STATIC RISK FACTORS AMONG JAMAICAN SEX OFFENDERS:
A CROSS-CULTURAL ANALYSIS

by

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Abstract

The aim of this thesis is to examine static risk factors for the commission of further sexual offences in Jamaican sex offenders, in contrast to British and Canadian sex offenders. Following the Introduction, Chapter Two presents a critique of a static risk assessment tool known as Static-99 Revised (Hanson & Thornton, 2000). The chapter explores the development of risk assessment tools in response to growing needs for effective offender management. The measure is then evaluated in terms of its psychometric properties. Strengths and limitations are also discussed. Chapter Three presents a cross-cultural, empirical investigation of static risk factors for sexual offending between Jamaican and British/Canadian sex offenders. No significant difference was found in the total static risk score of Jamaican and British/Canadian sex offenders. In terms of specific factors, more Jamaican sex offenders endorsed items that were indicative of an antisocial lifestyle, rather than items that related to sexual deviance, persistent sexual offending and range of victims. It was also found that offender type (rapist, extra- familial child molester and incest offender) did not impact significantly on static risk scores within the samples. A systematic review of the literature on protective factors for sexual offending is conducted in Chapter Four. Results indicate that empathy, motivation and treatment are likely to have a protective effect on sexual offending; however, further research into how these factors work together to enhance desistance (i.e., cessation of sexual offending) is needed. The review also suggests that further to assessing risk factors, examining protective factors offers insight into the treatment needs and appropriate management of sexual offenders. Chapter Five concludes the thesis with a discussion of the main findings and presents the implications for practice, followed by directions for future research.
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Dedication

“I come from a place that likes grandeur; it likes large gestures; it is not inhibited by
flourish; it is a rhetorical society; it is a society of physical performance; it is a society
of style...”

Derek Walcott (1930-2017)

For my beautiful island home—ours is a splendour and resilience that far surpass our
pain.
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CHAPTER ONE

INTRODUCTION
Introduction

Sexual offending describes the act of committing a range of crimes, including rape, unlawful sexual intercourse, grievous sexual assault, indecent exposure and sexual touching of a child. Similarly, non-sexual offences can have a sexual component, for example, when a murder is sexually motivated (Palmer, 2012). While inconsistent definitions of sexual assault and different rates of reporting, recording and conviction for sexual offences make it difficult to accurately determine its prevalence, it is agreed that such offences violate human rights and serve to debilitate victims in significant ways, including psychologically (Chang, 2011; World Health Organisation [WHO], 2013).

A United Nations Office on Drugs and Crime (UNODC, 2013) statistical report compiled from 72 contributing countries found a total of 424,684 police-reported cases of sexual violence in 2011. This figure includes rape, sexual assault and sexual offences against children. The widespread scope of this problem has led to various efforts to understand its occurrence as well as predict risk of sexual reoffending. Sexual reoffending (or recidivism) refers to the act of committing a further sexual offence, after receiving some form of criminal justice sanction for a similar offence (Ministry of Justice, 2011). It is acknowledged that measuring reoffending accurately is challenging. Records are usually taken from the police or courts, but underestimate the true rate of reoffending as only some crimes are detected and sanctioned, and not all crimes and sanctions are recorded in a central system. However, other methods of measuring reoffending, such as self-report studies, are likely to be unreliable (Ministry of Justice, 2011).
With regard to understanding sexual offending, Beech and Ward (2004) outline a process where they incorporate aetiological theories of sex offending with systems of risk assessment. By doing this, they reconcile ideas from Marshall and Barbaree’s (1990) integrated theory of sexual offending and the pathways model (Ward & Siegert, 2002). Marshall and Barbaree’s (1990) integrated theory suggests that individuals who experience negative developmental events (e.g., poor parenting, inconsistent and harsh punishment, physical and sexual abuse) are more likely to demonstrate distorted internal working models of relationships, especially in terms of sex and aggression, which may result in poor social and self-regulation skills from an early age (Beech & Ward, 2004). On the other hand, the pathways model of sex offending proposes that there are multiple pathways that lead to child sexual offending and these involve four mechanisms: 1) intimacy; 2) emotion; 3) cognition; and 4) arousal.

Aetiological pathways and risk

Stemming from the integrated theory and pathways model, Beech and Ward (2004) have proposed an aetiological model that includes developmental, psychological and environmental factors. Within this model, they theorise how such factors relate to risk of sexual offending.

Developmental (distal) factors. Previous research has linked negative developmental backgrounds (e.g., abuse, rejection and attachment deficits) to sexual offending against children (e.g., Craissati, McClurg, & Browne, 2002; Hanson & Bussière, 1998). However, Beech and Ward (2004) acknowledge that although developmental
Vulnerability (trait) factors. In their examination of static and dynamic risk variables, Ward and Beech (2004) employ Mrazek and Haggerty’s (1994) distinction between risk factors that play a causal/psychological (dispositional) role, and factors that simply classify the probable risk for offending (marker). It is useful to note that static risk factors refer to relatively fixed aspects of offenders’ backgrounds (e.g., previous offending) that raise the risk of reoffending but cannot be improved through intervention. In contrast, dynamic risk factors describe potentially changeable psychological or behavioural features of the offender that may influence the possibility of reoffending (e.g., distorted cognitions or deviant sexual interests; Andrews & Bonta, 2006). These factors can be either stable (enduring) or, acute (transient). Beech and Ward (2004) argue that ‘stable dynamic’ variables are causal psychological risk factors, while ‘historical’ (static) risk factors are fundamentally marker variables for level of risk.

Psychological dispositions. In Beech and Ward’s (2004) aetiological model, psychological dispositions are stable dynamic factors that include: deviant sexual interests and difficulties with sexual self-regulation; attitudes supportive of sexual assault; interpersonal functioning; and general self-regulation problems (Thornton, 2002). Finally,
in accordance with the theoretical view that vulnerabilities are activated in certain situations, resulting in deviant arousal, affective disturbance, and/or distorted thinking. Beech and Ward’s (2004) model also shows how stable dynamic factors interact with triggering events (contextual risk factors) to produce acute dynamic risk factors.

**Historical markers.** Historical (static) risk factors act as observable indicators of underlying psychological dispositions/trait. As outlined previously, historical markers present factors that implicate risk of reoffending. Moreover, static factors have been identified as useful measures for long-term recidivism prediction (Andrews & Bonta, 2013). Therefore, static risk factors form the empirical focus of the current thesis due to their association with underlying traits such as antisocial lifestyle and sexual deviance, and the influence these traits have on recidivism. It is believed that examining these factors will provide useful information on the characteristics of sexual offenders in the context highlighted (see Chapter Three).

**General characteristics of sex offenders and risks posed**

Efforts to identify the characteristics of sexual offenders in relation to risk have not yielded straightforward results (Hanson & Morton-Bourgon, 2005). What is certain, however, is that sex offenders differ on a range of factors and these factors impact risk of reoffending in different ways (Grubin, 1998; Hanson & Morton-Bourgon, 2005). Research has suggested that sexual recidivism is associated with two general factors: 1) deviant sexual interests, and 2) antisocial orientation/lifestyle instability (Hanson & Bussiére, 1998; Quinsey, Lalumière, Rice, & Harris, 1995; Roberts, Doren, & Thornton, 2002).
Deviant sexual interests constitute an enduring proclivity towards illegal or highly unusual sexual acts, while antisocial orientation refers to antisocial personality or traits, impulsivity, substance misuse and unemployment, as well as a history of rule defiance (Hanson & Morton-Bourgon, 2005). Hanson and Morton-Bourgon (2005) explain that although sexual offending is socially deviant, not all sex offenders have an enduring preference for such behaviour. Moreover, rapists have been found to be more likely than child sexual offenders to have an antisocial orientation (Firestone, Bradford, Greenberg, & Serran, 2000); however, indicators of hostility and unstable lifestyle are associated with sexual recidivism in both groups (Hanson & Morton-Bourgon, 2005; Rice, Quinsey & Harris, 1991).

**Empirical findings for static risk factors**

**Age.** It has been established within criminology that an inverse relationship exists between age and offending (Farrington, 1986). This relationship has been found to be stable across time and geographic locations, for various types of crimes and offenders, and in both community and incarcerated offender populations (Blonigen, 2010; Farrington, 1986; Hirschi & Gottfredson, 1983). As it relates to sexual reoffending, Hanson and Bussière (1998) also found a small but consistent inverse relationship between age and sexual offence recidivism in their meta-analysis. However, Beech and Craig (2012) contend that the “inverse linear relationship with age and sexual recidivism risk is questionable” (p. 181), as child sexual offenders have demonstrated persistent patterns of sexual deviance over longer periods, throughout time. Moreover, it has been argued that age can be expressed in both static and dynamic terms (Beech & Craig, 2012). That is,
although age constitutes a static variable in many actuarial risk assessment tools (e.g., age at onset of offending or age at release from facility), it also has dynamic properties where changes in age impact risk of reoffending (Craig, 2008).

One illustration of age as a dynamic factor is Hanson’s (2002) investigation of its impact on sexual recidivism in a combined sample (rapists, incest offenders, and extra-familial offenders) of 4,673 sex offenders. It was found that incest offenders had the highest recidivism rate for age-at-release less than 25 years. Conversely, extra-familial child sex offenders showed the highest rate of sexual recidivism for age-at-release greater than 24 years. Rapists and incest offenders showed a relatively steady decrease in recidivism as age increased, while in comparison, extra-familial sex offenders showed relatively little decline in recidivism risk until after the age of 50. However, in general, Hanson (2002) found that sex offenders released at an older age were less likely to reoffend and sexual recidivism decreased with age.

**Criminal history factors.** Hanson and Bussière’s (1998) meta-analysis revealed that general criminal lifestyle was a reliable but modest predictor of sexual offence recidivism. The most significant of these predictors were antisocial personality disorder \( r = .14 \) and the total number of prior offences \( r = .13 \). On the other hand, sexual criminal history variables showed small to moderate correlations with recidivism, where the risk for sexual offence recidivism was increased for those who had prior sexual offences \( r = .19 \), began offending sexually at an early age, or had engaged in diverse sexual crimes. Similarly, Hanson and Morton-Bourgon (2005) found that antisocial orientation (specifically, antisocial personality, antisocial traits, history of rule violation) was the key
predictor of violent (including sexual) recidivism ($d = .54$).

Moreover, studies have shown that more non-sexual offenders have previous convictions for non-violent and violent offences when compared to sexual offenders (Baxter, Marshall, Barbaree, Davidson & Malcolm, 1984; Hanson, Scott & Steffy, 1995). For instance, a long-term follow-up study on child molesters and non-sexual offenders released from a Canadian maximum security prison found that prior to their index offences, 40% of child molesters, compared with 83% of non-sexual criminals had convictions for non-violent offences. Relatedly, 16% of child molesters and 30% of non-sexual criminals had convictions for non-sexual, violent offences (Hanson et al., 1995). These findings are congruent with the notion that not all sex offenders have an enduring proclivity for antisocial behaviour (Hanson & Morton-Bourgon, 2005). It can also be hypothesised that sexual offenders tend to be less criminogenic than other types of offenders because of more restrictive and long-term consequences (e.g. registration and supervision), which lead to less opportunities to reoffend.

In terms of different types of sexual offenders, research has found that sex offenders against children have lower rates of convictions for non-sexual offences in comparison to rapists (Baxter et al., 1984; Hanson et al., 1995). One study looked at the criminal histories of 144 sex offenders who were assigned to four groups: 1) men who had sexually assaulted peer age victims; 2) men who had sexually assaulted victims between the ages of 12 to16; 3) men who had assaulted female children under the age of 12; and 4) men who had assaulted male children under the age of 12 (Baxter et al., 1984). Results indicated that the men who offended against girls under age 12 had, on average, less than half the number of
theft convictions, as well as a significantly lower number of convictions for non-sexual assaults, when compared to men who had sexually assaulted peer aged victims. Similar results in the rates of non-sexual assaults were found among the other groups of sex offenders against children. Such findings support the view that rapists tend to have more of an antisocial orientation, when compared to child sexual offenders (Firestone et al., 2000).

**Choice of victim.** Since the conceptualisation of paedophilia, distinctions have been made between child molesters who target girls, those who target boys, and those who do not discriminate the sex of their victims (Grubin, 1998). Generally, offenders who sexually abuse boys or both boys and girls are believed to have more victims and to be at a higher risk of reoffending in comparison to those who only offend against girls (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Hanson, Steffy, & Gauthier, 1993). Research conducted by Marshall (1994) found that individuals who offended against a wide range of victims (adults and children, males and females), as well as those who offended exclusively against male children were at the highest risk of reoffending. Further, Hanson and Bussière’s (1998) meta-analysis indicated that risk for sexual offence recidivism was increased for offenders who had victimised strangers, had an extra-familial victim and had male victims. One could postulate that social stigma associated with male sexual abuse may influence the extent to which these crimes are reported, and therefore, opportunities to reoffend are perpetuated.

The Social Work Services Inspectorate in Scotland (1997) notes that two of the strongest predictors of sexual recidivism in their sample were a sexual preference for children, particularly male children, and previous sexual offending against unrelated children.
However, Grubin (1998) cautions that increased risk among offenders with a sexual preference for male children has not been exclusively found, as one study suggested that the sex of victims was not related to re-offense risk (Prentky, Knight, & Lee, 1997).

Nonetheless, Waterhouse, Dobash and Carnie’s (1994) study found that offenders who sexually abuse children outside their family present a greater risk for sexual recidivism, where approximately 75% of men convicted of abusing extra-familial children reported one or more previous convictions for a sexual offence, compared to 14% of those who abused family members. This is arguably due to sexual offenders having a wider range of victims when they abuse outside of their family, as long-term protection orders tend to prohibit access to victims in intra-familial offending (Bardon, 2013).

**Risk of reoffending**

Research contends that sexual recidivism rates are relatively low (Grubin, 1998; Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Marshall (1994) investigated the rate of reoffending among 900 randomly selected untreated sex offenders released from a British prison in 1987. He reports that by 1991, 7% had been reconvicted for a sexual offence. Marques, Day, Nelson and West (1994) examined reconviction records on a group of serious sex offenders released from prison in California. They found that 14% of the untreated group reoffended at the 5-year follow-up. Hanson and Bussière (1998) conducted a meta-analysis that included nearly 29,000 sex offenders with a follow-up period ranging from six months to 23 years ($M = 66$ months). Offenders were from correctional institutions (48%), the community (25%), or both (27%), and approximately 48% were from sex offender treatment programmes. The included studies were conducted between
1943 to 1995. Results revealed a sexual recidivism rate of 13% for child molesters and 19% for rapists, while recidivism for non-sexual and violent offences was 10% and 22%, respectively. They contend that these figures need to be considered in the context of recidivism rates among male offenders in general, where the rate is about 50% over two years and 60% over four years.

Additionally, Hanson et al. (1995) found that following release, 83% of the non-sexual offenders and 62% of the child sex offenders were reconvicted over the next 15 to 30 years. For non-sexual recidivism, 41% of the child molesters compared with 80% of the non-sexual offenders were reconvicted of non-violent offences; while, 14% of the child molesters and 71% of non-sexual offenders were reconvicted of a non-sexual violent offence. Therefore, from these findings, it appears that men who sexually abuse children commit other non-sexual crimes at a significantly lower rate than the general criminal population and other types of sex offenders.

