.8%) of court outcomes almost match those of Roberto & Teaster's (2003) state of Virginia study of 125 APS cases whereby 6 cases ended in conviction. Conventional wisdom as well as study findings suggests some of the non-arrested men could repeat their coercive sexual behavior.

We therefore propose a model that treats sexual assault as a public health problem and delineates a model for managing and de-escalating the problem of sexual assault and sexual coercion (see Prentky & Burgess, 2000, p. 238). Despite the hypervigilant attention to sexual crimes and victims, the legal and social remedies fail to address the preponderance of individuals who violate the sexual autonomy of others. By and large, those who sexually intimidate and sexually coerce others do so with impunity (Burgess, Lewis-O'Connor, Nugent & Fanflick, 2006; Holmstrom & Burgess, 1983; Prentky & Burgess, 2000). In sum, the number of

individuals who are apprehended, charged, and convicted for their sexual crimes is greatly eclipsed by the total number of men who engage in the full gamut of sexually coercive and abusive behavior.

Attenuation of unwanted sexual behavior, however it manifests itself, requires a reconceptualization of the problem, a focus on reducing risk associated with all facets of unwanted sexual behavior. One recommendation is implementation of a comprehensive management model for rape; and support for programmatic research that informs and guides the management model.

Gerontophilia as a Paraphilia

Although "gerontophilia" (defined as an age-discordant sexual preference) has long been known to exist, gerontophilic rape has rarely been subjected to empirical scrutiny. As previously discussed, the analysis of rapist motivation of elderly victims raises the question of whether or not such sex offenders constitute a separate type of paraphilia.

Stevenson & Jeary (2005) noted a recurring theme in the offenders who reported an inability to perform sexually in age-appropriate relationships that applied across the age-range of offenders. This sexual dysfunction included an inability to sustain an erection or to ejaculate during consenting sex, and such feelings of sexual inadequacy led the men to seek out victims who would be potentially be least able to resist, to mock, or to report on their sexual performance. This theme was noted in interviews with this sample of offenders.

The issue of paraphilia is more than being sexually aroused by non-socially condoned objects. The issue for rapists of elders may be polymorphous sexuality where the person is not only aroused by non-social objects but also age-inappropriate persons. The critical point is that the offender is acting on his impulse, has a loosening of internal and external controls, and has

proximity to a vulnerable victim. We can see in many persons, especially in family situations, a disregard for getting caught. The urge, impulse, desire and actions come quickly. This is a matter of understanding the conditions of the actions not condoning the actions. As noted with the dynamics of rapists, there is a strong element of power combined with the abuse. Feeling powerful over the victim and not acknowledging their inability to monitor and manage their arousal state compensates for the lack of control over his sexuality. Because they have no ability to control these states, offenders then try to control and dominate the victim (Prentky & Burgess, 2000).

Resident-on-Resident Sexual Abuse

The problem of resident-on-resident abuse is serious. The last several years has witnessed media attention to the number of cases where sex offenders have been allowed to reside in nursing homes. A Perfect Cause, identified in the media as a "watchdog group, has identified 1,084 registered sex offenders as residents in long-term care facilities since launching its investigations in 2004. The organization has documented 50+ criminal acts including 20+ sexual assaults, 9 rapes, 4 murders, 3 assaults, and 1 kidnapping by offenders while residing in long-term care facilities. Victims included females and males and their ages ranged from three to 90-years of age. Clearly, guidelines and policy are needed for nursing home agencies.

Interprofessional Cooperation

The main groups of professionals who work with elder victims are police, adult protective service staff, social workers, health care providers, and lawyers. The most striking thing about these groups is their specialization and professional isolation. There is often a lack of communication between them. When each group tends to stay with its own limited field, they neither learn from each other nor teach others any of its specialized knowledge. This isolation is

clear in the specialty of elder sexual abuse. For example, emergency department physicians and nurses are largely uninformed about legal procedures such as the difference between the role of a police officer and an adult protective services worker in investigating elder cases.

Effort has been put into increasing cooperation between the professional groups that deal with elder victims. For example, the Department of Justice funded through its state attorney general's offices, training programs in elder abuse. It is recommended that this type of effort be extended as policy for health care agencies and adult protective services.

Speeding Up the Institutional Response

Elder sexual abuse victims, as all rape victims, suffer when there is delay in the institutional response to their dilemma. Delays in reporting and in an examination can cost loss of potential biological evidence, psychic energy, and memory for the elder. The elder does not have time on his or her side.

Criminal justice personnel could institute changes to reduce court delays for the elder. One recommendation is to review guidelines and policies for witness appearance control, witness liaison and support teams, and court continuance. Courts could have an experienced prosecutor carefully and critically examine each elder case as to its success (or not) and to use diversionary protocols to divert certain types of offenders from criminal court to other appropriate agencies.

The Need for Elder Victim Programs

Many institutions deal with rape victims. Many prosecutor offices have victim advocates who, as part of their role, are assigned the responsibility of helping elder through the system and of protecting their rights. Similarly, there are sexual assault centers and domestic violence programs that should be able to provide services to elder victims. These services were not in place for our population of elder victims and thus policy recommendations are suggested.

Sexual assault centers need guidelines and protocols for elder victims of sexual abuse especially in assisting elders with disabilities of physical and mental limitations. Similarly, domestic violence, as noted in our study as well as other studies, can continue into the elder years. These domestic partners are linked by a variety of needs such as financial as well as psychological. As recommended by Ramsey-Klawsnik (2003), there needs to be an evaluation of whether or not this has been a chronic condition or if there has been a recent stressor or problem such as someone reaching his or her limit in terms of care giving. This is especially noted in cases of dementia where the partner feels so disconnected from the demented partner that they lose their own tolerance and patience. Centers need to develop guidelines along with the prosecutor's office on victim refusal to prosecute, as our study noted, and the high number of spouse or partners who dropped out of the criminal justice system. This action left the elder victim in danger of further abuse.

Training and Continuing Education for Staff

Training is needed at all levels of practice starting with those health care providers who treat the frail and vulnerable elder including home health aides and visiting nurses. These health professionals have access to the homebound dependent elder and need training on the signs and symptoms of elder sexual abuse.

Training of sexual assault nurse examiners and physicians on skin assessments of bruises and evidence collection is essential. Some examples of age-related changes include: atrophy of skin tissues, increased vascular fragility, loss of muscle mass, decreased estrogen, and loses of fatty deposits making the anogenital thinner and to less protected. Thus, patterns of bruising on the neck, breasts, pelvis area and inner thighs may identify intentional injury.

Training of police and investigators. There needs to be standardization of training in law enforcement and protocols of best practice. The development of a police consortium on elder sexual abuse and homicide would provide a focus and opportunity to build a database of cases. Investigative procedures need to be adapted to the developmental aspects of working with an aged crime victim and for avoiding the corruption of any forensic evidence. Multidisciplinary training of police and nurses would lead to improved practice and research opportunities, especially on the predatory and repetitive nature of the sex offender.

Cost of crime Medical, legal, and humanitarian costs of crimes against the elderly are immeasurable. Experts from this study anecdotally reported that victims often had serious complications or even death from being sexually assaulted, perhaps even more so than a younger cohort. Experts hypothesized that older adult sexual assault crimes result in an increased need for more costly health care such as nursing home care or hospitalization. Certainly, the personal suffering of the victim and their families must be considered along with a higher cost burden.

Primary Prevention

Nursing homes Nursing home administrators need education on how predators get into facilities and how to assess or conduct background checks on staff. They need to document the criminal history of offenders living in nursing homes to provide data (positive and negative) on the behavior of these residents.

Senior citizen groups such as the American Association of Retired Persons and elders could reach out to legislators to work with them on minimizing the risk of sexual abuse. The quality and regulation of nursing homes need stringent consequences for noncompliance with regulations that place elders at risk for sexual abuse. Nursing homes need incentives to take corrective action and to provide in-service education to their staff on elder sexual abuse.

Elder self-defense Self-defense techniques would benefit elders to feel stronger if the need arises to deal with an assailant and would increase their awareness of security and home safety. Such programs are often offered at senior citizen centers.

Train the Trainer Programs There is a critical need is to get information out to elders and professionals as to the issue of sexual abuse. One method is the "train the trainer" model that has been successful in other areas of crime prevention.

In summary, although there is still a great deal to learn, findings from this study can be used to educate health care professionals and criminal justice investigators and staff about elder sexual abuse that we hope will, in turn, promote early detection and the development of evidenced-based protocols. Building knowledge about characteristics of sexually traumatized elders with and without dementia, outcomes (particularly exacerbation of comorbid conditions and death), and the effectiveness of interventions are essential for future research and policy development.

Forensic nurses, community and healthcare practitioners, family and other caregivers need to become better informed about interpersonal violence, including sexual assault, perpetrated on elders, and how to support and provide opportunities for enhanced comprehensive assessment and medico-legal and psychotherapeutic intervention.

Future Research

Detecting Intentional Sexual Injury In today's violence-prone society, especially when victims are very old and powerless, there is often a critical need for forensic experts to evaluate and date the age of a contusion. Forensic nurses, forensic pathologists and emergency department staff are asked to offer fact or expert testimony and to make a determination as to whether an injury is consistent with the scenario provided by witnesses.

