Aging and Sexual Offending: An Examination of Older Sexual Offenders

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ABSTRACT

This thesis examined the effect of age on sexually offensive behaviour. Research has noted both an increase in the average age of incarcerated offenders and that a higher percentage of older offenders are incarcerated for sexual offences than are younger offenders. Older sexual offenders were initially compared with younger offenders on offender and offence characteristics and these analyses revealed that older sexual offenders had a higher incidence of male victims, a younger victim age, and more intra-familial victims. Phallometric assessments of all sexual offenders were then examined to see whether sexual deviance may account for the differences found between older and younger sexual offenders in victim age and gender. These analyses revealed that the oldest and youngest offenders were more deviant than middle-aged sexual offenders and that the sexual interests of older offenders were more commonly for females. Finally, all subjects were classified as either Historical (offending had ceased, without judicial intervention, at least 7 years prior to incarceration), First-time (incarcerated for a recent sexual offence and no history of sexual offending), or Recidivist sexual offenders (currently incarcerated for a sexual offence and have at least one prior sentencing date for any sexual offence): age accounted for 12% of the variance in categorisation. Fifty-five percent of the sexual offenders age 60 years or more were found to have committed and ceased their offending at least seven years prior to incarceration (i.e., were Historical offenders). The percentage of Recidivist offenders remained relatively consistent across age groups at about 20%. No difference was found in phallometrically assessed sexual deviance between the groups of older offenders.

ACKNOWLEDGEMENTS

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CHAPTER 1: INTRODUCTION

Sexual assault is a serious social problem. No other crime, perhaps even murder, evokes such an emotional societal response. There are numerous websites and groups on social networking websites dedicated to the vilification of sexual offenders. Despite clear evidence showing an overall drop in crime rates (Statistics Canada, 2005) and a reduction in recidivism with treatment (e.g., Hanson et al, 2002; Löesel & Schmucker, 2005), including sexual offences, the general public has the perception that sexual crime is increasing in frequency and that the vast majority of, if not all, sexual offenders will re-offend (Pfeiffer & Windzio, 2006).

Elderly people are the fastest growing segment of the population in this and many other countries (Feldman, 1997; MacLean, 1989). The average age of the population of Canada has increased significantly over the last half-century; the percentage of those who are aged 65 years or more has nearly doubled in the last 50 years, from 7.7% in 1956 to 13.7% in 2006, with projections of 19% by the year 2021 (Statistics Canada, 2008). If Statistics Canada's estimations are correct, then by the year 2021 there would be nearly seven million people in Canada over the age of 65 years. The aging population presents many new challenges for psychology and for healthcare in general.

Paralleling this demographic change, there has been an increase in the number of older men incarcerated for crimes and some have referred to this phenomenon as the *"greying of prisons"* (Rayel, 2000; Rosefield, 1993; Uzoaba, 1998). This aging prison population places many demands on already strained judicial and correctional resources. Researchers have recently become interested in older offenders as this trend counters what was accepted about the effect of age on crime; that is, that crime is primarily

committed by younger men. Consequently, factors that contribute to the onset, maintenance, and desistance of criminal behaviour need further examination (Smallbone, W. L. Marshall, & Wortley, 2008). This thesis will examine the phenomenon of an increased number of older people in prison for sexual crimes. The existing literature on age and offending, and age and sexual offenders, will be reported and then theories of sexual offending and theories of aging will be examined for applicability.

AGE AND OFFENDING

Despite the growing relevance, there is still a lack of research on elderly offenders. What little research that does exist on elderly offenders is primarily directed at health issues (Booth, 1989) and mental disorders (Wormith, 1995). Although these are important issues, research on elderly offenders is also needed to provide insight into the unique needs of elderly offenders in areas such as treatment and risk management.

Age and Sexual Offending

Older sexual offenders are a significant proportion of the growing elderly offender population. It has been reported that in English prisons at least half of the males sentenced to prison at the age of 59 years or older are sexual offenders (Fazel, Hope, O'Donnell, & Jacoby, 2002). In a descriptive study of older offenders in the Canadian Correctional system, Uzoaba (1998) reported that with age, the distribution of the types of offences that men go to prison for changes: as age increases the total number of offenders incarcerated decreases, yet the percentage of these offenders incarcerated for sexual offences increases. In Uzoaba's report, of the 13,976 offenders in Corrections Canada in July, 1996, 1542 (11%) were over the age of fifty years. Sexual offenders made up 587 (38%) of the 1542 incarcerated male offenders aged 50 or more years within the

Correctional Service of Canada's prisons. This included: 216 (29%) of the 731

incarcerated offenders between the ages of 50 and 54; 159 (37%) of the 419 offenders

between the ages of 55 and 59; 109 (51%) of the 214 incarcerated offenders between the

ages of 60 and 64; 60 (54%) of the 111 incarcerated offenders between the ages of 65 and

69; and 43 (64%) of the 67 incarcerated offenders who were over the age of 70 years.

Rates of recidivism in sexual offenders have been reported to increase with

greater time at risk (Hanson, Steffy, & Gauthier, 1993), yet, recidivism rates have also

been shown to decline linearly as sexual offenders get older (Barbaree, Blanchard, &

Langton, 2003; Hanson 2002). Using a sample of 4,673 sexual offenders from 10 follow-

up studies, Hanson (2002) reports a statistically significant correlation ($r = -.13$) between

sexual recidivism and age, such that as age increases rates of sexual recidivism decrease.

By age 60 years at release sexual offenders were reported to be at very low risk, <1% for

incest and rapist offenders, and ~5% for extra-familial child molesters. Hanson

hypothesizes that of the factors that have been linked to sexual offending the three factors

that are the most relevant to the finding of a reduction in risk for recidivism with age are:

self-control, opportunity, and deviant sexual interests.

Self-control

Hanson (2002) cites research showing that self-control displays a positive

correlation with age, such that as people age their self-control increases, and he

hypothesizes that this may account for the linear reduction in recidivism with age found

in his study. Hanson is suggesting that, even if a released offender has opportunity and a

deviant sexual interest, as he ages his self-control will be great enough to prevent sexual

recidivism. There are at least two questions that arise from Hanson's hypothesis about the

relationship between increased age and increased self-control: are there sexual offenders who offend for the first-time later in life, and why do some offenders persist in offending despite the research showing an increase in self-control. In fact, given Uzoaba's (1998) findings reported earlier in this thesis of an increased percentage of sexual offenders with increased age, it might be that increases in self-control accounts for reductions in non-sexual re-offending, but may have a more limited effect when it comes to sexual offending.

<center>*Opportunity*</center>

Opportunity for sexual offending has long been considered an important precursor to the commission of a sexual offence. For example, Finkelhor's (1984) *Precondition Theory* of sexual offending, as well as relapse prevention based approaches to treatment (Pithers, 1990), both place emphasis on the importance of an offender's opportunity for sexual offending. Hanson (2002) hypothesizes that opportunity for sexual offending should decrease with age for rapists because people tend to associate with people their own age and most rape victims are young women who are known to the offender. Consequently, as men age, their opportunity to offend against this type of victim will decrease. Hanson opines that although sexual offenders against children gain increased opportunity as they reach middle adulthood, because this is the stage of life when they are most likely to have their own children or have friends who have children, in late adulthood their opportunities for sexual offending against children will decrease as their children, and the children of friends, grow up. However, older sexual offenders may also have access to their own grandchildren, or the grandchildren of friends, later in life and

consequently we might expect an increase in the percentage of offences against children with increased sexual offender age.

Deviant sexual interests

Deviant sexual interests are described by Hanson (2002) as providing the motivation for sexual offending. However, Hanson notes that there may be many reasons why a sexual offender may commit a sexual offence that are not necessarily related to deviant sexual interests, such as peer pressure, impulsivity, and opportunity. Research has indicated that deviant sexual interests are indeed a risk factor for sexual recidivism (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004) and this is reflected in risk assessment instruments (STABLE-2007, Hanson, Harris, Scott, & Helmus, 2007). Hanson (2002) cites research on normal populations which has shown a reduction in male sexual drive with age, to explain the observed reductions in recidivism with increased offender age. Other factors that have been associated with reduced sexual drive in men, and are particularly salient to an examination of older sexual offenders, are disease and age-related reductions in testosterone. Consequently, Hanson hypothesizes that the reduction in risk for sexual recidivism with age found in his study may be in part due to reductions in sex drive.

In a study examining Hanson's hypothesis, that the reduction in risk for sexual recidivism with age is related to reductions in sexual drive, Barbaree, Blanchard, and Langton (2003) report there to be a linear decrease in maximum erectile response with increased age which essentially matches the linear decrease in recidivism found in both their study and Hanson's (2002). It is important to note that Barbaree et al.'s study is not longitudinal and therefore there may be age-cohort effects. However, what is not reported

by Barbaree and his colleagues, and may contribute to a better understanding of risk for

sexual offending and sexual recidivism in old age, is whether any of these maximum

responses reflect deviant sexual interests. Secondly, although deviant sexual interests may

provide insight into why sexual offenders recidivate at a lower rate as their age increases,

it fails to explain sexual offenders who commit their first sexual offence later in life. This

aspect of Hanson's theory fails to account for older sexual offenders who offend for the

first-time later in life because if they had a deviant sexual interest throughout their life,

why would it only appear in later-life when Hanson reports that opportunity decreases and

self-control increases.

<div style="text-align:center">PREVALENCE OF SEXUAL OFFENDING</div>

Sexual offending is a crime with serious consequences for both victims and

society and, if reported, for the offender as well. Although estimates differ widely, it has

been noted that in Canada more than one-third of males and more than one-half of

females report having experienced sexual abuse as a child, most before the age of 12

years (Bagley & King, 1990). Many victims, if not all, suffer negative consequences

including behavioural, cognitive, and emotional effects (Rind, Tromovich, & Bauserman,

1988). Estimates report that 50% or more of women will experience some form of sexual

assault during their lifetime (Statistics Canada, 1993).

Sexual assault against women (typically referred to as "rape") is also,

unfortunately, common with estimates as high as 6 to 10 times the official reported

statistics (Koss, 1992). Although estimates of the rate of incident-to-reports of sexual

assault against adults has increased from 6% (Statistics Canada, 1993) to 8% (Statistics

Canada, 2005) it remains one of the lowest incident-to-report crimes. Sexual offending

typically involves a non-physically violent crime, 98% of the over 23,000 sexual assaults

reported to police in the year 2005 did not involve any use of a weapon, threats to use a

weapon, cause bodily harm, or wound, maim, or disfigure or endanger the life of the

victim (Statistics Canada, 2005). The effects of sexual offending are none-the-less

potentially devastating with 85% of victims reporting negative emotional, cognitive,

behavioural, and physiological effects (Roberts, 1994). Rape victims, compared to non-

victims, are 8.7 times more likely to commit suicide (The Canadian Panel on Violence

Against Women, 1993).

Police reports indicate that sexual assault in Canada peaked in the early 1990s,

with annual rates of about 120 persons out of every 100,000 becoming a victim of sexual

assault. Current rates of police reported sexual assault are about 72 per 100,000 persons

annually which represents a 25% decrease over 1995 rates and this rate is consistent with

rates reported prior to the early 1990s (Statistics Canada, 2005). Why the rate of reported

sexual assault increased in the early 1990s is unknown. Possibly, the changes to Canada's

laws and in societal attitudes in the mid to late 1980s made it safer for victims of sexual

offending to come forward with allegations. Given that Canada does not have a statute of

limitations on the reporting of sexual crimes, it is possible that some of the offenders

incarcerated in the early 1990s committed their crimes many years prior to incarceration

causing an artificial increase and this would also account for the apparent decrease in later

rates of incarceration to pre-1990 levels.

DIAGNOSES

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM) of the

American Psychiatric Association (APA), currently in its Fourth Edition, has little to

contribute to the issue of sexual assault. In the section on sexual disorders under the

subsection titled *"paraphilias",* some of the behaviours relevant to sexual offending have

appeared, such as paedophilia, sexual sadism, exhibitionism, frotteurism, voyeurism, and

a catchall category labelled "paraphilias not otherwise specified". However, there has

been criticism of these diagnoses due, in part, to their poor inter-rater reliability (e.g.,

Levenson, 2004; W. L. Marshall, 1997, 2006; O'Donohue, Regev & Hagstrom, 2000) and

in the case of paedophilia, due to its lack of relationship to recidivism (Wilson, Abracen,

Picheca, Malcolm, & Prinzo, 2003).

Because aging processes are assumed to be a normal part of the lifespan there is

no mention of any age-related issues in DSM other than in the case of Dementia (see

sections 290.0 to 290.43). Dementia may indeed be related to sexual offending as

anecdotally there have been suggestions that sexual assault may occur more frequently in

nursing homes for the elderly (Heinik, Kimhi, & Hes, 1994). In fact, Dementia has been

shown to be more prevalent in sexual offenders (Schwartz, 1995). However, there has

been a reluctance to examine the issue of sexual offending in care homes due, at least in

part, to the possible impact on patients considering entering a care home and,

consequently, the finances of care homes. There have also been criticisms of the DSM

diagnosis of Dementia (e.g., Jorm & Henderson, 1985; Sunderland, Jeste, Baiyewu,

Sirovatka, & Regier, 2007). It seems, then, that DSM will provide little insight into the

issue of aging and sexual offending.

Whenever a relatively new-to-examination population is being reported on, it is

important to test for differences between what is currently known about similar

populations and the new population of interest. There exists a robust body of literature on

sexual offenders from a variety of different perspectives and methods (Laws & W. L.

Marshall, 2003; W. L. Marshall, & Laws, 2003). Consequently, there also exists theories

of sexual offending that have been subjected to empirical testing and some of these

theories appear to fit better than others. An examination of these theories may give

guidance to discovering any unique characteristics of older sexual offenders. A

comprehensive theory of sexual offending will need to be able to account for both the

observed reductions in recidivism with increased sexual offender age (Barbaree,

Blanchard, & Langton, 2003; Hanson, 2002), and for late onset sexual offending, perhaps

the largest challenge for a theory.

<center>THEORIES OF SEXUAL OFFENDING</center>

The primary objective of a good theory of sexual offending is the explanation of

aetiology, onset, and maintenance of this disorder. Ideally, such a global theory would

integrate all relevant phenomena into a rich, coherent, structure. Unfortunately such a

theory has yet to be put forward and appears to be some way off. There are many issues

which limit the possibility of such a theory. First, no longitudinal developmental

prospective studies of sexual offending exist and therefore the factors currently known to

be related to sexual offending are limited and are typically related to re-offending rather

than the aetiology and onset of sexually offensive behaviour. These known factors, as

evidenced by risk for sexual recidivism measures, typically have moderate, at best,

predictive value, suggesting that there are many other factors that can improve the

predictive value of risk instruments. The predictive ability of risk for sexual recidivism

assessment instruments is usually examined by the Receiver Operator Characteristic's

(ROC) Area Under the Curve (AUC) analysis, which gives an estimate of the accuracy of

prediction. Perfect prediction using AUC calculations would result in a value of 1.00, .50 represents chance, and .00 means no predictive ability. Risk for sexual recidivism instruments typically display AUCs in the .70-.75 range (see for example Hanson & Thornton, 2000).

Secondly, research has consistently shown sexual offenders to be a heterogeneous group (W. L. Marshall, Anderson, & Fernandez, 1999; Saleh & Guidry, 2003) and consequently a comprehensive theory must account for a diverse range of biology, behaviours, cognitions, and societal influence; no small challenge. Indeed, some of the existing theories on sexual offending are targeted at subgroups of sexual offenders, such as child molesters (Finkelhor, 1984) or rapists (Malamuth, Check, & Briere, 1986), or even more specific subgroups such as incest offenders (Smallbone, 2006).

There have been a number of single perspective theories on the causes of sexual offending from a variety of perspectives, such as Biological, Cognitive, Behavioural, Social Learning, Personality, and Evolutionary (see Stinson, Sales, & Becker, 2008, for a review of these theories from a sexual deviance perspective). Due to inherent limitations in single perspective theories, more complex theories of sexual offending have appeared which integrate some or all of the earlier single perspective theories (i.e., Biological, Cognitive, Behavioural, Social Learning, Personality, and Evolutionary). All of these theories on the causes of sexual offending have led to treatment approaches and techniques (see Laws & W. L. Marshall, 2003; W. L. Marshall & Laws, 2003, for a history), some of which are used in current treatment programs (McGrath, Cumming, & Burchard, 2002).

Some of the available theories on sexual offending are directly applicable to Hanson's (2002) hypotheses on the observed effect of aging on risk for recidivism; that is, increased self-control, reduced opportunity for sexual offending, and decreased overall sexual arousal as males age will decrease risk for sexual re-offending. This section of this thesis will examine two of the extant theories of sexual offending in the context of Hanson's hypotheses on the relationship between reductions in recidivism with increased age and for factors which explain later life onset of sexual offending.

Finkelhor's Precondition Model

Finkelhor's *Precondition Model* (1984) of sexual offending - commonly called Finkelhor's *Four Stages of Offending* – incorporates both internal and external, variables and conditions and was developed to account for child sexual offending. Given Hanson's (2002) hypothesis that older sexual offenders will primarily target children, Finkelhor's theory may provide insight into the offending of both recidivists and late onset older sexual offenders.

This theory hypothesizes that in order for an offence to occur, four preconditions must be satisfied. First, the offender must have the drive or motivation to engage in sexually offensive behaviour. Secondly, the offender must overcome any internal inhibitions, such as learned moral values or internalized societal norms. Next, the offender must have opportunity to offend, this includes both access to a victim but also circumstances under which the offender is likely to be successful. Finally, the sexual offender must overcome any resistance by the victim(s).

Finkelhor's theory has been criticized for many of its limitations, such as the lack of aetiology of motivation (e.g., deviant desire for children), that the temporal sequence

of the preconditions may not apply in all sexual offenders, and the lack of integration of other possible factors (e.g., cognitive, biological, social) (Howells, 1994; Ward & Hudson, 2001). However, given Hanson's hypothesis that older offenders would be less likely to offend against adults, the *Precondition Model* may provide a guide into why sexual offending may occur in later life in terms of motivation for offending, opportunity, and overcoming victim resistance.

Some biological theories, such as genetic (Rhee & Waldman, 2002) and sex chromosome abnormalities (Harrison, Clayton-Smith, & Bailey, 2001), and mental retardation (Murray et al., 2001), may provide insight into older recidivist sexual offenders but seems unlikely to provide an explanation for the onset of (i.e., motivation for) sexually offensive behaviour in later life. However, hormones, in particular high levels of free circulating testosterone, have been implicated in sexual offending behaviour (e.g., Bradford, 1983; Hucker & Bain, 1990). Testosterone peaks in early adulthood and decreases throughout the lifespan thereafter (Davidson & Myers, 1988; Vermeulen, 1991), and Hanson reports that this may account for decreases in recidivism with increased offender age. It seems unlikely, though, that higher levels of testosterone would also apply to the emergence of sexually offensive behaviour in later life. Perhaps men who offend sexually for the first-time in later life have similar testosterone levels to younger sexual offenders, yet this is contraindicated by Barbaree, Blanchard, and Langton's (2003) finding of an overall reduction in sexual arousal with increased age in sexual offenders and, therefore, high levels of free circulating testosterone seems unlikely to be the primary motivation for sexual offending in later life.