**Protective factors**

Further to the previously discussed theoretical framework and research highlighting pathways to, and risk of sexual offending, is the concept that risk management efforts work best when offenders’ strengths are recognised alongside their vulnerabilities and difficulties. Protective factors are circumstances or attributes (e.g., skills, strengths, resources, support systems or coping strategies) that help offenders deal more effectively with stressful events and mitigate or eliminate risk of reoffending (Thornton, 2013). Therefore, it is believed that emphasis should be placed on a recovery approach, and on
developing the offenders’ ability to cope with their vulnerabilities in addition to the
difficult demands placed on them (Department of Health, 2007).

**Cultural features of sexual aggression**

Goldsmith, Hall, Garcia, Wheeler and George (2005) argue that research regarding sexual
offending has often neglected cultural aspects of the problem, and the field of psychology
has generally been slow to acknowledge the influence of culture on people’s thoughts,
attitudes and behaviours. They highlight that research on sexual offending among ethnic
minorities provides culturally relevant findings on risk and protective factors, as well as
appropriate treatment and preventative methods. However, Goldsmith et al. (2005) contend
that most of these studies concentrate on victims. Further, Hall, Teten and Sue (2002)
assert that most theoretical models have considered European Americans and have not
been sufficiently explored in other populations. As such, efforts to understand sexual
offending and develop effective treatment and prevention strategies among varying
populations require research that focuses specifically on ethnic minority sex offenders
(Fontes, 1995; Futa, Hsu, & Hansen, 2001; Goldsmith et al., 2005).

It is suggested that taking into account the interaction between factors such as culture, peer
groups, family background, spiritual beliefs/religious affiliations, and individual
differences will better inform the assessment and treatment of minority populations.
Moreover, ethical treatment of such individuals requires knowledge of, and an appreciation
for, diverse backgrounds. Equally, continuous consultation with ethnic minority
populations and the integration of culturally sensitive approaches to assessment, treatment,
prevention strategies and research are imperative (Gahir & Garrett, 1999; Goldsmith et al., 2005).

A relationship between culture and sexual abuse has been found, where, for example, cultural norms and related belief systems may influence aetiological pathways to sexual aggression (Hall, Sue, Narang, & Lilly, 2000). Goldsmith et al. (2005) assert that these culture-specific pathways may stem from historical experiences such as colonisation and marginalisation; and are, therefore, said to be important influences on sexual aggression. Mainly, they theorise that sexual assault and abuse may be one outcome of internalised colonialism and oppression, in which sexual violence is the reenactment of power and domination. Additionally, sexual victimisation may also be part of a mechanism in which persons repeat and maintain harmful behaviours that they have subconsciously learned through their experience (see Comas-Diaz, 1995; Duran, 2002). Similarly, poverty and isolation, while not primarily related to culture, tend to feature in minority groups, and as such, may present risk factors for sexual aggression (Okamura, Heras, & Wong-Kerberg, 1995).

**Aims and structure of the Thesis**

The theories and constructs outlined above provide a framework for the components of the current thesis. It is recognised that although these theories reflect extensive efforts to understand and manage sexual offending, there is need for further empirical investigation of risk factors among offenders from diverse cultural backgrounds (Hall et al., 2002). With regard to this, the current thesis aims to present a cross-cultural perspective on sexual
offending, and focuses on comparing static factors in relation to risk of reoffending, between British/Canadian and Jamaican sex offenders. Sexual offending has not yet been explored empirically in Jamaica and research is needed to inform management efforts, as no assessment or rigorous, empirically based treatment interventions currently exist.

The thesis consists of five chapters. Following this introduction, Chapter Two presents a critique of the risk assessment tool known as the Static-99 Revised (Static-99R; Hanson, Babchishin, Helmus, Thornton, & Phenix, 2016; Hanson & Thornton, 2000; Helmus, Thornton, Hanson, & Babchishin, 2012), which is employed in the empirical study. The Static-99R is an actuarial assessment tool designed to evaluate risk of reoffending by utilising a base rate for recidivism from a normative sample. It was developed for use with male sexual offenders who are at least 18 years of age. This critique outlines the scientific properties of the instrument and explores its overall strengths and weaknesses. The Static-99R is critiqued in an effort to inform the empirical study of properties related to validity and reliability. Moreover, this particular actuarial measure was chosen because the data available for the study were consistent with the items on the Static-99R, which facilitated scoring.

An empirical investigation of static risk factors between Jamaican and British/Canadian sex offenders is presented in Chapter Three. This chapter provides an in-depth overview of the socio-economic and cultural facets of sexual offending in Jamaica, and sets out to remedy the lack of country-specific research by examining static risk factors evident among Jamaican sex offenders, in comparison to British/Canadian offenders. Given that static factors have been found to be useful measures for long-term recidivism (Andrews &
Bonta, 2013), it is expected that findings from this study will provide some insight into the characteristics of sexual offenders within this cultural context, and, therefore, speak to how best to approach management efforts in Jamaica.

Next, a systematic review of the literature on protective factors is conducted in Chapter Four. This review seeks to determine whether empathy, motivation and treatment have a protective effect on sexual offending. It is considered that examining protective factors will further inform future assessment and treatment interventions in Jamaica. Moreover, this will help to achieve a balanced exploration of management efforts, where identifying strengths and protective features alongside risk factors have been promoted (Department of Health, 2007).

Finally, Chapter Five concludes the thesis with a discussion of the main findings of the investigation, as well as the implications for practice and future directions for research.
CHAPTER TWO

A CRITIQUE OF STATIC-99 REVISED
Introduction

Despite primarily aiding professionals in measuring implicit traits such as attitudes, cognitions and personality, the principles of psychometric testing are extended in the field of Forensic Psychology to incorporate a behavioural predictive element. A significant focus of the application of mental health within the criminal justice system is the issue of risk and how this can be measured and thus, managed (Craig & Beech, 2009). In accordance with the overarching evolution of scientific testing in the social sciences to include more robust statistical methods, the assessment of risk has transformed from unstructured clinical judgement to increasingly sophisticated forms of measurement (e.g., Beech, Fisher, & Thornton, 2003; Craig, Thornton, Browne, & Beech, 2007).

Actuarial risk assessment tools such as the Static-99 Revised (Static-99R) arose as ‘second generation’ improvements to ‘first generation’ clinical judgement assessment methods (Andrews & Bonta, 1998). The term ‘generation’ is used to describe the development of violence risk assessment, where first generation involves assessment based solely on clinical judgement; second generation consists mainly of static risk factors (e.g., age and criminal history); and third generation risk instruments take into account static and dynamic risk factors, and are often referred to as risk-needs tools (e.g., Structured Professional Judgement (SPJ) tools). Lastly, to expand beyond the examination of criminogenic needs, fourth generation tools integrate the assessment of risk with case management plans (Andrews, Bonta, & Wormith, 2008).

Actuarial risk assessments are empirically based instruments that emphasise historical risk factors. These factors have been found to be statistically associated with a particular
adverse event reoccurring. Although actuarial tools have been criticised for failing to identify dynamic treatment needs among sexual offenders, they are still widely used because of their perceived objectivity, predictive accuracy and ease of administration using commonly available information (Brown & Singh, 2014). This presents a key rationale for selecting an actuarial measure for this study and the current related psychometric critique.

Still, there are a range of measures for predicting recidivism among sexual offenders. Some include: the Minnesota Sex Offender Screening Tool–Revised (MnSOST–R; Epperson et al., 1998), Risk Matrix (RM2000; Thornton, 2007), Rapid Risk Assessment for Sex Offence Recidivism (RRASOR; Hanson, 1997), Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997) and Sex Offender Risk Appraisal Guide (SORAG; Quinsey, Harris, Rice, & Cormier, 2006). Babchishin, Hanson and Helmus (2011) note that there is considerable overlap in test items, and each tool has demonstrated similar levels of predictive accuracy, in terms of their ability to differentiate between sexual recidivists and non-recidivists (e.g., Hanson & Morton-Bourgon, 2009).

Given the similarity among sexual risk instruments, Babchishin et al. (2011) contend that clinicians should use measures that: 1) can be coded reliably, 2) have relevant normative data and, 3) make valid inferences. The Static-99R was chosen for the empirical study primarily because items were consistent with available data from official records in Jamaica. Likewise, with reference to Babchishin et al.’s. (2011) criteria for risk instrument selection, Static-99R is critiqued in an effort to inform the empirical study, as it relates to its scientific properties and applicability in this context.
Moreover, it was noted that RM2000, which is a comparable measure, has been developed for use in the United Kingdom (UK) and its scoring rules were tailored to specific features of the criminal justice system in this country. Therefore, RM2000 could not be coded with the data available.

**Static-99 and Static-2002**

Hanson and Thornton (2000, 2003) have developed various static risk tools (e.g., Static-99, Static-99R, Static-2002, and Static-2002 Revised) for use with adult male sexual offenders. They have done this by incorporating statistically relevant items from the Structured Anchored Clinical Judgment (SACJ; Hanson & Thornton, 2000) and the RRASOR (Hanson, 1997) scales. The purpose of these tools is to estimate the comparative risk of sexual recidivism using criminal history as well as demographic information. Risk estimates are empirically derived from base rates for recidivism from samples that are considered to represent all convicted sex offenders. These tools have been employed in various settings, such as: treatment planning (Jackson & Hess, 2007; McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010); community supervision (Interstate Commission for Adult Offender Supervision, 2007); and preventative detention hearings (Blais & Forth, 2014; Doyle, Ogloff, & Thomas, 2011; Jackson & Hess, 2007; Neal & Grisso, 2014).

In terms of research, Static-99 (Hanson & Thornton, 2000) has been extensively examined in relation to recidivism. For example, Hanson and Morton-Bourgon (2009) identified 63 Static-99 predictive validity studies that included more than 20,000 offenders. These studies have tended to utilise retrospective scoring methods from existing file information, with follow-up periods ranging from 12 months to 330 months.
(Hanson & Morton-Bourgon, 2009; Helmus, Hanson, & Thornton, 2009). Further, unlike RM2000, which is tailored for use in the UK, Static-99 was found to be employed in 54% of community treatment programmes in the United States (Archer, Buffington-Vollum, Stredny, & Handel 2006; McGrath, Cumming, & Burchard, 2003), and is also used in diverse countries including Israel, Singapore, and Taiwan (Helmus & Hanson, 2007).

Static-2002R (Hanson & Thornton, 2003) is the most recent version of this instrument, and was developed to improve upon weaknesses identified in the Static-99R, for example, inadequacies in the relationship between age and recidivism; moderate predictive accuracy; and uncertainty surrounding the underlying meaning of risk scores. However, the Static-99R has been tested in more samples and in more countries than the Static-2002R, and continues to be recommended and routinely used to measure risk of recidivism (e.g., Craig, Browne, & Stringer, 2004; Hanson et al., 2016; Helmus & Hanson, 2007; Neal & Grisso, 2014). Moreover, when Static-2002R and Static-99R are compared, there is in fact little to no difference in predicting sexual recidivism (Hanson, Helmus, & Thornton, 2010; Helmus & Hanson, 2007). As such, Static-99R was considered suitable for use in the empirical study (see Chapter Three). Moreover, this critique aims to examine the scientific properties of the Static-99R, specifically in the areas of validity and reliability.

**Considerations for the assessment of risk**

Preceding the development of successive generations of risk instruments was research that examined violence and recidivism among offenders with mental illness (see Cocozza & Steadman, 1975; Kozol, Boucher, & Garofalo, 1972; Steadman, 1976;
Steadman & Cocozza, 1974; Thornberry & Jacoby, 1979). Results found that even the best risk instruments could only achieve an accuracy rate of 33% (Monahan, 1984). Specifically, one in every three mentally disordered persons who were deemed to be violent by psychiatrists or psychologists went on to commit a violent act. Interestingly, Monahan (1984) found that the best predictors of violence among mentally disordered individuals were the demographic factors that also predicted violence among non-disordered offender populations (e.g., age, gender, social class, history of prior violence). Further, the weakest predictors of violence among mentally disordered persons were found to be psychological factors such as diagnosis or personality traits (Monahan, 1984).

Other crucial considerations when assessing the recidivism risk of previously convicted sex offenders involve sensitivity and specificity (Campbell, 2003). Test sensitivity is the ability of a tool to accurately identify (true positive) the presence of the problem being measured (e.g., recidivism), whereas test specificity refers to the ability of the test to correctly identify the absence of this problem (true negative; Altman & Bland, 1994). Clinical use of actuarial instruments requires identifying the classification accuracy (i.e., those who will recidivate and those who will not) associated with specific cut-off scores (Swets, Dawes, & Monahan, 2000). Therefore, Sjöstedt and Långström (2001) investigated the sensitivity and specificity of cut-off scores on the Static-99 and found that a cut-off score of >1 accurately identified an estimated 92% of the recidivists in their hypothetical sample ($N = 1,000$). However, this compromised the tool’s level of sensitivity, where a false positive rate of approximately 55% was observed. On the other hand, efforts to maximise specificity created an unfavourable frequency in false negative classifications (Sjöstedt & Långström, 2001). Campbell (2003) argues that this
outcome fails to effectively achieve public protection. Moreover, such results imply notable challenges in achieving classification accuracy with regard to both specificity and sensitivity, and have raised ethical considerations for the use of actuarial tools in legal proceedings (Campbell, 2003). Hence, ethical considerations for the use of Static-99R in forensic practice will also be examined in this chapter.
Overview of Static-99 Revised

Static-99R was revised in 2016 and consists of 10 rated items that assess criminal history, demographic information, and victim characteristics, with total scores ranging from negative three (-3) to 12 (see Appendix A). These items are said to measure four general factors that have been linked to sexual offending: 1) sexual deviance; 2) range of potential victims; 3) persistent sexual offending; and 4) antisocial lifestyle/criminality (Craig, 2007; Hanson & Bussière, 1998; Roberts et al., 2002). Sexual deviance is related to whether the offender has lived with a lover, had any convictions for non-contact sex offences, or had any male victims. Range of potential victims refers to whether the offender has unrelated or stranger victims. The number of previous sexual convictions or charges measures persistent sexual offending. While, antisocial lifestyle incorporates past and present convictions for non-sexual violence, four or more previous sentencing dates, and age at release from index sex offence (see Craig et al., 2007).

Except for the ‘Age’ (scores = -3 to 1) and ‘Prior Sex Offence’ variables (scores = 0 to 3), the Static-99R is scored dichotomously (1 = present, and 0 = absent). Until recently, Static-99R had four nominal risk categories: low, low-moderate, moderate-high, and high. However, due to the emergence of new norms, Static-99R risk categories have been reconsidered and now consist of five groups: 1) very low risk (Level I); 2) below average risk (Level II); 3) average risk (Level III); 4) above average risk (Level IV); and 5) well above average risk (Level V) (Hanson et al., 2016; see Appendix B). This change derived from the recognition that a standard for outlining risk categories with specific meanings related to, for example, recidivism rates, psychopathology and treatment needs, does not exist. That is, the meaning of risk categories in actuarial
assessments is restricted to interpretations set out by test developers while; on the other hand, the clinician assigns risk categories and corresponding interpretations when using Structured Professional Judgement tools (Hanson et al., 2016). It has been noted that different test developers, as well as clinicians, do not use risk category labels consistently, despite the possibility that important decisions can be predicated on test outcomes. Consequently, there have been considerable variations in the observed recidivism rates for offenders who have been given the same risk label on different risk assessment tools (Singh, Fazel, Gueorguieva, & Buchanan, 2013, 2014). Phenix, Helmus and Hanson (2016), therefore, contend that using ‘Levels’ to describe risk will help to achieve consistency if this becomes a shared language across diverse risk scales. In light of this, very low risk, below average risk, average risk, above average risk and well above average risk will be used to describe risk levels in the empirical chapter of this thesis.