The current method of describing bruises or dating the age of a bruise usually involves visual examination of the bruise on the body followed by approximate matching of the observed color to text tables listing color changes over time. This methodology is hampered by a lack of consistency and is quite susceptible to individual subjectivity and other limitations. Serious skepticism has been raised regarding the current subjective visual method because of the wide observer variations in interpreting color and the lack of a universal protocol.

The Working Group recommended that there needs to be a mix of existing photometric and colorimetric technology to provide an objective and standardized color evaluation of contusions in order to estimate with reasonable reliability the age of a contusion. This method will remove interpersonal variability and ensure reproducibility. Through the use of modern information technology, the digital data from the proposed system can be easily calibrated to the same standard; therefore images can be sent to the prosecution, defense, and outside experts for evaluation without concern of color change.

Appendix A

Working Group Members

The Working Group participants, selected for their expertise in sexual assault, elder abuse, analysis of forensic evidence in the elderly, medical evaluation of trauma in the elderly, law enforcement and for their access to confirmed cases of elder sexual abuse include the following:

Eileen Allen, BSN, RN, coordinator, SANE Program, Monmouth County Prosecutor's Office, Freehold, New Jersey.

Kathleen Bell, BLS, RN, Past President, International Association of Forensic Nursing. Member of the Tulsa, Oklahoma Police Department, Tulsa, Oklahoma.

Wes Bledsoe, President, A Perfect Cause, Oklahoma City, Oklahoma

Kathleen Brown, PhD, RN, Clinical Professor, University of Pennsylvania, Philadelphia, PA

Allen G. Burgess, DBA, President, Data Integrity, Inc., Newton, MA

Ann W. Burgess, DNSc, RN, FAAN, Professor, Boston College School of Nursing, Chestnut Hill, Massachusetts.

Gregory Cooper, FBI (ret.) Investigative Support Division, Motorola

Mary Duffy, PhD, Connell School of Nursing, Boston College, Chestnut Hill, MA

Anne G. Hargreaves, MS, RN. Professor Emeritus, Boston University

Carol R. Hartman, DNSc, Professor Emeritus, Boston College

Anne K Kibrick, EdD, RN, Professor Emeritus, University of Massachusetts-Boston.

Michael King, Detective (ret.) Investigative Support Unit, Motorola

Steven Kohler, PhD, Epidemiologist, Allegheny County Coroner’s office, Pittsburgh, PA.

Linda Ledray, RN, PhD, Director Sexual Assault Resource Service (SARS) program, Minneapolis, MN

Leonard I. Morgenbesser, PhD, Research psychologist, New York State

Department of Correctional Services in Albany, New York and Adjunct Professor, Empire College, NY
Barbara Moynihan, PhD, RN, Associate Professor, Quinnipiac University, Director, Forensic Nursing Program, Hamden, Connecticut.

Janet Necessary, J. D., Deputy District Attorney, Office of the District Attorney for Allegheny County, Pittsburgh, Pennsylvania

Dona Petrozzi, MSN, Doctoral student, Connell School of Nursing, Boston College, Chestnut Hill, MA

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Holly Ramsey-Klawsnik, PhD, LCP, Klawsnik & Klawsnik Psychotherapy Associates, Canton, Massachusetts.

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Mark E. Safarik, Supervisory Special Agent, Behavioral Science Unit-CIRG, FBI Academy, Quantico, VA.

Kevin Steele, JD. Deputy Prosecutor, Montgomery County, PA

George Struebert, MD Quakertown, Pennsylvania

Jean Weyman, PhD, Professor and Director, Continuing Education, Connell School of Nursing, Boston College

Joan Zorza, JD, Editor, Sexual Assault Report, Washington, DC

Appendix B
COMPREHENSIVE SEXUAL ASSAULT ASSESSMENT TOOL-ELDER
CSAAT-E

Instructions: Please answer all the questions. When information is not available, check the "No DATA" box. When the question is not applicable, check the "Not Applicable" Box. Please date and initial if you collected the data.

Case Number _____ Today's Date _____

If there were multiple victims, please check here ☐ (Fill out a separate form for each victim)

If there were multiple perpetrators, please check here ☐ (Fill out a separate form for each perpetrator)

Source of information (check all that apply):

☐ Chart ☐ Medical Record ☐ Mental Health/Social Service Record ☐ Investigative Data

☐ Court Record ☐ Attorney Record ☐ SANE Report ☐ Administrative Data

Name of Person Collecting the Data: _____ e-mail _____ Phone: _____

Discipline of person collecting the data (check all that apply):

☐ SANE ☐ Clinician (non-SANE) ☐ Mental Health Clinician ☐ Investigator

☐ Research Assistant ☐ Administrator

Date	No Data	Not appl.	VICTIM INFORMATION		Initials
			Client Number _____ Date of Assault _____ Time of Assault _____ Hours since Assault _____ Date of exam _____		
			Age (years)		
			Gender	☐ Female ☐ Male	
			Race	☐ White ☐ Black ☐ Native Alaskan ☐Native Amer. ☐Asian Indian ☐Chinese ☐Filipino ☐Japanese ☐ Korean ☐Vietnamese ☐Other Asian ☐Samoan☐ Native Hawaiian ☐Other Pacific Islander ☐ Guamanian or Chamorro ☐ Other: Specify _____	
			Ethnicity	☐ Hispanic/Latino Decent ☐ Non Hispanic/Latino Decent	
			History of interpersonal violence?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	
			History of sexual abuse?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	
			History of physical abuse?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	

			Client's account of the assault?	☐ Sexual Assault ☐ Incest ☐ Attempted Sexual Assault ☐ Physical Assault		
			Physical Status	___ Limitations ___No Limitations		
			PROBLEM CONDITIONS	**CIRCLE ALL** that apply a) Weight gain or loss of 3 or more pounds b) Delusions c) Fever d) Hallucinations e) Internal Bleeding f) Unsteady gait g) Vomiting h) Urinary Tract Infections	Condition existed prior to the assault a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No	

Date	No Data	N/A	VICTIM INFORMATION (Continued)			
			ADL SELF-PERFORMANCE	**CIRCLE ONE.** a) INDEPENDENT—No help or oversight –OR – Help/oversight provided only 1 or 2 times per day b) SUPERVISION---Oversight, encouragement or cueing provided 3 or more times per day—OR—Supervision (3 or more times) plus physical assistance provided only 1 or 2 times per day. c) LIMITED ASSISTANCE---Individual highly involved in activity; received physical help in guided maneuvering of limbs or other non-weight bearing assistance 3 or more times per day –OR—More help provided only 1 or 2 times per day. d) EXTENSIVE ASSISTANCE –While individual performed part of activity, help of following type(s) provided 3 or more times: ----Weight-bearing support ----Full support during part (but not all) of last 7 days. e) TOTAL DEPENDENCE ----Full support of activity	Condition existed prior to the assault ☐ Yes ☐ No	
			Mental Status	☐ Impaired ☐ Not Impaired	Condition existed prior to the assault ☐ Yes ☐ No	
			MEMORY (Recall of what is learned or known.)	**CIRCLE ALL** that apply a) Short-term memory Problems (recall after 5 minutes) b) Long-term memory Problems (recall of long past)	Condition existed prior to the assault a) □ Yes; □ No b) □ Yes; □ No	
			MEMORY/RECALL ABILITY	**CIRCLE ALL** that the individual is normally able to recall a. Current season — a) □ Yes; □ No b. Location of own room — b) □ Yes; □ No c. Names and Faces — c) □ Yes; □ No d. The place he/she is living (home, etc) — d) □ Yes; □ No e. NONE OF THE ABOVE are recalled — e) □ Yes; □ No	Condition existed prior to the assault a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No	
			SLEEP-CYCLE ISSUES	Insomnia ☐ Yes ☐ No	Condition existed prior to the assault ☐ Yes☐ No	

			SAD, APATHETIC, ANXIOUS APPEARANCE	**CHECK ALL** that apply ☐ a) Sad, pained, worried facial expressions – e.g., furrowed brows. ☐ b) Crying, tearfulness ☐ c) Repetitive physical movement –e.g., pacing, hand wringing, restlessness, fidgeting, picking.	Condition existed prior to the assault a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No	
			LOSS OF INTEREST	**CHECK ALL** that apply ☐ a. withdrawal from activities of interest – e.g., no interest in long standing activities or being with family/friends ☐ b. Reduced social interaction.	Condition existed prior to the assault a) □ Yes; □ No b) □ Yes; □ No	

Date	No Data	Not appl.	VICTIM INFORMATION (Continued)		Initials
			Medical Diagnoses	List (use ICD-9-CM when available):	
			Psychiatric Diagnoses	List (use ICD-9-CM when available):	

Date	No Data	Not appl.	EXAMINATION OF THE VICTIM		Initials
			Was an exam performed?	□ Yes; □ No	
			Date of the exam	Date:	
			Time lapse since the assault	Time:	
			Examiner:	□ Nurse □ Physician □ PA □ NP	
			Was the Examiner trained in forensic methods (ex: SANE trained)?	☐ Yes ☐ No	
			METHOD OF EXAM a. Anoscope used b. Colposcope used c. Toludine blue used d. Speculum used e. Alternate light source used	 a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No	
			Clothing Collected? Panties? Other ?	□ Yes; □ No □ Yes; □ No □ Yes; □ No Specify: _____	
			RESOURCES UTILIZED a. Advocate present b. Social services consulted c. Translator present d. Crisis intervention center consulted	 a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No	

			Prophylaxis given at time of exam? a. STDs b. HIV c. Immunizations	 a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No	

Date	No Data	Not appl.	EXAMINATION OF THE VICTIM (Continued)	Initials

Were orifices penetrated?