Structural abnormalities which result in disinhibition, such as temporal (e.g., Langevin, Bain, et al., 1988) and frontal (Cummings, 1999) lobe damage, and low or abnormal cerebral blood flow (Raine & Buchsbaum, 1996), are unlikely to account for the observed reductions in recidivism with increased sexual offender age but may provide insight into the emergence of later-life sexual offending. It is possible that age-related pathology or injury may affect these areas of the brain resulting in disinhibition to sexual offending. While not directly providing motivation for offending, disinhibition may remove constraints to engaging in sexually offensive behaviour. If this is found to be the case, then this would mean that older men who commit sexual offences for the first-time later in life had the potential for sexual offending (e.g., a deviant sexual interest) but were able to control their desires until some brain change resulted in lower inhibition. Brain injury or pathology may also account for Finkelhor's second *Precondition*, namely, overcoming internal inhibitions. However, there have been mixed findings on the relationship between these abnormalities and sexual offending, with one study finding more abnormalities (Galski, Thornton, & Shumsky,1990) and another finding fewer abnormalities (Langevin, Wortzman, et al., 1988) in sexual offenders.

Other aspects of the *Precondition Theory* which may be particularly relevant to older sexual offenders are opportunity and overcoming victim resistance. Those offenders committing sexual offences later in life are, according to Hanson (2002), unlikely to target adults or to have opportunity to offend against their own children. The older sexual offender is likely to be less physically capable of overcoming a victim's physical resistance and therefore will choose more vulnerable, less physically threatening, victims such as young children. Older sexual offenders, then, ought to have more limited

opportunity and choose victims and circumstances where they are likely to be successful, such as by victimizing grandchildren.

The *Precondition Theory* provides some limited guidance to generating hypotheses about older sexual offenders. Based on this model, older sexual offenders appear to be more likely to have deviant sexual interests, suffered a brain injury or pathology resulting in greater disinhibition, and target less physically threatening victims. Unfortunately, this theory is limited by its inability to explain the aetiology of sexual offending, such as the causes of deviant sexual interests. Understanding the causes and motivations for sexual offending may be informative with regard to differences between the recidivist sexual offenders reported in Hanson (2002) and Barbaree et al.'s (2003) studies, and later life onset of sexual offenders.

An Integrated Theory of Sexual Offending

While Finkelhor's *Precondition Theory* is still commonly used to guide treatment for sexual offenders, it has received little empirical attention or revision. Of later, more comprehensive theories of sexual offending, W. L. Marshall and Barbaree's (1990) *Integrated Theory* has received both much empirical examination (e.g., L. E. Marshall & W. L. Marshall, 2002; W. L. Marshall, Barbaree, & Eccles, 1991; Stirpe, Abracen, Stermac, & Wilson, 2006; Seidman, W. L. Marshall, Hudson, & Robertson, 1994) and modification (e.g., W. L. Marshall, Anderson, & Fernandez, 1999; W. L. Marshall & L. E. Marshall, 2000; Smallbone, 2006). The *Integrated Theory* places emphasis on aetiological factors (e.g., biological, developmental, socio-cultural) and also acknowledges the importance of transitory situational factors (e.g., emotional, sexual, substances).

Biological influences

Marshall and Barbaree argue that biological inheritance provides both sexual and aggressive tendencies in males. They cite research showing that sex and aggression are mediated by common neural substrates and sex steroids. However, they report that this does not mean that sexual aggression is to be seen as unavoidable or excusable. They suggest that it is biology that provides the capacity to sexually aggress and variations in hormonal levels between individuals may moderate this propensity. Social inhibitors of sexual aggression, then, are of critical importance, particularly for males during puberty. As Ellis (1989) and others have argued, our biological and evolutionary history may make learning not to sexually aggress a difficult task, but the strength of Marshall and Barbaree's theory is that it is far from unattainable as a goal.

Childhood experiences

In the second part of Marshall and Barbaree's theory, the importance of early childhood experience is considered. After reviewing developmental literature, these authors concluded that some particular features of a negative childhood experience may contribute to later anti-social and aggressive behaviours, including sexual aggression. Negative parental interactions, impoverished sexual and development knowledge, inadequate socialization, and poor attachments, create vulnerability which leads to poor adolescent and adult socialization. This can lead to problems with interpersonal relationships (including the inability to form interpersonal relationships), coping, empathy toward others, sense of self-worth, and can lead to impersonal and aggressive behaviour toward others. In fact, feelings of emotional loneliness have been reported to be a strong predictor of aggressive behaviour toward others (Check, Perlman, & Malamuth, 1985)

and research evidence supports the importance of damaging childhood experiences

(Starzyk & W. L. Marshall, 2003).

Socio-cultural context

The third component of Marshall and Barbaree's *Integrated Theory* is the socio-cultural context in which the child is immersed. Although societal messages are ubiquitous and will affect every individual to some degree, children with poor parental role models are particularly vulnerable to these messages because of the impoverished modelling and attitude formation in the home. This is an issue taken up in the popular media every time, for example, there is a shooting at a school perpetrated by children. Typically, the popular media cites some video game or rock band that influenced the child and suggests that they are at least partly responsible for the child's actions and the public starts calling for a ban on either the game or the band, or both. Yet, it is clear that many children engage in violent video games or listen to the same music and do not commit horrendous acts of violence. The *Integrated Theory* suggests that it is children from impoverished home environments who are the most vulnerable to these socio-cultural messages, and in the case of future sexual offenders, it is inappropriate societal messages about interpersonal and sexual relationships to which vulnerable children may respond. W. L. Marshall and L. E. Marshall (2000) expanded this aspect of the *Integrated Theory* to show how poor early childhood attachments can lead to a vulnerability to socio-cultural messages, which may result in sexual offending. Although a clear link between exposure to violence and aggressive behaviour has been convincingly shown, there is still much debate in the sexual offender literature about the relationship between, for example, exposure to pornography and sexually aggressive behaviour (Seto, 2009).

Transitory situational factors

Sexual offenders do not take advantage of every opportunity they have for sexual offending (Wakeling, Webster, Moulden, & W. L. Marshall, 2007). Clearly, then there must be situational factors influencing the likelihood of a sexual offender engaging in offensive behaviour. Marshall and Barbaree (1990) report some of these internal and external transitory situational factors to be substance use, transitory emotional states (e.g., anger toward women, depression), low probability of being caught, and victim access, and cite research which supports their claim. These factors are likely of particular importance to the onset, but also play a role in the maintenance of, sexual offending.

Marshall and Barbaree's (1990) *Integrated Theory* has limitations but also many strengths. Ward (2002) has provided a well thought out critique of Marshall and Barbaree's theory and many of his points are summarised here, but the reader is encouraged to refer to Ward's full article for a more comprehensive view of problems with the *Integrated Theory*. Ward claims that Marshall and Barbaree's theory only explains a specific subset of sexual offenders: early onset, deviant sexual offenders with low self-esteem, abnormal juvenile sexual behaviours, and a history of having experienced childhood sexual abuse, however, this leaves many sexual offenders unaccounted for. This theory also lacks explanation as to why a vulnerable youth ends up offending sexually, against an adult rather than a child, or why a particular modus operandi is used in offending. A revision by W. L. Marshall and L. E. Marshall (2000) of the *Integrated Theory* from an attachment perspective sought to clarify these issues but has yet to be comprehensively empirically examined.

Ward (2002) also criticizes the assumption that sex and aggression are fused at the biological or learned psychological level. Although sex and aggression rely on similar neural pathways and structures in the brain, this does not necessarily mean they are intricately linked and, indeed, not all sexual offences involve aggression (Statistics Canada, 2005). Ward argues that these brain pathways and structures are responsible for a wide variety of behaviours and psychological processes and it would be incorrect to assume they are similar or confused in the brain. However, Smallbone (2006) has argued that the link between sex and aggression proposed by Marshall and Barbaree needs to be expanded beyond aggression alone and he cited evidence showing that the sexual, attachment, and parenting (or nurturing) brain pathways also work in common. Smallbone then used this observed relationship and other aspects of the *Integrated Theory* to explain incest sexual offending. Research cited by Smallbone appears to support his position however prospective studies on sexual offenders are needed. A further criticism is that not all sexual offenders have experienced a negative childhood or have insecure attachments.

Although there are a number of problems with Marshall and Barbaree's (1990) theory, it remains the most comprehensive and influential theory in the field of sexual offender treatment and research. There have been a number of revisions of this theory (e.g., W. L. Marshall & L. E. Marshall, 2000; Smallbone, 2006; Ward & Seigert, 2002) but none have, to date, supplanted the *Integrated Theory* in terms of an effect on treatment and research.

Marshall and Barbaree's (1990) theory appears to be able to account for the reductions in recidivism with age reported by Hanson (2002) and Barbaree et al (2003).

This theory places emphasis on early childhood experiences as the foundation for sexual offending and perhaps with age or incarceration these early negative childhood experiences get socialized out or become less relevant and the offender is able to exert sufficient self control to be able to prevent reoffending. In terms of later life onset of sexual offending, this theory does not appear to be able to explain why a man would live an otherwise prosocial life and then commit a sexual offence in later life. Given the hypothesis above that later onset sexual offenders may have had a deviant sexual interest (i.e., motivation) for sexual offending throughout their life and that an acquired brain injury or pathology reduces inhibition sufficiently for sexual offending to occur, it is possible that these deviant interests are developed in an impoverished childhood, as the *Integrated Theory* would predict, and that and although initially controlled by socialization, these propensities are loosed due to changes in inhibitory control. If this is indeed the case then older first-time sexual offenders ought to have little criminal history and score low on measures of inhibitory problems, such as psychopathy.

Both the *Precondition Model* and the *Integrated Theory* offer some, but limited insight into the effect of increasing age on sexual offending. It appears that brain injury or pathology, deviant sexual interests, and negative childhood experiences, may be factors related to sexual offending in later life. The task of generating a theory of sexual offending which can account for both an increase in desistance with age, and later life onset of sexual offending, is a difficult one. Perhaps an examination of theories on aging will expand an understanding of later life issues and sexual offending and so the next section of this thesis will examine extant theories on aging.

THEORIES ON AGING

There are many biological theories on how and why aging occurs, such as error and fidelity, somatic mutation, glycation, programmed cellular aging, aging pacemaker, autoimmune disorders, neuroendocrine control, effects of temperature, nutrient deprivation, and lipofuscin, to name but a few. Some of these theories of biological aging are studied through disorders such as Hutchinson-Guilford Progeria, a rare human genetic disease that accelerates many symptoms of aging such as atherosclerotic heart disease (victims usually die at around age 13 years), and Werner's syndrome which also accelerates many of the symptoms of aging such as baldness, grey hair, skin conditions, heart disease, some cancers, cataracts, arthritis, and diabetes (victims usually die by age 50 years). All of these theories are important and have some influence on the ability to successfully age psychologically. However, it is beyond the scope of this paper to address these issues as well as the psychological theories of aging and, therefore, the focus will be on aging psychologically.

The scientific history of the psychology of aging is quite brief (Birren, 1961). There was limited literature on psychogerontology generated prior to World War II (e.g., Buhler, 1933; Hall, 1922; Jung, 1933; Miles, 1933). There have been three lines of psychological research and theory on aging since the end of World War II: 1) the aged, focussing on older people and later life issues (e.g., Alzheimer's disease, life satisfaction, widowhood, retirement, cognition, death and dying); 2) age, the study of age differences in behaviour by comparing groups of different ages in cross-sectional research (e.g., processing speed, attentional capacity); and, 3) aging, which represents an integration of the psychology of age and the aged in longitudinal research (Schroots, 1996).

Psychological Theories of Aging

Theories on developmental changes associated with the lifespan exist; however, there are few theories which explore later-life changes. Modern developmental theories on aging began with Havighurst (1948) and Erikson (1950). Havighurst's theory was based on the concept of developmental tasks that occur during the lifespan. A developmental task arises at or around a certain period in the life of an individual and the successful achievement of the task leads to happiness and success with later tasks, while failure leads to unhappiness, disapproval by society, and difficulty with later tasks. All of these tasks have biological (physical maturation), psychological (aspiration, values), and cultural (expectations of society) bases.

Erikson's (1950) psychosocial theory of personality development centered around eight stages each with its own crisis which arises out of the conflict between two opposing tendencies. The stage Erikson described as "Ego Integrity versus Despair" reflects later-life development. This crisis involves a life review, and the degree to which the individual is, or is not, satisfied with their life to that point, which then determines whether they will successfully adjust to old age. That is, a person would be most satisfied with their later life if they were able to review their life to that point and have a positive view of their previous experiences and accomplishments. This was the start of the inclusion into theories of later life issues such as body changes, retirement, and psychological issues. Erikson's life-review perspective suggested that it was the psychological adjustment to being old (i.e., an acceptance of being old) that would predict whether the person adjusted well to the aging process, and this was the precursor to the focus on what is now called "successful aging" theories.

Theories of Successful Aging

The first important study on successful aging was reported by Cumming and Henry (1961). These authors advanced a theory of aging based on their research which they called *Disengagement* theory. Cumming and Henry's research indicated that those older individuals with the lowest morale were those who were in the process of moving from engagement to withdrawal/disengagement, whereas those with the highest morale were those who were either still fully engaged or those who were fully disengaged. Examples given of later life crises, which Cumming and Henry report to support their theory, were retirement and widowhood; Cumming and Henry found that widowhood led to a more successful outcome than did retirement because, they hypothesized, widowhood goes along with disengagement rather than against it, whereas retirement involves a more protracted disengagement. This led these authors to hypothesize that successful aging was best achieved with a quick and, more or less, complete withdrawal (disengagement).

George Maddox (1963a) advanced the next account of successful aging which he called *Activity* theory, in part as a counter to what Maddox described as "Cumming and Henry's (1961) rather dismal, deterministic, view of aging*"* (pp. 33). Maddox (1963b) was particularly critical of Cumming and Henry's interpretation of their research results. He reported his own research demonstrating that the level of activity older people engaged in - what he termed *"contact with the environment"* and which Cumming and Henry call *"engagement"* - was the critical determinant of successful aging. By focusing on aberrant cases where morale and contact with the environment level were not related in the usual way, Maddox found that factors such as health and type of activity modified the relationship between contact with the environment and morale.

There are, however, also a number of problems with Maddox's theory. For example, the societal response to Maddox's theory was to suddenly force unprepared and unsuited elderly people to engage in physical activity beyond their capacity. Unfortunately, elderly people were sometimes pushed beyond their limit and this resulted in poor outcomes for interventions based on *Activity* theory. Maddox also recognized the limitations of *Activity* theory and in 1968 proposed *Continuity* theory. *Continuity* theory hypothesizes that as people are in younger life, so they will need to be in old age in order to adjust to old age successfully. For example, if a person was a socially active person during their adulthood *Continuity* theory would suggest that in order to achieve life satisfaction in later life, they would need to continue to be socially active. Contrarily, for a person who values privacy and solitude *Continuity* theory suggests that forcing them into situations such as nursing or care homes where solitude and privacy are difficult to achieve, will result in low levels of life-satisfaction.

Person-Environment Theories

A definition of successful aging is that it is comprised of optimum physical and functional health, cognitive and emotional wellbeing, and activities that are within the individual's abilities and needs (Hooyman & Kiyak, 1999). Based on this definition of successful aging, the environment is a key component of wellbeing. The ability of the elderly person's environment to satisfy or facilitate the other components of his or her wellbeing (e.g., social interaction, autonomy, privacy) is important as it may impact safety, finances, loneliness, and ability to receive assistance. The environment presents the context for activities to occur, and can also stimulate activity by placing demands on the person. It has been suggested, and research supports the idea, that human behaviour is

affected by the environment in which it occurs (Thelen, 1995) and psychologists have long recognized that personality characteristics of the individual interact with the environment to influence behaviour. For example, Lewin (1951) presented a model which postulates behaviour to be a function of environmental and personal characteristics (B = f(P,E)). Understanding the person-environment effect on behaviour has led to models that have attempted to explain how the environment and the individual's personality can affect wellbeing (Hooymans & Kayak, 1999).

Person-Environment Congruence

Person-Environment congruence theories (e.g., Kahana & Kahana, 1983) suggest that the degree of wellbeing that elderly persons will experience is dependent on achieving equilibrium in the dynamic processes between the person's needs and the demands of the environment. Under the person-environment congruence model then, persons high in assistance needs will experience greatest well-being when they perceive their environment as supportive of their needs. Conversely, persons high in independence needs will experience the greatest well-being when they perceive their environment as supportive of autonomy.

Person-Environment Competence

The competence model (e.g., Lawton, 1975, 1985, Parmelee & Lawton, 1990) differs from the congruence model in that it focuses on the individual's cognitive and physical abilities rather than their needs and preferences. Under this model, a decline in the elderly person's cognitive and physical abilities decreases the ability to deal with the demands of the environment. Wellbeing is only achieved, in this model, to the extent that the person can adapt by reducing environmental pressures.

Theory of Selective Optimisation with Compensation

A recent theory of successful aging, *Selective Optimisation with Compensation* (SOC), has been developed by M. Baltes, P. Baltes, and their colleagues (M. Baltes & Carstensen, 1996; P. Baltes, 1997; P. Baltes & M. Baltes, 1990; P. Baltes, Dittman-Kohli, & Dixon, 1984; Freund & P. Baltes, 1998; Marsiske, Lang, Baltes, & Baltes, 1995). Under this theory successful aging is seen as the conjoint maximization of gains (desired goals or outcomes) and the minimization of losses (undesired goals or outcomes). The definition of gains and losses, and the dynamic between gains and losses, is culturally, personally, and age, determined (Freund & P. Baltes, 1998). Thus what may be considered a loss at one point in the lifespan may be considered a gain at a different point in time.

The theory advanced by P. Baltes and M. Baltes (1990) of successful aging (SOC) hypothesizes that when faced with loss, the optimum way to adjust is to Select and Optimize remaining capabilities, and then in some way compensate for losses. Selection involves the identification of desired and attainable goals and outcomes, sometimes by narrowing the pool of potentialities. Optimization is achieved through remaining, or enhancing existing, goal-directed means and resources, sometimes through the acquisition or orchestration of enhancing contexts. Compensation involves a response to a loss in goal-relevant means in order to maintain success or desired level of functioning (outcomes). The model of SOC is a recursive one in that the response to a loss at an earlier time has implications for future ability to use SOC.

Baltes and colleagues usually illustrate their model of SOC with the example of the pianist Arthur Rubinstein, who seems to be the most likely inspiration for their SOC

model. When he was in his 80s, Rubinstein was asked in a television interview how he

maintained such a high level of expertise in piano playing. He, presumably unknowingly,

illustrated the SOC model by explaining that he played fewer pieces (selection); practiced

these pieces more often (optimization); and to counteract his loss in mechanical speed

played more slowly prior to fast segments to make the latter appear faster (compensation).

       An alternative possible illustration of SOC, which has relevance for the current

examination of aging and sexual offending, is a loss in physical sexual functioning, such

as in the case of impotence or a reduced drive. If a person loses their ability to function

sexually, due to poor circulation or reduced testosterone, and can no longer engage in the

same level, if at all, of a previously enjoyed activity (e.g., sexual intercourse with their

life-partner), some may choose to test their capacity with an alternative partner. This

alternative partner might be a younger more physically attractive person, such as a

younger woman. Some of these men may choose to engage in this test by soliciting a

surrogate or prostitute and consequently may not come to the attention of the judicial

system. However others, not having the financial resources to hire a prostitute, or who

feel embarrassed and humiliated about their sexual functioning problem, may turn to

those around them and if they have grandchildren, attempt to engage them in sexual

activity leading to legal difficulties. Clearly this would only apply to a very small number

of older men and presumably it would only occur in those who already possess some of

the features of sexual offenders but who have, for whatever reason such as lack of

opportunity, not acted on these propensities.