Hanson and his colleagues (2016) further argue that in order to achieve advancement in the “professional lexicon for risk communication,” there needs to be “standardized metrics to represent the information contained in risk assessments” (p. 2). Despite using discrete categories in static risk tools, Hanson et al. (2016) make the assumption that risk is continuous, with no natural breaks dividing risk categories (Hanson et al., 2010; Hanson, Babchishin, Helmus, & Thornton, 2013; Hanson et al., 2016). Hence, they have employed logistic regression to associate Static-99R scores with recidivism rates. Due to this assumption, Hanson et al. (2016) argue that ‘very low risk, below average risk, average risk, above average risk and well above average risk’ are more “defensible” categories (p. 3).
Scientific Properties of Static-99R: A Critical Review

The properties that constitute a good forensic assessment tool are no different from the expected empirical standards of psychometric tests (Douglas, Cox, & Webster, 1999). According to Kline (1986), these include at least an interval scale of measurement, reliability and validity (including structures that discriminate differences among outcome scores), as well as appropriate normative data. The Static-99R will be evaluated against each of these properties.

**Scale of Measurement**

The variables on the Static-99R, including the ‘Age’ and ‘Prior sex offence’ items, assume an ordinal scale of measurement, in that items are ranked in relation to their contribution to increased risk (see Appendix A). Specifically, the 0 point on the ‘Age’ scale does not indicate the absence of age in this instance; and although the 0 point on the ‘Prior sex offence’ scale signifies that the offender has no previous sexual offences, the successive values simply rank order a range of conviction/charges. Total risk scores assume a continuous level of measurement (interval) for the purposes of statistical analyses. The standardised quantification of factors relating to risk allows for robust statistical tests to be carried out in terms of identifying the psychometric properties of the tool (Kline, 1986).

**Reliability**

*Internal consistency versus inter-rater reliability in the assessment of risk*

Reliability refers to the general consistency of a measure (Kline, 1998). Relatedly, internal consistency is the extent to which all parts of a test contribute equally to what is
being measured. Further, inter-rater reliability (IRR) is the degree of concordance in scoring between evaluators, and is of significant concern in the application of assessments within forensic settings (Kline, 1986). It is of note that a correlation minimum of 0.7 is required for a test to be considered reliable (Nunally, 1978).

In their examination of the Historical and Clinical Risk-20 (HCR-20; Douglas, Webster, Hart, Eaves, & Ogloff, 2001), Douglas and Reeves (2010) assert that IRR is the most important aspect of reliability for this Structured Professional Judgment tool, as it is “not a measure of a psychological construct” (p.162). Therefore, items do not “hang together” to form a construct (p.162), making internal consistency less significant than it would be for a measure such as the Hare Psychopathy Checklist – Revised (PCL-R; Hare, 1991). This reasoning may have been applied to the Static-99R, as ‘risk’ does not constitute what is considered to be a psychological construct and developers do not report on the internal consistency. However, it is considered that with tools such as the Static-99R, where items are combined to provide a score that has significant consequences for offenders, internal consistency should not be ignored. In other words, factors relating to risk should be adequately evaluated and the most statistically relevant and correlated factors offered as the basis of the assessment tool.

Whether or not assessments of risk yield the same outcomes for offenders across evaluators, settings or services, has important implications for offender treatment/management and public safety (Quesada, Calkins, & Jeglic, 2014). Hanson et al. (2016) acknowledge that sound risk categories, based on risk scores, should suggest implications for decision-making that can be justified empirically. An established principle within the criminal justice system is targeted treatment, whereby low-risk
offenders receive little to no intervention, and offenders with moderate to high risk of recidivism receive higher levels of treatment (i.e., Risk-needs-responsivity (RNR); Andrews & Bonta, 2010). Naturally, these outcomes have significant consequences on budgeting, labour and resource allocations (Johnstone, 2013; Prison Reform Trust, 2013).

IRR for the Static-99R has been measured by correlations with the full range of scores. When scored by trained researchers, inter-rater reliability has tended to fall between .85 and .95 (e.g., McGrath, Lasher, & Cumming, 2012; Smid, Kamphuis, Wever, & van Beek, 2014; Thornton & Knight, 2015). Quesada et al. (2014) extended their examination of Static-99R IRR to include practitioners, which provides relevant information, as it is within this setting that static risk tools are used most frequently. The authors employed Cohen’s Kappa statistic to analyse the degree of agreement between independent raters on dichotomous items; and the Intraclass Correlation Coefficient (ICC) statistic to measure reliabilities between raters on scaled items, such as total score. Results generally indicated high IRR, with estimates for total score between practitioners reaching “excellent”. Kappa estimates on individual items ranged from “substantial” ($k = .62$ to $.79$) on the first eight items, to “outstanding” on the remaining two items, including “male victims” ($k = .941$) and “stranger victims” ($k = .804$).

Nonetheless, there are on-going concerns regarding differences in scoring between practitioners and researchers. Overall, Quesada et al. (2014) found identical total scores between practitioners and researchers more than half (55%) of the time, whether or not there were different scores on individual items. This frequency is consistent with
findings from Boccaccini et al.’s (2012) study. Still, it is noted that where rater discrepancies existed, practitioners were more likely to reach lower total scores than researchers. Quesada et al. (2014) observed that the most common explanation for scoring discrepancies was “error in coding from manual” (p. 1372).

Further, other research with the Static-99R have suggested that ‘high score’ agreement may also be less frequently observed in routine use (Rice, Boccaccini, Harris, & Hawes, 2014; Boccaccini et al., 2012; Levenson, 2004), and also when comparing the scores of opposing professionals in court proceedings (Murrie et al. 2009). Since risk categories are associated with total scores, these findings should not be taken lightly. Varela, Boccaccini, Cuervo, Murrie, and Clark (2014) found that risk category labels had substantive influence among prospective jurors, where they were much more influenced by the Static-99R category labels than by any numeric information associated with the scores.

Inconsistencies across evaluators highlight the value in adequate training, as well as the potential need to report confidence intervals (CI) for total scores and use multiple raters to enhance reliability (Boccaccini et al., 2012; Craig & Beech, 2009). CI refer to an estimated range of values, which is likely to be a particular population parameter that is calculated from the normative sample. The CI offers an estimate of how variable the risk percentages associated with each score could be if the sampling process was replicated repeatedly (Doren, 2002). This has added to the overall appeal of the Static-99R despite the discrepancies in scoring (Craig & Beech, 2009).
Validity

Predictive Validity

Whether a tool measures what it sets out to measure is known as its validity (Kline, 1986). As it relates to risk of sexual recidivism, the literature has predominantly examined the construct and predictive validity of the Static-99R. Predictive validity relates to whether a test instrument accurately predicts future behaviour, and is typically measured by the Area Under the Curve (AUC) statistic (Mossman, 1994; Sternberg & Grigorenko, 2001). As highlighted in the discussion on the implications of test reliability in forensic settings, the predictive validity of the Static-99R similarly depends on accurate scoring, and consequently, discrepancies in these scores may compromise the scale’s overall performance.

Meta-analyses aimed at identifying factors associated with sexual reoffending suggest that the 10 items included in the Static-99R are strong predictors of sexual recidivism (Hanson & Bussiere, 1998; Hanson & Thornton, 1999; 2000). Moreover, Static-99R has been found to be more accurate in predicting sexual recidivism (AUC = .71, $r = .33$) than the RRASOR (AUC = .68, $r = .28$) and the SACJ-Min (AUC = .67, $r = .23$) (Hanson & Thornton, 2000). Static-99R also showed moderate predictive accuracy for violent (including sexual) offence recidivism (AUC = .69, $r = .32$; Craig et al., 2007). Static-99R predictive accuracy for sexual recidivism is comparable to RM2000, which has been found to have a predictive accuracy of $d = .74$ (Helmus, Babchishin, & Hanson, 2013).

It is important to note that these findings represent sample estimates. Particularly, the AUC is calculated for samples, and cannot necessarily be applied to an individual case.
where idiographic factors have a significant impact on risk. This should be taken into consideration, as decisions made based on risk scores have a long-term effect on offenders. Further, an important observation has been made where research on the predictive effectiveness of static risk assessments, including Static-99, has shown higher ability to predict risk in studies conducted by instrument authors, in comparison to studies done by independent researchers (Blair, Marcus, & Boccaccini, 2008; Quesada et al., 2014). Enhanced predictive accuracy is thought to reflect the test authors’ ability to score the tool more accurately than non-authors (Blair et al., 2008), as well as the possibility that conditions closely resembling the original tool validation in strict research contexts yield better results. This, to a greater extent, emphasises the need for examination of test reliability and validity in routine, practical settings (Quesada et al., 2014).

It is also necessary to evaluate the predictive validity of the Static-99R in terms of ethnic diversity. In light of the potential bias associated with psychological assessment tools, widely accepted ethical standards underscore the importance of appropriate test selection and application (Leach & Oakland, 2007). This includes ensuring representativeness. For example, the British Psychological Society (BPS) User Guide for Psychological Testing (2007) states:

> It is possible that factors such as sex, ethnicity or social class may act to obscure, mask or bias a person’s true score on a test. If this is the case, the observed test score may not be an accurate or valid reflection of the quality assessed through the test.… Test manuals should state whether the test has been
evaluated for potential bias, what methods have been used to carry out such an
evaluation and the results obtained. (p.11)

Likewise, the American Psychological Association (APA, 2010) Ethical Principles of
Psychologists and Code of Conduct states, “…Psychologists take into
account…situational, personal, linguistic, and cultural differences that might affect
psychologists’ judgment or reduce the accuracy of their interpretations” (Standard
9.06).

There is evidence to suggest that the Static-99R does not accurately predict sexual
recidivism among non-white males. For example, Varela, Boccaccini, Murrie, Caperton
& Gonzalez (2013) discovered that the Static-99R was not a statistically significant
predictor of recidivism among Latino offenders, and only predicted recidivism among
Black offenders on some occasions. This is supported by other research where only
small to moderate predictive effects have been found among ethnically diverse samples
(Bartosh, Garby, Lewis, & Gray, 2003; Boccaccini, Murrie, Caperton, & Hawes, 2009;
Sreenivasan et al., 2007). Varela et al. (2013) conclude that Static-99R may not work as
well for Latino offenders in comparison to White and Black offenders. They further
hypothesise that this outcome could be a result of actual differences in the historical
characteristics of Latino offenders, or a product of unreliable scoring due to missing
information.

Construct Validity

Construct validity refers to the degree to which inferences on the intended construct of a
measure can justifiably be made on the basis of test scores (Kline, 1986). Psychological
tests are usually designed to measure latent constructs, where clinical importance is
centred on the extent to which these constructs (e.g., impulsivity) are related to the outcomes in question (e.g., violence) (Babchishin et al., 2011). However, unlike psychometric tools that measure an attribute of a person, risk assessments assess an ascribed quality (risk), which lends itself to bias, stigma and inconsistencies (Walker, 1978). This presents another caveat when using Static-99R. Relatedly, it is recognised that implications for the management of offenders are based on the extent to which the risk factors such as antisocial lifestyle and sexual deviance impact overall risk scores on the Static-99R (Hanson et al., 2016).

In spite of the assertion that risk assessments do not measure psychological constructs per se, the literature points to efforts to identify the latent constructs of the Static-99R, and how these serve to influence reoffending. For instance, Brouillette-Alarie, Babchishin, Hanson and Helmus (2015) examined whether psychologically meaningful constructs could be identified within the Static-99R and report that paraphilia and general criminality have coherent interpretations, as indicated by item content and predictive validity patterns. They, therefore, conclude that sexual violence risk is a multidimensional construct. Cronbach and Meehl (1955) assert that although it is desirable, a comprehensive understanding of the latent psychological constructs being assessed is not always necessary (or possible) for a measure to have practical utility. Such has been the case in forensic settings, where static risk assessments are used to inform offender management decisions, though scores on their own do not provide insight into treatment goals or assess change directly (Brouillette-Alarie et al., 2015). Nonetheless, practical utility does not negate the need for consistency in the meaning ascribed to risk scores.
It is established that the most useful risk categories have construct validity (Cronbach & Meehl, 1955). As previously mentioned, research examining scoring among groups of mental health practitioners and evaluators indicates that risk category labels have been associated with varying recidivism rates (Hilton, Carter, Harris, & Sharpe, 2008; Monahan & Silver, 2003). Further, deviations in interpretation persist despite experience with forensic risk assessments (Slovic, Monahan, & MacGregor, 2000). Hanson et al. (2016) also recognised significant limitations in the construct validity of risk categories on Static-99R, in the absence of accepted standards that link risk category labels to useful meanings relating to recidivism rates, psychological features and expected treatment needs. As such, they established the new standardised risk categories outlined above, based on principles identified in the literature (see Appendix B). They state that this change in labelling and underlying quantities have improved the “conceptual coherence” of the Static-99R (p. 11).

Moreover, with the revised risk categories, sexual offenders who are given different risk ratings are expected to be implicitly different on risk-relevant predispositions and, as such, require different treatment strategies. This has important implications for the risk-needs-responsivity model of intervention (Andrews & Bonta, 2010), as greater accuracy in predicting the magnitude of risk could better align treatment programmes to the offenders who need it. Hanson et al. (2016) also assert that proposing psychologically meaningful risk categories provides an opportunity to further research the construct validity of these new risk categories. Specifically, future research investigating how sexual offenders with these risk categories differ on the latent, risk-relevant constructs assessed by risk tools could prove beneficial (Hanson et al., 2016). Finally, the authors
express that the more distinctly defined risk categories can be challenged and refined as advances in theory and research unfold.

**Concurrent and face validity**

Concurrent validity is the extent to which the results of a test correspond with previously established tests for the same construct, while face validity is the appearance that a test measures what it is supposed to measure (Kline, 1998). A range of tools exists for the prediction of recidivism among sexual offenders (Babchishin et al., 2011). However, discrepancies in the observed recidivism rates for offenders who have been given the same risk label by different risk assessment tools suggest that there are gaps in the concurrent validity of these instruments, including the Static-99R. Further, Babchishin et al. (2011) highlight that divergent results for measuring risk are frequent, where, for example, Barbaree, Langton, and Peacock (2006) found that less than 8% (n = 20) of sexual offenders from a sample of 262 were consistently identified as high or low risk by five commonly used actuarial risk tools (i.e., MnSOST–R, SORAG, Static-99, RRASOR and VRAG). This finding illustrates the fact that evaluators involved in the actuarial risk prediction of sex offenders should carefully decide what measure is most appropriate. Also, if more than one is used, it is necessary to consider how to adequately interpret divergent results (Babchishin et al., 2011).

Actuarial risk instruments appear to measure what they purport to measure (i.e., risk of sexual reoffending), as there is considerable overlap in their items (demographics, prior criminal history; Babchishin et al., 2011). Moreover, these instruments have been shown to have similar levels of predictive accuracy, to the degree that they can usually differentiate sexual recidivists from non-recidivists (Hanson & Morton-Bourgon, 2009).
However, as we have extracted through further investigation of the tool, deeper discrepancies apply that may attract potentially serious consequences in forensic practice.