	Penetrate	Attempted	Unkno Victim	to
Oral	□ No □ Digital □ Penile □ Other	□ No □ Digital □ Penile □ Other	□ No □ Dig □ Pen □ Oth	
Vaginal	□ No □ Digital □ Penile □ Other	□ No □ Digital □ Penile □ Other	□ No □ Dig □ Pen □ Oth	
Anal	□ No □ Digital □ Penile □ Other	□ No □ Digital □ Penile □ Other	□ No □ Dig □ Pen □ Oth	

Oral ejaculation? □ Yes □ No □ Unknown to victim
Rectal ejaculation? □ Yes □ No □ Unknown to victim
Skin ejaculation? □ Yes □ No □ Unknown to victim
Condom used? □ Yes □ No □ Unknown to victim

Demeanor of the victim during the exam

Check all that apply
□ Quiet □ Avoids questions □ Trembling □ Tense
□ Reluctant response to questions □ Resistant to exam □ Agitated □ Sobbing □ Tearful □ Fearful □ Anxious
□ Depressed □ Avoidant □ Verbalizing excessively
□ Not verbalizing □ Tearful/sobbing □ Withdrawn
□ Other:
specify_____

AIS (Abbreviated Injury Score)

NISS (New Injury Severity Score)

SPAN Score: _____

		Condition existed prior to the assault
Startle	a. □ Yes □ No	a. □ Yes □ No
Physiology	b. □ Yes □ No	b. □ Yes □ No
Anger	c. □ Yes □ No	c. □ Yes □ No
Numbness	**d.** □ Yes □ No	d. □ Yes □ No

			INJURIES: a. bruise/contusion b. tenderness (pt complaint) c. redness d. swelling e. petechiae f. tear/laceration (blunt force trauma) g. abrasion h. cut/incision (sharp object trauma) i. avulsion j. bite k. bums l. patterned m. Specify_____ ___	**Use key # (below) to indicate Location** a. □ Yes; □ No _____ b. □ Yes; □ No _____ c. □ Yes; □ No _____ d. □ Yes; □ No _____ e. □ Yes; □ No _____ f. □ Yes; □ No _____ g. □ Yes; □ No _____ h. □ Yes; □ No _____ i. □ Yes; □ No _____ j. □ Yes; □ No _____ k. □ Yes; □ No _____ l. □ Yes; □ No _____ m. □ Yes; □ No _____	

			Key: 2=Head/Neck 3=Face 4=Arms	**5=Hands 6=Torso 7=Abdomen**	**8=Legs 9=Feet 10=Buttock**	**11=Vaginal A 12=Anal Are 13=Back**	**a**

Date	No Data	Not appl.	**EXAMINATION OF THE VICTIM (Continued)**		Initials
			VULVAR/VAGINAL: Check all that apply. a. Labia Majora b. Labia Minora c. Clitoris And Hood d. Urethra/Periurethra e. Vestibule/Introitus f. Fossa Navicularis g. Posterior Fourchette h. Superior Perineum i. Inferior Perineum j. Hymen k. Vaginal Vault l. Posterior Fomix m. Cervix n. Other	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No i) □ Yes; □ No j) □ Yes; □ No k) □ Yes; □ No l) □ Yes; □ No m) □ Yes; □ No Specify:	

			Anal/Rectal: Injuries To? a. Perianal Folds b. Anal Verge c. Periactinate Line (Pectinate/Dentate Line) d. Rectum e. Other, specify	a. □ Yes; □ No b. □ Yes; □ No c. □ Yes; □ No d. □ Yes; □ No Specify:	
			Penile/Scrotum a. Scrotum b. Testicle c. Penile Shaft d. Foreskin e. Glans f. Urethral Meatus g. Other, specify	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) Specify:	
			Oral/Head/Neck: Injuries To? a. Inner Lips b. Outer Lips c. Lip Frenulum d. Tongue Frenulum e. Teeth/Gingival f. Tongue g. Buccal Membrane h. Soft Palate i. Hard Palate j. Tonsilar Pillars k. Visible Pharanx l. Uvula m. Head n. Face o. Neck p. Other	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No i) □ Yes; □ No j) □ Yes; □ No k) □ Yes; □ No l) □ Yes; □ No m) □ Yes; □ No n) □ Yes; □ No o) □ Yes; □ No p). Specify:	
Date	**No Data**	**Not appl.**	**EXAMINATION OF THE VICTIM (Continued)**		**Initials**

			Body a. Hands b. Arms c. Buttocks d. Abdomen e. Upper Legs f. Lower Legs g. Feet h. Chest i. Breast/Nipple/Areola j. Back	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No i) □ Yes; □ No j) □ Yes; □ No Specify:	
			Following the exam, the client was discharged to:	☐ Home ☐ Medical admission ☐ Psychiatric admission ☐ Other Person's Home (friend, family) ☐ Safehouse/shelter ☐ Other: Specify _____	
Date	**No Data**	**Not appl.**	**CRIME INFORMATION**		**Initials**
			Date assault reported (MM/DD/YY)	Date:	
			Time of day of the assault:	☐ A.M. ☐ P.M.	
			Day of the week of the assault	☐ Sun ☐ Mon ☐ Tues ☐ Wed ☐ Thurs ☐ Fri ☐ Sat	
			Time lapse from assault to disclosure	Hours/Days:	
			Location of the assault:	☐Personal Residence ☐Nursing Home ☐Assisted Living ☐Other Specify_____	
			State in which the assault occurred:	Name state:	
			Zip code of the place of the assault:	Zip Code:	
			Was an Evidence Kit Collected?	☐ Yes; ☐ No	
			Were Photographs taken at the crime scene?	☐ Yes; ☐ No	
			Was the assault reported to Protective services?	☐ Yes; ☐ No	
			Date of report to Protective Services	Date:	
			What allegations were reported?	Check all that apply: ☐ Sexual Abuse ☐ Physical Abuse ☐ Neglect ☐ Financial exploitation ☐ Self-neglect ☐ Emotional Abuse ☐ Other, specify: _____	
			Type of suspected sexual abuse case	☐ Stranger/acquaintance	

				☐ Unrelated care provider ☐ Incestuous, specify relative _____ ☐ Marital/partner ☐ Resident-to-resident ☐ Other, specify:	
Date	**No Data**	**Not appl.**	**CRIME INFORMATION (continued)**		**Initials**
			Who reported the allegations?	☐ Self-report ☐Family Member (specify_____) ☐ Medical/Nursing professional ☐ Social services professional ☐ Mental Health professional ☐ Police/Fire/EMT or other public safety personnel ☐ Unknown ☐ Other specify:_____	
			What led to the discovery of the sexual assault? How was it known an assault occurred?	**Check all that apply:** ☐Victim Disclosure ☐ Observed physical injury ☐ Other specify:	
			a. Was the suspected victim interviewed during the investigation? b. If yes, did the suspected victim disclose sexual behavior by the alleged offender? c. If yes, did the suspected victim disclose that the behavior was abusive?	a. ☐ Yes; ☐ No ☐ Victim unable to communicate b. ☐ Yes; ☐ No c. ☐ Yes; ☐ No	
			a.Was the suspected offender interviewed during the investigation? b.If yes, did the suspect confirm sexual behavior towards victim? c.If yes, did suspect deny that the behavior was abusive?	a. ☐ Yes; ☐ No b. ☐ Yes; ☐ No c.☐ Yes; ☐ No	
			Did the suspected offender have a known history of mental illness?	☐ Yes; ☐ No If yes, specify any known diagnoses:	
			Did the suspected offender have mental limitations or problems?	☐ Yes; ☐ No If yes, specify	
			Did the suspected offender have a Developmental Disability?	☐ Yes; ☐ No If yes, specify any known diagnoses or problem:	
			Did the suspected offender have	☐ Yes; ☐ No	

			physical limitations or problems?	If yes, specify any known diagnoses or problem:	
			Under what conditions did sexual contact occur?	(**Check all that apply.)** ☐ Sexual contact was physically forced on victim ☐ Victim was manipulated/tricked into sexual contact ☐ Victim was unable to grant informed consent to sexual contact ☐ Service provider engaged client (victim) in sexual contact ☐ Unknown ☐ Other, specify_____	