Model of Successful Aging

Although it provides no improvement on the Baltes' theory of Selective Optimisation with Compensation (SOC), it is worth noting that concurrent to the development of SOC there was an alternative called the *Model of Successful Aging* (Rowe & Kahn, 1997). This model was developed in the 1980s and 1990s and hypothesized that if individuals could not prevent age-related loss and maintain physical and mental health they could not continue to be engaged and would thus become a burden to society. This framework has been embraced by the popular media (Chapman, 2005) but criticized for its potentially marginalizing criteria for success (Scheidt & Humpherys, 1999). Aging successfully, under this model, involves leading a life that avoids disability and disease and thereby maintains physical and mental health which facilitates productive and social engagement in society (Rowe & Kahn, 1997). Thus, the individual has not only a responsibility to themselves, but also to society, to maximize autonomy and minimize dependence. Although similar to Activity theory (Maddox, 1963a), in that disengagement is rejected and engagement encouraged, the emphasis of this theory is on aging well as a responsibility to self and society.

HYPOTHESES

If the model of Selective Optimisation with Compensation (SOC) is applicable to the issue of sexual offenders who commit offences for the first time in later life, then the victims of these older offenders are likely to be younger, more vulnerable, children who are related or to whom the offender has ready access. Given that self-control increases over the lifespan (Hanson, 2002), and the incidence of rape by men diminishes with age (Apfelberg, Sugar, & Pfeffer, 1944; West, 1983), it is unlikely that older sexual offenders

will seek victims who would be in a position to rebuff their advances, such as adult

women. Younger children are seen by child molesters generally as less threatening and

more easily manipulated and compliant (Howells, 1979) and this is likely to be

exaggerated in older males who are experiencing problems of sexual functioning. These

older males may therefore turn to younger children to reassert their sense of masculinity

because such children would reduce the offender's risk of physical injury and being

reported to the authorities. In particular, grandfathers or step-grandfathers would be able

to have access to children without arousing suspicion in others and could groom their

victims over time, perhaps by testing the child's compliance in small graduated steps, a

common feature of those child molesters who abuse family members or the children of

friends (L. E. Marshall & W. L. Marshall, 2002; L. E. Marshall, Moulden, & W. L.

Marshall, 2004). Therefore, it is suggested, older sexual offenders will be more likely to

have younger victims who are closely related to them. If these offenders are indeed

responding to later life issues, and in particular with Selective Optimisation with

Compensation, they ought to have characteristics and offence features which are different

from younger sexual offenders. The first step in examining the issue of older sexual

offenders, then, is to compare them with younger offenders on offender and offence

characteristics and Chapter 3 of this thesis will be focussed on describing these issues.

Because there is currently nothing known about the distinguishing features of

older sexual offenders, Chapter 3 of this thesis will establish the bases upon which

hypotheses can be generated for subsequent studies. However, given Hanson's (2002) and

Barbaree et al.'s (2003) findings and the theory of Selective Optimisation with

Compensation reported above, it is also possible to generate testable hypotheses.

Overall Predictions

1. There will be significant differences between older and younger offenders in terms of offender and offence characteristics.

2. Older offenders will be less sexually deviant and lower risk for recidivism than younger offenders.

3. These differences will be illustrative of the onset, and desistance or maintenance of sexually offensive behaviour.

CHAPTER 2: OMNIBUS METHOD

This overall method section (Chapter 2) will describe features common to the subsequent three chapters.

PARTICIPANTS

In the literature on the elderly or older people, and on elderly or older offenders, there has been a wide range of ages used to define elderly or older. Researchers have cited ages 55, 60, 65, or 70 years as the lower end cut-off for the definition of older without making a convincing argument for any particular criterion. Clearly this presents problems for research directed at examining the effects of being older. Because there is a need to make a decision on the definition of older in this series of studies "older sexual offenders" will refer to those who have reached or are past the age of 60 years. The reasons for the use of this criterion are: many researchers seem to agree on this age being within their definition of "older" (e.g., Booth, 1989; Rayel, 2000; Rosefield, 1993; Uzoaba, 1998; Wormith, 1995), and it is around this age that a number of later life issues that may have an impact on a propensity to sexually offend begin to confront men, such as retirement, loss of a loved one, health difficulties, or difficulties of sexual functioning. However, it is important to note that this definition is arbitrary and is arguably an incorrect definition of older. However, in the absence of any agreement in the psychogerontological or offender literature on what constitutes "older", it is necessary to decide on at least an approximation on a definition of older and, as mentioned above, our criterion of age 60 years falls within the definition used in most reports on aging issues in offenders.

Archival intake assessment information on male sexual offenders incarcerated in a federal induction institution in Ontario, Canada, was accessed in this research. These sexual offenders include men whose offences are against adult women (commonly referred to as rapists), and those whose offences are against children (commonly referred to as child molesters). Subjects all completed an assessment package given to all incarcerated sexual offenders, independent of age, shortly after admission to the Canadian Federal Correctional System.

In all, data from 802 sexual offenders was extracted from archived files. This included 186 offenders convicted of offences against adult females and 616 offenders convicted of offences against children. Age data were not available for 25 offenders. The remaining 777 offenders had a mean age of 47.78 years (SD = 13.48, Range = 20-88 years). This included 182 offenders convicted of offences against adult females (Mean offender age = 38.20 years, SD = 10.90, Range = 20-70 years) and 595 offenders convicted of offences against children (Mean offender age = 50.72 years, SD = 12.81, Range = 20-88 years). Offenders against children were found to be significantly older than offenders against adults, t (775) = 11.91, p < .001. This finding of child molesters being significantly older than rapists is commonly reported in the sexual offender literature (e.g., Apfelberg, Sugar, & Pfeffer, 1944; Hanson, 2002; West, 1983). As noted above, Hanson (2002) has offered an explanation for the discrepancy in age between child molesters and rapists, that is, the targets of rape tend to be young women who are known to the offender and people tend to associate with people their own age, therefore, as men age they would have less opportunity to commit a rape, whereas, opportunities for child molesting increase in middle adulthood.

ASSESSMENT PROCEDURE

Upon arrival at the Induction Centre all sexual offenders were provided with consent forms to read and sign. This consent form indicated that the offenders agreed to participate in the subsequent assessments and were made aware that their data might be used in subsequent research. Any subsequent research, they were assured would not identify them. They were then interviewed by Behavioural Science Technologists, and completed paper and pencil tests. Participants were also requested to undergo phallometric testing and if they agreed they then signed an additional consent form. Some offenders declined or were transferred before they could complete that portion of the assessment.

The procedure involved in this assessment process was as follows: during an initial interview, each participant was told the purpose and procedure of the entire assessment at which time the option of declining assessment was presented. Following this, willing participants were interviewed individually by a Bachelor level Behavioural Science Technologist trained in the administration of all measures. A structured psycho-social assessment (Webster, Harris, Rice, Cormier, & Quinsey, 1994) was completed which formed the basis of the scoring of the measures of treatment needs (LSI-R) and risk for sexual recidivism (RRASOR). A review of case file information was used to verify information gathered during the interview and to obtain scores on a measure of risk for general recidivism (SIR-R) that was scored by case workers and placed on the case files. Participants were then interviewed individually by a PhD psychologist who was the Director of the assessment process and the Regional Coordinator of Sexual Offender Programs. Any discrepant scores on any measure were discussed by the Director and

assessor and modified if needed following a discussion of scoring criteria. Upon completion of the interview, willing participants completed phallometric assessment.

Phallometric assessments were conducted in a private, sound-attenuated room for one or more sessions that last 1 to 2 hours each and were separated by at least 24 hours from the preceding session. Presentation of the age/gender interest stimuli was preceded by three warm-up stimuli involving depictions of a nude adult male, a nude adult female and a neutral stimulus. The sexual violence warm-up stimuli consisted of one consenting and one non-consenting sexual episode involving an adult male and an adult female. After exposure to the warm-up stimuli, the actual assessment stimuli were presented in one of two predetermined orders. These orders of presentation ensured that episodes of a given type never followed one another more than once. Further, more specific details of the phallometric stimuli used to elicit sexual interests will be presented in the method section of Chapter 4 where sexual interests are reported. For the purposes of this research, a sexual deviance index (SDI) was calculated by taking the average z-score to the appropriate category and subtracting the average z-score to an inappropriate category (Harris, Rice, Quinsey, Chaplin, & Earls, 1992; Serin, Malcolm, Khanna, & Barbaree, 1994).

Categorization into First-time, Historical, or Recidivist offender was based on the offender's file information on history of offending and the date of the most recent offence. These categorizations were made independently by the assessment technicians and the researcher. When deciding on an acceptable level of inter-rater agreement it is important to match the criterion level with the degree of impact the decisions to be made could have. Murphy and Davidshofer (1995) report .90 to be an acceptable level of inter-

rater agreement for making important decisions about respondents. No decisions that would impact the participants in this research will be made as a result of this study. However, the potential decisions that could be made in the future based on this research could have a serious impact on elderly sexual offenders and society. Consequently, a criterion of .90 was set as an acceptable level of inter-rater agreement. In the few cases where discrepancies between technician and researcher categorizations occurred, these were resolved by the researcher on the basis of the fact that file information from police and courts is sometimes more complete after the intake assessment has been completed. The researcher, by definition, had access to this later information. Inter-rater agreement for the categorizations (Historical, First-time, Recidivist) will be reported in Chapter 5 of this thesis.

<div align="center">MEASURES</div>

Data gathered by review of file materials and interviews with the offenders form the basis of this research. Domains of functioning assessed include Psychopathy, measured by the *Psychopathy Checklist Revised* (PCL-R) (Hare, 1991); Treatment Needs, measured by the *Level of Service Inventory* (LSI) (Andrews & Bonta, 1995); and Risk for General Recidivism, measured by the *Statistical Information on Recidivism* (SIR) (Nuffield, 1982). These measures (PCL-R, LSI, SIR) will be described in more detail in Chapter 3 of this thesis. The number of victims, age of victims at onset of offending, gender of victims, and information on the offender was gathered through archival file information, including police reports. The measures of sexual arousal and deviance used in this study were derived from phallometric assessments and will be described in more detail in Chapter 4 of this thesis.

CHAPTER 3: OFFENDER AND OFFENCE CHARACTERISTICS

It is commonly reported that sexual offenders are a heterogeneous group (e.g., W. L. Marshall, Anderson, & Fernandez, 1999; Saleh & Guidry, 2003). Although group differences have been found between sexual offenders and a variety of "control" groups, such as university students (e.g., Smallbone & Dadds, 2000), non-sexual offenders (e.g., Fernandez & W. L. Marshall, 2003), and socio-economically matched community respondents (e.g., W. L. Marshall, L. E. Marshall, Sachdev, & Kruger, 2003), on many aspects of functioning, the size of the differences are often small suggesting a good deal of overlap, and the standard deviation of the sexual offender groups is often large, again suggesting that a substantial number of sexual offenders would be in the normative range. Consequently, it is important to determine whether older sexual offenders (i.e., those aged 60 years or older) are a more or less heterogeneous group than is commonly found in research on sexual offenders.

Given the lack of information on older sexual offenders, and the intent in the subsequent chapters of this thesis to examine features of older sexual offenders, it is important to initially consider whether there are basic differences between older and younger sexual offenders in terms of their offending behaviour. Chapter 3 of this thesis, then, will compare older sexual offenders with younger sexual offenders on offender and offence characteristics. Offender characteristics that will be examined in this chapter include age, sentence length, and estimated risk for sexual and nonsexual recidivism. Offence characteristics include number of victims, age of youngest victim at onset of offending, victim gender, and the relationship, if any, of the victim to the offender.

PREDICTIONS

1. Older sexual offenders will have a greater number of victims than younger sexual

    offenders because they have lived longer and therefore have had a greater number of

    opportunities for offending.

2. Older sexual offenders will have younger victims than younger sexual offenders

    because their lack of confidence in their sexual and physical functioning will cause

    them to seek less threatening victims.

3. Older sexual offenders will victimize those who are known to them more than

    younger sexual offenders, again because a lack of self-confidence will direct them

    toward victims they know and whom they can groom over time without threat.

4. Older sexual offenders will be lower risk to reoffend than younger sexual offenders

    because Hanson (2002) and Barbaree et al (2003) have found this to be true.

5. Older sexual offenders will be more likely than younger sexual offenders to target

    female victims because the hypothesized reason for their offending is threat to

    masculinity rather than well-formed deviant sexual interests.

METHOD

All archival data reported here was collected at the Millhaven Assessment Unit

(i.e., the Induction Centre) between the years 1994 and 2000 and the participants and

procedures are those described in the Omnibus Method chapter above.

Measures

Risk assessment data were gathered by reviewing file materials that included

interviews and assessments of the offenders by Behavioural Science Technologists (BST)

at the Millhaven Assessment Unit of the Ontario Region of the Correctional Service of

Canada. The number of victims, age of youngest known victim at onset of offending,

gender of victims, relationship of the victim to offender, as well as demographic

information on the offender was derived from the same file information, as well as from

court and police reports. The reader will note that data were not available on all subjects

for all the features examined; the Tables indicate the relevant number of subjects for each

feature.

Rapid Risk Assessment for Sexual Offence Recidivism

The *Rapid Risk Assessment for Sexual Offence Recidivism* (RRASOR) (Hanson,

1997) has been reported to be the most commonly used actuarial measure of risk for

sexual recidivism (Doren, 1999). Hanson and Bussiere's (1996) meta-analytic

examination of factors that predict sexual recidivism demonstrated that there were factors

associated with sexual recidivism that differed from those associated with general or non-

sexual violent recidivism. The RRASOR was developed from Hanson and Bussiere's

(1996) meta-analytic review and seven different follow-up studies, and then replicated on

an additional independent sample (Hanson, 1997). The RRASOR is composed of 4 items:

prior sexual offences (scores range from 0 for no prior convictions or charges, to 3 for

four or more prior convictions or six prior charges whichever is higher), age less than 25

years (if under age 25 years, score = 1; if aged 25 years or more, score = 0), extrafamilial

victims (any, score = 1), and male victims (any, score = 1). Total score on the RRASOR

ranges from 0 to 6 with higher scores indicating greater risk to sexually re-offend.

This scale demonstrated moderate predictive accuracy in the development study (r

= .27, ROC area = .71) and further studies have also demonstrated the moderate

predictive value of the RRASOR (ROC area between .62 to .77, e.g., Hanson & Thornton, 2000; Langton et al, 2007) and is the only actuarial risk for sexual recidivism scale that has been validated for use with developmentally delayed (Craig, 2006) or intellectually disabled sexual offenders (Harris & Tough, 2004). The RRASOR is also intended to be used as a screening tool for treatment intensity and has been shown to be as accurate or better for this purpose and risk prediction (Hanson & Thornton, 2000; Langton et al, 2007; Sjöstedt & Långström, 2002) than most of the other available actuarial tools such as the STATIC-99 (Hanson & Thornton, 2000), MnSOST-R (Epperson, Kaul & Hesselton, 1998), PCL-R (Hare, 1991), SVR-20 (Boer, Hart, Kropp, & Webster, 1997), or VRAG (Webster, Harris, Rice, Cormier, & Quinsey, 1994).

Psychopathy Checklist - Revised

The *Psychopathy Checklist - Revised.* (PCL-R) (Hare, 1991) is a commonly used measure of anti-social tendencies. Scores on the PCL-R range from 0 to 40 with higher scores reflecting greater psychopathy. Scores are based on interview and file information. Administering the PCL-R requires specialized training and all assessment personnel at the Millhaven Assessment Unit Specialized Sexual Offender Assessment received this training. In addition to lifestyle and criminal behaviour, the checklist assesses glib and superficial charm, grandiosity, need for stimulation, pathological lying, conning and manipulating, lack of remorse, callousness, poor behavioural controls, impulsivity, irresponsibility, and failure to accept responsibility for one's own actions. The scores are used to predict risk for criminal re-offence and probability of rehabilitation. The PCL-R is hypothesized to be comprised of two factors reflecting anti-social personality (Factor 1, selfish, callous and remorseless use of others) and criminal, or anti-social, lifestyle

(Factor 2, chronically unstable, antisocial and socially deviant lifestyle) (Hare, 2003).

Although the current version of the PCL-R lists four factors (1a, 1b, 2a, 2b), these factors

are part of the two factor structure mentioned above and the version of the PCL-R at the

time of the assessment of the sexual offenders in this report was the two factor version.

Consequently, the results reported below will use the PCL-R under the two factor model.

Researchers (e.g., Anderson, 2003; Craissati & Beech, 2007) and two major correctional

services (i.e., Her Majesty's Prison Service and the Correctional Service of Canada) have

used various cut-off scores as meeting diagnosis for psychopathy, such as 20, 25, and 30

with no empirical bases for these cut-off points. Anderson (2003) analyzed her PCL-R

data in three groups: one group whose total scores were under 20 on the PCL-R which

she called low or no psychopathy, respondents who had total scores between 20 and 29

were deemed to be have moderate psychopathy, and those with scores 30 and higher who

were deemed to be high in psychopathy. The PCL-R can also be used as a continuous

measure of psychopathy with higher scores reflecting greater psychopathy.

Level of Service Inventory – Revised

The *Level of Service Inventory - Revised* (LSI-R; Andrews & Bonta, 1995) is an

actuarial risk/need instrument used to classify offenders (both those who are incarcerated

and those who are supervised in the community) according to their risk for future

criminal behaviour and their need for treatment. Items are scored as either present or

absent based on a semi-structured interview and a review of available file information.

Scores are then summed to yield a total score with higher scores reflecting a greater need

for intervention. The LSI-R contains 54 items grouped according to 10 subcomponents

representing different risk/need areas: criminal history, education/employment, finances,

family/marital, accommodation, leisure, companions, substance use, emotional/personal, and attitude/orientation. Total scores on the LSI-R can range from 0 to 54.

Research has shown the LSI-R to have acceptable internal consistency (r = .72), inter-rater reliability (r = .94) and temporal stability (r = .80) (e.g., Bonta & Motiuk, 1990; 1992). A meta-analysis summarizing 30 studies on the predictive validity of the LSI-R (Gendreau, Goggin, & Smith, 2002) found that scores on the LSI-R significantly correlated with general (r = .42) and violent (r = .29) recidivism.

Although much of the research on the LSI-R has been on Canadian provincial offenders (i.e., those serving a sentence of 2 years or less), there also is research on the LSI-R among longer term offenders (i.e., those with sentences of more than 2 years) (e.g., Loza & Simourd, 1994), including sexual offenders (Simourd & Malcolm, 1998). Loza and Simourd (1994) found the LSI-R to have acceptable construct validity and to discriminate between violent and non-violent offenders. Similarly, Simourd and Hoge (2000) report that the LSI-R distinguished psychopaths from nonpsychopaths, and Simourd and Malcolm (1998) demonstrated that the LSI-R discriminates between rapists and child molesters. Kroner and Mills (2001) showed that the LSI-R predicted reconviction (r = .34) among a longer-sentence (i.e., more than 2 years) offender group.

Statistical Information on Recidivism-Revised 1

The *Statistical Information on Recidivism-Revised 1* (SIR-R1) is an actuarial risk prediction instrument indicating risk for general recidivism within three years of release, (Nuffield, 1982). The scale consists of 15 items that, when summed, provide a single score which is within the ranges associated with five levels of risk for recidivism ranging from "poor", reflecting a high risk for recidivism, to "very good" which is indicative of a

low risk for recidivism. Items are scored such that lower values reflect a higher probability of recidivism. Individual items on the SIR-R1 can be scored negatively, neutrally, or positively with possible scores ranging from -30 (high risk) to +27 (low risk). In addition to raw risk scores, a grading system for quantifying offenders' risk level was devised, which allows offenders to be allocated to a level of risk on a 5-point scale: "Very good" (i. e., least likely to recidivate) (+6 to +27), "Good" (+1 to +5), "Fair" (-4 to 0), "Poor" (-8 to -5), and "Very Poor" (i. e., most likely to recidivate) (-30 to -9). In addition to the original study (Nuffield, 1982), several subsequent research undertakings have validated the predictive validity of the instrument and demonstrated the stability of the classification system (i. e., recidivism rates by risk level) over time (Bonta, Harman, Hann, & Cormier, 1996; Hann & Harman, 1989; Wormith & Goldstone, 1984). Items on the SIR-R1 include type of current offence, age at admission to custody, history of offending and incarceration, marital status, time between offending, number of dependents, and employment status at time of arrest.