**Normative data**

The issue of appropriate norms for the Static-99R is the most contentious within the literature, and represents the most significant weakness of the tool. Ethical standards discussed previously emphasise the importance of representativeness in assessment measures. However, the Static risk tools have not upheld this essential scientific component. Before its revision in 2009, the Static-99 normative sample included offenders from Britain and Canada who were released from custody predominantly in the 1970s (Screenivasan, Weinberger, Frances, & Cusworth-Walker, 2010). It has been argued that this sample does not accurately represent the risk of offenders in other countries and may overestimate the risk in minority groups, even though the tool is used in diverse populations (Sreenivasan et al., 2007; Sjöstedt & Långström, 2001).

Following observed deficits (such as changing demographics) in the normative samples used in replication studies, the developers went on to re-norm the Static-99 (Hanson et al., 2016). Static-99R was developed using data on sexual recidivism from 8,106 sex offenders across 23 samples, from Canada, the United States, the United Kingdom (UK), Austria, Denmark, Germany, Sweden, and New Zealand. The Evaluator Workbook (available at static99.org) indicates that these offenders are subdivided into groups labelled, ‘routine corrections’ and ‘preselected as High Risk/High Need (HRHN)’. However, demographic details beyond age are absent. Sreenivasan et al. (2010) focus attention on the fact that the Static-99R normative data are based
overwhelmingly on unpublished studies. Most of these have been doctoral or master’s theses, which have limited details on the samples of study.

Further, different custodial statuses (e.g., probation; forensic hospital release; prison release; and outpatients on sex offender treatment programmes) have been used in some datasets. This variability in the samples weakens the potential for the norms to be representative (Screenivasan et al., 2010). Moreover, the difference in definitions for recidivism that have been found in the norming studies, in addition to underreported statistical methods and an overreliance on unpublished manuscripts serve to undermine the validity of the risk scores (Screenivasan et al., 2010). Another important point that has been made involves the unlikelihood that the Static-99R risk estimates will apply to persons who are observed to have unique or unquantifiable risk factors that have not been outlined in existing studies (e.g., persistent or outlier sexual deviance such as multiple paraphilias; Screenivasan et al., 2010). Relatedly, where individuals have comorbid difficulties such as, substance dependence, personality disorder, psychopathy, or an intellectual disability, use of the Static-99R may misrepresent or fail to identify the risks (Craig & Beech, 2009).

Overall, the points raised illustrate the importance of appropriate norms, as deficits in this component of the tool do not occur in isolation, but affects the overall validity and reliability of the tool.

**Conclusions**

The development of the Static-99R represents one of the significant enhancements in sexual risk assessments. Particularly, it has improved upon the ad hoc nature of purely clinical judgement, and facilitated a number of research studies aimed at understanding
and predicting sexual risk. In terms of scientific properties, the main strengths of the Static-99R include the inter-rater reliability and the predictive validity in comparison to other similar tools, despite being only moderately accurate.

Areas to be mindful of as it relates to the use of the tool within forensic practice are: the inconsistencies in scoring evident across evaluators, especially between practitioners and researchers; the discrepancies in recidivism rates; and the reduced predictive efficacy in ethnic minority groups, which extends from a lack of representativeness in normed samples (Blair et al., 2008). Moreover, one hypothesis regarding practitioners reaching lower total scores than researchers is despite efforts to apply science to practice, clinical judgement may be unavoidable in forensic settings. Particularly, in routine assessments, clinicians may incorporate clinical judgement to supplement actuarial assessment, where they rely on their own knowledge of the individual to moderate overall risk category.

The value of clinical judgement cannot be denied and it is noted that this judgement is still heavily weighed in court proceedings. Therefore, in addition to the suggestions regarding adequate training, using multiple evaluators and reporting confidence intervals (Boccaccini et al., 2012), discussing potential risks as a multi-disciplinary team where possible may be imperative to the objective of achieving public safety. Moreover, developers of the Static-99R should prioritise the need to achieve a more representative normative sample, with increased transparency in the details of the samples used.

Limitations were also identified in the evaluation of construct and concurrent validity. Hanson et al. (2016) assert that the risk category labels in previous Static risk tools have
neglected construct validity in the absence of accepted standards that link risk category labels to useful meanings. Further, it has been asserted that scores from static risk instruments do not provide enough insight into treatment needs or offender progress (Brouillette-Alarie et al., 2015). Hanson et al. (2016) have sought to improve this by establishing new standardised risk categories that are empirically sound and conceptually coherent. However, this research needs to be replicated in order to emphasise the progress that is believed to have been made with the new risk categories.

With regard to assessing treatment needs, supplementary tools that measure dynamic risk and psychological deficits may be beneficial. Structured Professional Judgement tools are believed to provide this added value, as they utilise both static factors and dynamic factors in an effort to optimise reliability and validly in the risk assessment of individuals (Belfrage & Douglas, 2002).

Finally, this critique has demonstrated that Static-99R has fair psychometric properties, offers ease of administration using commonly available information and is, therefore, a research friendly tool. Also, there is a strong body of evidence to support its continued use in forensic settings, though special considerations are to be made when seeking to ascertain treatment needs as well as sexual risk among ethnic minorities and other unique groups. Moreover, the apparent simplicity of the Static-99R leaves it vulnerable to application errors and, thus, misinterpretation in the presentation of the results (Craig & Beech, 2009). Nonetheless, the scientific strengths that have been highlighted are appealing for the purposes of research, especially in countries such as Jamaica where offender data are limited. However, in light of the substantial impact that risk assessment outcomes can have on sex offenders and the community, further
development is needed on the reliability and validity of the Static-99R in practical settings.

The following chapter outlines a study that examined static risk factors for the commission of further sexual offences among Jamaican sexual offenders, in comparison to British/Canadian sex offenders. The Static-99R was used to conduct this cross-cultural analysis.
CHAPTER THREE

STATIC RISK FACTORS AMONG JAMAICAN SEX OFFENDERS:

A CROSS-CULTURAL ANALYSIS
Abstract

Aim: This chapter presents a cross-cultural examination of static risk factors in Jamaican sexual offenders, in comparison to a British/Canadian sample of sexual offenders.

Method: The sample consisted of 90 male Jamaican sex offenders and 100 male sex offenders from England and Canada. Offender data from the Department of Correctional Services, Jamaica, were coded using the Static-99R. The British/Canadian sample was previously scored for research purposes, using Static-99R. Data were analysed using Statistical Package for the Social Science (SPSS) and Jmetric.

Results: No significant difference was found in the total static risk scores between Jamaican and British/Canadian sex offenders. Significantly more Jamaican sex offenders endorsed items that were indicative of an antisocial lifestyle, rather than items related to sexual deviance. Offender type (rapist, extra-familial child molester and incest offender) did not impact significantly on static risk scores within the samples. Age was not found to influence the outcome of risk scores.

Conclusions: Findings on static risk factors for sexual offending among Jamaican sex offenders compared to British/Canadian sex offenders can be understood in light of the socio-cultural context of Jamaica. The tendency for Jamaican sex offenders to be rated higher on anti-social items on the Static-99R reflects socio-economic challenges in Jamaica and suggests that management efforts should target offence supportive attitudes. Likewise, assessment methods that are sensitive to underlying socio-cultural factors may be useful in this context.

Key words: Static risk factors; sexual offending; reoffending.
Introduction

Violence and crime in Jamaica

Crime rates in general were observed to have increased from 3.8 per 100,000 people in 1962 when Jamaica gained its independence, to 41 per 100,000 in 1997 (Harriott, 2004). Since then, Jamaica has consistently met the international standard for ‘high intensity conflict’ within a country, with over 1,674 murders (a rate of 58 per 100,000 people) in 2005 (United Nations Office on Drugs and Crime [UNODC], 2007) and 1,574 people murdered in 2007 (a rate of 59 per 100,000 people; United Nations Development Program [UNDP], 2008).

Recent data estimate an increase in murders and shootings, although there was a decrease in other serious violent crimes, where Jamaica had a homicide rate of 36.1 per 100,000 people in 2016 (Overseas Security Advisory Council [OSAC], 2017). With a population of approximately 2.8 million people, these figures continue to establish Jamaica as having one of the highest per capita national homicide rates in the world. These crime rates underscore both the ineffectiveness of the current approach to crime prevention within the Jamaican criminal justice system, as well as the need for systematic adjustments that utilise other approaches (Caribbean Coalition for Development & Reduction of Armed Violence, 2009; Harriott, 2004; Headley, 1996).

Sexual crimes, particularly against children, have gained prominence in the media and Jamaican authorities are grappling to establish effective ways of managing sexual offenders. In 2016, there were 480 reported incidents of rape, down from 792 (39%) in 2015 (OSAC, 2017). Nonetheless, Bourne et al. (2015) examined rape and ‘carnal abuse’ (sex with a person who is under the age of 16 years) in Jamaica over a four-
decade period, from 1970 to 2013, and found an average rate of 43.5 per 100,000 people (SD = 10.7 per 100,000). More alarmingly, the rate of carnal abuse and rape was 63.3 per 100,000 in 2012 alone.

Looking solely at sexual abuse of children, the Office of the Children’s Registry (OCR) documents that there were 3,386 reported cases in 2013 (OCR, 2013). Further, Chang (2011) states that according to the Child Development Agency (CDA), the most common reason for hospital visits among children in 2011 was sexual assault. Specifically, children under age ten accounted for 17% of all sexual assault cases, and children between ten and 19 accounted for 57% of all sexual assaults (Chang, 2011). It is also recognised throughout the research available in other countries (e.g., Ministry of Justice [MOJ], 2013; WHO, 2013) that sexual violence is perpetually under-reported (Amnesty International, 2006) and predominantly affects girls and women from lower socioeconomic groups (Wilson, 2012). Therefore, it is expected that these figures represent only a fraction of the true extent of the problem in Jamaica. Still, the high rates of reported sexual victimisation illuminate another dimension to the issue of crime in the country.

Given the debilitating effects of sexual abuse on victims, the present study will focus on persons convicted of sexual offences and the risk factors associated with the perpetration of sexual crimes, in an effort to inform preventative efforts in Jamaica.

**Violent crime in Canada and England**

With a population of 36.28 and 54.78 million respectively (World Bank, 2015), Canada and England present a contrast to Jamaica (see Table 1). It is reported that overall crime rates in Canada saw a steady decline between 2004 and 2014 (Boyce, 2014), and a
homicide rate of 1.68 per 100,000 people in 2015 (Allen, 2016). Despite this, however, the number of sexual assaults increased in 2015, where there were 21,500 police-reported cases. Importantly, in 2015, the rate of reported sexual violations against children declined slightly for the first time since 2010, with 4,532 recorded incidents (Allen, 2016).

In England and Wales, the homicide rate was 1.1 per 100,000 population in 2016 (Office for National Statistics [ONS], 2017). Further, police recorded crime statistics saw a 12% increase in sexual offences, up from 103,292 in 2015 to 116,012 in 2016 (ONS, 2017). Rape is specifically reported to have increased consistently since 2007/08, with a 13% increase (39,335 cases) in 2016 when compared to the previous year. Sexual offences against children accounted for 36% of the total increase in the number of sexual offences recorded by the police. Notably, it is stated that improvements in crime recording practices and an increase in the willingness of victims to report sexual offences may have influenced the increases in police-recorded incidents (ONS, 2017).

Nevertheless, data from Canada and England alert us to the widespread prevalence of sexual violence, especially as it relates to offences committed against children. This underscores the importance of investigating the risk factors related to sexual offending in general. It is worth noting that despite having only a fraction of the population of Canada, England and Wales, significantly higher homicide rates are observed in Jamaica. Likewise, Canada, England and Wales have higher rates of sexual violence; and, as previously highlighted, extensive efforts have been made to understand and manage sexual offending in these countries (see Chapter One). Thus, Canada, England
and Wales offer an alternate perspective to Jamaica, where research of this nature is unprecedented.

Table 1

*Most recent crime statistics for Jamaica, Canada, England and Wales*

<table>
<thead>
<tr>
<th></th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>36.1</td>
</tr>
<tr>
<td>Rape/Sexual Assault</td>
<td>17.1</td>
</tr>
</tbody>
</table>

*The historical and cultural context of sexual crimes in Jamaica*

In light of the notable influence of culture on sexual aggression discussed in Chapter One, it is worthwhile to review the historical and cultural context that is inherent to the perpetration of sex crimes in Jamaica. Generally speaking, Jamaica’s journey to independence from British rule was not without its enduring challenges. For instance, issues relating to policing and crime control must be understood as a legacy of colonialism, where Jamaica’s postcolonial context reflects the power imbalance that governed slave societies (Harriott, 2000). This context includes an unstable economy that gave rise to poverty; an inefficient justice system, specifically in the areas of policing and punishment; as well as a crime-inducing political system (Harriott, 2000).

To further illustrate the colonial impact, Gray (2004) expresses that increases in crime essentially began as soon as Jamaicans established the right to vote in the 1940s, owing to conflicts within the class-divided society. Specifically, he points out that the political
patronage and related violence that existed since then was borne out of the need to gain access to limited resources. This intensified during the 1960s (around the time of independence) when housing, a widespread scarce resource at the time, was made available to the poor solely on the basis of partisanship, and set rival impoverished contingents against each other as a result (Gray, 2004).

From this conflict to obtain scarce resources came a social response which Gray (2004) terms “badness-honour” (p. 123). He describes this as the “oral-kinetic practice in Jamaica that enables claimants, usually from disadvantaged groups, to secure a modicum of power and respect by intimidation” (p. 123). The ‘informer fi dead’ (i.e., informers should be killed) ideology also emanated from this social construct and placed acts of aiding the police as a social abomination punishable by death (Harriott, 2000). Gray (2004) theorises that by 1971, badness-honour had achieved moral dominance as a cultural practice within the urban poor society, where there was a formalised criminality (known as “badness” or “badmanism” in Jamaican parlance; Gray, 2004, p.123) that triggered fear in the larger society but earned praises in the slums. Through ‘badness’, asserters could challenge the norm of civility and affirm a racially charged defiance as a new basis for social identity and honour (Gray, 2004). Defiance of conventional norms by juvenile gangs and political enforcers (known in Jamaica as ‘dons’) gave these disadvantaged rebels a hostile and violent identity (Gray, 2004).

Further, as a former slave society and colonial territory, sex and power in Jamaica are inextricably linked, due to historical race and class relations that involved the interplay of sex and power as a means of intimidation/ punishment, as well as social mobility
Culturally, sexual extremism, popularly known as ‘dancehall’, can be seen as a post-independence phenomenon that describes music and ideologies that are specific to Jamaica, and was initially perceived as belonging only to the ghetto and contrary to that of the civilised upper class. This extremism is characterised by exhibitionist erotic behaviour and explicit sexual lyrics in song and in theatrics. Gray (2004) theorises that this developed as a deliberate political choice in reaction to power imbalance, through mocking the sexual etiquette of the middle and upper classes. To this end, Gray (2004) notes:

Dancehall culture, with its celebration of the erotic, sexually vulgar and gangster lifestyle, had therefore opened another front in the war on a tottering and defensive society. Sexual indiscipline by ghetto youth, by male and female dancehall DJs, and by middle-class defenders of the dancehall, was another and later means by which the black lumpenproletariat raised the ante in an ongoing social struggle. (p. 315)

This alignment of power and sex within the milieu of socio-economic struggle is also evident in the gender norms and stereotypes that persist throughout the populace, and reinforces supportive attitudes towards sexual violence. A man, in this setting, is defined by physical strength and prowess, chauvinism, boldness, risk-taking, sexual dominance, and resilience (Plummer, 2009, 2013). Such characteristics bear resemblance to psychopathic traits, where impulsivity, fearless dominance and callousness have been found to be strong predictors of positive attitudes toward predatory sexual behaviours in men (O’Connell & Marcus, 2016). Hope (2006) further describes Jamaica as “tightly gender ordered” (p.47), while West (2010) notes that the
ultimate ‘badman’ (i.e., thug) represents the heterosexual male ideal in inner-city communities.