Date	No Data	Not appl.	**CRIME INFORMATION (continued)**		Initials
			Based upon evidence, what markers of sexual abuse were present?	**Check all that apply.** ☐ Direct or coded victim disclosure ☐ Eye witness report, specify witness ☐ Physical trauma ☐ Sexually transmitted disease diagnosed in victim ☐ Evidence of forcible restraint (for example, rope burns, finger imprints) ☐ Evidence of severe physical abuse (for example, bite marks, inflicted burns) ☐ Victim displayed shame or guarded response when asked about abuse signs ☐ Victim fear or strong ambivalent feelings towards suspected offender ☐ Victim upset regarding receiving personal care ☐ Inappropriate boundaries observed (for example, son shares mother's bed) ☐ Suspected offender overly intrusive regarding provision of personal care ☐ Symptomatic statement made by suspected offender, specify ☐ Symptomatic behavior displayed by suspected offender, specify- _____ ☐ Other, specify_____	
			During the assault, was the client…? a. Kissed? b. Breasts fondled? c. Vaginal Penetration? d. Oral offender to victim? e. Oral victim to offender? f. Anal Penetration? g. Offender masturbated self? h. Offender ejaculated? i. Offender used a condom? j. Object was used k. Harmful Genital Practices? l. Victim exposed to unwanted	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No i) □ Yes; □ No j) □ Yes; □ No k) □ Yes; □ No If yes, specify _____	

			pornography m. Victim used to produce pornography n. Offender exposed self to victim o. Sexual harassment/threats p. Voyeuristic activity	l) □ Yes; □ No m) □ Yes; □ No n) □ Yes; □ No o) □ Yes; □ No p) □ Yes; □ No If yes, specify_____	
			During the assault, was the victim…? a. Strangled or suffocated? b. Slapped? c. Kicked? d. Punched? e. Pushed? f. Burned? g. Called Names (whore, etc)? h. Demeaned?	a) □ Yes; □ No b) □ Yes; □ No c) □ Yes; □ No d) □ Yes; □ No e) □ Yes; □ No f) □ Yes; □ No g) □ Yes; □ No h) □ Yes; □ No Other Specify_____	
Date	**No Data**	**Not appl.**	**CRIME INFORMATION (continued)**		**Initials**
			Were weapon(s) used?	**Check all that apply:** □ Firearms □ Knives □ Blunt Objects □ Other Cutting Objects □ Physical Force □ None □ Other, Specify _____	
			Was the victim strangled or suffocated?	□ Yes □ No	
			At the time of the suspected sexual abuse, were the victim and offender living in the same residence?	☐ Yes; ☐ No Specify:	
			At the time of the suspected sexual abuse, was the suspected offender dependent upon the victim for any necessities of life (food, shelter, money, transportation, required assistance, etc.)?	☐ Yes; ☐ No Specify:	
			At the time of the suspected sexual abuse, was the victim dependent upon the suspected offender for any necessities of life (food, shelter, money, transportation, required assistance, etc.)?	☐ Yes; ☐ No Specify:	
			During the investigation, did other allegations of sexual abuse come to light in regard to the suspected sexual offender (for which no criminal record exists)?	☐ Yes; ☐ No Specify:_____ _____	
			Was there an attempt to destroy evidence?	☐ Yes; ☐ No Specify:	
			Were other crimes committed	☐ Yes; ☐ No Specify: _____	
			Did the victim die at the time of the assault?	☐ Yes; ☐ No	

			State the Medical Examiners determination of cause of death_____		
			If the victim died, how many days/weeks/months did the victim die after the assault?	Days_____ Weeks_____ Months_____	
Date	**No Data**	**Not appl.**	**OFFENDER INFORMATION**		**Initials**
			Was the offender identified?	☐ Yes; ☐ No	
			Gender	☐ Male ☐ Female	
			Age		
			Race	☐ White ☐ Black ☐ Native Alaskan ☐ Native Amer. ☐ Asian Indian ☐ Chinese ☐ Filipino ☐ Japanese ☐ Korean ☐ Vietnamese ☐ Other Asian ☐ Samoan ☐ Native Hawaiian ☐ Other Pacific Islander ☐ Guamanian or Chamorro ☐ Other: Specify _____	
			Ethnicity	☐ Hispanic/Latino Decent ☐ Non Hispanic/Latino Decent	
Date	**No Data**	**Not appl.**	**OFFENDER INFORMATION (Continued)**		**Initials**
			History of interpersonal violence?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	
			History of sexual abuse?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	
			History of physical abuse?	☐ Yes; ☐ No If yes, ☐child, ☐adolescent ☐adult	
			Approximate Height/Weight		
			Unique Features	☐ None ☐ Tattoos ☐ Facial/body hair ☐ Scars ☐ Body piercing ☐Other _____	
			Method of attack	☐ Con (subterfuge or a ploy) ☐ Surprise ☐ Blitz ☐ Other: specify_____	
			How did the offender control the victim?	**Check all that apply:** ☐ Mere presence? ☐ Bound? ☐ Gagged?	

				☐ Abducted? ☐ Weapon: Specify_____ ☐ Weapon of opportunity: Specify_____ ☐ Was a weapon used on the victim? ☐ Blindfolded? ☐ Battery/beating? ☐ Bribery? ☐ Medications? ☐ Threats? ☐ Other: Specify_____	
			Did the offender have a history of alcohol or drug abuse (specify type)	☐ Yes; ☐ No	
Date	**No Data**	**Not appl.**	**CASE DISPOSITION**		**Initials**
			The collected evidence indicated that….	☐ Sexual abuse occurred ☐ Sexual abuse did not occur, If so how was that determined? _____ ☐ It was not possible to determine allegation validity. If so, specify why: _____	
			Suspect identified	☐ Yes; ☐ No	
			Suspect Arrested	☐ Yes; ☐ No	
Date	**No Data**	**Not appl.**	**CASE DISPOSITION (Continued)**		**Initials**
			Was the case referred to the DA?	☐ Yes; ☐ No ☐ Unknown	
			What was substantiated as a result of the investigation?	**Check all that apply:** ☐ Sexual Abuse	

				☐ Physical Abuse ☐ Neglect ☐ Financial Exploitation ☐ Self neglect ☐ Emotional Abuse ☐ Nothing was substantiated ☐ Other: Specify _____	
			Current Status of the Case	☐ Police notified ☐ Report filed ☐ Case closed ☐ Victim declined prosecution (with suspect id) ☐ Beyond statute of limitations ☐ DA rejected ☐ Out of jurisdiction ☐ Unfounded: false report ☐ Leads exhausted ☐ Pending DA review ☐ Victim declined prosecution (without suspect id) ☐ Recant Other: _____ _	
			Case Inactivated	☐ Indicted ☐ Charges ☐ Convicted: ☐ plea ☐ trial ☐ Sentence _____ Other:_____ _____	

List names and contact information of others (DA, police investigators, protective services, etc) who may have been involved in the case:

_____

_____

_____

Please use this section and the back of these pages to provide any additional information that you have regarding this case that may not have been asked in this questionnaire. Thank you for completing this questionnaire.

Offender Classification Data Sheet

1. Name: _____

2. Offender age: _____

3. Primary Subtype: _____

4. Expressive agression: ____ Low ____ High
   1 2
5. Unsocialized behavior – juvenile: ____ Absent ____ Present
   1 2
6. Unsocialized behavior – adult: ____ Absent ____ Present
   1 2
7. Social competence: ____ Absent ____ Present
   1 2
8. Mood state: ____ Absent ____ Present
   1 2
9. Sadism: ____ Absent ____ Present
   1 2
10. Offense planning: ____ Absent ____ Present
    1 2
11. Location: ____ Domicile, ____ Institution, ____ Other
    1 2 3
12. Victim injury: ____ No ____ Yes
    1 2
13. Victim restrained: ____ No ____ Yes
    1 2
14. Weapon: ____ No ____ Yes
    1 2
15. Victim's age: _____

Appendix C

Pilot Work on Forensic Bruising

Forensic experts and legal investigators can learn a great deal about the events surrounding violence by a thorough visual examination of existing bruises and bruising patterns. However, establishing a time interval from the initial trauma of a particular bruise is a more difficult task for those in the medical and forensic community (Larkin & Wecht, 1995). Two key questions that medical specialists should be asking upon seeing a bruise include: "How old is each of the bruises?" and "Are the appearances of the bruises consistent with the circumstances of the events reported to have caused the bruises"? (Langlois & Gresham 1991).

This section reports the results of a small pilot study on dating bruises through color.

Literature Review

Numerous forensic markers have been identified through research that indicates the occurrence of elder abuse. These may include bruises, abrasions, lacerations and fractures. Our focus for this pilot project was on bruises (contusions).

The result of blunt force with associated rupture of small blood vessels under the skin without breaking the skin results in superficial discoloration of the skin known as a bruise (Dyer et al., 2003) or a bruise (Brown et al., 2004). The trauma can be inflicted unintentionally in cases such as a motor vehicle accident, a fall, or during routine I.V. placement or it can be intentional as in cases of elder abuse (Spraycar 1995).