The SIR-R1 is a well-researched measure of criminal risk with acceptable reliability and validity (Motiuk & Porporino, 1988; Nafekh & Motiuk, 2002; Wormith & Goldstone, 1984). Nafekh and Motiuk (2002) report internal consistency alphas of between .75 and .77 for the revised version of the SIR. The revised version of the SIR used in these analyses has also been validated with sexual offenders (Bonta, Harman, Hann, & Cormier, 1996).

Procedure

Offender and offence characteristics of sexual offenders aged 60 years or older will be reported first. Then, the older sexual offenders will be compared to those under

age 60 years. Next, the relationship between aging and continuous variables will be examined. Finally, Chi square analyses will be used to provide a staged view of lifespan changes. Lifespan analyses will compare ages that have been linked to changes that could theoretically have an effect on the propensity for sexual offending. For example, most measures of risk for sexual recidivism (e.g., the STATIC-99 and the RRASOR) report an increased risk for sexual recidivism among sexual offenders who are under the age of 25 years.

In addition, as reported in the introduction, there are two lines of research demonstrating changes in males which occur at about age 40 years that may affect their propensity to sexually offend. Sprague and Quadagno (1989) report that motivation in men for engaging in sexual behaviour changes at about age 40 years from a focus on physical release to a focus on the affectional features of the relationship. Secondly, there exists a relationship between age and serum testosterone such that levels greatly increase during puberty, peak in the early twenties, then begin to decline by the mid to late thirties, and thereafter show a slow but steady decline until a sudden and dramatic drop at age 60 years (Davidson & Myers, 1988; Vermeulen, 1991). This finding is important since research has shown that testosterone levels in males are a major determinant of the desired frequency of sexual behaviour, although this may be tempered by the observation that by age 40 years, emotional aspects of the individual's relationships play an increasingly important role with a corresponding decrease in concern about physical gratification (McConaghy, 1993). Finally, researchers have recently reported that risk for sexual recidivism approaches zero in men over the age of 60 years (Barbaree, Blanchard, & Langton, 2003; Hanson, 2002) which is consistent with the previously noted largest

drop of testosterone levels in men that occurs at age 60 years and older. These four age

groups (<25, 25-39, 40-59, 60+) will therefore be compared on the available data in the

second section of the results.

<div align="center">RESULTS</div>

<div align="center">*Comparison of Older and Younger Sexual Offenders*</div>

The following is an exploratory examination of a newly described subpopulation

of sexual offenders. The analyses below contain more between-subjects tests than would

normally be considered appropriate without using some method of correction for multiple

comparisons. However, due to the exploratory nature of this thesis and the robust sample

size, no corrections for multiple tests were used. One of the goals of this thesis is to

encourage other researchers working with sexual offenders to consider the effects of

aging on sexually offensive behaviour and to attempt to replicate the analyses presented

here. Consequently, desiring to avoid the possibility of a Type II error and having an

important factor overlooked, it was decided to present the results without a correction for

multiple comparisons and allow the reader (subsequent researcher) to determine if the

strength of difference, when found, is meaningful and worthy of further examination.

Table 3.1 describes the characteristics of older sexual offenders (i.e., those aged

60 years or more) and younger sexual offenders (i.e., those younger than age 60 years) on

the continuous victim variables. Student's t-tests were used to examine whether there

were any significant differences between older and younger sexual offenders on the

continuous variables reported in Table 3.1. These analyses demonstrated significant

differences in: older sexual offenders scoring lower (15.86, SD = 7.06) on the measure of

treatment needs (LSI-R), reflecting lower treatment needs, than did the younger offenders

(19.68, SD = 8.60), t (363) = 4.53, p < .001; older sexual offenders scoring lower on the

PCL-R (11.95, SD = 5.81), reflecting lower psychopathy, than did younger offenders

(15.31, SD = 7.44), t (258) = 3.99, p < .001; older sexual offenders scoring lower on the

PCL-R Factor 2 (3.16, SD = 2.82), reflecting lower criminal lifestyle, than did younger

offenders (4.44, SD = 3.26), t (178) = 2.77, p < .01; older offenders having on average a

greater number of victims (3.33, SD = 3.20) than younger sexual offenders (2.01, SD =

2.06), t (816) = 6.62, p < .001; older offenders being more likely to offend against

younger victims (8.87 years, SD = 7.28) than were the younger offenders (12.77 years,

SD = 11.62), t (662) = 4.13, p < .001. No significant differences were found between

older and younger sexual offenders on length of sentence (p = .07), RRASOR score (p =

.65), SIR-R (p = .08), and PCL-R Factor 1 (p = .57).

Table 3.2 describes the features of the offences for which both groups of sexual

offenders (i.e., those < 60 years and those 60 years and older) in the present sample have

been incarcerated.

Table 3.1. Descriptives – Sexual Offenders by Age Group.

	Age Group	N	Mean (SD)	Range	sig
Offender and Offence Characteristics					
Age	<60	603	42.38 (10.48)	20-59	
	60+	172	65.74 (5.15)	60-88	$p < .001$
Sentence in years	<60	602	5.98 (6.46)	2-25	
	60+	172	5.05 (3.72)	2-25	NS
Sexual Recidivism (RRASOR)	<60	568	1.42 (1.32)	0-5	
	60+	153	1.36 (1.51)	0-5	NS
Treatment Needs (LSI-R)	<60	209	19.68 (8.60)	3-43	
	60+	156	15.86 (7.06)	3-38	$p < .001$
General Recidivism (SIR-R1)	<60	323	+8.46 (9.29)	-14-27	
	60+	157	+10.07 (9.61)	-8-25	NS
Psychopathy (PCL-R Total Score)	<60	143	15.31 (7.44)	3-38	
	60+	117	11.95 (5.81)	2-32	$p < .001$
PCL-R Factor 1 Total	<60	66	6.79 (3.56)	1-15	
	60+	114	7.08 (3.12)	0-14	NS
PCL-R Factor 2 Total	<60	66	4.44 (3.26)	0-13	
	60+	114	3.16 (2.82)	0-13	$p < .01$
Number of victims	<60	603	2.02 (2.06)	1-25	
	60+	172	3.33 (3.20)	1-20	$p < .001$
Age of youngest victim at onset of offending	<60	494	12.77 (11.62)	1-91	
	60+	170	8.87 (7.28)	0.25-78	$p < .001$

Table 3.2. Victim Characteristics – Sexual Offenders by Age Group.

		N		Percent	
		<60	60+	<60	60+
Age of youngest victim at onset of offending					
Prepubescent Child Victim (<13 yrs)		242	130	41%	76%
Pubescent Child Victim (13-17 yrs)		178	32	30%	19%
Adult (18+ years)		173	9	29%	5%
	TOTAL	593	171	100%	100%
Gender of Victim(s)					
Female		525	126	81%	72%
Male		73	25	11%	14%
Female & Male		49	24	8%	14%
	TOTAL	603	172	100%	100%
Relationship to victim					
Family		310	146	48%	83%
Well known but not related		56	15	9%	9%
Casual acquaintance		151	9	24%	5%
Stranger		86	0	13%	0%
More than one of the above		36	5	6%	3%
	TOTAL	603	172	100%	100%

Chi square analyses demonstrated a significant difference between older and younger offenders in the developmental stage of the youngest known victim, χ^2 (2, N = 764) = 71.82, p < .001, the gender of the victim, χ^2 (2, N = 775) = 8.34, p < .05, and in the relationship of the victim to the offender, χ^2 (4, N = 775) = 79.45, p < .001. These data suggest that older offenders targeted younger victims (primarily prepubescent) who were predominately female and known to the offender and these findings will be further examined in subsequent chapters of this thesis.

Relationship of Aging to Other Variables

The age of the sexual offenders (collapsed across both older and younger offenders) in this data set was found to be significantly correlated with: the age of the youngest victim when offending started such that the older the offender the younger the

victim, r (629) = -.26, p < .001; the total number of identified victims such that the older

the offender the greater number of identified victims, r (771) = .31, p < .001. However,

age was found to be unrelated to scores on the risk for sexual recidivism measure

(RRASOR), *r* (684) = -.06, p = .88.

<div align="center">Sexual Offenders by Four Age Categories</div>

In order to more clearly examine the previously reported observations, it was

decided to separate the sexual offenders into four age categories: Under age 25 years, 25-

39 years, 40-59 years, and 60 plus years. This was done because the evidence previously

alluded to has shown that testosterone drives sexual behaviour (at least to some extent)

and that it peaks at approximately age 25 years, drops steadily until the mid to late 30s,

and then drops again rather precipitously at age 60 years.

As shown in the following Tables (i.e., 3.3, 3.4, 3.5, and 3.6), there are significant

differences between the four age categories on the: measure of psychopathy (Table 3.3),

χ^2 (6, N = 260) = 28.45, p < .001; relationship of the offender to the victim(s) (Table 3.4),

χ^2 (12, N = 767) = 149.33, p < .001; gender of victims (Table 3.5), χ^2 (6, N = 773) =

15.59, p < .02; and the developmental stage of the victim(s) (Table 3.6), χ^2 (6, N = 764) =

153.21, p < .001. These differences appear to reveal lower psychopathy in sexual

offenders over age 40 years, increases in victims known to the offender across each age

category, a small but steady increase in the victimisation of males over the age categories,

and a marked increase in the victimisation of prepubescent children with increases in the

offender's age. However, further examination of these findings is needed and will be

examined in subsequent chapters of this thesis.

Table 3.3. PCL-R Categories: Percentages of older and younger incarcerated sexual offenders.

Age of Sexual Offenders	PCL-R Scores			
	Low (< 20)	Moderate (20-29)	High (30+)	Total
< 25	50%	50%	0%	100%
25-39	51%	38%	11%	100%
40-60	79%	18%	3%	100%
60+ years	89%	9%	2%	100%

Table 3.4. Relationship of offender by age category to victim.

	Relationship to Victim											
	Family		Significant other		Casual acquaintance		Stranger		Mix of other categories		Total	
Age category	N	%	N	%	N	%	N	%	N	%	N	%
< 25	1	7	4	26	7	47	3	20	0	0	15	100
25-39	77	33	20	9	72	31	48	21	13	6	230	100
40-59	210	60	28	8	63	18	27	7	23	7	351	100
60+	143	83	15	9	8	5	0	0	5	3	171	100
Total	431	56	67	9	150	20	78	10	41	5	767	100

Table 3.5. Victim gender by offender age category.

	Gender of Victim(s)							
	Female		Male		Both		Total	
Age Category	N	%	N	%	N	%	N	%
< 25	14	93	0	0	1	7	15	100
25-39	199	86	20	9	12	5	231	100
40-59	275	77	47	13	34	10	356	100
60+	124	72	24	14	23	14	171	100

Table 3.6. Developmental stage of victim by offender age category.

	Developmental Stage of Victim							
	Prepubescent		Pubescent		Adult		Total	
Age Category	N	%	N	%	N	%	N	%
< 25	2	13	3	20	10	67	15	100
25-39	53	23	75	33	102	44	230	100
40-59	187	54	100	29	61	17	348	100
60+	130	76	32	19	9	5	171	100
Total	372	49	210	27	182	24	764	100

DISCUSSION

This chapter set out to give an overall picture of older sexual offenders (i.e., those aged 60 years or more) and contrast them with younger sexual offenders (i.e., those under age 60 years) in a number of ways. The effect of aging on factors, such as psychopathy, treatment needs, risk for recidivism, and offender and offence characteristics, related to sexual offending was examined. Older sexual offenders were compared to younger sexual offenders both dichotomously (< 60 versus 60+) and in a life-stage fashion (< 25, 25-39, 40-59, 60+). Both of these ways of dividing age into groups yielded interesting findings.

Older sexual offenders evidenced an average RRASOR score that would be considered in the low-moderate range (M = 1.36, SD = 1.51), as did the overall group (M = 1.39, SD = 1.35) and sexual offenders under age 60 years (M = 1.42, SD = 1.32). This is slightly below the mean risk level reported in the development and validation sample (M = 1.58, SD = 1.21) of the RRASOR. However the differences between the means in this study and those in the development and validation sample are not significant: validation sample versus older sexual offenders, t (740) = 0.17, ns; validation sample versus all offenders in current study, t (274) = 0.15, ns; validation sample versus sexual offenders under age 60 years, t (124) = .13, ns. These findings encourage confidence that the present data are representative of incarcerated sexual offenders.

The finding that the mean age of the victims of older sexual offenders (8.87 years) was significantly younger than the mean age of the victims of younger sexual offenders (12.83 years) suggests the possibility that older sexual offenders may fear victims who might have the physical strength to repel their advances; or, as Hanson (2002) has noted, older offenders may simply only have access to a pool of potential victims who are in this

age range (e.g., grandchildren or the children of younger neighbours). Given that such a

large proportion of the offences of older sexual offenders are against family members

(83.6%) it may be that grandchildren are the prime targets of these offenders. However,

Canada has no statute of limitations on prosecution for offending therefore it is also

possible that some of the older sexual offenders are incarcerated for crimes they

committed many years prior to coming to prison, and may, therefore, include other family

members, such as the offender's own children. Clearly this finding needs further

examination and will be pursued in the fifth chapter of this thesis.

Another interesting finding is the small increase in the number of male victims

and corresponding reduction in female victims as the ages of the sexual offenders

increase. Taken in the context of the reductions in victim age with the increased age of

the present group of sexual offenders, it is unclear whether this reflects a deviant sexual

interest in young males or whether younger males are simply more available to older

sexual offenders. In a study examining the sexual interests of men who offend against

male children, Marshall and his colleagues (W. L. Marshall, Barbaree, & Butt, 1988)

report there to be two clearly distinguishable subgroups: One group who offended against

male children was found to be homosexually oriented in their responses to adults and

these offenders had a mean victim age of 12 years and a second group who were

heterosexually oriented and had a mean victim age of 7 years. The heterosexual men in

Marshall et al.'s study reported that it was the lack of secondary sexual characteristics,

such as pubic hair and smooth skin (perhaps feminine characteristics) which they found

attractive in the boys they victimized, while the homosexual men reported that it was

these secondary sexual characteristics that they found attractive. Interestingly for the

purposes of this thesis, the men who molested younger boys in Marshall et al.'s study also indicated that it was easier for them to access boys than girls. Examining the sexual arousal patterns of the offenders in this data set may shed light on whether the observed increase in number of male victims with increases in the sexual offenders' age is related to a deviant sexual interest in young males or is simply an issue of availability (opportunity).

In this chapter, older sexual offenders had significantly lower scores on Factor 2 (criminal lifestyle) of the PCL-R. This suggests that the offending of these older sexual offenders is not part of a generally criminal lifestyle. This is a challenge to Hanson's (2002) hypothesis that older sexual offenders who offend for the first time later in life have less general self-control than other older males. It may be that the other two factors Hanson hypothesizes to be related to older sexual offenders (i.e., opportunity for offending and deviant sexual interests) are more relevant to understanding older sexual offenders. A comparison of the sexual interests among incarcerated sexual offenders may shed light on the factors associated with sexual offending in later life, and this will be pursued in the next chapter.

<div align="center">CONCLUSIONS</div>

This chapter sought to shed light on some of the features of older sexual offenders that may differentiate them from younger sexual offenders. Relationship to victim, victim age, and victim gender appear to be important distinguishing characteristics between older and younger sexual offenders. It is important to know whether these differences are a result of deviant sexual interests and whether there are differences between men incarcerated for crimes they have recently committed, or that occurred historically, or that

are a part of repeated pattern of sexual offending throughout the lifespan. Consequently,

the next two chapters will examine phallometric assessments of sexual offenders and then

compare offenders based on when their offending occurred.

CHAPTER 4: SEXUAL DEVIANCE

Although numerous authors have pointed out limitations of, and concerns about, phallometry (see Marshall & Fernandez, 2003, for a review) it is the most commonly used procedure in the assessment of sexual interests in sexual offenders (McGrath, Cumming, & Burchard, 2002). There has been considerable research examining the sexual interest profiles of sexual assaulters of children and adults. The very limited body of research examining the sexual interests of older offenders has shown a reduction in overall peak arousal with age which is very similar to observed reductions in recidivism with age (Barbaree, Blanchard, & Langton, 2003) and this has led some, most notably Hanson (2002), to hypothesize that age-related reductions in sexual interest may be responsible for age-related reductions in re-offending. Unfortunately, there are no reports on whether these reductions in overall arousal at phallometric testing and reductions in recidivism with age, are the result of a specific reduced deviance in older sexual offenders or simply lower arousal to all categories of stimuli.

An interesting finding from Chapter 3 of this thesis was the modest, but significant, increase in the numbers of male victims with the increase in age of sexual offenders. Taken in context of the reductions in victim age with increased age in sexual offenders, it is unclear whether this observed increase in male victims reflects a deviant sexual interest in young males or whether younger males are simply more available to older sexual offenders. As reported in Chapter 3, a study (Marshall, Barbaree, & Butt, 1988) of the sexual interests of men who offend against male children reported there to be two clearly distinguishable subgroups: One which was found to have an adult homosexual orientation and had a mean victim age of 12 years, and a second group who

were heterosexually oriented and had a mean victim age of 7 years. The heterosexual men

in Marshall et al.'s study reported that it was the lack of secondary sexual characteristics,

such as pubic hair and smooth skin (typically seen as feminine characteristics) which they

found attractive in the boys they victimized, while the homosexual men reported that it

was these same secondary sexual characteristics they found to be attractive. The

heterosexual offenders in Marshall et al.'s study also reported that it was easier for them

to get access to young boys than young girls. This chapter, then, will examine the sexual

arousal patterns of sexual offenders in order to shed light on the relationship between

aging in sexual offenders and an increase in the number of male victims found in Chapter

3. The question is whether this positive relationship between age and gender of victim is

the result of a deviant sexual interest in young males or an issue of availability.

Chapter 4, then, examines the phallometric responses of sexual offenders across

age groups. First, the effect of age on maximum arousal will be examined and compared

to Hanson's (2002) and Barbaree et al.'s (2003), results. Next, arousal to deviant stimuli,

such as rape or child molesting, will be compared to arousal in response to adult

consenting stimuli. Finally, the focus of deviant arousal will be examined to determine

whether the observation in Chapter 3 of an increase in male victims with increased

offender age is because of a deviant sexual interest for young males.

<div align="center">PREDICTIONS</div>

The predictions for these analyses, then, are:

1. There will be a reduction in overall arousal with increased age.

2. Older offenders will be less deviant than younger offenders.

3. Age will be related to the target of offending such that with increased age there will

be an increased deviant sexual interest in young males.

METHOD

Participants

Not all sexual offenders who were assessed by the Millhaven Specialised Sexual

Offender Assessment Unit participated in phallometric testing. The Correctional Service

of Canada requires that participation in any or all of the assessments by incarcerated

sexual offenders be optional. The phallometric procedure is considerably more invasive

than the rest of the assessment and consequently some men refuse to participate. The

Tables will reveal the available numbers or participants.

Measures

Deviant Sexual Arousal.

Sexual arousal was measured circumferentially using a mercury-in-rubber strain

gauge (Medical Monitoring Systems, D.M. Davis Inc. - see Davidson, Malcolm, Lanthier,

Barbaree, & Ho, 1981, for a detailed description). Conductance changes in the gauge as a

result of changes in penile tumescence were transduced through a Parks model 240

plethysmograph (Parks Electronics).