Although it is recognised that sexual crimes in Jamaica are not unique to inner-city communities, it is noted that most reported cases of sexual abuse, especially against children, are from the lower socio-economic class (Jones, 2015). Sub-cultural abuse supportive themes have also been linked to the occurrence of sexual offending against children, where it is reported that some men feel entitled to sexual contact with girls who are under their care (United Nations Children’s Emergency Fund [UNICEF], 2006). Relatedly, the prominence of ‘dons’, or gang leaders, in inner-city communities give rise to entrenched sexual exploitation, as gang leaders often demand that families make their young girls available for sexual conduct (Immigration and Refugee Board of Canada [IRBC], 2007).

It is also likely that culture influences the prevalence of reports regarding male to male sexual abuse as well as female perpetrated sexual abuse, especially against peer aged males. Particularly, sociocultural factors result in a lack of acceptance for males to experience or acknowledge victimisation (Sorsoli, Kia-Keating, & Grossman, 2008). As such, males may be more inclined to ‘suffer in silence’ in an effort to preserve their masculine/ heterosexual identity and avoid being stigmatised. Female to male perpetrated sexual abuse is generally harder to detect and, by extension, difficult to prove in legal proceedings. Hence, reluctance to disclose and strict legal standards are likely to result in even lower conviction rates for female sexual offenders.

This sociological and historical background to crime and violence in Jamaica offer the basis from which its occurrence is to be understood. It is important to recognise that
sexual victimisation is not an isolated criminal justice problem, but is embedded in the socio-economic and cultural structures highlighted above. Moreover, the historical and cultural factors presented permeate through the legislative and social responses to sexual crimes, which require consideration in an attempt to further contextualise this problem and inform the current study.

Current approach to sexual crimes in Jamaica

Legislative and institutional interventions. The Sexual Offences Act (2009) governs the legal parameters and treatment of contact sexual crimes. This legislation makes provisions for: 1) the prosecution of rape and other sexual offences, 2) sentencing, 3) the establishment of a Sex Offender Registry to maintain a record of sex offenders who are convicted, and 4) the elimination of a ‘male to female’ gender bias in sexual crimes, where women can now be charged for crimes such as incest and carnal abuse. It is noted, however, that although an effort has been made to reduce gender bias in sexual offending against children, sociocultural influences continue to be a key factor in the reporting of female perpetrated sexual abuse, and male experience of victimisation in general (Sorsoli et al., 2008). While it is recognised that the sexual exploitation of females is underreported, this is likely to be on an even larger scale for males in light of existing gender stereotypes.

The Sexual Offences Act (2009) also makes provisions for sexual offences and indecent assault against children, which include, sexual touching or interference, and grooming (i.e., the process by which a sex offender prepares a child to be abused). Jamaica has also passed the Child Pornography (Prevention) Act (2009) to prohibit the production, distribution, importation, exportation or possession of indecent images of children, and
the use of children for indecent images.

A number of organisational structures have also been developed to aid in the administration of the legal framework regarding sexual offences. Three such agencies include: the Centre for the Investigation of Sexual Offences and Child Abuse (CISOCA; UNICEF Jamaica, 2016), the Office of the Children’s Advocate (OCA, 2016) and the Office of the Children’s Registry (OCR, 2013). These institutions are victim centred and emphasise reporting and investigation as responses to the high prevalence of sexual crimes in Jamaica. What is missing, however, is a system to adequately manage and treat perpetrators. Currently, no assessment or treatment interventions exist for sexual offenders, and the concept of risk factors has not yet been explored empirically.

**Socio-economic influences**

As previously mentioned, sexual victimisation in Jamaica often manifests as part of the economic challenges that plague the society. Despite legal provisions that make it a serious criminal offence for anyone to have sex with another person who is under the age of 16 years (carnal abuse), a larger problem exists in the widespread minimisation of abuse against girls who consent to sexual relations for financial or other gains (Amnesty International, 2010). The imbalance of power in ‘consensual’ relations between men and under-aged girls leaves them at increased risk for victimisation (UNICEF Jamaica, 2016).

Further, although carnal abuse contributes to a significant portion of the statistics on sexual violence in Jamaica (Bourne et al., 2015), there seems to be a hierarchal classification of sexual misconduct within the Jamaican society. That is, sexual abuse against very young children (especially boys) is evidently considered to be the most
heinous and unacceptable form of sexual offence, while rape and sex with under-aged girls are glorified in the culture, through, for example, music and offence supportive attitudes among caregivers and perpetrators alike (Bureau of Gender Affairs & Gender Advisory Committee [BGA & GAC], 2011).

The authors of the UN Secretary General’s study on Violence Against Children (UNICEF, 2006) note that the underreporting of sexual abuse may be partially due to the acceptance of abuse by other household members because of financial dependence on the perpetrator. With women still being largely dependent on men, poverty and lack of employment opportunities also perpetuate the sexual exploitation of girls; and caregivers are often complicit, viewing sex as a legitimate way for girls to make a financial contribution.

Undoubtedly, the fear and intimidation that underlie the larger context of crime perpetration is no different in sexual violence. Reluctance to speak out on issues of sexual victimisation due to fear of consequences such as violent reprisal and apathetic attitudes continue to influence reporting and conviction rates (Amnesty International, 2010; Brown, 2012; Leslie, 2012). The need for credible evidence and the daunting nature of providing evidence in court convolutes prosecution. Further, anecdotal accounts from agencies involved suggest that victims of sexual abuse are often forced to leave their homes and communities, while the perpetrator often remains unpunished (UNICEF, 2006).

On a macro level, Jamaica’s unique melange of economic constraint, dependence on tourism, violence vulnerability and criminogenic undertones has served to foster a very reactive response to crime control in general (Harriott, 2000). The recognition of the
harsh effects crime continues to have on the country’s development has led to a seemingly desperate approach to improve the State’s capacity to maintain order, much to the detriment of social reform and justice (Harriott, 2000). Harriott (2000) argues that social policy is used as a temporary protective layer rather than an instrument for lasting development, which has produced a more punitive approach to crime control. This is of significance when considering how offenders, including sexual offenders, are managed within the criminal justice system. Here, the focus is on removing such individuals from the society, with few mechanisms in place for rehabilitation.

What is more, conviction rates for rape are said to be “woefully low”, where, for instance, 208 individuals were arrested for rape, out of a total of 1,787 reports of sexual offences in 2004. Of these, 50 cases (3%) were disposed of in court (Myers, 2005, para. 5). One can therefore assert that in matters relating to sexual crimes, where there has been an emphasis on increasing the channels for reporting and improving the legislative framework, institutional responses have neglected the systems that influence this problem. These systems include economic instability, gender inequality and the marginalisation of women and girls, as well as a lack of rehabilitative programmes for offenders.

The preceding discussion of the institutional and legislative approaches to sexual crimes in Jamaica collectively details the advances made in seeking to manage the problem and the extent to which cultural and socio-economic factors continue to influence its alarming prevalence. It also highlights which criminal justice responses have so far been prioritised, and outlines notable gaps that need addressing. Overall, it can be said that sexual offending in Jamaica occurs within a distinct context and responses
generally reflect a punitive approach that has not taken into account the need for research, assessment of risk and evidence-based interventions. It is believed that in order for such advances to be achieved, country-specific research on risk of sexual offending that takes into consideration the cultural and socio-economic influences is needed.

The current study

Rationale

Although the general climate of crime in Jamaica has been examined for some time, extensive focus has not been given to sexual crimes. A large number of sexual crimes have been reported (e.g., Bourne et al., 2015; OCR, 2013) but little is known about the offenders, as empirical research in this area is absent. Issues concerning sex offender management cannot be resolved without first understanding and treating factors that contribute to the problem (Andrews, Bonta, & Hoge, 1990; Andrews et al., 2011). Given the lack of research in this area, country-specific data are needed to inform management programmes and preventative efforts. It is believed that a cross-cultural examination of static risk factors offers an opportunity to begin thinking about how best to manage the issue of sex offending in Jamaica.

Aims of study

Validated risk factors for recidivism have been established in countries such as Canada, England and Wales. These factors have been incorporated into actuarial tools, which are used to predict future offending. Therefore, in light of the need to establish an understanding of sexual offending in Jamaica, the aim of the current study was to examine risk factors among Jamaican sexual offenders in contrast to British/Canadian
sex offenders, using the Static-99R. The study also sought to highlight how underlying factors such as socio-cultural differences may impact on the outcome of static risk assessment, and thus, considered the applicability of the Static-99R in Jamaica.

**Hypotheses and research questions**

General research questions included:

- Are Jamaican sex offenders more at risk of reoffending than British/Canadian sex offenders?
- Do Jamaican sex offenders have similar risk profiles to British/Canadian offenders, with regard to antisocial lifestyle/criminality and sexual deviance?
- Are the groups different in terms of individual risk factors such as number of prior sexual offences?

Given the outlined socio-cultural context of sexual offending in Jamaica, the following hypotheses were made:

1. There will be a significant difference in the level of risk, as indicated by total Static-99R score, between British/Canadian and Jamaican sex offenders. It is expected that given the high prevalence of violent crimes in Jamaica, Jamaican sex offenders will have higher total risk in comparison to British/Canadian sex offenders.

2. There will be underlying factors that will illustrate differences between Jamaican sexual offenders and British/Canadian offenders on the Static-99R.

3. In light of the high rates of violent crime in Jamaica, which have been linked to the socio-economic challenges faced by the country, it is predicted that Jamaican
sexual offenders will have more prolific criminal histories. Therefore, Jamaican offenders will be more likely to score higher on items related to criminality.

4. The literature discussed in Chapter One outline differences in recidivism rates among varying types of sex offenders, as defined by victim type. Hence, it is hypothesised that offender type (rapist, extra-familial child molester and incest offender) will impact significantly on static risk scores within the samples.
Method

**Ethical considerations**

A preliminary examination of ethical concerns was conducted using the University Ethics Self-Assessment Form (SAF). No participants were seen and data were gathered from official anonymous records. Results, therefore, determined that based on the nature of the study, no further ethical review was required (see Appendix C).

**Sample**

The sample included the sum total (N = 90) of male Jamaican sexual offenders who were incarcerated at the time of data collection (July 2016), and 100 male sexual offenders from England and Canada. With permission from the researchers, a combined sample of British/Canadian sex offenders was randomly selected from a dataset of 1,208 sex offenders, drawn from four secure settings, including secure psychiatric and prison facilities (see Hanson & Thornton, 2000). These offenders were released to the community or treatment programmes in Canada, England and Wales between 1958 and 1993. Due to the anonymous nature of the data set, Canadian participants were not distinguished from British participants. However, the original study consisted of 677 Canadian sex offenders and 531 sex offenders released from British prisons (Hanson & Thornton, 2000). This sample provided a suitable comparison group due to the static, unchanging nature of variables. It is important to note that data regarding ethnicity were not available. Thus, inferences from the results were made from a sociocultural standpoint, rather than ethnicity.
Sample characteristics

Age. Due to the nature of data available in Jamaica, it was not possible to compare equivalent samples in terms of age. Specifically, age for the Jamaican sample reflects age at detainment, whereas age for the British/Canadian sample is at release. For the purposes of research, age in this study represented a static variable. Consequently, this factor and its association with overall risk score were operationalised as ‘at the time of this study’, and not as a dynamic construct (see Chapter One).

There was a significant difference in age between both groups, \( t(188) = 3.25, p < .05 \) (two-tailed), with Jamaican sex offenders having a higher mean age \( (M = 40.39, SD = 12.4) \) than their British/Canadian counterparts \( (M = 34.56, SD = 12.31) \). Jamaican offenders ranged from age 20 to 68, while British/Canadian offenders were aged 18 to 68.

Offender type. British/Canadian sex offenders were categorised into three offender types: 1) rapist; 2) extra-familial child molester; and 3) incest offenders. Rapists referred to offenders who offended against adults, while extra-familial child molesters were those who abused unrelated children. Incest offenders were those who offended against members of their immediate family. Jamaican sex offenders were listed according to their index offence(s) (see Appendix D).

Jamaican offences were based on legal definitions outlined in the Sexual Offences Act (SOA, 2009) and the Offences Against the Person Act (OAP, 2010; see Appendix E). However, due to the comparative nature of this study, consistency in the coding for both samples was required. As such, the offence categories in the Jamaican sample were recoded to match the three offender types in the British/Canadian sample (rapist, extra-
familial child molester and incest offender). Therefore, offences against persons aged 16 or older were coded as ‘rapists’. Offences involving victims below the age of 16 were coded as ‘extra-familial child molester’. Finally, offences involving incest were coded as ‘incest offender’. A second coder was not employed on this occasion; hence, reliability could not be achieved through concordance between coders. In spite of this, data were obtained from official police records in Jamaica, and frequency statistics were used to disaggregate offender type.

There was no significant difference in the proportions of offender types in both samples, \( \chi^2 (2, n = 174) = 5.21, p = .07 \). The majority of participants were extra-familial child molesters (\( n = 82 \)). This was the most frequent offender type in the British/Canadian sample. On the other hand, sex offenders in the Jamaican sample were mostly rapists (see Table 2).

Table 2

*Descriptive statistics for offender type with frequency and percentages*

<table>
<thead>
<tr>
<th>Offender Type</th>
<th>Jamaican</th>
<th>British/Canadian</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( N )</td>
<td>( % )</td>
<td>( N )</td>
</tr>
<tr>
<td>Rapist</td>
<td>49</td>
<td>54.4</td>
<td>35</td>
</tr>
<tr>
<td>Extra-familial child molester</td>
<td>35</td>
<td>38.9</td>
<td>47</td>
</tr>
<tr>
<td>Incest offender</td>
<td>6</td>
<td>6.7</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>46.6</strong></td>
<td><strong>82</strong></td>
</tr>
</tbody>
</table>
Risk level. As previously stated, the risk categories employed in the current study reflect Phenix et al.’s (2016) newly developed Static-99R risk levels. No significant difference in the proportions of each risk level in both samples was found, $\chi^2(2, N = 190) = 1.57, p = .46$. Further, most offenders fell in the average (Level III) range for level of risk (see Table 3). Likewise, there was no significant difference in risk scores between Jamaican ($M = 1.61, SD = 1.92$) and British/Canadian ($M = 1.87, SD = 2.02$) sex offenders, $t(188) = -0.9, p = .37$.

Table 3
Descriptive statistics for level of risk with frequency and percentages

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Jamaican</th>
<th>British/Canadian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N$</td>
<td>(%)</td>
</tr>
<tr>
<td>Very Low</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Below Average</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>Average</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>Above Average</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Well Above Average</td>
<td>4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Procedure

Data from the Department of Correctional Services (DCS), Jamaica, were coded using the Static-99R. The British/Canadian sample was scored for previous research purposes using the Static-99R (see Hanson & Thornton, 2000). As outlined in Chapter Two, the Static-99R is an actuarial assessment tool developed by Hanson and Thornton (2000)
for use with adult male sexual offenders who are at least 18 years of age. It is used to evaluate the risk of reoffending by utilising a base rate for recidivism from a sample that the developers consider to represent all convicted sex offenders. Static-99R is the most widely used sex offender risk assessment instrument in the world, and is extensively used in the United States, Canada, the United Kingdom, Australia, and many European nations.