With age, generally the blood vessels become easier to rupture (Dix, 2000). A bruise can become noticeable hours or days after an initial insult. Blood escapes into surrounding tissues and can track through fascial planes resulting in bruising distant from the site of injury. In the elderly, bruises occur more frequently and resolve more slowly than in younger person and can

last for months rather than one to two weeks (Dyer et al., 2003). Elder skin becomes loose, thin, and transparent with a decreased vascularity and atrophy that makes it fragile. Elders bruise under less force or pressure than do younger persons (Brown et al., 2004). There is currently no way to determine exactly the amount of force needed to produce a bruise (Dix, 2000).

The bruise pattern may suggest the cause of the injury, as a bruise can retain the shape of knuckles or fingers and parallel discoloration marks can indicate injury from a cylindrical object (Dyer et al., 2003). The neck, arms and legs may show fingertip bruising from restraint. The face, breast, check, abdomen and extremities may exhibit bruises from punches and may resemble the shape of a fist with a clear area in the center. The central clearing is created when the punch forces the blood from the capillaries away from the targeted location (Brown, Streubert & Burgess, 2004).

The Current Method of Dating Bruises

Prior research has demonstrated that bruises undergo a series of color changes from initiation to resolution (Adelson 1974.Camps & Cameron 1971; Camp 1976; Polson & Gee 1973; Spitz & Fisher 1980; Glaister 1973; Smith & Fiddes 1955). Based on this knowledge and experience, the current method of dating a bruise is accomplished in the following manner:

- First, a physician, ER staff, forensic nurse or forensic pathologist conducts a visual examination of the bruise(s).
- Second, the examiner determines the color of the bruises through a subjective observation and description of the bruises using generalized color words, such as “red,” “magenta,” “orange,” or “chartreuse” to describe the color of the bruises.
- Third, the observed descriptive color is compared to the cited sequence of color changes by time to determine the age of the bruises (Larkin & Wecht, 1995). Table C.1 shows the

sequence of color changes over time from several studies (Adelson 1974; Camps & Cameron 1971; Camp 1976; Polson & Gee 1973; Spitz & Fisher 1980; Glaister 1973; Smith & Fiddes 1955; Raekallio 1977).

This current manual method makes several assumptions. The first is that individuals who suffer a traumatic bruise will heal at approximately the same rate regardless of age, sex, medical history, or health status. However, it has been shown that the color change sequence varies more among children, the elderly, menopausal woman, individuals with metabolic or clotting disorders, and certain medications or herbal supplements (Mosqueda, 2004). The second assumption is that the healing process evolves in a fairly specific pattern of color changes over a set period of time (Bruise/age dating chart 2004; Paliwal, Sirohiwal, Vijay, 2004)

The limitations of the manual method revolve around the issues of validity and reliability. The current method relies on an individual perceiving and evaluating the color of a bruise and then assigning a color. Subjective color concept-words as previous identified have been used to describe the color of the bruises, but evaluators may also use “crimson” to describe “red” or describe “magenta” as “bluish-magenta” or “reddish-magenta”. From a scientific viewpoint, however, the exact color is still unknown. The terms used are imprecise and are based on the individual’s visual acuity, experience assessing bruises, color perception, and knowledge of color concepts and vocabulary.

Color is described scientifically in terms of wavelength of light. For example, when the term “red” is utilized, it is specified as red-617.2, meaning a red color with a specific wavelength of 617.2 μ̃m. With this approach, those who deal with colors have a common understanding and reference scale.

Currently, computer analysis of bruise coloring is not done in forensic practice. This lack of consistent interpretation of colors causes problems when viewing images on a different computer monitor or printed on different media, as color corrections are not usually made. In summary, the current method used to make an estimation of the age of bruise is highly interpretive, lacking in reliability, validity and is without scientifically evaluated uniform reference standards (Stephenson & Bialas 1996; DiMaio & DiMaio 2004).

Forensic Implications

Most people, including the elderly, never seek professional assistance for everyday bruises. The vast majority of bruises occur at home or work and are a matter of accidental trauma. People with bruises are usually well aware of the cause of the injury and, most often, self- treatment is accomplished.

Bruises, however, can be intentionally inflicted during physical altercations, or elder abuse or as a result of self-abuse. Individuals with serious bruising are typically seen by emergency room nursing or physician staff, or social workers evaluating an adult protective service referral, or by staff in medical examiner's (ME) office during the forensic pathological autopsy examination.

Once an intentional bruise is suspected to be a result of an assaultive act, a police investigation often ensues. If the victim dies, a ME/Coroner investigation is also carried out in conjunction with the police investigation. The accurate determination of the age of a bruise has both criminal and civil implications. During legal proceedings forensic experts are frequently asked to provide an opinion as to whether the age of the bruise is consistent with the story provided by the accused. In this case the forensic practitioner (forensic nurse or forensic pathologist) testifies as to his or her opinion regarding the age of the bruise.

Usually, this forensic opinion is based on the current methodology (described above) which involves visual examination and assigning a text color to the bruise; the color corresponding to a traditional text-based description of color and age of the bruise (Larkin & Wecht, 1995.

Pilot Objective

A presentation on elder bruising by one of the Working Group members raised the issue of using computer technology to study the relationship between bruising color and date of injury. A pilot study was approved as part of this project. The primary objective of the pilot work was to (1) design and print color rulers to be used in photographs of bruises, and (2) to develop a new methodology using computer software technology to reliably and objectively determine the age of bruises in a variety of settings with acceptable specificity and sensitivity.

Method

Measurement Techniques

The design and printing of color rulers was the first task of this project. Standard colors and calibration scales had to be used. There are two important concepts in computer color design. First, a computer can store millions of colors. Microsoft Windows 2000 and Windows XP are capable of displaying 24 million colors or 2^{24} Most personal computers reduce this number of colors and are set at 256 colors. While the human eye can generally discriminate only about 16 colors, it is possible for a photo to contain hundreds of varying shades of colors. A second concept in computer color analysis relates to pixels. A pixel represent a single point in the photo and can have only one color code. Pixels are not discernable to the human eye and each photo is composed of a large number of pixels.

The color calibration scale and ruler design for this project contains two measures (inches and centimeters), two orientation circles, a standard Gray Scale (Kodak® Gray Scale), standard color scale containing Red, Green, Blue Cyan, Magenta, and Yellow, and an area to write in the case number. The ruler coding has been developed to enable coding up to the 24 million colors that are stored in the computer's memory.

The color rulers were designed and printed. They were then distributed for testing to a select number of forensic pathologists and emergency room staff. Instructions were given to use the color ruler when digital photographs were taken and then were to be saved in uncompressed TIFF format.

Sample

Photographs The test photos were taken by different people to provide enough variance to determine whether (or not) the software could be applied equally. Some of these photos were taken with professional photographers and some by nurses in the emergency room using digital cameras and in one case with a cell phone. The pilot photos included in this Appendix were selected from 40 photos currently available to test the wide range of photos. Photos 1, 5 & 6 were taken upon entry to the emergency room. The precise time the bruising occurred was unknown but was ascertained to be within 24 hours.

Analysis

Photo analysis Six photos were selected to be included in this section to illustrate the color ruler and computer analysis. The range of unique colors was reduced in discrete steps by grouping colors within a given range about a base number.

A computer software program that was written for the project and contained both standard and proprietary software analyzed the images. The goal was to determine the average

color of the marked bruise and the percentage of the three primary colors (red, green, and blue). Each image was assigned a nine number value representing the average color of the bruise. The first three numbers correspond to the amount of red, the next three to green, and the last three to blue. In addition, the percentage of the three primary colors (red, green, and blue) was assigned to each image.

The colors were first calibrated to the color ruler in the picture. The red, green and blue values were matched for colors in the color ruler. The color code obtained from the picture of the color ruler was used to adjust other colors in the photo. The red on the color ruler was created with a RGB value of 255, 0, 0; green 0, 255, 0 and blue 0. 0. 225. After the colors were adjusted using the color ruler, color distribution was compared with the original scores. Different color smoothing algorithms were tested for impact on color differentiation.

The results are shown below. The number of unique colors was quite large because of the resolution of the photos (cf. total number of pixels). The computer could detect subtle shading and color changes. This allowed the computer analysis of the photos to be more discerning than a human analyst.

The ratio of number of colors to the total number of pixels provides some insight into the diversity of the color of the bruising and its relationship to color discernable to the human eye. The color variety ranged from 11,383 different colors in photo 1 (ratio of .706 total pixels) to .243 in photo 4 that had 41,060 different colors.

Photo 1 had 16,112 total pixels and the largest number of different colors (11.383) and produced the highest ratio of different colors to total pixels according to the computer, but viewed by the human eye appears to be similar to the other four photos. Photo 2 was one of the smallest photos. It had 11,770 total pixels and 4,847 different colors. Photos 3 through 5 had a

ratio of .243 to .245 unique colors to total pixels. Photo 4 was the largest photo with 168,744 pixels indicating the larger the bruise, the greater number of pixels needed.

Results

Pilot testing of sample photos of bruises with the color standard indicate the computer analysis of colors was more sensitive to color differences than the human eye. The program calculated the average value of red, blue and green in the total photo and then identified each unique color and determined the number of pixels of that color in the photo and calculated the percentage of that color in the picture. The program created a file containing all values for all colors.