Age/gender interest was assessed by monitoring tumescence changes to a standard

set of 35mm color transparencies. These slides include three presentations each of nude

models of both sexes and of three physical developmental stages (pre-pubescence,

pubescence, and adulthood) (Tanner, 1971) as well as sexually neutral images (Harris,

Rice, Quinsey, Chaplin, & Earls, 1992; Malcolm, Andrews & Quinsey, 1993). The

assessment of sexual violence employed audio-taped descriptions of two adults engaging

in heterosexual activity, including consensual, non-consensual, and non-sexual violence, as well as sexually neutral descriptions (Harris, et al., 1992). The assessment of child sexual violence employed twenty taped descriptions, ten involving female children and ten involving male children. In addition, two neutral (non-sexual) descriptions were presented. The ten gender specific descriptions were further subdivided into five categories involving sexual conduct by an adult male with: (1) a consenting adult; (2) a passive child; (3) a coerced child; (4) sexual violence toward a child; and (5) non-sexual violence toward a child.

Phallometric assessments were conducted in a private, sound-attenuated room for one or more sessions that lasted for 1 to 2 hours each, and were separated by at least 24 hours from the preceding session. Presentation of the age/gender interest stimuli was preceded by three warm-up stimuli: a slide of a nude adult male, a nude adult female, and a neutral image. The sexual violence warm-up-stimuli consists of one consenting and one non-consenting episode of adults sexually interacting. After exposure to the warm-up stimuli, the actual assessment stimuli were presented in one of two predetermined orders. These orders of presentation ensure that episodes of a given type never followed one another more than once. For the purposes of this research, a sexual deviance index (SDI) was calculated by taking the average penile response to a relevant inappropriate category and dividing it by the average penile response to an appropriate category (Harris, et al., 1992; Serin et al. 1994). As per Millhaven Assessment Unit's Specialized Sex Offender Assessment standards, minimum responding required for interpretation of results is 3 millimetres of change. The presence of deviance is determined by the calculation of a deviant index which derived from dividing the maximum deviant response by the

maximum non-deviant response. A deviant index of .80 or more indicates the presence of deviance.

RESULTS

Of the total sample (N = 802), 123 respondents either refused to participate in phallometric testing, or the test was not available at the time they were at the testing facility - the phallometry laboratory at the Millhaven Assessment Unit underwent renovation for a period during the time these data were collected and consequently the test was not available for all subjects. Of the respondents in this study who underwent phallometric testing (N = 679), 154 (22.7%) displayed an uninterpretable response (i.e., less than 3 millimetres of change for any trial), 369 (54.3%) evidenced a non-deviant ("normal") profile (i.e., a deviant index of less than .80), and 156 (23%) showed a deviant sexual interest (i.e., a deviant index of .80 or greater). The 22.7% whose responses were too low to be interpreted is approximately the same as has been reported in other studies (see Marshall & Fernandez, 2003, for a review).

Overall responding by age group

Table 4.1 shows the distribution of the responses to phallometric testing based on the age of the offender. Chi square analyses demonstrated a significant difference in the distributions of phallometric responding based on age: under age 60 years versus those 60 years and older, χ^2 (2, N = 679) = 69.67, $p < .001$; when using four categories of age χ^2 (6, N = 679) = 91.62, $p < .001$. These significantly different age distributions all appear to reveal greater deviance in the offenders aged 60 years or older.

TABLE 4.1. Phallometric Response by Age Group.

| | Phallometric Response | | | | | | | |
| | Uninterpretable | | Non-Deviant | | Deviant | | Total | |
Age Group	N	%	N	%	N	%	N	%
<60	121	20	356	61	112	19	589	100
60+	33	37	13	14	44	49	90	100
Total	154	23	369	54	156	23	679	100
χ^2 (2, N = 679) = 69.67, p < .001								
	N	%	N	%	N	%	N	%
<25	2	3	43	65	21	32	66	100
25-39	46	19	156	66	35	15	237	100
40-59	73	25	157	55	56	20	286	100
60+	33	37	13	14	44	49	90	100
Total	154	23	369	54	156	23	679	100
χ^2 (6, N = 679) = 91.62, p < .001								

Maximum arousal by age

The relationship between age and penile response was examined using the *Output Index* or OI (Freund, 1967). The OI is the average of the three largest penile responses to stimuli containing sexual material regardless of the content of the stimuli. Penile response is reported in millimetres of change in the strain gauge from peak to baseline. The mean OI for the entire sample of valid responders (i.e., greater than 3 millimetres of change to any sexual stimulus) was 10.61 (SD = 7.83) millimetres of change from peak to baseline or approximately 30% of a full erection (see Howes, 1995, for this conversion). Linear regression analysis evidenced a statistically significant relationship between age and OI, r $_{(525)}$ = -.34, t $_{(524)}$ = 8.25, p < .001, with age accounting for 11% of the variance in OI.

Figure 2.1 shows the relationship between the OI and age and suggests that the data may better be represented by a curved rather than straight line. Similar to the results reported by Barbaree et al (2003), the curve that best fit the data is an inverse function of the form $Y = b_0 + (b_1/X)$. In other words, the magnitude of OI is better described as a

function of 1/age, rather than of age. The correlation between OI and the inverse of age was statistically significant, $r_{(525)} = -.37$, $t_{(524)} = 9.23$, $p < .001$, with age accounting for 14% of the variance in OI. All other curve estimations (i.e., logarithmic, quadratic and cubic) did not improve model fit over that shown by the inverse curve.

Figure 2.1. Graph of Output Index and Age of Offenders
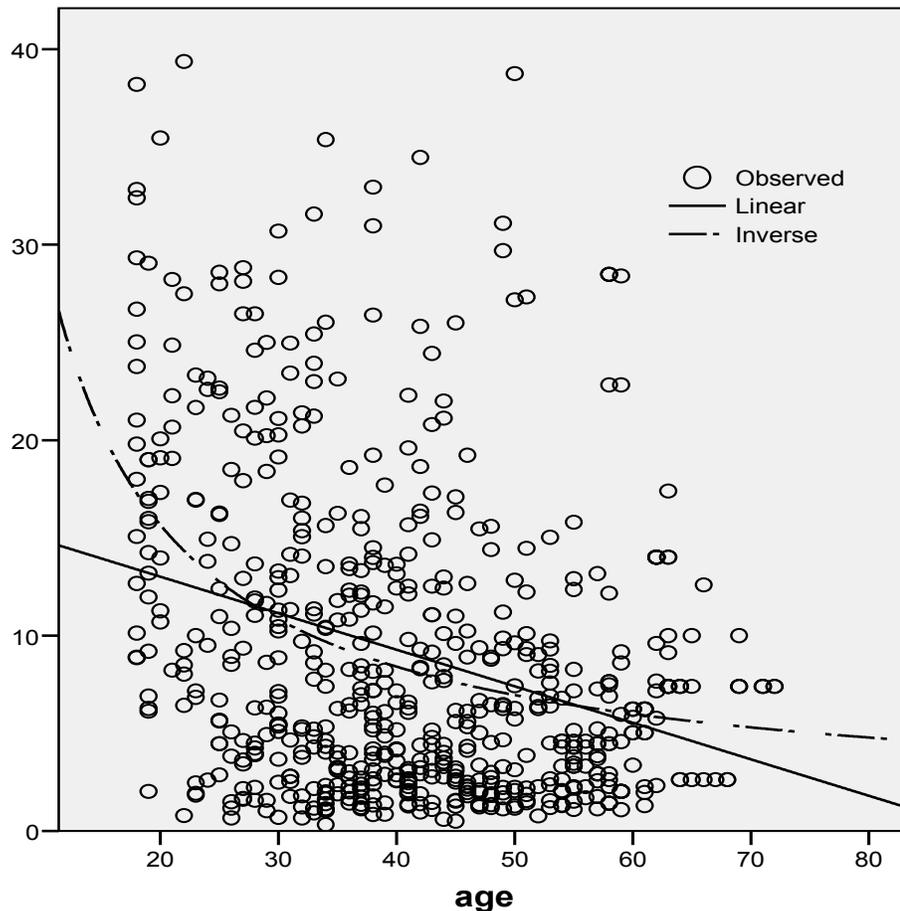
The participants were then divided into the two age categories (i.e., those aged 60 years or more versus those aged less than 60 years) and the four age categories (i.e., those aged less than 25 years, those aged 25 to 39 years, those aged 40 to 59 years, and those aged 60 years or more) employed in Chapter 3. There was a significant difference

between the OI of respondents under age 60 years (M = 10.96, SD = 8.13) and those age

60 years or more (M = 7.67, SD = 3.63), $\underline{t}$ (523) = 3.02, $\underline{p}$ < .01.

The mean Output Indices (OI) of the four age groups is shown in Table 4.2. A

one-way analysis of variance revealed a significant difference between the OI of the four

age groups, F (3, 521) = 24.06, $\underline{p}$ < .001. A post-hoc Tukey's Honestly Significant

Difference test revealed the OI for the under age 25 group to be significantly higher than

the three other groups (i.e., age 25-39, 40-59, 60+ years) at $\underline{p}$ < .001, and the age group

25-39 to be significantly higher than either the group aged 40 to 59 years and those aged

60 or more years, at $\underline{p}$ < .001. No significant difference was found between the group

aged 40 to 59 years and those aged 60 years or more.

TABLE 4.2. Means and Standard Deviations of the maximal Output Index (in mm) by

Age.

Age Group	Output Index (OI)	
	M	SD
<25	16.71 [a]	9.01
25-39	11.64 [b]	7.80
40-59	8.63 [c]	7.14
60+	7.67 [c]	3.63
OVERALL	10.61	7.83

[a] and [b] are significantly different from all other age groups @ $\underline{p}$ < .001

Deviance and age of offenders

In order to determine if sexual interest in male children is related to the age of the

perpetrator, the type of phallometrically assessed deviance was sorted into a deviant

sexual interest in rape, female children, and male children. Because very few offenders

displayed arousal to children of both genders, and because risk for sexual recidivism is

greater in those offenders who display any interest in male children, those offenders

displaying an interest in children of both genders were classified as displaying an interest

in male children. Table 4.3 shows the distribution of deviant sexual interests among

sexual offenders under the age of 60 years, and those aged 60 years or more, as well as

those in the four age categories.

Table 4.3. Deviant sexual interest by Age

| | Deviant Sexual Interest | | | | | | | |
| | Rape | | Female Child | | Male Child | | Total | |
Age Group	N	%	N	%	N	%	N	%
<60	32	28	59	53	21	19	112	100
60+	2	4	33	75	9	21	44	100
Total	34	22	92	59	30	19	156	100
	N	%	N	%	N	%	N	%
<25	8	38	8	38	5	24	21	100
25-39	13	37	18	52	4	11	35	100
40-59	11	20	33	59	12	21	56	100
60+	2	4	33	75	9	21	44	100
Total	34	22	92	59	30	19	145	100

Chi square analyses indicate that there is a significant difference between sexual

offenders under the age of 60 years and those aged 60 years or more in their deviant

sexual interests, χ^2 (2, N = 156) = 11.08, $p < .01$. Chi square analysis of the four age

categories shown in Table 4.3 also reveals that the distribution of sexual interests by age

is different from the hypothesized distribution, χ^2 (6, N = 156) = 17.78, $p < .01$. It was

predicted sexual offenders aged 60 years or more versus those age less than 60 years

would exhibit greater arousal to male children than females. Therefore the deviant sexual

interest in female children and rape columns were collapsed (no offenders in this study

convicted of sexual assault against an adult had male victims) and compared to deviant

sexual interest in male children. Fisher's exact test revealed no significant difference in

the proportion of deviant sexual interest based on the two age categories (aged 60 years or more versus those age less than 60 years), $p =. 82$. Because the omnibus chi square is significant, a post-hoc contrast analysis using Hopper's (2010) correction procedure was conducted. These analyses confirmed that older offenders, when compared to younger sexual offenders, had lower interest in rape than for female children, χ^2 (1, N = 126) = 42.68, $p < .001$.

DISCUSSION

In this chapter (4) of this thesis the maximum sexual arousal and the sexual interests of older sexual offenders were compared with those of younger sexual offenders. This study revealed differences between the phallometric assessments of younger and older sexual offenders. In particular, as shown in Table 4.1, the percentage of sexual offenders with a deviant response was highest in those aged 60 years or more. Interestingly, the presence of a deviant response appears to be U-shaped, with those offenders aged less than 25 years and those aged 60 years or more having the highest presence of a deviant response. It seems likely that there are different reasons for the higher presence of deviance in these two age groups (<25 years and 60+) given the differences found in maximum overall arousal with younger offenders having the highest and older offenders having the lowest Output Index (OI).

Although the Output Index of sexual arousal decreased with age at a higher rate (i.e., r = -.34) than that observed by Barbaree and his colleagues (i.e., r = -.13), the findings are consistent with other reports on the relationship between age and Output Index: Castonguay and his colleagues (Castonguay, Proulx, Aubut, McKibben, & Campbell, 1993) and Hall (1991) have both reported a relationship between age and

phallometric responding that is similar to the one reported in the current study, r = -.36

and r = -.35 respectively.

Despite this relationship between lower overall penile response and increased age,

the older sexual offenders in the current data set appear to be more deviant than younger

offenders. This does not quite match theories which suggest that the observed reduction

in overall arousal with increased age may be responsible for the observed reduction in

recidivism with increased age (Hanson, 2002). However, the older sexual offenders in

this chapter may have been repeat sexual offenders and representative of the most deviant

and persistent sexual offenders. Yet, as shown in Chapter 3, they did not receive

significantly longer sentences than younger offenders suggesting that they may not

necessarily be repeat offenders, so this will be examined in more detail in the next chapter

of this thesis.

In the discussion of his findings relating to age and sexually offensive behaviour,

Hanson (2002) hypothesized that rape ought to decrease in frequency as sexual offenders

age at least partly because young women tend to be the victims of sexual assaults, and

that people tend to associate with similar aged others, consequently reducing

opportunities older offenders have to assault young adult females. This hypothesis was

supported by the findings in Chapter 3 of this thesis; that is, there was an observed

decrease in the percentage of subjects convicted for a sexual assault against an adult, as

the age of the offender increased. However, phallometric assessments of deviant sexual

interests of sexual offenders in this chapter found that rape behaviour may also be

decreasing with increased age because of a lack of sexual interest overall or in rape

specifically. The rates of a deviant sexual interest in rape in the analyses in this study

went from 38% of the sexual offenders aged less than 25 years, to just 4% of those aged 60 years and older. Interestingly, the percentage of respondents displaying a deviant sexual interest in female children went from 38% in those under age 25 years, to 75% in those aged 60 or more years. Thus the observations of Chapter 4 contradict Hanson's hypothesis and are inconsistent with the findings of Chapter 3.

In terms of the relationship between age and victim gender observed in Chapter 3 (i.e., as age increases the victim is somewhat more likely to be male) the results of phallometric testing appear to indicate that it is not deviant sexual interest that is driving this behaviour. The relationship between deviant sexual interest and age was such that as age increased, the number of offenders who displayed a deviant sexual interest for female children increased whereas there was no change in the interest for male children. This would appear to be consistent with the finding reported by Marshall, Barbaree, and Butt (1988) that prepubescent males were offended against by heterosexually oriented adult offenders because such victims were easier for the offender to access.

Given the apparent contradictory findings between Chapters 3 and 4 of this thesis in terms of gender interests, it is important to examine the possible causes of these discrepancies, although it should be noted that in Chapter 3 the increase in male child victims with age was statistically significant but not remarkable. One possible reason for the difference in findings between the identified target victims and the phallometrically assessed deviant sexual interests of the older sexual offenders, may have to do with when the offending occurred. Because Canada does not have a statute of limitations on the prosecution of offences, and victims sometimes wait many years to bring forth allegations of sexual abuse, it is possible that some of the older offenders are incarcerated for

offences against male victims which occurred years prior to their current incarceration.

For example, in studies of Catholic priests who offended against boys, the offences

typically occurred many years before they were reported (Hanson, Pfäfflin, & Lutz,

2003).

CONCLUSION

This chapter examined the sexual interests of sexual offenders. This was done, in

part, to determine whether the modest increase in the number of male victims with

increased sexual offender age found in Chapter 3 was due to a sexual interest in male

victims in older sexual offenders. The findings of this chapter (4) contradicted the

findings of Chapter 3 and Hanson's (2002) hypothesis of reductions in sexual arousal

with increased age being responsible for observed reductions in recidivism with increased

age, in that more older sexual offenders in this study were found to be deviant than

younger offenders and more likely to have a deviant sexual interest for females. It is

conjectured that differences in sexual offenders in terms of the nature of their offending

may shed light on these findings and this will be explored in the next chapter of this

thesis.

CHAPTER 5: A COMPARISON OF HISTORICAL, FIRST-TIME, AND

RECIDIVISTS AMONG YOUNGER AND OLDER SEXUAL OFFENDERS

In Chapter 3 of this thesis it was found that the mean age of the victims of sexual offenders age 60 years or more was 8.91 years (SD = 7.28) and that this was significantly younger than victims of sexual offenders age 59 years or less (M = 12.77, SD = 11.61). Hanson (2002) has noted that reductions in recidivism with age may be a result of decreased access to a pool of potential victims, particularly access to adult victims. In the sample used in this thesis a large proportion of the offences committed by older sexual offenders were against children who were family members (83.6%) and therefore likely to be grandchildren. Thus, while Hanson may be right about the access of older offenders to adult victims, it may be that these older offenders have ready access to young victims. However, because Canada has no statute of limitations on the prosecution of offences it is also possible that some of the older sexual offenders are incarcerated for sexual offences they committed many years ago when they had access to their own children. In order to fully understand the effects of aging on sexual offending, and in particular sexual offenders who commit their crimes later in life, we will need to rule out those who committed their crimes many years prior to coming to jail. If there are significant effects of aging on sexually offensive behaviours then these "Historical" sexual offenders ought to be more like the younger sexual offenders described in the earlier chapters of this thesis.

Another finding in Chapter 3, that has relevance for this issue, is that as sexual offenders increased in age, the percentage of offenders with male victims also increased. This result may have occurred because the older sexual offenders are the most persistent

and highest risk; that is, they may be repeat offenders (recidivists) who target male

victims. As Hanson and Bussiere (1998) report, men who preferentially molest male

children are more likely to reoffend than are those who molest female children. In fact

most risk for sexual recidivism measures (e.g., RRASOR, STATIC-99) give greater

scores, reflecting higher risk for sexual recidivism, to offenders who have any male

victims. Again, this finding suggests a need to determine the rates of recidivists in the

current data set in order to determine whether the findings from Chapter 3 are an artefact

of the choice of victim (i.e., males) rather than an effect of aging.

 In order to attempt to control for the influence of age-cohort effects on both sexual

drive (Barbaree, Blanchard, & Langton, 2003) and self-control (Hanson, 2002), this

chapter will divide elderly sexual offenders into groups dependent on when their

offending occurred. Various features will be examined in older sexual offenders who are

either first-time offenders, or repeat offenders (hereafter called "recidivists"), or who

have recently been convicted for an offence that occurred at least 7 years prior to

incarceration (hereafter called "historical" offenders). Unfortunately there are no existing

reports on these different groups of sexual offenders. This is surprising given that Canada

does not have a statute of limitations on sexual crimes and that much of the research on

sexual offending has been done in Canada, including the limited research on elderly

sexual offenders (i.e., Uzoaba, 1998, Wormith, 1995) as well as on the most commonly

used risk assessment instruments (RRASOR & STATIC-99). It seems intuitively obvious

that offenders who ceased offending many years ago would be at lower risk than

offenders who offended more recently, and indeed coding rules for the commonly used

risk measure, the STATIC-99, now allow for reductions in risk based on time since release (Harris, Phenix, Hanson, & Thornton, 2003).