Though Static-2002R (Hanson & Thornton, 2003) is the most recent version of this instrument, Static-99R has been tested in more samples and in more countries than the Static-2002R, and continues to be recommended and routinely used. Furthermore, the Static-99R includes more data items that are collected by the DCS. Hence, this version was considered more suitable for the current study.

It is also important to note that recidivism data were not included in the current study, as the Jamaican sample consisted of incarcerated sexual offenders.

*Measures and scoring*

As discussed in Chapter Two, the 10 items on Static-99R are based on research that found these factors to be predictive of future violence (see Table 4). The description of each item as well as coding rules, as specified by the coding rules handbook are outlined in Appendix B (Phenix et al., 2016).
Information on the relationship status of Jamaican sexual offenders was not available at the time of data collection. As such, ‘Ever lived with a lover’ was omitted for both the Jamaican and British/Canadian samples in an effort to maintain uniformity. Phenix et al. (2016) assert that this is the only item that may be omitted or scored as a ‘0’ (zero) if no information is available.
Results

Treatment of data

Analyses were conducted using the SPSS Statistics Editor Version 24 and the Jmetric software. Data were checked for errors prior to analyses (Pallant, 2013) and frequencies of each scale item were conducted to ensure that the values fell within the range of possible scores. Missing data across all items were more prevalent in the British/Canadian sample (79 cases) when compared to the Jamaican sample (6 cases). The majority of missing cases in the British/Canadian sample were found in the unrelated (37 cases) and stranger victim (37 cases) items. It is considered that data were gathered on British/Canadian offenders released between 1958 and 1993; therefore, this may reflect the quality of record keeping during this period. As such, missing data were replaced with the SPSS missing code ‘999’ (Pallant, 2013) and scored as zero in order to avoid data loss and to achieve cautious measurement of risk where information was unavailable. For multi-dimensional scaling (MDS) and Rasch analysis, missing data were also scored as zero for the same reason.

Evaluation of assumptions

In order to determine the most appropriate statistical techniques (parametric vs. non-parametric), preliminary analyses were performed to evaluate the assumptions of normality and homogeneity of variance. This process involved inspecting normal probability plots and histograms, as well as conducting analyses of assumptions specific to particular statistical tests (Pallant, 2013). Further, the level of measurement for each variable was taken into account when choosing statistical techniques, with non-parametric tests used for nominal and ordinal variables (Pallant, 2013).
**Exploration of Static-99R underlying dimensions**

MDS was used to examine the structure of the test in the two samples by exploring the inter-relations of the variables. MDS refers to “a family of models by means of which information is contained in a set of points in space. These points are arranged in such a way that geometrical relationships such as distances between points reflect the empirical relationships” (Coxon, 1982, p.1). In other words, the relationships between variables are represented simultaneously as distances in a two-dimensional geometric space. This method has previously been used to explore the underlying dimensions of behaviour (e.g. Canter, Bennell, Alison, & Reddy, 2003) and the properties of psychometric tests such as the Hare Psychopathy Checklist – Revised (e.g. Bishopp & Hare, 2008).

MDS provides a non-parametric technique that is beneficial as an exploratory method and can be used as an alternative to factor analysis; enabling underlying dimensions to be viewed as clusters within the scalogram (i.e., two-dimensional space) and interpreted based on theoretical logic (see Borg & Groenen, 2003). The distances between variables represent the empirical relationships of those variables. This is known as the Euclidean distance model. The overall fit of the model is indicated by the coefficient of alienation (i.e., stress), which ideally should be under 0.2, as well as the squared correlation (RSQ). For both the Jamaican and British/Canadian samples, the fit of the model was .04 and was therefore considered good. Further, 99% of variance in both models was explained by the two dimensions (RSQ = .99).
Results for both samples demonstrated strong empirical relationships between the static variables: male victims; stranger victims; unrelated victims; non-contact sexual offence; index non-sexual offence; prior non-sexual offence; and prior sentencing dates. Conversely, age and prior sexual offence were isolated constructs for the Jamaican and British/Canadian samples (see Figures 1 and 2).

![Figure 1](image)

*Figure 1.* Euclidean distance model with clusters of static variables for the Jamaican sample.
As outlined in Chapter One, Static-99R items are said to measure four primary categories associated with increased risk of committing further sexual offences (Craig et al., 2007; see Table 5). However, MDS results indicated one distinct cluster: antisocial lifestyle and victim type; and two isolated items related to demography and persistence.

It is recognised that only 10 items measure risk on Static-99R, and only 9 were included in this study. Thus, the lack of multiple clustering may reflect the small number of variables. Nonetheless, it is suggested that demography and persistence may reflect possible additional dimensions underlying Static-99R.

*Figure 2.* Euclidean distance model with clusters of static variables for the British/Canadian sample.
Table 5

*Primary categories associated with increased risk of committing further sexual offences with related Static-99R items*

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Static-99R items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual deviance</td>
<td>Any male victims</td>
</tr>
<tr>
<td></td>
<td>Ever lived with a lover (omitted for the current study)</td>
</tr>
<tr>
<td></td>
<td>Any convictions for non-contact sex offences</td>
</tr>
<tr>
<td>Range of potential victims</td>
<td>Any unrelated victims</td>
</tr>
<tr>
<td></td>
<td>Any stranger victims</td>
</tr>
<tr>
<td>Persistent sexual offending</td>
<td>Prior sex offences</td>
</tr>
<tr>
<td>Antisocial lifestyle</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Index non-sexual violence</td>
</tr>
<tr>
<td></td>
<td>Prior non-sexual violence</td>
</tr>
<tr>
<td></td>
<td>Four or more sentencing dates</td>
</tr>
</tbody>
</table>

*Item Response Theory (IRT)*

In view of the similarity in MDS findings for both samples, the ability of Static-99R items to discriminate persons based on risk was examined using Item Response Theory’s (IRT) polytomous Rasch model. This analysis was conducted on the combined Jamaican and British/Canadian samples, using the Jmetric software. IRT is a psychometric testing theory that examines the relationship between responses on test items and individuals’ overall performance on the instrument in terms of the trait being measured (Embretson & Reise, 2013). In so doing, IRT establishes whether or not test items fit a unidimensional model and therefore, cumulatively assess the latent trait in
question. Unidimensionality speaks to the homogeneity of the instrument or, in other words, whether “items function in unison to form a single underlying pattern in a data matrix” (Sick, 2010, p. 24).

The polytomous Rasch model is based on the IRT and is a measurement model that can be applied to rating scales in which items scored with successive integers indicate increasing levels of the trait being assessed (Andrich, 1978, 2011). The model provides an empirical method for determining if item categories represent increasing levels of a latent attribute or trait (in this case, risk) and are thus, ordered. To do this, fit statistics are carried out to establish a predictive model that fits adequately enough for the data to be considered a product of that model (Andrich, 1978, 2011). Therefore, a Rasch model represents the structure that data should demonstrate in order to obtain reliable measurements of the trait being evaluated. It is important to note that for Rasch analysis, Sick (2010) differentiates psychological or construct unidimensionality from psychometric unidimensionality. He contends that unidimensional measurement within an instrument can be influenced by multiple underlying constructs.

The weighted mean square (WMS), also known as the infit (i.e., information weighted sum), measures whether or not test items fit the predicted model. WMSs of 0.5 to 1.5 are said to represent productive measurement items in terms of fit (Andrich, 2011). Further, the standardised weighted mean square (Std. WMS) measures the degree to which items fit the predicted model. This is known as a z-statistic, where values larger than 1.96 indicate significant misfit (Field, 2013). The model also produces a statistic known as ‘difficulty’, which represents the ability of the items to discriminate individuals in terms of risk. Positive scores indicate higher levels discrimination. Results are presented in Table 6 and show that items were generally within the accepted
range of measurement (i.e., WMS). The model indicated reasonable predictability (i.e., Std. WMS), with age having the largest misfit although this was within the acceptable range (Std. WMS = 1.5). In terms of difficulty, non-contact sexual offence and four or more sentencing dates were found to be the highest discriminating items, while unrelated victims and age were found to be the least discriminating.

Table 6

*Polytomous Rasch model with difficulty, weighted mean squares and standard error*

<table>
<thead>
<tr>
<th>Item</th>
<th>WMS</th>
<th>Std. WMS</th>
<th>Difficulty</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrelated victims</td>
<td>1.05</td>
<td>0.74</td>
<td>-2.08</td>
<td>.17</td>
</tr>
<tr>
<td>Age</td>
<td>1.14</td>
<td>1.50</td>
<td>-2.02</td>
<td>.11</td>
</tr>
<tr>
<td>Prior non-sexual offence</td>
<td>.98</td>
<td>-.17</td>
<td>-.26</td>
<td>.18</td>
</tr>
<tr>
<td>Prior sex offence</td>
<td>.88</td>
<td>-.87</td>
<td>-.04</td>
<td>.10</td>
</tr>
<tr>
<td>Stranger victims</td>
<td>.99</td>
<td>-.06</td>
<td>.05</td>
<td>.19</td>
</tr>
<tr>
<td>Male victims</td>
<td>1.04</td>
<td>.40</td>
<td>.33</td>
<td>.21</td>
</tr>
<tr>
<td>Index non-sexual offence</td>
<td>1.04</td>
<td>.31</td>
<td>.93</td>
<td>.25</td>
</tr>
<tr>
<td>Non-contact sexual offence</td>
<td>.98</td>
<td>-.28</td>
<td>1.35</td>
<td>.29</td>
</tr>
<tr>
<td>Four or more sentencing dates</td>
<td>.90</td>
<td>-.35</td>
<td>1.75</td>
<td>.25</td>
</tr>
</tbody>
</table>

*Test reliability*

Given the previously discussed considerations regarding internal consistency in risk tools (see Chapter Two), a reliability analysis was also conducted. It has been stated in the literature that a coefficient of .7 or higher is considered acceptable (Field, 2013; Kline, 1998). Results indicated that Static-99R appeared to have very low internal consistency, $\alpha = .32$. Furthermore, the largest increase in alpha would result from
deleting the age item, with removal increasing the alpha to .38. Tavakol and Dennick (2011) highlight that if multiple factors underlie the items on a scale, unidimensionality is violated and, thus, alpha underestimates the reliability of the test. Additionally, if the number of test items is small, the assumption of unidimensionality is also violated; and therefore, reliability is underestimated (Tavakol & Dennick, 2011). In contrast to Rasch analysis, unidimensionality in terms of internal consistency refers to whether items measure a single latent trait or construct (Tavakol & Dennick, 2011).

As previously stated, 10 items measure risk on the Static-99R and only 9 were used to measure test reliability in the current study; thus, results regarding internal consistency are interpreted with caution. Moreover, although evidence from the Rasch analysis suggested that Static-99R measures risk cumulatively, MDS results indicated that multiple constructs underlie risk and hence, this is not a homogenous construct. This may have further influenced internal consistency results.

**Relationship between samples and risk factors**

Chi-square tests for independence were carried out (see Tables 7 to 10) to further explore the association between items related to each of the four general factors associated with risk and offender groups (i.e., Jamaican and British/Canadian). As formerly stated, ‘Ever lived with a lover’ was excluded from the analyses.

With regard to the test assumptions, it is stipulated that at least 80% of cells should have a frequency of five or more. This cell count is increased to 10 for 2x2 tables (Pallant, 2013). It was revealed that this assumption was met for all tables that were larger than 2x2, with only one variable, ‘Prior sex offences— charges and convictions’, having an expected cell count of less than five (12.5%, expected count = 4.74). For 2x2 tables,
three variables did not meet this assumption (‘Index non-sex violence’, ‘Four or more prior sentencing dates’ and ‘Non-contact sex offence’); therefore, the statistic for Fisher’s Exact Probability Test was used in these cases. Further, the Yates’ Correction for Continuity was used to gain accurate results for all other 2x2 tables, as recommended by Pallant (2013). A Cohen’s (1988) criteria of .10 for small effect, .3 for medium effect and .5 for large effect were used to assess the phi coefficient for 2x2 tables. Where tables were greater than 2x2, Cramer’s V was used to evaluate the effect sizes. Here, the criteria of small = .01, medium = .3 and, large = .5 was followed (Gravetter & Wallnau, 2016).

Table 7

*Summary of Chi-square with frequency distribution for items related to sexual deviance*

<table>
<thead>
<tr>
<th>Sexual deviance items</th>
<th>Jamaican N</th>
<th>(%)</th>
<th>British/Canadian N</th>
<th>(%)</th>
<th>p-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-contact sex offence—Yes</td>
<td>5</td>
<td>5.6</td>
<td>9</td>
<td>9</td>
<td>.42</td>
<td>.07 (small)</td>
</tr>
<tr>
<td>Male victims—Yes</td>
<td>7</td>
<td>7.9</td>
<td>25</td>
<td>26</td>
<td>.00*</td>
<td>.24 (small)</td>
</tr>
</tbody>
</table>

Note *p<.05,**p<.001

Jamaican offenders were significantly less likely to offend against males, $\chi^2$ (1, $n = 185$) = 9.43, $p<.001$, $phi = .24$ (see Table 7). However, there was no significant association between the samples and ‘Non-contact sex offence’.
Table 8

Summary of Chi-square with frequency distribution for items related to range of potential victims

<table>
<thead>
<tr>
<th>Range of potential victims items</th>
<th>Jamaican</th>
<th>British/Canadian</th>
<th>p-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(%)</td>
<td>N</td>
<td>(%)</td>
</tr>
<tr>
<td>Unrelated victims—Yes</td>
<td>68</td>
<td>76.4</td>
<td>46</td>
<td>73</td>
</tr>
<tr>
<td>Stranger victims—Yes</td>
<td>16</td>
<td>18</td>
<td>23</td>
<td>36.5</td>
</tr>
</tbody>
</table>

Note *p<.05, **p<.001

A significant association between the samples and ‘Stranger victims’ was found, where a higher proportion of British/Canadians offended against strangers, χ² (1, n = 152) = 5.7, p<.05, phi = .21 (see Table 8). On the other hand, no significant relationship was found for the ‘Unrelated victims’ item.

Table 9

Summary of Chi-square with frequency distribution for items related to persistence of sexual offending

<table>
<thead>
<tr>
<th>Persistence of sexual offending</th>
<th>Jamaican</th>
<th>British/Canadian</th>
<th>p-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(%)</td>
<td>N</td>
<td>(%)</td>
</tr>
<tr>
<td>Prior sex offences—3 to 6+ charges and convictions</td>
<td>11</td>
<td>12.2</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Note *p<.05, **p<.001

British/Canadian offenders were significantly more likely to have three or more prior sexual offence charges and convictions, χ² (3, N = 190) = 22.53, p<.001, Cramer’s V = .34 (see Table 9).
Table 10

Summary of Chi-square with frequency distribution for items related to antisocial lifestyle

<table>
<thead>
<tr>
<th>Antisocial items</th>
<th>Jamaican</th>
<th>British/Canadian</th>
<th>p-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 18 to 34.9</td>
<td>32</td>
<td>51</td>
<td>.02*</td>
<td>.24 (small)</td>
</tr>
<tr>
<td>Index non-sex violence—Yes</td>
<td>15</td>
<td>5</td>
<td>.02*</td>
<td>-.19 (small)</td>
</tr>
<tr>
<td>Prior non-sex violence—Yes</td>
<td>31</td>
<td>17</td>
<td>.00*</td>
<td>-.23 (small)</td>
</tr>
<tr>
<td>Four or more prior sentencing dates</td>
<td>15</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note *p<.05, **p<.001

Findings showed that a significant relationship existed between antisocial items and offender group, and generally indicated small effect sizes. Jamaicans were found to be more likely to have higher scores on all items except ‘Age’, with Jamaicans having fewer offenders in the ‘18 to 34.9’ category. Results are presented in Table 10.