A barrier to measuring the color of bruises, as previously mentioned, is the great variance in conditions of the patient. For example, medical condition, gender, health history, metabolic or clotting disorders, certain medications, and age can affect bleeding into tissue following blunt trauma. A more accurate but invasive method of aging contusions is histological examination of the damaged tissue. One strategy to narrow the aging of contusions would be daily documentation of the bruise.

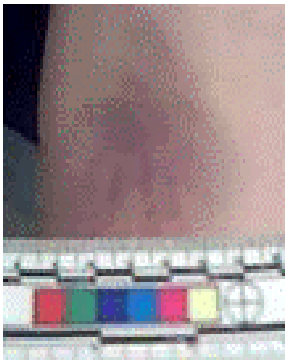
Two further analyses are planned. First, the non-bruised area surrounding the bruise will be used to determine the flesh tone of the victim. Flesh tone will be eliminated from the color of the bruised area to produce an accurate color distribution within the bruise. We anticipate that this procedure will enable us to differentiate bruising in all human pigmentation. Second, photos of the same bruise will be taken over a fixed interval of time and compared with the original color distribution. Changes will be recorded into a database. This analysis will focus on dating the bruise and identifying unique patterns to be matched with the mechanism of injury that

caused the bruise. Industry standard photo enhancement algoritms will be tested for further enhancement of the photos to see if the bruising is more defined for analysis.

Photo 1.

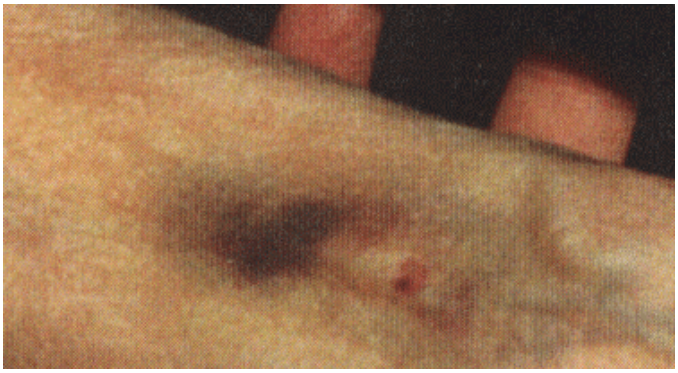
Averages:
Red = 187
Green = 195
Blue = 177
Total pixels = 16112
Number different colors = 11383
Ratio of Number of colors to
Total Number of pixels = .706

Photo 2



Averages:
Red = 152
Green = 136
Blue = 139
Total pixels = 11770
Number different colors = 4847
Ratio of Number of colors to Total Number of pixels = .412

Photo 3



Averages:
Red = 148
Green = 110
Blue = 78
Total pixels = 76125
Number different colors = 18669
Ratio of Number of colors to Total Number of pixels = .245

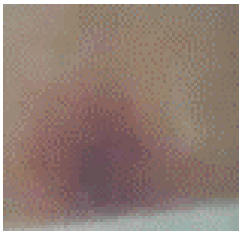
Photo 4

Averages:
Red = 188
Green = 139
Blue = 73
Total pixels = 168744
Number different colors = 41060
Ratio of Number of colors to Total Number of pixels = .243

Photo 5

Averages:
Red = 148
Green = 107
Blue = 70
Total pixels = 25252
Number different colors = 6210
Ratio of Number of colors to Total Number of pixels = .245

Photo 6



Averages:
Red = 141
Green = 120
Blue = 110
Total pixels = 5850
Number different colors = 3366
Ratio of Number of colors to Total Number of pixels = .575

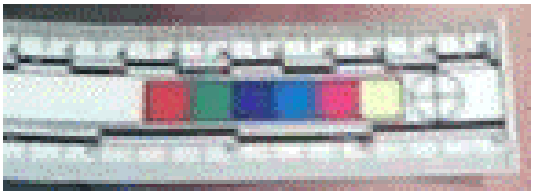


FIGURE 1. Color Scale and Rules

TABLE C.1. Color of Bruises by Time from Several Studies

Age of Bruise	Color of Bruise [5,12]	Color of Bruise [9]	Color of Bruise [7]	Color of Bruise [4]	Color of Bruise [8]	Color of Bruise [11]	Color of Bruise [10]
Immediate	Red	Violet	Red, black	Red/blue	Blue/red		Red, violet
< 1 day	Dusky purple/black		Red/dark red/black			Red, red/blue, purple	Purple/ Black
1-3 days	Purple/black		Purple, black	Blue/brown	Dark purple	Blue-black/ blue-brown, dk purple	Dark blue
3 days		Blue					
4-5 days	Green					Yellow/ Green-brown	Green
5-7 days		Green				Yellow	Green
1 week	Green		Green	Yellow/green	Green/Yellow		Green
8-10 days	Yellow	Yellow			Brown	Yellow-brown	Yellow
2 weeks			Yellow		Resolution		
13-18days	Resolution	Resolution	Yellowing				Resolution
>18 days			Resolution				

Page 96 of Appendix "C" was inserted by the author in the original source document and appears out of order in this PDF version.

Appendix D. Tables for Chapter 2 and 3

Table 2.1. Victim Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	19	6.7	6.8	6.8
	Female	261	91.9	93.2	100.0
	Total	280	98.6	100.0	
Missing	System	4	1.4		
Total		284	100.0		

Table 2.2. Victim ages by Decades

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60 - 69	55	19.4	21.9	21.9
	70 - 79	76	26.8	30.3	52.2
	80 - 89	86	30.3	34.3	86.5
	90 - 99	32	11.3	12.7	99.2
	100 and over	2	.7	.8	100.0
	Total	251	88.4	100.0	
Missing	System	33	11.6		
Total		284	100.0		

Table 2.3. Assault Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Domicile	180	63.4	72.0	72.0
	Institution	58	20.4	23.2	95.2
	Other	12	4.2	4.8	100.0
	Total	250	88.0	100.0	
Missing	System	34	12.0		
Total		284	100.0		

Table 2.4. Observable Markers of sexual abuse: direct or coded victim disclosure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	38	13.4	20.5	20.5
	Yes	147	51.8	79.5	100.0
	Total	185	65.1	100.0	
Missing	System	99	34.9		
Total		284	100.0		

Table 2.5. Observable Markers of sexual abuse: eye witness report

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	66	23.2	60.6	60.6
	Yes	43	15.1	39.4	100.0
	Total	109	38.4	100.0	
Missing	System	175	61.6		
Total		284	100.0		

Table 2.6. Observable Markers of sexual abuse: physical trauma

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	65	22.9	43.6	43.6
	Yes	84	29.6	56.4	100.0
	Total	149	52.5	100.0	
Missing	System	135	47.5		
Total		284	100.0		

Table 2.7. Observable Markers of sexual abuse present: sexually transmitted disease diagnosed in victim

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	83	29.2	93.3	93.3
	Yes	6	2.1	6.7	100.0
	Total	89	31.3	100.0	
Missing	System	195	68.7		
Total		284	100.0		

Table 2.8. Observable Markers of sexual abuse present: evidence of forcible restraint (for example, rope burns, finger prints)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	79	27.8	80.6	80.6
	Yes	19	6.7	19.4	100.0
	Total	98	34.5	100.0	
Missing	System	186	65.5		
Total		284	100.0		

Table 2.9. Observable Markers of sexual abuse present: evidence of severe physical abuse (for example, bite marks, inflicted burns)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	77	27.1	80.2	80.2
	Yes	19	6.7	19.8	100.0
	Total	96	33.8	100.0	
Missing	System	188	66.2		
Total		284	100.0		

Table 2.10. Behavioral Markers of sexual abuse and Mental Limitations

		Mental Limitations						
Behavioral Cues		No		Yes		Total		p
		Number	Percent	Number	Percent	Number	Percent	
Displayed shame or guarded response when asked about abuse signs	No	19	79.2	37	77.1	56	77.8	.547
	Yes	5	20.8	11	22.9	16	22.2	
	Total	24	100.0	48	100.0	72	100.0	
Displayed fear or strong ambivalent feelings towards suspected offender	No	15	44.1	32	56.1	47	77.8	.186
	Yes	19	55.9	25	43.9	44	22.2	
	Total	34	100.0	57	100.0	91	100.0	
Upset regarding receiving personal care	No	20	80.0	38	67.9	58	71.6	.198
	Yes	5	20.0	18	32.1	23	28.4	
	Total	25	100.0	56	100.0	81	100.0	
Inappropriate boundaries observed	No	18	85.7	41	74.5	58	77.6	.235
	Yes	3	14.3	14	25.5	17	22.4	
	Total	21	100.0	55	100.0	76	100.0	
Suspected offender overly intrusive regarding provision of personal care	No	19	90.5	42	76.4	61	80.3	.144
	Yes	2	9.5	13	23.6	15	19.7	
	Total	21	100.0	55	100.0	76	100.0	
Symptomatic statement made by suspected offender	No	15	68.2	40	67.8	55	67.9	.598
	Yes	7	31.8	19	32.2	26	32.1	
	Total	22	100.0	59	100.0	81	100.0	
Symptomatic behavior displayed by suspected offender	No	19	79.2	40	67.8	59	71.1	.223
	Yes	5	20.8	19	32.2	24	28.9	
	Total	24	100.0	59	100.0	83	100.0	