In the present study, first-time older sexual offenders are defined as having offended for the first and only time later in life (i.e., at or after age 60 years). These offenders present a challenge to those research findings showing that sexual drive diminishes with age (Barbaree, Blanchard, & Langton, 2003, Castonguay, Proulx, Aubut, McKibben, & Campbell, 1993; Hall, 1991), that self-control increases with age (Hanson, 2002), and that the rates of sexual re-offending approaches zero by age 60 years (Barbaree, Blanchard, & Langton, 2003; Hanson, 2002). Because the investigative process and prosecution can take a significant amount of time (due to appeals, delays, an over-crowded court system, etc.) criteria for first-time versus historical older sexual offenders will need to be determined and are described in the *Method* section below.

The examination of these three groups of older sexual offenders (i.e., Historical, First-time, & Recidivist) will inform both treatment providers and researchers on factors associated with sexual offending. Historical offenders can shed light on the factors associated with cessation of offending in the absence of legal intervention. First-time offenders may be informative concerning the factors responsible for the onset of offending, and recidivist offenders will highlight factors associated with the maintenance of sexually offensive behaviour after judicial sanction.

PREDICTIONS

There is no available literature on these three groups of offenders (Historical, First-time, & Recidivist) and therefore predictions can only be generated by inductive reasoning. Consequently, the predictions for this chapter are:

1. There will be significant differences between Historical, First-time, and Recidivist sexual offenders and these differences will be most apparent in older sexual offenders.

2. Older Historical sexual offenders will have offender and offence characteristics which are similar to younger Historical sexual offenders.

3. Older First-time sexual offenders will have significantly different offender and offence characteristics than younger First-time sexual offenders.

4. Older Recidivist sexual offenders will have offender and offence characteristics which are similar to younger Recidivist sexual offenders.

5. Among the older sexual offenders, First-time and Recidivist sexual offenders will be more likely to display a deviant sexual interest than Historical sexual offenders.

METHOD

All subjects are those described earlier in the *Omnibus Method Chapter (2)*. All measures used in this chapter are those described in the other earlier chapters of this thesis. Similar to the case of the data in the third chapter of this thesis, some of the measures used in this series of studies were not consistently used throughout the time span of data collection. Some of the measures, such as the RRASOR, appeared later within the data collection period and others, such as the PCL-R, were dropped from the Millhaven Assessment Unit's Specialized Sexual Offender Assessment (MAU). The RRASOR was scored on all respondents in this data set by the MAU assessment team as part of a continuing evaluation of the utility of the measure for Corrections Canada purposes. Also, due to systemic issues, not all measures were scored on every sexual offender who passed through MAU, for example due to offender having a short sentence

and therefore the need to move the offender to a treatment institution as soon as possible, or the mental or physical health of some individuals impacted their ability to participate in or respond to assessment. Consequently, the number of completed assessment items reported below is inconsistent across measures. The number of subjects having completed each assessment measure is reported.

Categorization into Historical, First-time and Recidivist

The categorization of all sexual offenders (younger and older) into Historical, First-time, or Recidivist offenders was based on each offender's file information revealing the history of offending and the date of the most recent offence. The information on time between last offence and arrest is typically found in police reports, but was also available from other sources, such as victim impact statements and community assessments.

Historical.

Because what is of interest about historical offenders is the cessation of offending in the absence of judicial intervention, there had to be a clear gap between when the offender was accused and the time of the last reported offence. A gap of 7 years between the actual occurrence of the offence and the report of the offence to the authorities was chosen as a cutoff for categorization as a Historical sexual offender. This cutoff point was used based on reviewing a large number of files where it was apparent that the finalization of the judicial process could take as long as five years from its initial report and that the offending had ceased in the absence of judicial intervention. Also, when the gap between the last known offence and incarceration was 10 years or less, a more

thorough review of the file was undertaken in order to ensure the judicial process, and any period spent in a remand institution, did not account for the gap.

When there was a discrepancy between sources of information on when offending ceased (typically disagreement between the victim and the offender) the victim's report was used. This method was used because most sexual offenders present with cognitive distortions (Barbaree, 1991) in order to minimize their culpability and to reduce criticism from others. As a result offenders will often report that the offending started later and ended earlier than the victim reports, in order to make the victim appear older when the offending occurred and minimize the length of time over which the offending occurred.

If the initial reporting of the offence did not result in a charge, but then the victim(s) later filed charges and there was no detected offending between the last incident and the recent report, then the offender was considered a Historical offender. This was done in order to examine factors related to an absence of judicial sanctions on the cessation of sexually inappropriate behaviour. Incarceration is intended to fulfill a number of societal needs including, but not limited to, a specific deterrent to the offender from engaging in further criminal activity. However, more pro-active preventative strategies of reducing victimization are preferable (Smallbone, Marshall, & Wortley, 2008) and an examination of Historical offenders may shed light on how to prevent offending and particularly recidivism. Maruna (2001), for example, has cast light on why it is that some offenders desist from crime after conviction whereas others persist. Examining the features of Historical sexual offenders may reveal factors associated with their desistance in the absence of judicial intervention and may, thereby, expand the work of Maruna.

First-time

In order to be considered a first-time sexual offender, there had to be no previous incarcerations for sexual offending, and sexual offending had to have ceased no more than seven years prior to incarceration, any temporal gap between offence cessation and incarceration had to be accounted for by the prolongation of the judicial process.

Recidivist.

These offenders are similar to first-time elderly sexual offenders in that the offence(s) for which they are most recently incarcerated occurred within seven years of incarceration and assessment. However, they must also have had at least one previous judicial sanction (prison, probation) for a previously committed sexual offence.

Categorizations were made independently by the assessment technicians at the Millhaven Specialized Sexual Offender Assessment Unit and the present author. Inter-rater reliability for categorization was found to be excellent, *kappa* = .98. The very few discrepancies between technician and author categorization were resolved by the author because file information from police and courts is sometimes more complete after the intake assessment has been completed.

RESULTS

The results will be presented in accordance with the predictions for this Chapter. First, although not part of the predictions due to the exploratory nature of the division into Historical, First-time, and Recidivist sexual offenders, the number of subjects in each category (5a), and the relationship between age and categorization (5b) will be reported. Next, (5c) the first prediction of the relationship, if any, for all offenders between categories and the offender and offence variables reported in Chapter 3 of this thesis (age, sentence length, risk for sexual recidivism, etc.) will be examined; then (5d) only those sexual offenders aged 60 years or more who have been categorized into Historical, First-time, and Recidivists will be compared on the variables reported in section 5c; Next, examining predictions 2, 3, and 4, (5e) analyses will be done separately by category (Historical, First-time, Recidivist) between older and younger sexual offenders on offender and offence variables. Finally, prediction 5, phallometric responses of only Historical, First-time, and Recidivist sexual offenders aged 60 years or more will be presented for comparison with the results reported in Chapter 4 (5f).

5a. Categorization

Insufficient data were available to be able to classify 13 subjects (1.6%). In total, 789 respondents (98.4%) were successfully classified into Historical (N = 189, 24%), First-time (N = 441, 56%), and Recidivist (N = 159, 20%) sexual offenders.

5b. Categorization and age in all offenders

As shown in Table 5.1, more than half of the sexual offenders aged 60 years or over in the current data set were convicted for offences that occurred at least 7 years prior to being arrested. In this respect the Historical offenders differed from both First-time and

Recidivists whether they were categorized into the two or four age groups. Chi square analyses of the two (<60 years, 60+) and four age (<25, 25-39, 40-59, 60+) categories revealed a significant difference in the distributions to that expected by chance: two age categories χ^2 (2, N = 766) = 113.18, p < .001, four age categories χ^2 (6, N = 766) = 166.54, p < .001.

TABLE 5.1. Age of offenders by category.

	Historical		First-time		Recidivist		Total	
	N	%	N	%	N	%	N	%
<60	92	16	374	63	128	21	594	100
60+	94	55	51	30	27	15	172	100
Total	186	24	425	56	155	20	766	100
<25	0	0	14	93	1	7	15	100
25-39	4	2	178	77	48	21	230	100
40-59	88	25	182	52	79	23	349	100
60+	94	55	51	30	27	15	172	100
Total	186	24	425	56	155	20	766	100

5c. Categories and offender and offence features for all offenders

Table 5.2 shows the means of the continuous offender and offence variables from Chapter 3 for each of the three offender groups (Historical, First-time, Recidivist). There are significant differences between the three categories on: age, F (2, 776) = 141.00, $p <$ .001; sentence length, F (2, 783) = 10.85, $p <$ .001; estimated risk for sexual recidivism (RRASOR), F (2, 696) = 97.25, $p <$ .001; treatment needs (LSI-R), F (2, 333) = 27.90, p < .001; estimated risk for general recidivism (SIR-RI), F (2, 480) = 12.74, $p <$ .001; psychopathy (PCL-R), F (2, 266) = 10.53, $p <$ .001; criminal lifestyle (PCL-R Factor 2), F (2, 177) = 5.84, $p <$ .01; number of victims, F (2, 783) = 14.05, $p <$ .001; and age of the youngest victim at the onset of offending, F (2, 641) = 21.80, $p <$ .001. No significant

differences were found between the three categories (Historical, First-time, Recidivist) on anti-social personality (PCL-R Factor 1). Overall these findings reveal that Historical offenders compared to the Recidivists are older, have shorter sentences, are at lower risk to reoffend both sexually and generally, have lower treatment needs, are less psychopathic and less likely to have a criminal lifestyle, have more victims, and their victims are of a younger age. Compared to First-time offenders the Historical offenders are older, at lower risk to reoffend but not sexually, less psychopathic, have more victims and their victims are younger. First-time offenders compared to Recidivists are younger, have a shorter sentence, are at less risk to sexually reoffend, and have older victims.

Table 5.3 describes the set of variables that are categorically classified. Chi square analyses of these data demonstrated a significant difference in the distribution of offence variables between historical, first-time and recidivist sexual offenders in the developmental stage of the victim at the onset of offending, χ^2 (4, N = 783) = 117.49, $p <$ .001, gender of the victim, χ^2 (4, N = 788) = 23.15, $p < 001$, and relationship of the offender to the victim, χ^2 (8, N = 782) = 87.98, $p < .001$. These analyses again suggest that the Historical offenders are more likely than the other two groups to have younger victims, to have targeted family members than either of the other two groups, but that all three groups are equally likely to have targeted female victims. Because these differences were not specifically predicted, further research is needed to better elucidate differences, if they indeed exist.

Table 5.2. Categorization by continuous offender and offence variables.

Measure		N	Mean		SD	Range
Age	Historical	189	59.70	[a]	9.32	30-84
	First-time	431	42.78	[b]	12.12	20-88
	Recidivist	159	47.03	[c]	12.35	22-72
Sentence Length (years)	Historical	189	4.71	[a]	3.01	2-25
	First-time	438	5.61	[a]	5.91	2-25
	Recidivist	159	7.55	[b]	7.89	2-25
Risk for Sexual Recidivism (RRASOR)	Historical	170	1.08	[a]	1.28	0-5
	First-time	397	1.10	[a]	1.10	0-5
	Recidivist	132	2.70	[b]	1.36	0-5
Treatment Needs (LSI-R)	Historical	135	14.40	[a]	5.96	3-30
	First-time	143	19.80	[b]	8.19	4-43
	Recidivist	58	21.74	[b]	8.09	9-39
Risk for General Recidivism (SIR-R1)	Historical	151	12.07	[a]	9.31	-6-25
	First-time	244	7.56	[b]	9.19	-14-27
	Recidivist	88	7.71	[b]	8.38	-12-24
Psychopathy (PCL-R Total Score)	Historical	109	11.65	[a]	5.33	2-29
	First-time	114	15.06	[b]	7.07	3-34
	Recidivist	46	16.13	[b]	6.94	4-32
PCL-R Factor-1 Total	Historical	98	6.82		2.91	0-14
	First-time	53	7.06		3.86	1-15
	Recidivist	29	7.34		3.44	1-13
PCR-R Factor-2 Total	Historical	98	3.06	[a]	2.59	0-13
	First-time	53	3.83	[ab]	3.44	0-13
	Recidivist	29	5.17	[b]	3.49	1-13
Number of victims	Historical	189	3.08	[a]	2.36	1-13
	First-time	441	1.99	[b]	2.41	1-25
	Recidivist	156	2.34	[b]	2.57	1-16
Age of youngest victim at onset of offending	Historical	179	7.87	[a]	3.94	2-35
	First-time	337	14.35	[b]	13.95	.25-91
	Recidivist	128	11.02	[c]	6.82	1-43

Category means in Measure column with different superscripts significantly differ at $p <$ .05 (Tukey HSD). NB: Higher scores on the SIR-R1 indicate less risk.

Table 5.3. Categorization by categorical offence variables for all offenders.

	Historical		First-time		Recidivist	
	N	%	N	%	N	%
Developmental stage of youngest victim at onset of offending						
Prepubescent Child Victim (<13 yrs)	150	80	153	35	73	47
Pubescent Child Victim (13-17 yrs)	35	18	148	34	40	25
Adult (18+ years)	3	2	137	31	44	28
TOTAL	188	100	438	100	157	100
Gender of Victim(s)						
Female	136	72	375	85	116	73
Male	24	13	38	9	28	18
Female & Male	28	15	28	6	15	9
TOTAL	188	100	441	100	159	100
Relationship to victim						
Family	157	83	213	49	69	44
Significant other	13	7	37	8	17	11
Casual acquaintance	9	5	104	24	42	27
Stranger	1	1	61	14	18	12
More than one of the above	8	4	23	5	10	6
TOTAL	188	100	438	100	156	100

5d. Sexual offenders aged 60 years and older

In order to avoid the potential confound of age-cohort differences, this section will examine only those offenders aged 60 or more years, and, in the interest of brevity, they will be referred to as older sexual offenders. One hundred and seventy four older sexual offenders in the current sample were successfully categorized as either historical (N = 95, 55%), first-time (N = 52, 30%), or recidivist (N = 27, 15%) sexual offenders. The mean age of these older sexual offenders was found to be 65.80 years (SD = 5.13)

The means and standard deviations of the continuous characteristics of the offenders and offences for these older offenders are shown in Table 5.4. Significant differences were found between the three categories on: age, $F (2, 171) = 6.19$, $p < .01$; estimated risk for sexual recidivism (RRASOR), $F (2, 156) = 74.48$, $p < .001$; treatment

needs (LSI-R), F (2, 150) = 15.10, $p <$ .001; estimated risk for general recidivism (SIR-

R1), F (2, 152) = 9.22, $p <$ .001; psychopathy (PCL-R), F (2, 114) = 14.47, $p <$ .001;

criminal lifestyle (PCL-R Factor 2), F (2, 111) = 21.97, $p <$ .001; and, age of the youngest

victim at the onset of offending, F (2, 165) = 4.17, $p <$ .05. No significant differences

were found between the three categories (historical, current, recidivist) on sentence

length, $p =$ .08, anti-social personality (PCL-R Factor 1), $p =$ .06, and number of victims,

$p =$ .41. These results reveal that compared to Recidivist older offenders, Historical older

offenders are at lower risk to reoffend (both sexually and generally), have less treatment

needs, are less psychopathic, are less likely to have a criminal lifestyle, and have younger

victims. They also show that First-time older offenders are at lower risk to reoffend (both

sexually and generally), have less treatment needs, are less psychopathic, and are less

likely to have a criminal lifestyle than are the Recidivist older offenders. Compared to

First-time older offenders the Historical older offenders are older and have younger

victims.

The number and percentage of each category in terms of their offence

characteristics are shown in Table 5.5. Because older offenders were found to have no

stranger victims (see Chapter 3) which would violate the assumptions of chi square

analysis, and because what is of particular interest to this thesis is whether older offenders

are more likely to offend against family members (i.e., grandchildren), the relationship to

victim will also be explored as familial versus non-familial victims. Chi square analyses

revealed significant differences in the gender of victim, χ^2 (4, N = 173) = 10.85, p < .05,

and the offender's relationship to victim, χ^2 (2, N = 173) = 12.19, p < .01, between the

categories (Historical, First-time, Recidivist) of older sexual offenders and more research

is needed to further examine these results.

Table 5.4. Categories of older (60+) sexual offenders on offender and offence

characteristics.

		N	Mean		SD	Range
Age	Historical	95	66.87	a	5.49	60-84
	First-time	52	63.84	b	4.53	60-88
	Recidivist	27	65.78	ab	3.76	60-72
Sentence Length (years)	Historical	95	4.64		2.33	2-15
	First-time	52	5.34		4.67	2-25
	Recidivist	27	6.45		5.28	2-25
Risk for sexual	Historical	86	0.85	a	1.02	0-5
recidivism (RRASOR)	First-time	47	0.87	a	1.03	0-4
	Recidivist	26	3.65	b	1.26	1-5
Treatment needs (LSI-R)	Historical	88	14.19	a	5.44	3-28
	First-time	43	16.00	a	7.94	4-38
	Recidivist	22	22.68	b	7.14	9-35
Risk for general	Historical	89	12.13	a	9.64	-3-24
recidivism (SIR-R1)	First-time	45	10.84	a	8.76	0-25
	Recidivist	21	2.62	b	7.67	-12-17
PCL-R	Historical	69	10.91	a	4.78	2-27
	First-time	33	10.93	a	5.11	3-23
	Recidivist	15	18.73	b	7.32	7-32
PCL-R Factor-1	Historical	66	6.88		2.75	0-14
	First-time	33	6.67		3.32	2-13
	Recidivist	15	8.87		3.73	3-14
PCL-R Factor-2	Historical	66	2.56	a	2.29	0-12
	First-time	33	2.61	a	2.12	0-7
	Recidivist	15	7.00	b	3.36	2-13
Number of victims	Historical	95	3.31		2.67	1-13
	First-time	52	2.94		3.32	1-20
	Recidivist	27	3.96		4.41	1-16
Age of youngest victim	Historical	91	7.47	a	3.40	2-20
at onset of offending	First-time	50	10.51	b	11.34	.25-78
	Recidivist	27	10.89	b	6.26	3-31

Category means with different superscripts significantly differ at $p < .05$ using Tukey's
HSD.
NB: Lower scores on the SIR-R1 mean higher risk for general recidivism.

Table 5.5. Categorization by categorical offence variables for older offenders only.

	Historical		First-time		Recidivist	
	N	%	N	%	N	%
Developmental stage of youngest victim at onset of offending						
Prepubescent Child Victim (<13 yrs)	78	83	37	71	16	59
Pubescent Child Victim (13-17 yrs)	14	15	11	21	8	30
Adult (18+ years)	2	2	4	8	3	11
TOTAL	94	100	52	100	27	100
Gender of Victim(s)						
Female	74	78	39	75	13	48
Male	9	10	8	15	7	26
Female & Male	11	12	5	10	7	26
TOTAL	94	100	52	100	27	100
Relationship to victim						
Family	87	93	45	86	18	67
Non-family	7	7	7	14	9	33
TOTAL	94	100	52	100	27	100

5e. Categories of older versus younger sexual offenders on offender and offence

characteristics

Historical Offenders

As revealed earlier in Table 5.3 no sexual offenders under the age of twenty-five and only four aged between 25 and 39 years were found to be Historical offenders. Consequently, only differences between historical sexual offenders aged 60 years or more and those under age 60 years will be reported here. In examining the offender and offence characteristics (risk for recidivism measures, sentence length, etc.) reported in previous chapters of this report, student's t-tests revealed a significant difference between Historical offenders aged 60 years or more and those under age 60 years only on criminal lifestyle (PCL-R Factor 2) with older sexual offenders having a lower mean score (M = 2.56, SD = 2.29) than did younger sexual offenders (M = 4.09, SD = 2.88), t (96) = 2.85,

$p < .01$. No other offender or offence variables were found to significantly differ between older and younger Historical offenders.