**Impact of offender type on risk scores**

A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of the three offender types (rapists, extra-familial child molester and incest offender) on level of risk, as measured by Static-99R total risk score. Risk score was found to have a skewness of 2.43. Pallant (2013) maintains that with research in the social sciences, scores on the dependent variable often do not follow a normal distribution; however, with sample sizes greater than 30, the violation of this
assumption does not usually cause problems. Homogeneity of variance is a central assumption for statistics within the general linear model (e.g., t-tests and ANOVA; Pallant, 2013). The Levene’s test for homogeneity of variance was performed for ‘Total risk score’ within the Jamaican ($F(2, 87) = 1.69, p = .19$) and British/Canadian ($F(2, 81) = .64, p = .53$) samples. The non-significant results indicated that the equal variance assumption was met, and therefore, ANOVA was considered to be an appropriate statistic.

Results found no significant difference in the mean risk scores of the three offender types for Jamaican ($F(2, 87) = 2.88, p = .06$) and British/Canadian ($F(2, 81) = .2, p = .82$) samples.

**Influence of age on risk scores**

Given the non-equivalence and significant difference in age between the samples [$t(188) = 3.25, p < .05$ (two-tailed)], it was considered necessary to examine the impact of this variable on risk scores for both samples and types of offenders. Tests of linearity and homogeneity of regression slopes were conducted to investigate the interaction of age on risk scores.

The distribution of scores for each sample of sexual offenders did not follow a linear relationship. However, the test of homogeneity of regression slopes found no significant interaction between age and risk scores for Jamaican and British/Canadian sex offenders, $F(1, 166) = .11, p = .740$. The distribution of scores for each offender type also did not follow a linear relationship. No significant interaction between age and risk scores for rapists, extra-familial child molesters and incest offenders was found, $F(2, 166) = .13, p = .88$. 

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Secondary analyses

Secondary analyses were conducted to explore further differences between Jamaican and British/Canadian sex offenders in respect to Static-99R outcome. This was done in an effort to gain additional information on the characteristics of the sexual offenders included in the current study.

Above average risk sexual offenders. Whether or not offenders with above average risk scores in both samples (n = 31) were similar in terms of the four general factors associated with recidivism was examined. Results revealed that despite having an overall risk score that indicates above average risk for recidivism, more Jamaican offenders scored higher on items related to antisocial orientation (except for age). These items included index and prior non-sex offence, as well as four or more sentencing dates (see Figure 3). Conversely, more British/Canadian offenders scored higher on items associated with sexual deviance, range of potential victims and persistent sexual offending (see Figure 4). This result coincides with the higher numbers of rapists in the Jamaican sample, and higher numbers of extra-familial child molesters in the British/Canadian sample.

Figure 3. Comparison of offenders with above average risk on antisocial items.
Figure 4. Comparison of above average risk offenders on sexual deviance, range of potential victims and persistent sexual offending items

**Offender type and risk factors.** Differences in items related to antisocial lifestyle, sexual deviance, range of potential victims and persistent sexual offending were examined for each offender type across the Jamaican and British/Canadian samples. Specifically, the items that demonstrated a significant difference between both samples were included. These were: 1) Age; 2) Index non-sex offence; 3) Prior non-sex offence; 4) Four or more sentencing dates; 5) Male victim; and 6) Stranger victim.

**Antisocial lifestyle items**

For both samples, rapists were more likely to be between 18 and 34.9 years \( (n = 43) \), while incest offenders were the least likely \( (n = 1) \). Jamaican rapists more often had index and prior non-sexual offences. Further, whereas no sexual offenders in the British/Canadian sample had four or more prior sentencing dates, 10 rapists and 5 extra-familial child molesters in the Jamaican sample had four or more prior sentencing dates.
Sexual deviance item

Of the British/Canadian offenders, extra-familial child molesters were more likely to have a male victim \((n = 19)\), while rapists were more likely to have a male victim in the Jamaican sample \((n = 5)\).

Range of potential victim item

British/Canadian extra-familial child molesters tended to have stranger victims \((n = 11)\). On the other hand, rapists were more likely to have stranger victims among the Jamaican sex offenders \((n = 12)\).

Persistent sexual offending item

A higher proportion of extra-familial child molesters in the British/Canadian sample demonstrated persistent sexual offending, with 15 offenders having 3 to 6 or more prior sexual offences, compared to three sexual offenders in the Jamaican sample. Of the Jamaican sample, rapists were more likely to demonstrate persistent sexual offending \((n = 7)\).

Overall, findings suggested that notable differences in characteristics exist not only between Jamaican and British/Canadian offenders, but also between types of sexual offenders, in relation to the four risk categories examined.
Discussion

The current study aimed to investigate static risk factors for committing further sexual offences among Jamaican sex offenders, compared to British/Canadian sex offenders. It was hoped that findings would provide insight into the characteristics of sexual offenders within the Jamaican cultural context and, therefore, inform management efforts.

Findings did not support the hypothesis that there would be a significant difference in the level of risk between British/Canadian and Jamaican sex offenders. Interestingly, most offenders were found to have average risk of reoffending in both samples. Further, although there was a significant difference in the age of sexual offenders in both samples, this variable did not confound the outcome of risk scores. While researchers such as Varela et al. (2013) argue that the Static-99R does not always accurately predict sexual recidivism among non-white males, the absence of data on ethnicity and follow-up reoffending rates in the current study limit the extent to which such conclusions can be made. Average risk, however, suggests that Jamaican sex offenders have criminogenic needs in a number of areas; and therefore, may benefit from structured interventions to decrease their recidivism risk (see Hanson et al., 2016). Importantly, due to their impact on risk, it is considered that cultural and socio-economic factors should be taken into account when seeking to design interventions. For example, sociocultural systems such as economic instability and offence supportive themes consistent with the marginalisation of women and girls are integral to understanding what management structures might have a risk-mitigating effect.
With regard to the meaning of risk scores in relation to reoffending rates, Hanson, Thornton, Helmus and Babchishin (2016) examined recidivism among sex offenders released from a range of correctional services. They outline a predictive rate of 3.9% to 7.9% for average (Level III) risk offenders in a five-year follow-up (see Appendix F). The total observed rate of recidivism was 8.3%. This is congruent with findings that reoffending rates among sex offenders are relatively low in comparison to non-sexual and violent offenders (e.g., Grubin, 1998; Firestone et al., 2000; Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; Marques et al., 1994; Marshall, 1994). In fact, the literature suggests that not all sex offenders have an enduring proclivity for antisocial behaviour (Hanson & Morton-Bourgon, 2005). However, it is important to bear in mind that where sexual deviance is coupled with antisocial orientation, the risk of recidivism may be increased. Additionally, it is believed that sexual offenders tend to be less criminogenic than other types of offenders because of more restrictive and long-term consequences such as registration and supervision. Therefore, if such supervisory structures are absent in efforts to manage sex offenders following release, this may lead to more opportunities to reoffend.

The prediction that there would be underlying factors that illustrate differences between Jamaican and British/Canadian sexual offenders on the Static-99R was not supported. Instead, multi-dimensional scaling (MDS) results indicated similar empirical relationships between the items across samples. Hence, it appears that risk items on Static-99R relate similarly to risk of reoffending in both Jamaican and British/Canadian sexual offenders. Moreover, though the limited number of items may have influenced clustering, MDS plots suggested three possible dimensions: 1) antisocial lifestyle and victim type, 2) age, and 3) persistence. This departs from literature that suggests that
Static-99R items relate to four distinctive factors (Craig et al., 2007). Nevertheless, the observation that sexual violence risk is a multidimensional construct is consistent with findings from previous research. For example, Brouillette-Alarie et al. (2015) identified three latent psychological constructs in Static-99R and Static-2002R: 1) persistence/paraphilia, which was related to sexual criminality; 2) youthful stranger aggression, a construct that highlighted young age and offence seriousness; and 3) general criminality, which reflected the range and extent of criminal careers.

The similarity in the MDS structures raised questions regarding Static-99R’s ability to discriminate offenders based on risk. A Rasch analysis indicated that conviction for non-contact sexual offences (sexual deviance) and four or more sentencing dates (antisocial lifestyle) were the highest discriminating items. Theoretically, non-contact sexual offences represent illegal paraphilic interests and have been related to increased risk for sexual recidivism (Hanson & Bussière, 1998; Phenix et al., 2016). Likewise, antisocial lifestyle reflects a proclivity towards offending in general (Grubin, 1998; Hanson & Morton-Bourgon, 2005).

In terms of test reliability, Static-99R was found to have very low internal consistency. This result was considered to have been influenced by the small number of items used to measure risk, as well as the multidimensional nature of this construct (Tavakol & Dennick, 2011). It was highlighted in Chapter Two that risk constitutes an ascribed quality, and is therefore, not a psychological construct in the traditional sense. Based on this, risk assessment developers appear to place more emphasis on inter-rater reliability and predictive validity (Douglas & Reeves, 2010). However, in consideration of the applicability of Static-99R in diverse settings, the reliability and validity of test items
should not be taken lightly. Particularly, the influence of factors such as sex, ethnicity and social class should be carefully assessed; as such factors may obscure, mask or bias a person’s true score on a test (Leach & Oakland, 2007).

The third hypothesis predicted that Jamaican offenders would be more likely to score higher on items related to criminality. This was supported by the results, where significantly more Jamaicans had index and prior non-sexual violent offences as well as four or more sentencing dates. Conversely, significantly fewer Jamaican sex offenders had high scores on items indicative of sexual deviance, persistent sexual offending and range of victims. These items included three or more prior sex offences, and male and stranger victims. Hanson and Morton-Bourgon (2005) found that antisocial orientation, including antisocial personality or traits and history of rule violation, was a key predictor of violent (including sexual) recidivism. As such, this result presents important implications for sex offender management in Jamaica.

The propensity for Jamaican sex offenders to be antisocial can be interpreted as a function of the cultural and socio-economic undertones of crime in the country. On one hand, criminality has been a social response to inequality and poverty, and on the other hand, more deviant forms of sexual abuse (e.g., male to male sex) are generally deemed socially unacceptable. In fact, the Offences Against the Person Act (2010)—under the “unnatural offences” and “outrages on decency” provisions—criminalises buggery (anal sex) with “mankind or any animal”, as well as “acts of gross indecency” between men. These provisions are widely accepted as ‘anti-gay laws’ and reflect the popular persecutory stance on homosexuality in Jamaica (Lewis, 2014). Interestingly, despite there being few male victims in general, Jamaican rapists were found to be more likely
to have a stranger and male victim, and tended to demonstrate persistent sexual offending when compared to extra-familial child molesters and incest offenders. Therefore, although Jamaican sex offenders scored lower on items related to sexual deviance, it can be asserted that perhaps the negative social connotations of same sex sexual offences lead to reluctance to report victimisation. Significantly, Sorsoli et al. (2008) contend that sociocultural factors are associated with a lack of acceptance for men to experience or acknowledge victimisation. This may have factored into the results regarding sexual deviance.

Another example of how the influence of culture appears to feature in the findings is the observation that most Jamaican sex offenders were rapists, while British/Canadian offenders tended to be child sexual offenders. The higher rate of rapists among Jamaican sex offenders, coupled with their tendency to be antisocial highlight the association between power and sex within the context of socio-economic challenges (Gray, 2004). It is suggested that criminality provides a viable social and economic option for Jamaican offenders, and sexual dominance features as a cultural bi-product of this lifestyle. This also reflects the gender inequality and offence supportive attitudes that persist throughout Jamaica (Hope, 2006; Plummer, 2009, 2013). Likewise, in terms of the wider implications of such findings, Firestone et al., (2000) express that rapists have been found to be more likely to have an antisocial orientation than child sexual offenders.

Finally, the hypothesis that offender type will impact significantly on static risk scores across both samples was not supported by the results. Indeed, there was no significant difference in risk scores between rapists, extra-familial child molesters and incest
offenders in the Jamaican and British/Canadian samples. Likewise, the age of sexual offenders was not found to be a confounding variable in terms of risk score outcome. Given that Static-99R scores are said to be associated with recidivism rates, psychopathology and treatment needs (Hanson et al., 2016), the lack of significant difference implies that varying types of sexual offenders are similar in relation to these factors. However, findings from the current study, as well as previous research have highlighted differences between offender types as it relates to antisocial orientation, range of victims, sexual deviance and reoffending rates (e.g., Baxter et al., 1984; Firestone et al., 2000; Grubin, 1998; Hanson et al., 1995). Therefore, limitations in the Static-99R’s capacity to detect underlying criminogenic needs of different types of sexual offenders may explain this result. Brouillette-Alarie et al. (2015) report that static risk scores on their own do not provide enough insight into the treatment needs of offenders. Moreover, this reiterates the notion that careful considerations should be made when using Static-99R in forensic practice.

Implications for policy and practice

The central implication of this study concerns the management of sex offenders in Jamaica. As highlighted, the Jamaican criminal justice system utilises a predominantly retributive approach (Harriott, 2000). Undoubtedly, research has undermined the value of punitive-only methods of reducing recidivism. This mandated more rehabilitative advances within correctional services in North America and the UK (Ward & Brown, 2004; Ward & Stewart, 2003; Zehr, 2015). To this end, Tyler (2006) maintains that the focus in sex offender treatment should be on psychological approaches that aim to develop and activate internal values within offenders, in an effort to encourage self-regulatory behaviour in the future.
The results of the study indicate that Jamaican sex offenders have criminogenic needs in a number of areas and may benefit from structured interventions to decrease recidivism risk. Further, it is considered that rehabilitative programmes should take into account cultural and socio-economic factors such as inequality and attitudes linked to sexual violence. Goldsmith et al. (2005) assert that reflecting on the interaction between factors such as culture, peer groups and family background will better inform the assessment and treatment of persons from diverse backgrounds. Moreover, it has been established in evidence-based rehabilitative strategies that utilising social and cultural resources has a powerful influence on desistance from crime (Farmer, Beech & Ward, 2012; Ward & Stewart, 2003; McGuire, 2002).

It is evident that power imbalance exists where gender norms and stereotypes are a prominent feature in the Jamaican society. This, in turn, reinforces supportive attitudes towards sexual violence. Significantly, masculine identity in Jamaica is often aligned to physical prowess, chauvinism, boldness, risk-taking and sexual dominance (Plummer, 2009, 2013). An awareness of the association between these characteristics and positive attitudes toward predatory sexual behaviours in men is likely to be useful when considering intervention strategies (O’Connell & Marcus, 2016). Further, the tendency for Jamaican sex offenders to have an antisocial orientation will have an impact on their propensity to reoffend. Hence, a crucial aspect of management efforts is related to supervisory strategies following release from prison.

Positive rehabilitative approaches to sex offender management have been developed and implemented in North America and the UK. Such approaches (e.g., the Good Lives Model) propose that sexual offending results from an attempt to achieve natural desires
in harmful ways. Proponents argue that offending behaviour occurs when there is a breakdown in attachment to society (Sampson & Laub, 1993; see Chapter Four). As such, there is an emphasis on helping offenders to achieve personal goals in prosocial ways (Farmer et al., 2015; Maruna et al., 2012; Sampson & Laub, 1993). Based on the sociocultural context outlined, interventions that seek to support sex offenders in gaining the skills required to achieve goals such as economic stability, connectedness and respect, while challenging offence supportive attitudes, may be worthwhile.