Table 2.16. How Offender controlled the victim

		Frequency	Percent	Valid Percent	Cumulative Percent
Mere pressure	No	14	4.9	10.2	10.2
	Yes	123	43.3	89.8	100.0
	Total	137	48.2	100.0	
Missing	System	147	51.8		
Total		284	100.0		
Gagged	No	46	16.2	97.9	97.9
	Yes	1	.4	2.1	100.0
	Total	47	16.5	100.0	
Missing	System	237	83.5		
Total		284	100.0		
Abducted	No	45	15.8	100.0	100.0
Missing	System	239	84.2		
Total		284	100.0		
Weapon	No	45	15.8	90.0	90.0
	Yes	5	1.8	10.0	100.0
	Total	50	17.6	100.0	
Missing	System	234	82.4		
Total		284	100.0		

Table 2.17. Victims with visible injuries

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	10.6	22.7	22.7
	Yes	102	35.9	77.3	100.0
	Total	132	46.5	100.0	
Missing	System	152	53.5		
Total		284	100.0		

Table 2.18. Gender of the offender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	209	73.6	90.9	90.9
	Female	21	7.4	9.1	100.0
	Total	230	81.0	100.0	
Missing	System	54	19.0		
Total		284	100.0		

Table 2.19. Offender age by decade with over 70 as a group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 20	7	2.5	4.8	4.8
	20 - 29	5	1.8	3.4	8.3
	30 - 39	39	13.7	26.9	35.2
	40 - 49	29	10.2	20.0	55.2
	50 - 59	14	4.9	9.7	64.8
	60 - 69	15	5.3	10.3	75.2
	70 and older	36	12.7	24.8	100.0
	Total	145	51.1	100.0	
Missing	System	139	48.9		
Total		284	100.0		

Table 2.20. Offender relationship to victim

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stranger/Victim known to offender	74	26.1	29.2	29.2
	Unrelated care provider	31	10.9	12.3	41.5
	Incestuous	66	23.2	26.1	67.6
	Marital/partner	44	15.5	17.4	85.0
	Resident to resident	17	6.0	6.7	91.7
	Other	21	7.4	8.3	100.0
	Total	253	89.1	100.0	
Missing	System	31	10.9		
Total		284	100.0		

Table 2.21. Offender relationship to victim vs Gender of the offender

		Gender of the offender		Total
		Male	Female	
Offender relationship to victim	Stranger/Victim known to offender	56	1	57
	Unrelated care provider	15	6	21
	Incestuous	60	5	65
	Marital/partner	40	2	42
	Resident to resident	15	0	15
	Other	9	6	15
Total		195	20	215

Table 2.22. Case reported by vs Case reported to Adult Protective Services

		Case reported to Protective Services		
		No	Yes	Total
Allegations reported by	Self	68	11	79
	Family member	10	19	29
	Medical/nurse	17	32	49
	Social service	2	18	20
	Mental health	0	9	9
	Other	8	44	52
Total		105	133	238

Pearson Chi-Square F = 93.231, df = 5, p = .000

Table 2.23. Victim age group *vs Case reported to Adult Protective Services

		Case reported to Protective Services		
		No	Yes	Total
Victim age group	60 - 69	27	28	55
	70 - 79	31	45	76
	80 - 89	36	50	86
	90 - 99	21	11	32
	100 and over	0	2	2
Total		115	136	251

Pearson Chi-Square F = 8.302, df = 4, p = .081

Table 2.24. Offender relationship to victim vs Case reported to Protective Services

	Case reported to Protective Services				Total	
Offender relationship to victim	No		Yes			
	Number	Percent	Number	Percent	Number	Percent
Stranger/Victim known to offender	63	62.4	11	7.2	74	29.2
Unrelated care provider	17	16.8	14	9.2	31	12.3
Incestuous	4	4.0	62	40.8	66	26.1
Marital/partner	2	2.0	42	27.6	44	17.4
Resident to resident	9	8.9	8	5.3	17	6.7
Other	6	5.9	15	9.9	21	8.3
Total	101	100.0	152	100.0	253	100.0

Pearson Chi-Square, F = 122.789, df = 5, p = .000

Table 2.25. Assault Location vs Case reported to ADULT Protective Services

		Case reported to Protective Services		
		No	Yes	Total
Assault Location	Domicile	56	124	180
	Institution	41	17	58
	Other	10	2	12
Total		107	143	250

Pearson Chi-Square, F = 36.527, df = 2, p = .000

Table 2.26. Was an exam performed? vs Case reported to Adult Protective Services

		Case reported to Protective Services		
		No	Yes	Total
Was an exam performed?	No	33	123	156
	Yes	90	27	117
Total		123	150	273

Pearson Chi-Square F = 83.997, df = 1, p = .000

Table 2.27. Injuries vs Case reported to Protective Services

		Case reported to Protective Services				Total		Pearsons Chi Square p
		No		Yes				
		Number	Percent	Number	Percent	Number	Percent	
Visible injury	No	20	19.8	10	32.2	30	22.7	.116
	Yes	81	80.2	21	67.8	102	77.3	
Total		101	100.0	31	100.0	132	100.0	
Genital injury	No	33	37.9	8	61.5	41	41.0	.096
	Yes	54	62.1	5	38.5	59	59.0	
Total		87	100.0	13	100.0	100	100.0	
Anal injury	No	72	82.7	10	76.9	82	82.0	.426
	Yes	15	17.3	3	23.1	18	18.0	
Total		87	100.0	13	100.0	100	100.0	
Oral and/or throat injury	No	57	82.6	13	92.8	70	84.3	.306
	Yes	12	17.4	1	7.2	13	15.7	
Total		69	100.0	14	100.0	83	100.0	

Table 2.28. Criminal Justice System and Adult Protective Services

		Case Reported to Adult Protective Services				Total		
		No		Yes				
		Number	Percent	Number	Percent	Number	Percent	p
Suspect was identified	No	22	28.2	24	16.2	46	20.4	.027
	Yes	56	71.8	124	83.8	180	79.6	
	Total	78	100.0	148	100.0	226	100.0	
Suspect was arrested	No	32	42.7	115	85.2	147	70.0	.000
	Yes	43	57.3	20	14.8	63	30.0	
	Total	75	100.0	135	100.0	210	100.0	
Referred to the DA?	No	25	32.1	72	52.2	97	44.9	.010
	Yes	42	53.8	57	41.3	99	45.8	
	Unknown	11	14.1	9	6.5	20	9.3	
	Total	78	100.0	138	100.0	216	100.0	
Police notified	No	0	0.0	17	54.8	17	29.3	.000
	Yes	27	100.0	14	45.2	41	70.7	
	Total	27	100.0	31	100.0	58	100.0	
Report filed	No	0	0.0	21	0.0	21	38.9	.000
	Yes	27	100.0	6	0.0	33	61.1	
	Total	27	0.0	27	0.0	54	100.0	
Offender convicted	No	0	0.0	8	66.7	8	32.0	.000
	Yes	13	100.0	4	33.3	17	68.0	
	Total	13	100.0	12	100.0	25	100.0	
Plea Bargain	No	0	0.0	8	80.0	8	42.1	.001
	Yes	9	100.0	2	20.0	11	57.9	
	Total	9	100.0	10	100.0	19	100.0	

Table 2.28. Allegations reported by vs Mental Limitation

	Mental Limitations				Total	
	No		Yes			
Allegations reported by	Number	Percent	Number	Percent	Number	Percent
Self	48	62.3	15	12.8	63	32.5
Family member	6	7.8	19	16.2	25	12.9
Medical/nurse	6	7.8	38	32.5	44	22.7
Social service	3	3.9	12	10.3	15	7.7
Mental health	5	6.5	3	2.6	8	4.1
Other	9	11.7	30	25.6	39	20.1
Total	77	100.0	117	100.0	194	100.0

Pearson Chi-Square F = 58.777, df = 5, p = .000

Table 2.29. Physical limitations present * Mental Limitations

	Mental Limitations				Total	
	No		Yes			
Physical limitations present	Number	Percent	Number	Percent	Number	Percent
No	43	65.1	28	24.1	71	39.0
Yes	23	34.9	88	75.9	111	61.0
Total	66	100.0	116	100.0	182	100.0