First-time sexual offenders

Because there are a robust number of sexual offenders of all ages in the First-time sexual offender category, and what is of interest is the relationship between aging and sexual offending throughout the lifespan, differences will be examined with age as a continuous measure and with the age related stages described earlier; that is as a four-category (<25, 25-39, 40-59, 60+) variable.

Pearson product-moment correlation analyses applied to First-time offenders revealed age to be significantly positively related to number of victims ($r = 27, p < .001$), and significantly negatively related to the age of victim ($r = -.17, p < .01$), treatment needs (LSI) ($r = -.37, p < .001$), psychopathy (PCL-R) ($r = -.40, p < .001$), and criminal lifestyle (PCL-R Factor 2) ($r = -.31, p < .05$). These variables also accounted for a significant proportion of the variance in age among First-time offenders, $R^2 = .23, F (4, 87) = 7.59, p < .001$. Using a stepwise regression model, however, only the treatment needs measure (LSI-R1) significantly predicted age, $\beta = -.48, t (92) = 5.20, p < .001$; that is, treatment needs decreased with increased age. No significant relationship was found between age and sentence length ($p = .06$), risk for sexual recidivism (RRASOR) ($p = .06$), risk for general recidivism (SIR-R1) ($p = .14$), and anti-social personality (PCL-R Factor 1) ($p = .30$).

Insufficient data (<25%) were available to examine differences in the subscales (anti-social personality and criminal lifestyle) of the psychopathy measure (PCL-R) across the four age categories, and therefore these analyses were excluded. The means

and standard deviations for the remaining variables are shown in Table 5.6. Overall

significant differences were found between age categories (using the four category model

of age, <25, 25-39, 40-59, 60+) on length of sentence, $F (3, 420) = 2.66, p < .05$, risk for

sexual recidivism (RRASOR), $F (3, 381) = 6.12, p < .001$, treatment needs (LSI-R), $F (3,$

$142) = 5.03, p < .01$, psychopathy (PCL-R) $F (3, 110) = 6.30, p < .01$, number of victims,

$F (3, 421) = 7.86, p < .001$, and age of the youngest victim at the onset of offending, $F (3,$

$323) = 2.96, p < .05$. No significant differences were found between the age categories on

risk for general recidivism, $F (3, 232) = 2.33, p = .08$.

Differences between the four age categories (<25, 25-39, 40-59, 60+) on the

categorical variables used in previous analyses are shown in Table 5.7. Chi Square

analyses revealed a significant difference in the distribution of the developmental age of

the victim at the age of onset of offending, $\chi^2 (6, N = 422) = 71.36, p < .001$, and the

relationship of the offender to the victim, $\chi^2 (12, N = 423) = 71.46, p < .001$, between the

four age categories. No significant difference was found between the age groups in the

gender of the victim, $\chi^2 (6, N = 425) = 10.64, p = .10$.

Table 5.6. First-time sexual offenders: Offender and offence characteristics.

	Age Group	N	Mean		(SD)	Range
Sentence in years	<25	14	2.89	a	1.08	2-5
	25-39	177	5.02	a b	5.07	2-25
	40-59	182	6.34	a b	6.86	2-25
	60+	51	5.21	b	4.63	2-25
Sexual Recidivism (RRASOR)	<25	14	2.14	a	1.23	1-5
	25-39	160	1.03	b	0.83	0-4
	40-59	165	1.01	b	1.10	0-5
	60+	46	0.89	b	1.03	0-4
Treatment Needs (LSI-R)	<25	2	23.50	a b	2.12	22-25
	25-39	41	22.44	a	7.37	4-34
	40-59	57	19.19	a b	7.95	6-43
	60+	43	16.00	b	7.94	4-38
General Recidivism (SIR-R1)	<25	3	13.33		10.60	2-23
	25-39	85	8.13		8.81	-14-27
	40-59	103	6.84		9.55	-12-26
	60+	45	10.84		8.77	0-25
Psychopathy (PCL-R Total Score)	<25	2	22.5	a	6.36	18-27
	25-39	34	17.42	a b	7.86	3-34
	40-59	45	14.49	a b	6.66	3-32
	60+	33	10.94	b	5.11	3-23
Number of victims	<25	14	1.42	a	0.94	1-4
	25-39	178	1.46	a	0.96	1-6
	40-59	182	2.30	a b	2.83	1-25
	60+	51	2.98	b	0.34	1-20
Age of youngest victim at onset of offending	<25	6	16.67	a b	14.09	4-41
	25-39	121	16.61	a	13.72	1-88
	40-59	151	13.14	a b	13.75	1-91
	60+	49	10.45	b	11.45	<1-78

Category means with different superscripts significantly differ at $p < .05$ using Tukey's HSD.
NB: Lower scores on the SIR-R1 mean higher risk for general recidivism.

Table 5.7. First-time sexual offenders: Categorical offence characteristics.

	<25		25-39		40-59		60+	
	N	%	N	%	N	%	N	%
Developmental stage of youngest victim at onset of offending								
Prepubescent Victim (<13 yrs)	2	14	40	23	75	42	37	72
Pubescent Victim (13-17 yrs)	2	14	56	31	67	37	10	20
Adult (18+ years)	10	72	82	46	37	21	4	8
TOTAL	14	100	178	100	179	100	51	100
Gender of Victim(s)								
Female	13	93	160	90	150	83	38	74
Male	0	0	11	6	22	12	8	16
Female & Male	1	7	7	4	10	5	5	10
TOTAL	14	100	178	100	182	100	51	100
Relationship to victim								
Family	1	7	58	33	106	60	42	82
Significant other	4	29	18	10	9	5	5	10
Casual acquaintance	6	43	56	31	36	20	2	4
Stranger	3	21	36	20	19	10	0	0
More than one of the above	0	0	10	6	10	5	2	4
TOTAL	14	100	178	100	180	100	51	100

Recidivists

Only one recidivist offender was under age twenty-five years. Therefore, similar

to the case of the Historical offenders, analyses will concern only the two age categories

(<60 and 60+). In examining the offender and offence characteristics (risk for recidivism

measures, sentence length, etc.) reported in previous chapters of this report, student's t-

tests revealed a significant difference between Recidivist offenders aged 60 years or more

and those under age 60 years on: risk for sexual recidivism (RRASOR), with older sexual

offenders having a greater mean score (M = 3.65, SD = 1.26) than did younger sexual

offenders (M = 2.81, SD = 1.33), t (130) = 2.92, p < .01; risk for general recidivism (SIR-

R1) with older sexual offenders having a lower mean score (M = 2.62, SD = 7.67),

reflecting a greater risk for general recidivism, than did younger sexual offenders (M = 8.75, SD = 7.90), t (80) = 3.09, p < .01; and number of known victims with older sexual offenders having a greater mean number of known victims (M = 3.96, SD = 4.41) than did younger offenders (M = 1.98, SD = 1.81), t (150) = 3.80, p < .001. No other offender or offence continuous variable was found to significantly differ between older and younger offenders among the Recidivists. Correlational analyses demonstrated the same results with age being positively related to risk for sexual recidivism (RRASOR), r (134) = .30, p < .001, number of known victims, r (154) =.31, p < .001, and risk for general recidivism (SIR-R1), r (83) = .33, p < .001.

The distribution of the Recidivist offenders over and under age 60 years on the categorical variables described earlier (i.e., developmental stage of the victim, gender of victim, and offender relationship to victim) are shown in Table 5.8. Chi square analyses demonstrated significant differences in the distributions of Recidivist offenders on gender of victim, χ^2 (2, N = 155) = 9.01, p < .05, and offender relationship to victim, χ^2 (4, N = 153) = 11.31, p < .05. No significant difference was found between the distribution of older and younger Recidivist offenders on the developmental stage of the victim (p = 0.8).

Table 5.8. Victim Characteristics – Recidivists only.

		N		Percent	
		<60	60+	<60	60+
Developmental stage of youngest victim at onset of offending					
Prepubescent Child Victim (<13 yrs)		53	16	42%	59%
Pubescent Child Victim (13-17 yrs)		32	8	25%	30%
Adult (18+ years)		41	3	33%	11%
	TOTAL	126	27	100%	100%
Gender of Victim(s)					
Female		97	13	76%	48%
Male		19	7	15%	26%
Female & Male		12	7	9%	26%
	TOTAL	128	27	100%	100%
Relationship to victim					
Family		48	18	38%	67%
Significant other		14	4	11%	15%
Casual acquaintance		36	5	29%	18%
Stranger		19	0	15%	0%
More than one of the above		9	0	7%	0%
	TOTAL	126	27	100	100

5.f. A comparison of phallometric responses of older Historical, First-time, and

Recidivist offenders

For comparison with the previous chapter of this thesis on phallometric testing results, the phallometric responses of First-time, Historical, and Recidivist older (i.e., aged 60 years or more) offenders were examined as shown in Table 5.9 and 5.10. There were no significant differences in the distribution of First-time, Historical, and Recidivist offenders by interpretability of responding, χ^2 (N= 126, df = 6) = 1.45, p = .99, or prevalence of deviance, χ^2 (N= 57, df = 2) = 0.87, p = .96.

Table 5.9. Interpretability of phallometric response in sexual offenders aged 60 years or more.

		Interpretability				
		Not available	Refused	Uninterpretable	Interpretable	Total
Historical	N	12	4	17	28	61
	%	20%	6%	28%	46%	100%
First-time	N	13	3	12	20	48
	%	27%	6%	25%	42%	100%
Recidivist	N	3	1	4	9	17
	%	18%	6%	23%	53%	100%
Total	N	28	8	33	57	126
	%	22%	7%	26%	45%	100%

Table 5.10. Prevalence of deviance in responders aged 60 years or more.

		Response		
		Non-deviant	Deviant	Total
Historical	N	6	22	28
	%	21%	79%	100.0%
First-time	N	5	15	20
	%	25%	75%	100.0%
Recidivist	N	2	7	9
	%	22%	78%	100.0%
Total	N	13	44	57
	%	23%	77%	100.0%

DISCUSSION

This chapter aimed to discern more accurate representations of the effect of age on sexual offending. It was hypothesized that previous analyses of the effect of age on sexual offending suffered from confounds concerning when the offending occurred. In an attempt to remove this possible confound, sexual offenders were divided into groups based on when their offending occurred. Those whose offending ceased without judicial intervention were described as Historical offenders, those whose sexual offending was only stopped by judicial intervention were termed First-time sexual offenders, and those

who had at least one previous judicial intervention for a sexual offence were called

Recidivists.

There are, of course, possible problems with these labels (i.e., Historical, First-

time, and Recidivist) in that they rely on the rigour of the judicial system and the

transmission of accurate information. The results of these analyses are to some degree a

test of these issues and they do, indeed, appear to support the validity of dividing sexual

offenders into these categories. However, more research on other factors that may be

associated with the effect of age on sexual offending is needed. Some of these factors that

are of particular relevance for older sexual offenders would be health, employment, and

social changes associated with age. These factors might add further to theories of aging

that could be relevant to understanding sexual offenders.

In Subsection *5.a* the percentage of sexual offenders in each category (Historical,

First-time, Recidivist) was reported. Two findings from the categorization process are of

particular interest. The large number of Historical offenders (24%) was surprising as was

the even larger number of Historical offenders aged 60 years or more (55%). This result

means that nearly one quarter of all the sexual offenders, and greater than half of those

aged 60 years or more, in the Ontario Region of the Correctional Service of Canada are

incarcerated for crimes they committed more than seven years prior to being charged, and

which they ceased without judicial intervention. Of course incarceration is not only done

to stop offending, it also is expected to have a deterrence effect on those who are

contemplating offending and to give victims a sense of justice. However, given that these

offenders ceased offending without judicial intervention, it may be that lower, possibly

provincial sentences (i.e., less than two years), for these offenders may save tax payers

money and free-up scarce resources for interventions, but still address the other reasons
for incarceration. However, recidivism analyses are needed before changes to sentencing
practices with Historical offenders are made.

Secondly, the number of recidivist offenders (20%) found in this study is a match
for the expected rate of sexual re-offending of an unselected sample of sexual offenders,
as reflected in data on risk assessment instruments. This low rate of recidivists also goes
counter to the general public's perception of the re-offence rates for this type of crime.
For example, in a series of studies examining the public's perception of the rates of re-
offending among offenders, Pfeiffer and Windzio (2006) reported that the rates for sexual
offenders were expected to be close to 100%.

In Subsection *5.b* the categories (Historical, First-time, Recidivist) were compared
on the offender and offence variables reported in Chapter 3. An interesting pattern
appeared in the risk assessment measures in that risk for sexual recidivism was highest in
the Recidivists, with no differences between the Historical and First-time sexual
offenders. For the treatment needs and risk for *general* recidivism measures, however, the
First-time sexual offenders were found to be similar to the Recidivists. It is unclear what
the differences in these findings mean. It is possible that in First-time sexual offenders,
sexual offending is reflective of a criminal lifestyle and the sexual offence is simply
another expression of this tendency. Yet on the criminal lifestyle measure used in this
study (PCL-R Factor II) the First-time sexual offenders were found to be similar to the
Historical offenders and unlike the Recidivists. Future research could look at the rates of
non-sexual offending in these three groups to better understand these differences in the
categories and risk assessment measures.

The observed difference in the age of the youngest known victim at the onset of offending in Subsection *5.b*, with each category being significantly different in the mean victim age, suggests that rapists are most commonly represented in the First-time category. This finding supports Hanson's (2002) suggestion that rapists will be under-represented in older sexual offenders. Hanson claimed that the prevalence of rape will go down as sexual offenders get older because young women tend to be the target of rapists and people tend to associate with people of a similar age and therefore offenders will have less opportunity to rape as they age.

The Historical offenders were much more likely to target younger victims and family members than either the First-time or Recidivist sexual offenders. This suggests that these men stopped their offending when they or the child victim moved from the home; that is, they no longer had the opportunity to offend. Some of these offenders or their victims may have moved from the home in order to prevent continued offending. Clearly, more research is needed to better understand the reasons Historical sexual offenders cease offending. However, these results offer support for the current policy of Children's Aid Services of not allowing offenders who have offended against their own children, to return to their family and children, or to live with or have unsupervised access to children.

In Subsection *5.c* it was found that categorization (i.e., Historical, First-time, and Recidivist) modestly, but significantly, predicted age, with categorization accounting for 12% of the variance. While there is still a significant proportion of categorization that remains to be accounted for, clearly age is an important factor. The interesting thing about categorization was the steady increase in the percentage of Historical offenders and

decrease in percentage of First-time sexual offenders, as age increased, while the

percentage of Recidivists remained relatively static. Although there were fewer

Recidivists in the under age 25 group, the overall percentage essentially matched the

overall rate of sexual re-offending reported in a number of large scale studies (e.g.,

Hanson & Thornton, 2000).

Although in Subsection *5.d* Historical, First-time, and Recidivist sexual offenders

were found to significantly differ in age, as shown in Table 5.4, these observed

differences in age appear to be clinically insignificant. The maximum difference in age

was three years, with the First-time offenders being three years younger than the

Historical offenders. The only possible implication of this finding is that sexual offending

may indeed burn out, yet the oldest offender in the data was a First-time offender (aged

88 years). The important differences found between older Historical, First-time, and

Recidivist offenders, in terms of the continuous variables shown in Table 5.4, appears to

be that Historical and First-time offenders significantly differ from Recidivists in terms of

risk for any kind of recidivism. These findings suggest that Recidivists establish a pattern

of offending early in life and even judicial intervention does not appear to make them

desist in their sexually offensive behaviour. It is possible that the factors Hanson (2002)

hypothesized to be associated with desistance (i.e., increased self-control, and decreased

sexual arousal and opportunity) apply in reverse to a small, but significant, percentage

(20%) of sexual offenders and that these offenders go on to become reoffenders, but more

research is needed to examine this hypothesis.

The other interesting finding from the continuous variables used in Subsection

5.d, is that there was no significant difference in the age of the youngest victim at the

onset of offending between First-time and Recidivist offenders, yet Historical offenders were found to have offended against significantly younger victims than either First-time and Recidivist offenders. Based on the range in age of victims as reported in Table 5.4, the older First-time offenders appear to be targeting victims of all ages whereas older Historical and Recidivist offenders appear to be targeting younger victims. However, further examination of the data reveals that less than 6% of the victims of First-time offenders were over the age of 20 years (maximum age of victims of older Historical offenders), 5% of the victims of First-time offenders were over the age of 31 years (maximum age of victims of older Recidivists). Consequently, it appears that older First-time and Recidivist sexual offenders tend to target similar aged victims, while older Historical sexual offenders target younger victims. This hypothesis is also supported by the findings on the developmental age of victims shown in Table 5.5.

In Table 5.5 of Subsection *5.d*, older Recidivist offenders appear to be targeting male victims nearly twice as frequently as older Historical or First-time offenders. Table 5.5 also suggests that the victims of older Recidivist offenders are more likely to be non-family members, with older Recidivists being more than five times more likely than older Historical and more than three times more likely than older First-time offenders to have non-familial victims.

In Subsection *5.e* differences between older and younger sexual offenders within each of the categories of offenders (Historical, First-time, Recidivist) were explored. As hypothesized there were essentially no differences between older and younger Historical sexual offenders in terms of offender and offence features. This suggests that the offenders categorized as Historical offenders in this study had indeed committed their

offences many years prior to incarceration and that there may be features of this type of

offender that can inform on the desistance of offending in the absence of judicial

intervention. A closer examination of the characteristics of these offenders would help

providers of sexual offender treatment by illustrating desistance and preventative factors

and, indeed, Smallbone, Marshall, and Wortley (2008) have called for examination of

these desistance, and possibly preventative, factors. Given that the Historical offenders in

this series of studies tended to offend against young children, it is possible that

opportunity is a significant factor in sexual offending. However, theoretically all fathers

have opportunity for sexual offending, why only a few choose to commit sexual offences

is still unclear. Future research examining the reasons Historical offenders both started

and ceased offending, and then do not go on to reoffend, would help treatment providers

design interventions.

As was shown in Table 5.6, the number of reported victims of First-time sexual

offenders increased with age. It is unclear whether this reflects a tendency in older First-

time sexual offenders to have more victims at one time, or whether the older First-time

sexual offenders have offended over a longer period of time than younger First-time

sexual offenders; further research is needed to clarify this finding.

An interesting finding shown in Table 5.6 is that despite the age range of victims

over the four age categories (<25, 25-39, 40-59, 60+) being similar, especially after age

25 years, the mean age of victims declined as the age of the offender increased. Further

analysis revealed that the age of the youngest known victim at the onset of offending

significantly predicted First-time offender age, $\beta = -.17$, $t\,(332) = 3.12$, $p < .01$. This

supports the hypothesis that older offenders will target victims they find less, in particular

physically, threatening. As shown in Table 5.7, this hypothesis is also supported by the

finding on developmental stage of the youngest victim at onset of offending, with 72% of

the First-time offender aged 60 years or more having a prepubertal youngest victim at

onset of offending, while the younger age groups (<25, 25-39, 40-59) had 14%, 23%, and

42% prepubertal youngest known victim at onset of offending, respectively. The older

First-time offenders were also more likely to target family members than the younger

First-time offenders, which again gives support to the hypothesis that opportunity for

offending is important, and also suggests that First-time older sexual offenders are

targeting grandchildren.

Although there was no statistically significant difference found, also of interest in

the results in Table 5.7 is the small increase in male victims with increased offender age.

The lack of significance appears to be a result of the low rate of offending against males

and high rate of offending against females, rather than a lack of difference in number of

male victims between the age categories. One hypothesis for the low number of male

victims may be that males, especially younger males, are reluctant to come forward with

allegations of sexual abuse due to how they may be seen by others (e.g., they may fear

that others will assume they are homosexual or be revolted at homosexual contact, even if

it is unwanted). There are a number of possible explanations for the increase in male

victims with increased offender age such as, that older offenders targeting younger

victims may have more easy access to male victims or, given the reported rates of

victimisation of males (25% or more) noted in the introduction of this thesis and possible

fears of being seen as homosexual, the increase in male victims as offenders age may be a

result of greater revulsion by the victim at the abuse suffered. Clearly more research is needed to better understand these findings.

In this section, older Recidivist offenders were found to be at greater risk for future sexual recidivism than younger Recidivists. Yet, previous research has shown an actual decrease in recidivism with increased offender age (e.g., Barbaree, Blanchard, & Langton, 2003; Coxe & Holmes, 2009; Hanson, 2002; Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004). These previous studies reflect actual recidivism rather than predicted recidivism, and in fact, Barbaree and colleagues make the argument that current risk instrument measures over predict recidivism in older offenders. These previous examinations of the effect of increased age on actual recidivism also did not examine the effect of the categories of sexual offenders (Historical, First-time, Recidivist) used in this study. Both the current study and previous studies on the effect of age on recidivism suggest, then, that more rigorous examinations of the effect of age on risk for sexual recidivism are needed and should be applied to risk prediction measures.

The results shown in Table 5.8 suggest that as Recidivists age they are more likely to target younger and male, victims. While the differences found in developmental stage of victims is significant but quite small, the differences found in gender of victim is quite large with 52% of the Recidivists aged 60 years or more and only 24% of the younger Recidivists having any male victims. It is unclear whether this finding of an increase in male victims with age is a result of access or whether offenders who target males are more persistent in their offending, perhaps as a result of deviant sexual interests. Risk for sexual recidivism measures, such as the RRASOR (Hanson, 1997) and STATIC-99 (Hanson & Thornton, 1999), give higher scores, indicating increased risk, for the

presence of any male victims. Unfortunately, the reasons for the association between male victims and risk for sexual recidivism have not yet been fully explained.

In Subsection *5.f* the phallometric responses of older Historical, First-time, and Recidivist sexual offenders were examined. This revealed no overall significant differences between the three groups on availability of phallometric testing, refusal to participate in phallometry, and interpretability. Although there was no significant difference found between the three groups of older sexual offenders (Historical, Firsttime, Recidivists), the observed high-rates of deviance among this older sexually offending population is a surprising finding. The rates of deviance among these older sexual offenders was found to be nearly 80% which contradicts the hypotheses, put forward in previous research (see Barbaree, Blanchard, & Langton, 2003, and Hanson, 2002), that rates of sexual reoffending go down with age due to decreases in sexual arousal as this rate of deviance is well above those normally reported for sexual offenders which are more typically in the 30-50% range (see Marshall & Fernandez, 2003, for a review).

Hanson (2002) also cited evidence showing that self-control increases with age, and this ought to be reflected in responding at phallometric testing. The sexual offenders in this thesis were phallometrically tested at induction to the Federal Correctional system and this is a time when most offenders, especially sexual offenders, typically try to present themselves in a positive light to assessors because appearing lower risk can result in being placed in a less secure prison with more privileges and less threat to personal safety. Consequently, if self-control in sexual offenders increases with age, as hypothesized by Hanson (2002), and appearing deviant places a sexual offender at higher risk, then older sexual offenders ought to be able to control their deviance in this

circumstance. If it was a failure of self-control that resulted in high rates of deviance, then the recidivists ought to have been a significantly more deviant group as they have demonstrated the least self-control over their life-span. However, no significant difference in deviance was found between the three groups (Historical, Firsttime, Recidivist). Clearly more research is needed to better understand the high rates of deviance among older sexual offenders.

Research has shown that maximum arousal at phallometric testing decreases with age (Barbaree, Blanchard, & Langton, 2003; Castonguay, Proulx, Aubut, McKibben, & Campbell, 1993; Hall, 1991), which was also supported by the results in this thesis shown in Chapter 4. Yet, this decrease in maximum arousal did not result in decreases in deviance among these older offenders. These factors (increases in self-control and decreases in maximum arousal at phallometric testing with increased age), then, do not, according to the results of this thesis, appear to be accounting for reductions in recidivism with increasing age. Out of the three factors Hanson (2002) hypothesized to account for the decreases in sexual recidivism with increases in age (i.e., increases in self-control, reductions in sexual arousal, and opportunity for sexual offending), opportunity appears to be, according to the results of this thesis, the most important factor, however, more research is needed to both replicate the findings of this thesis and also to explore more fully the impact of opportunity for offending.

CONCLUSIONS

This chapter of this thesis sought to better understand the effect of increased age on sexual offending by comparing offenders based on when their offending occurred. The subjects in this thesis were divided into: Historical offenders whose offending had ceased

at least seven years prior to entering the Federal prison system; First-time offenders

whose offending occurred less than seven years prior to coming to prison and delays in

coming to prison had to be accounted for by the prolongation of the judicial process; and,

Recidivists whose offending, like First-time sexual offenders, had to have occurred less

than seven years prior to coming to prison and delays in coming to prison had to be

accounted for by the prolongation of the judicial process, but also had to have had at least

one previous judicial sanction for a sexual offence. Confusing findings on the offender

and offence features of older sexual offenders from the previous chapters of this thesis

needed explanation, such as the small increase in the number of male victims as the age

of sexual offenders increased found in Chapter 3, yet Chapter 4 found an increased

phallometrically assessed interest in females with increased sexual offender age. The

working hypothesis was that differences between when offending occurred may

illuminate the cause of these mixed findings and, indeed, this hypothesis was supported

by the results of Chapter 5. The results from Chapter 5 also supported the utility of the

use of these categories of sexual offenders.

There were a number of interesting findings in this chapter that have implications

for the management and treatment of, and research on, sexual offenders and, in particular,

older sexual offenders. The large proportion of offenders aged 60 years or more whose

offences were Historical (>50%), the younger age of the victims of older First-time sexual

offenders, and the nearly equal numbers of Recidivists (~20%) over all of the age groups

(except, of course, the very young sexual offenders who have not yet lived long enough to

be recidivists), provide important information for those who manage and treat older

sexual offenders.

The large number of older Historical sexual offenders who have ceased offending without judicial intervention and the existing research on the effect of age on recidivism such that older sexual offenders (i.e., those aged 60 years or more) are at minimal risk for sexual recidivism, suggests that, typically scarce, treatment resources would be best directed toward those older sexual offenders whose offences are not Historical in nature; that is the First-time and Recidivist sexual offenders. Also, a closer examination of the reasons for Historical sexual offenders stopping offending may help illuminate the factors which can then be targeted in treatment for all sexual offenders to assist them in living an offence free future.

In this chapter older First-time sexual offenders were found to be more likely to target younger and related victims, suggesting that opportunity is an important factor for sexual offending in later life. The victims of these First-time older sexual offenders are very likely grandchildren. Examination of differences between older First-time sexual offenders and older non-offenders may illuminate the reasons for sexual offending late in life and a closer examination of the differences between First-time and Historical older sexual offenders may shed light on factors which are protective of offending later in life.

The finding of the persistence of recidivism in approximately 20% of sexual offenders across the lifespan suggests that these offenders may illustrate the features which maintain sexual offending even after judicial sanction. Clearly for most (~80%) sexual offenders judicial sanction, and possibly in-prison system treatment, appears to be enough for them to cease sexually offensive behaviour. It is, of course, also possible that the designated non-recidivists become better at avoiding detection as a result of incarceration, but this is currently unknowable. Although a previous history of sexual

offending has been widely acknowledged as an increased risk factor for sexual recidivism (see any risk assessment instrument), other factors which maintain sexually offensive behaviour have only recently begun to be examined (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004). Although there are many risk assessment instruments available which have been shown to moderately predict sexual reoffending, most of these instruments are based on static, unchangeable, factors such as previous history of offending, and the presence of any male or stranger victims. Only recently has research been done to discover the dynamic, changeable, factors which predict reoffending (e.g., STABLE and ACUTE, Hanson, Harris, Scott, & Helmus, 2007). Future research comparing the features of Recidivist versus Historical and First-time sexual offenders may assist in the discovery of more static and dynamic risk factors.

The lack of a difference in sexual deviance between the categories (Historical, First-time, Recidivist) of older offenders was a surprising result. It was hypothesized that older Historical offenders would appear less deviant than older First-time and Recidivist sexual offenders, because the Historical offenders had ceased offending at least seven years prior to being phallometrically assessed. It appears that the Historical offenders still have deviant sexual interests but are able to restrain themselves from offending. Whether this is due to a lack of opportunity or increased self-control is unclear and further research is needed to examine this finding. However, the reason Historical offenders do not reoffend does not appear to be non-deviant sexual interests.

CHAPTER 6: OVERALL DISCUSSION

Interest in older offenders is growing. Recent examinations of the demographics of incarcerated prisoners demonstrates an increasing number of older offenders and has led some to describe the phenomenon as the "greying of prisons" (Fazel, Sjostedt, Langstrom, & Grann, 2006; Rayel, 2000; Rosefield, 1993; Uzoaba, 1998). Sexual offenders are a significant proportion of these older offenders with findings of more than half of older males sentenced to prison being sexual offenders (Fazel, Hope, O'Donnell, & Jacoby, 2002; Greenfield, 1997; UK Home Office, 2003; Uzoaba, 1998). Older incarcerated sexual offenders place many unique demands on the system in terms of the management, healthcare, treatment, and supervision of this population (Booth, 1989; Wormith, 1995). Consequently it is important to examine these sexual offenders in order to best serve the needs of both the offenders and the system.

Little is known about older sexual offenders. The few existing research reports on older sexual offenders either have small samples (e.g., Rayel, 2000; Wormith 1995), are focussed on issues of recidivism (e.g., Barbaree, Blanchard, & Langton, 2003; Hanson 2002), compare older sexual offenders with older non-sexual offenders (Fazel & Jacoby, 2002), or suffer from definitional issues, such as how to define "older" (Uzoaba, 1998). Therefore, Chapter 3 of the current thesis compared older sexual offenders with younger sexual offenders on offender and offence characteristics. In order to justify research examining older sexual offenders they will need to differ enough from younger sexual offenders such that existing research on younger sexual offenders would not necessarily apply. As a result of the findings of Chapter 3, further research was justified and Chapter 4 addressed an important difference found between older and younger sexual offenders in

Chapter 3; that is, older sexual offenders were more likely than younger sexual offenders to target younger, and male, victims. Contradictory findings between Chapter 3 and Chapter 4 forced a need to consider possible differences within older sexual offenders and this led to Chapter 5. The following discusses the findings of each chapter and provides an overall summary of the findings and their implications for treatment and further research.

CHAPTER 3: OFFENDER AND OFFENCE CHARACTERISTICS

Chapter 3 examined the differences between older and younger sexual offenders on offender and offence characteristics as a first step toward understanding both the effect of aging on sexually offensive behaviour and the issue of older sexual offenders. The key findings of this chapter were that older sexual offenders had significantly younger victims, were more likely to target male victims, and more likely to offend within their family, than were younger offenders.

Hanson (2002) has discussed the importance of opportunity for offending and the finding of a higher incidence of intra-familial offending among older offenders supports his hypothesis. However, it does not satisfactorily explain the higher incidence of offending against male victims among older sexual offenders. In the discussion of Chapter 3 it was hypothesized that deviant sexual interests may be accounting for the findings of younger and more male victims and Chapter 4 aimed to address this possibility.

CHAPTER 4: SEXUAL DEVIANCE

Chapter 4 described the phallometric responses of older and younger sexual offenders both in response to the findings of Chapter 3 and to enhance understanding of

the differences between older and younger sexual offenders. In Chapter 3 older sexual offenders were found to have younger victims and more male victims than did younger offenders and Chapter 4 sought to clarify whether this was because of a deviant sexual interest for younger, and male, victims.

Age was found to be a significant predictor of overall responding at phallometric testing, accounting for 14% of the variance, such that as age increased overall arousal decreased. Those responders under the age of 25 years had an Output Index (OI) which was more than twice the size of those aged 60 or more years, and nearly twice as large as those aged 40 to 59 years. The sexual offender participants in this thesis who were aged 25 to 39 years also had a significantly higher OI than those aged 40 or more years. These findings encourage confidence in the rationale for the age divisions created for this series of studies.

Several interesting patterns related to age also emerged. As age increased, the probability of not responding increased from 3% of those under age twenty-five years to 37% of those aged 60 or more years. Of those who did display an interpretable response, detected deviance increased with age, however, this was shown to exhibit a U-shaped pattern when using the four age categories (i.e., <25, 25-39, 40-59, 60+) with the under twenty-five (32%) and 60+ (49%) groups displaying greater deviance than the others. This suggests a disconnection between overall sexual arousal and sexual interest and leaves the causes of the observed reduction in recidivism with age still unclear.

In terms of sexual interest and age some very clear patterns emerged: sexual interest in rape declined with age, interest in female children increased with age, and interest in male children was uniform across ages. The only exception to this uniform

interest in male children was among the group aged 25-39 years who displayed a lower

sexual interest in males (11%) than did the other groups (21+%). This finding of a higher

sexual interest in female children with increased offender age counters the findings of

Chapter 3 and prompted a hypothesis and further research to account for the observed

differences between the studies; namely that older offenders may be incarcerated for

offences which occurred when they would have been placed in a younger age category

and Chapter 5 was designed to examine this hypothesis.

CHAPTER 5: A COMPARISON OF HISTORICAL, FIRST-TIME, AND RECIDIVISTS

AMONG YOUNGER AND OLDER SEXUAL OFFENDERS

Finally, in Chapter 5, sexual offenders were divided into the categories Historical,

First-time, and Recidivist offenders both in response to the findings in Chapter 4 and in

order to enhance understanding of the effect of aging on sexually offensive behaviour.

Contrary to the findings in Chapter 3 of an increase in number of male victims as the age

of sexual offenders increased, in Chapter 4 older sexual offenders were not found to be

more likely to have a deviant sexual interest in male children. In fact, as age increased so

did the percentage of sexual offenders who preferred female children but there was no

corresponding increase in the percentage of sexual offenders who preferred male children.

In the discussion section of Chapter 4 it was hypothesized that this finding may be related

to the fact that Canada has no statute of limitations on the prosecution of sexual offences,

and differences in when the offending occurred may be accounting for the contrary

findings of Chapters 3 and 4.

Dividing sexual offenders into Historical, First-time, and Recidivist offenders also

served to allow a more accurate examination of the effect of age on sexually offensive

behaviour. It was hypothesized that Historical sexual offenders, because their offending occurred when they were younger, ought to look similar to the younger sexual offenders in terms of their offender and offence characteristics and, indeed, this hypothesis was supported.

SUMMARY AND CONCLUSION

This series of three studies has shed light on the effect of aging on sexually offensive behaviour. The data revealed information on the difference in offending behaviour in sexual offenders at different times during the lifespan. The findings have implications for many areas related to the field of sexual offender management, such as treatment, risk assessment, and legal decisions. For example, initially sexual offenders age 60 years or more were found to have younger victims and more male victims than did younger sexual offenders. However, this was not what differentiated those who offended for the First-time in later life from other sexual offenders. In fact, those sexual offenders who offend for the first time at age 60 years or more tended to offend against females.

There was a similar age effect on the Output Index (OI), or mean maximum arousal, to previous reports (e.g., Castonguay, Proulx, Aubut, McKibben, & Campbell, 1993; Hall, 1991), yet this effect was not indicative of less deviance. In fact deviance was positively correlated with age such that as age increased so did the likelihood of displaying a deviant profile at phallometric assessment.

Finally, utility was found in making a distinction between those who offended many years prior to coming to prison (Historical), or those who offended for the first-time in later life (First-time), or those who repeatedly offended despite judicial sanctions (Recidivist). This difference demonstrated that the finding of an interest in male victims is not actually characteristic of those who offend for the first time in later life; these offenders primarily committed their assaults against pre-pubescent females (84%). Rather, it was the historical and recidivist offenders who skewed this data.

Implications for treatment and prevention

The findings of this thesis have implications for the treatment of sexual offenders. A high percentage of Historical offenders aged 60 years or more were found in this thesis. Research shows that sexual recidivism approaches zero when the offenders are released at age 60 or more years (e.g., Hanson, 2002). Only a small but significant number of offenders aged 60 or more years in this thesis offended for the first-time or had reoffended. This combination of factors suggests that determining the type of older offender may be useful for triaging older offenders into treatment intensity level. Recidivists have demonstrated a lack of ability to control their sexual behaviour suggesting they need a higher intensity treatment program than either Historical or First-time older sexual offenders. First-time older sexual offenders have demonstrated that they are at greater risk for recidivism than Historical older sexual offenders because they have recently committed their offences when the available research on age and sexual offending suggests that they should not. Historical older sexual offenders have demonstrated an ability to cease and manage their sexual behaviour even in the absence of judicial intervention suggesting they may be at the lowest risk for sexual recidivism. However, research examining the recidivism patterns of these offenders is needed before any firm conclusions should be drawn and, indeed, is currently being undertaken.

This thesis also calls into question the utility of treating deviant sexual interests in older sexual offenders. There were no differences detected in the deviant sexual interests of the older sexual offenders in this thesis, even in those who appear to have ceased their offending many years prior to coming to prison. If deviant sexual interests drive sexual offending, then the Historical offenders in this thesis ought to have, based on their

phallometrically assessed deviance, reoffended between their last detected offence, and being incarcerated. Also, if the First-time older sexual offenders in this thesis had deviant sexual interests throughout their life, why would they only offend later in life when their ability to control their behaviour ought to be at its highest? From the results of this thesis it appears that opportunity for offending is a more significant factor for sexual offending in later life and, unfortunately, while this is helpful to treatment providers who work with detected sexual offenders, it is not as helpful to the prevention of sexual offending in later life. A very small percentage of older males commit sexual offences and it would be unethical to suggest that all older males should not have access to children. Further research is needed to determine what the predictive factors of sexual offending in First-time older males are before preventative strategies could be implemented.

Implications for theories on aging and sexual offending

The theory of Selective Optimisation with Compensation (SOC) (Baltes & Baltes, 1991) described in the introduction to this thesis may offer some insight into strategies to prevent both offending and reoffending among older sexual offenders. It was hypothesized that older males may need to reorganize and compensate for age-related losses and that this process may lead to sexual offending. Although it is currently unknown which, and under what circumstances, older males may be vulnerable to commit sexual offences as a result of age-related losses, future research and treatment providers could examine whether this theory (SOC) applies to First-time older sexual offenders and, report which age-related losses make an older male more vulnerable to committing a sexual offence in later life. One of the possible factors that could be examined is age-related health issues, such as loss of sexual functioning (e.g., impotence)

or self-control (e.g., dementia). The loss of a sexual partner and the resultant loneliness along with an inability to establish a new appropriate sexual relationship may also be a factor. These possibilities fit with the Theory of Selective Optimisation with Compensation, indicating that it has the potential to enlighten us regarding the factors that lead some older men to sexually offend.

In terms of theories of sexual offending, the results of this thesis suggest that a new theory on the relationship between aging and sexual offending is needed. Although, some aspects of current theories were not directly explored in this thesis, such as the effect of brain injury and pathology, proxy measures of inhibition were used and did not find support for First-time older sexual offenders being qualitatively different from either Historical or Recidivist older sexual offenders. Further, motivation, in terms of sexual deviance, did not distinguish older sexual offenders who appear to have desisted from sexual offending many years prior to coming to jail (i.e., Historical offenders). Clearly there needs to be more research into the factors which trigger the onset of, maintain, and stop sexually offensive behaviour.

Based on the results of this thesis and hypotheses suggested by both theories on aging and sexual offending, examination of medical records for evidence of brain injury or pathology might provide further insight into factors related to later life onset of sexual offending. However, there are a number of other potentially relevant factors listed earlier, such as later life developmental tasks and conditions, which would enhance current understanding of older sexual offenders.

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