Pearson Chi-Square F = 29.740, df = 1, p = .000

Table 2.30. Criminal Justice System and Elders with Mental Limitations

		Mental Limitations				Total		
		No		Yes				
		Number	Percent	Number	Percent	Number	Percent	p
Suspect was identified	No	9	12.3	28	25.0	37	20.0	.026
	Yes	64	87.7	84	75.0	148	80.0	
	Total	73	100.0	112	100.0	185	100.0	
Suspect was arrested	No	40	55.6	87	87.0	127	73.8	.000
	Yes	32	44.4	13	13.0	45	26.2	
	Total	72	100.0	100	100.0	172	100.0	
Referred to the DA?	No	31	40.8	53	51.0	84	46.7	.284
	Yes	39	51.3	41	39.4	80	44.4	
	Unknown	6	7.9	10	9.6	16	8.9	
	Total	76	100.0	104	100.0	180	100.0	
Police notified	No	2	11.8	12	42.9	14	31.1	.029
	Yes	15	88.2	16	57.1	31	68.9	
	Total	17	100.0	28	100.0	45	100.0	
Report filed	No	4	23.5	14	56.0	18	42.9	.037
	Yes	13	76.5	11	44.0	24	57.2	
	Total	17	100.0	25	100.0	42	100.0	
Offender convicted	No	0	0.0	5	55.6	5	23.8	.006
	Yes	12	0.0	4	44.4	16	76.2	
	Total	12	100.0	9	100.0	21	100.0	
Plea Bargain	No	0	0.0	5	71.4	5	33.3	.007
	Yes	8	0.0	2	28.6	10	66.7	
Total		4	100.0	6	100.0	10	100.0	

Table 2.31. Criminal Justice System and Offender Relationship with Victim

		Offender relationship to victim														
		Stranger/ Victim known to offender		Unrelated care provider		Incestuous		Marital/ Partner		Resident to resident		Other		Total		Chi Square
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Suspect identified	No	14	25.9	9	34.6	10	50.0	3	7.1	2	18.2	4	23.5	42	19.7	
	Yes	40	74.1	17	65.4	53	50.0	39	92.8	9	81.8	13	76.5	171	80.3	.078
	Total	54	100.0	26	100.0	63	100.0	42	100.0	11	100.0	17	100.0	213	100.0	
Suspect arrested	No	20	37.7	17	77.3	54	50.0	30	83.3	9	90.0	11	73.3	141	71.6	
	Yes	33	62.3	5	22.7	7	50.0	6	16.7	1	10.0	4	26.7	56	28.4	.000
	Total	53	100.0	22	100.0	61	100.0	36	100.0	10	100.0	15	100.0	197	100.0	
Referred to DA?	No	14	25.9	11	25.9	38	65.5	19	47.5	5	41.7	6	37.5	93	45.6	
	Yes	32	59.2	9	59.2	15	25.9	20	50.0	6	50.0	10	62.5	92	45.1	.005
	Unknown	8	14.8	4	14.8	5	8.6	1	2.5	1	8.3	0	0.0	19	9.3	
	Total	54	100.0	24	100.0	58	100.0	40	100.0	12	100.0	16	100.0	204	100.0	
Police notified	No	0	0.0	1	5.2	8	53.3	6	75.0	0	0.0	2	50.0	17	32.1	
	Yes	19	100.0	3	94.8	7	46.7	2	25.0	3	100.0	2	50.0	36	67.9	.001
	Total	19	100.0	4	100.0	15	100.0	8	100.0	3	100.0	4	100.0	53	100.0	
Report filed	No	1	6.3	1	25.0	9	69.2	8	80.0	0	0.0	2	50.0	21	42.0	
	Yes	16	93.7	3	75.0	4	30.8	2	20.0	2	100.0	2	50.0	29	58.0	.001
	Total	17	100.0	4	100.0	13	100.0	10	100.0	2	100.0	4	100.0	50	100.0	
Charges	No	0	0.0	1	50.0	4	66.7	2	100.0	0	n/a	0	0.0	7	35.0	
	Yes	9	100.0	1	50.0	2	33.3	0	0.0	0	n/a	1	100.0	13	65.0	.018
	Total	9	100.0	2	100.0	6	100.0	2	100.0	0	n/a	1	100.0	20	100.0	
Indicted	No	2	28.6	1	25.0	3	60.0	2	100.0	0	n/a	0	0.0	8	42.1	
	Yes	5	71.4	3	75.0	2	40.0	0	0.0	0	n/a	1	100.0	11	57.9	.273
	Total	7	100.0	4	100.0	5	100.0	2	100.0	0	n/a	1	100.0	19	100.0	
Convicted	No	1	10.0	1	20.0	3	50.0	2	100.0	0	n/a	1	50.0	8	32.0	
	Yes	9	90.0	4	80.0	3	50.0	0	0.0	0	n/a	1	50.0	17	68.0	.092
	Total	10	100.0	5	100.0	6	100.0	2	100.0	0	n/a	2	100.0	25	100.0	
Plea	No	1	16.7	1	25.0	3	50.0	2	100.0	0	n/a	1	100.0	8	42.1	
	Yes	5	83.3	3	75.0	3	50.0	0	0.0	0	n/a	0	0.0	11	57.9	.174
	Total	6	100.0	4	100.0	6	100.0	2	100.0	0	n/a	1	100.0	19	100.0	

Chapter 3 Tables: Sex Offenders of the Elderly and Classification by Motive

Table 3.1: MTC:R3 Motivational Classification of Rapists of the Elderly

Type	Number	Percentage
Opportunistic	10	13%
Pervasive Anger	17	22%
Sexualization	31	40%
Sadistic	3	4%
Vindictive	16	21%

Table 3.2. Motivational Clusters vs. Expressive Aggression

Motivational Clusters	Expressive aggression		Total
	Low	High	
Opportunistic - types 1 & 2	5	6	11
Pervasive anger - type 3	1	14	15
Sadistic - types 4 & 5	1	2	3
Non-sadistic - types 6 & 7	26	5	31
Vindictive - types 8 & 9	3	14	17
Total	36	41	77

Pearson's Chi Square: F = 32.848, df = 4, p = .000

Table 3.3. Motivational Clusters vs Unsocialized Behavior - Juvenile

Motivational Clusters	Unsocialized Behavior - Juvenile		Total
	Absent	Present	
Opportunistic - types 1 & 2	1	9	10
Pervasive anger - type 3	1	14	15
Sadistic - types 4 & 5	2	1	3
Non-sadistic- types 6 & 7	9	9	18
Vindictive - types 8 & 9	3	10	13
Total	16	43	59

Pearsons Chi Square: F = 11.907, df = 4, p = .018

Table 3.4. Motivational Clusters vs. Unsocialized Behavior - Adult

Motivational Clusters	Unsocialized Behavior - Adult		Total
	Absent	Present	
Opportunistic - types 1 & 2	2	6	8
Pervasive anger - type 3	0	14	14
Sadistic - types 4 & 5	2	1	3
Non-sadistic - types 6 & 7	10	11	21
Vindictive - types 8 & 9	1	13	14
Total	15	45	60

Pearson's Chi Square: F = 15.556, df = 4, p = .004

Table 3.5. Motivational Clusters vs. Mood State - Anger

Motivational Clusters	Mood state - Anger		Total
	Absent	Present	
Opportunistic - types 1 & 2	6	5	11
Pervasive anger - type 3	3	12	15
Sadistic - types 4 & 5	1	2	3
Non-sadistic - types 6 & 7	27	4	31
Vindictive - types 8 & 9	8	9	17
Total	45	32	77

Pearson's Chi Square: F = 21.362, df = 4, p = .000

Table 3.6. Motivational Clusters vs. Severity of Crimes

Motivational Clusters	Severity of crimes					Total
	No penetration	Rape	Aggregated rape	Rapes + 1 murder	Multiple rapes & murders	
Opportunistic - types 1 & 2	1	7	3	0	0	11
Pervasive anger - type 3	1	3	3	3	5	15
Sadistic types - 4 & 5	0	1	2	0	0	3
Non-sadistic - types 6 & 7	6	23	2	0	0	31
Vindictive - types 8 & 9	0	3	7	6	1	17
Total	8	37	17	9	6	77

Pearson's Chi Square: F = 55.018, df = 16, p = .000

Table 3.7. Coefficients(a,b)

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Offender's age	.035	.027	.315	1.315	.198
Expressive aggression	.650	.626	.315	1.038	.307
Unsocialized behavior - juvenile	-1.163	.873	-.585	-1.333	.192
Unsocialized behavior - adult	.943	.915	.469	1.030	.311
Social competence	.321	.499	.140	.644	.524
Mood state - anger	-.954	.499	-.415	-1.912	.065
Offense planning	2.088	.731	1.152	2.857	.008
Offender used weapon	-1.194	.636	-.443	-1.878	.070
Victim's age	-.008	.018	-.178	-.468	.643
Number of victims	-.062	.475	-.030	-.130	.897
Severity of crimes	.209	.267	.181	.784	.439

a Dependent Variable: Motivational Classification of subtypes
b Linear Regression through the Origin

Table 3.8. Motivational Clusters vs. Offense planning

Motivational Clusters	Offense planning		Total
	Absent	Present	
Opportunistic types 1 & 2	1	7	8
Pervasively angry type 3	2	11	13
Sadistic types 4 & 5	0	3	3
Non-sadistic types 6 & 7	1	27	28
Vindictive types 8 & 9	1	15	16
Total	5	63	68

Pearson's Chi Square: F = 2.397, df = 4, p = .663

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