Efforts to address gaps in the response to sexual violence need to be made at a policy and institutional level, for example, through training and programme development. Jamaica has a number of organisational structures that have been developed to aid in victim reporting and police investigations (OCA, 2016; OCR, 2013; UNICEF Jamaica, 2016). However, while victim centred interventions and increasing channels for reporting are important, a system that fosters continued research, assessment of risk and evidence-based interventions is likely to be beneficial. It is recognised that police records offer a biased representation of the prevalence of crime, as fear, intimidation and stigma affect reporting rates. Therefore, anonymised victim surveys that target crimes that have not been reported to, or recorded by the police may provide a better reflection of the extent of sexual crimes.

Additionally, once programmes are designed, training correctional service professionals to conduct risk assessments and administer interventions will potentially have far reaching effects in the response to the problem of sexual violence. In respect to this, the theoretical explanations for sexual offending, the empirical findings on risk factors associated with recidivism, and the socio-cultural factors that have all been outlined in
the current thesis provide preliminary guidance on the matter of achieving enhanced offender management (Beech & Ward, 2004; Marshall & Barbaree, 1990; Ward & Siegert, 2002).

**Methodological considerations**

Attempting to conduct research on this sensitive topic in Jamaica presented significant challenges. Limited response from government agencies, their reluctance to share information that could potentially compromise the reputation of correctional services, and poor record keeping influenced the extent to which data could be gathered. For instance, efforts to conduct face-to-face interviews with sex offenders in Jamaica were not supported on this occasion. This restricted the extent to which information could be corroborated. Therefore, data reflected the information collected by the Department of Correctional Services. It is also unclear whether offender demographic information is collected at release, or if sexual recidivism is being monitored. This hindered the examination of follow-up recidivism data as well as efforts to achieve equivalence between the samples, where age represented different points in time for both groups.

Similarly, the British/Canadian sample was scored using the Static-99R for previous research purposes; hence, interviewing these offenders was also not possible. Phenix et al. (2016) highlight that although interviews with offenders are not necessary to score Static-99R, it is potentially useful. Moreover, while the Jamaican sample included all sexual offenders who were incarcerated at the time of data collection, the small sample size restricts the generalisability of the results. Likewise, the study has not explored sex offending in females or persons under the age of 18 years, and it is recognised that such research is needed in order to represent the full cross-section of sexual offenders.
Finally, data from convicted sexual offenders were used in both samples. This presents a sampling bias, where offenders not known to the police, or those who have been accused and charged of a sexual offence, but were not convicted due to insufficient evidence have been excluded. In light of the biased nature of police records and low conviction rates of sexual offences in Jamaica (Myers, 2005), a more inclusive method of measuring the amount of sexual crime in Jamaica should be considered (e.g. national victim surveys). Furthermore, this study did not examine the intimate relationship status of offenders due to lack of information. Thus, it would be useful to take this factor into account, given its association with reoffending (Hanson & Bussière, 1998). Missing data, especially within the British/Canadian sample, limit the extent to which definitive conclusions can be made regarding differences found, as well as the overall performance of Static-99R, due to unreliable scoring (Varela et al., 2013).

**Directions for future research**

The unique nature of this study in Jamaica offers a platform for further research in this area. Particularly, the current study examined Jamaican sex offenders in contrast to sex offenders in Britain and Canada; however, previous research has compared sex offenders to persons who commit other types of offences (Hanson, Scott, & Steffy, 1995). Therefore, there is scope to expand on the country-specific research available by exploring Jamaican sexual offenders in comparison to other types of offenders in this country. It is believed that this will provide further insight into the treatment and management needs of sex offenders.

Despite the outlined disadvantages of the Static-99R (including limits to reliability and validity in diverse populations), this tool presents a method of risk assessment that has
not yet been in explored in Jamaica. The characteristics and statistical properties of Static-99R as well as the limitations described offer a foundation from which to consider sexual violence risk assessment in Jamaica. It is noted that the Rasch analysis conducted in the current study included both Jamaican and British/Canadian sex offenders. Therefore, future research should explore the way risk tools operate structurally with larger offender samples in Jamaica, as it is likely that results will be different in this unique context.

Moreover, with the findings that more Jamaican sex offenders demonstrated antisocial orientation, this study has unearthed further questions for research. For example, are sexual deviance and antisocial orientation equally related to recidivism? Which of the two factors, antisocial orientation or sexual deviance, is more related to recidivism in this context? Such questions are worth exploring in research that utilise a follow-up method for investigating rates of recidivism, as well as face to face interviews with offenders to gather as much data as possible.

**Conclusions**

The study presented a cross-cultural perspective on sexual offending by comparing static risk factors associated with reoffending in Jamaican and British/Canadian sex offenders. It has expanded on what is known about sexual offending in Jamaica, and has been the first study of this kind to be conducted in the country. Sexual violence in Jamaica is a complex and multidimensional occurrence, and has been explored in relation to the socio-economic and cultural context in which it occurs. As such, results from this study offer pertinent information that can be used to inform responses to this problem, especially as it relates to sex offender management. The results regarding
Jamaican sex offenders having average risk of reoffending and a tendency to be antisocial present some insight into possible criminogenic needs. Importantly, implications for policy and practice have been outlined, where it is noted that attitudes towards sexual violence are linked to the sociocultural context; and therefore, impacts risk of reoffending. An alternative approach to purely punitive methods has been highlighted, where it is considered that these factors need to be taken into account when seeking to design and implement assessment and management strategies.

Extending from the critical review of Static-99R and the empirical investigation of static risk factors associated with sexual offending, the next chapter provides a systematic review of the literature on protective factors. As discussed, positive rehabilitative methods seek to support offenders in developing skills to achieve their desires in prosocial ways. Such a concept makes room for the consideration of criminogenic needs in light of the sociocultural context by focusing on the individual’s circumstance alongside efforts to improve their lives. Although protective factors specific to Jamaican sexual offenders goes beyond the empirical scope of this thesis, advances in the areas of assessment and treatment to incorporate these factors have presented a more optimistic outlook on management efforts. Hence, it is believed that examining protective factors will further inform future research in this area, as well as assessment and treatment efforts in Jamaica. Equally, this review will help to achieve a balanced exploration of sex offender management approaches, as identifying strengths and protective features alongside risk factors have been supported (Department of Health, 2007).
CHAPTER FOUR

EMPATHY, MOTIVATION AND TREATMENT AS PROTECTIVE FACTORS IN SEXUAL OFFENDING

A SYSTEMATIC REVIEW
Abstract

Aim: This chapter presents a systematic review of the literature on empathy, motivation and treatment as protective factors in sexual offending. It seeks to establish whether or not these factors are associated with mitigating the risk of reoffending.

Method: A scoping search for existing reviews on the topic was conducted using Cochrane Database of Systematic Reviews, Campbell Systematic Reviews, PubMed and Google Scholar, as well as a general Google search. Five major databases were searched for relevant articles. Reference lists of the studies that met the inclusion criteria were also examined for other relevant articles. Studies for the review were chosen based on exclusion/inclusion criteria and quality appraisal. Of a total number of 270 citations, 22 were quality assessed from which eight studies were reviewed. Two studies were found from hand searching reference lists.

Results: Results suggested that treatment programmes have some effect on empathy and motivation among offenders; however, the definitions of these constructs varied. Further, where an association between these factors and desistance from offending was found, it was noted that this was contingent on how the factors were conceptualised. Studies with an expanded view of empathy, not just empathy related to victims, reported a protective effect.

Conclusions: The results from this review indicate that it is likely that empathy, motivation and treatment have a protective effect; however, a closer investigation of how these factors work together to enhance desistance is needed. Nonetheless, it can be said with confidence that examining protective factors along with risk helps to enhance considerations for the treatment and management of sexual offenders.

Key words: Empathy; motivation; treatment; desistance; protective factors; sexual offending; reoffending.
Introduction

When an individual offends, two competing objectives become critical: protecting the public and rehabilitating the offender (Zehr, 2015). Efforts to meet both objectives have largely focused on the assessment of risk, and managing offenders based on the level of risk identified. Assessing risk in known offenders has evolved significantly over time. Development in this area has transcended clinical judgment and actuarial assessment, to structured professional judgment, which now includes the consideration of dynamic factors as amenable treatment needs (Beech et al., 2003; Cooke & Michie, 2013).

However, there has been a recent shift in intervention and management efforts, where a balanced, strengths based approach is employed to address offending behaviour (Craig, Browne, & Beech, 2008). This approach views risk reduction as a holistic endeavour and seeks to identify positive areas to counterbalance pathology. Importantly, Thornton (2013) highlights that this positive perspective does not negate risk factors; rather, it complements and balances the assessment of risk, and presents a motivating feature to the evaluation and treatment process. Further, he asserts that identifying positive factors makes it easier to engage offenders in evaluation and treatment.

Kewley (2016) notes that although the strengths based approach emerged as a response to growing levels of incarceration and recidivism rates, it has partly influenced professionals to consider alternative responses to crime. Relatedly, the concept of protective factors has come about through attempts to establish effective treatment programmes geared towards mitigating risk. Rogers (2000) maintains that, “risk-only evaluations are inherently inaccurate” and “represent implicitly biased evaluations” (p. 598). According to Rogers (2000), emphasis on risk factors and exclusion of protective factors has negative consequences for forensic populations and may promote stigmatisation and cynicism among professionals.
In terms of assessments, de Vries Robbé, Mann, Maruna and Thornton (2015) assert that considering strengths as well as risks is important as this could improve the predictive validity of risk assessment tools, and may prevent the over-prediction of risk with poor risk management and treatment planning. However, despite this recognition of the clinical relevance and importance of incorporating protective factors, inconsistency exists in the definition and nature of such factors. Boer (2013) states that an “environmental factor is viewed as protective when the presence of such a factor could or does result in decreased risk” (p. 9). He also notes that while some protective factors are mere opposites of risk factors, the relationship they have with offending is complex. Therefore, the absence or presence of particular factors is not by themselves protective, instead it is the mechanism by which these factors serve to decrease offending behaviour that brings about a protective effect.

Two approaches that adopt a strengths-based, positive approach and take into consideration protective factors have been applied to the treatment of sexual offenders. These include: the Good Lives Model and the Desistance approach.

**Good Lives Model (GLM)**

The GLM is an approach to rehabilitation that is based on the premise that offending behaviour, including sexual offending, results from an attempt to achieve normal goals in maladaptive ways. It asserts that risk-based interventions and approaches that focus on avoidance strategies are necessary, but insufficient to address the treatment needs of sexual offenders (Ward & Mann, 2012; Ward, Mann, & Gannon, 2007; Yates, Prescott, & Ward, 2010). The model theorises that sexual offenders share desires that are inherent to all humans (e.g., intimacy, pleasure, and connectedness) but are ill-equipped to attain them in pro-social ways due to internal and environmental deficits (Ward & Stewart, 2003b). Therefore, management efforts should seek to help these offenders establish
and develop the skills and resources, both internal and external, which will empower them to achieve these values in sustainable, safe ways.

This model relies on the assumption that offenders, like everyone else, have the capacity to set goals, make plans and work towards achieving these goals. Emphasis on agency is the strengths-focused basis on which the GLM proposes confronting dynamic risk factors. In an effort to outline criminogenic needs as treatment needs, Ward and Stewart (2003a, 2003b) put forward a distinction between primary and secondary goals, where primary goals relate to basic human needs and secondary goals are the means by which they are achieved. For example, seeking to achieve intimacy (primary) by pursuing relationships (secondary). Further, research exploring the theoretical foundation of the GLM has found that there are direct and indirect pathways to offending behaviour (Purvis, 2010). A direct pathway occurs when an offender actively attempts to attain basic needs in antisocial, harmful ways; while an indirect pathway is when an offender, owing to maladaptive coping strategies, ends up offending as a result of a breakdown in their attempt to achieve primary goals.

The GLM sets out environmental factors relevant to risk, which will enable an offender to safely pursue his/her primary goals as part of the rehabilitative process (Boer, 2013). Namely, intervention within this model involves the development of a comprehensive ‘good lives plan’ (GLP). This requires an evaluation of the environmental circumstances of each individual, as well as an analysis of their main primary goals, in order to help the offender achieve these in a safe manner. Boer (2013) takes it a step further by stating that, “possible protective factors should also be as assiduously assessed in order to help formulate a GLP” (p. 10). He maintains that there are five categories of environmental protective factors: 1) support, 2) occupation, 3) accommodation, 4) treatment programmes, and 5) management plans. It is important to note that these factors can also act as risk enhancing features for sexual offending, and
therefore, should be assessed carefully on an individual basis when developing a GLP for sexual offenders (Boer, 2013).

**The Desistance approach**

Investigation into the reasons people desist from sexual crime is relatively recent (Farmer, McAlinden, & Maruna, 2015; Laws & Ward, 2011). Despite this, the desistance model has been found to have similar qualities to the GLM, in that it also considers offenders’ agency in identifying meaningful ways, as defined by the individual, to improve their lives. It departs from the thinking that offenders are objects of correctional services and curative efforts to reduce antisocial traits and attitudes should be imposed upon them. Maruna’s (2001) examination of desistance features a cognitive transformational approach, where human agency, transformation of self, and the generation of a new self-identity are key factors.

Within this model, the offender’s motivation is essential to understanding the change process and, therefore, it is believed that interventions should focus on natural processes that impact offending behaviour (Maruna & LeBel, 2010). McNeill, Farrall, Lightowler and Maruna (2012) also note that there is no clear definition or measurement of desistance and assert that, “some see desistance as a permanent cessation of offending over several years, whilst others take an arguably more fluid definition of desistance, accepting that episodes of reoffending may occur” (p. 3). However, it has been acknowledged that desistance is a complex process for offenders with extensive criminal histories. Therefore, it is likely that this process will involve setbacks (Farrall & Bowling, 1999).

Nonetheless, the desistance paradigm calls for a change in the labelling and stigmatisation of offenders, where the justice process instead recognises offenders as more than just the sum of their antisocial behaviours. It is held that the individual’s
relationship with society is another aspect of desistance, and offending behaviour occurs when there is a breakdown of some sort in their attachment to society (Sampson & Laub, 1993). Maruna et al. (2012), therefore, argue that desistance is to be understood within the context of human relationships. Advocates of this approach aim to support and develop capacities and resources that will impact offenders’ lives in meaningful and personal ways (Farmer et al., 2015; Maruna et al., 2012; Sampson & Laub, 1993).

In terms of sexual offending, Farmer et al. (2015) suggest that the process of desistance for sexual offenders is distinct from that of non-sexual offenders. They highlight that research into desistance from persistent non-sexual crime has attributed its occurrence to maturation that is characterised by the development of ‘goods’, such as employment and relationships (e.g. Kazemian, 2014). It is said that these goods offer non-sexual offenders “social capital, a sense of belonging, a change in routine activities and something they are afraid to lose” (Farmer et al., 2015, p. 17). Conversely, sexual offenders tend to have less prolific criminal histories, and have been found to portray their desistance as a self-initiated, rational choice about the costs of their offending. Moreover, sex offenders have emphasised the merits of structured rehabilitation programmes, such as probation supervision and sex offender treatment programmes, as elements that have helped them to maintain desistance (Farmer et al., 2015).

Further to this, Göbbels, Ward and Willis (2012) have developed an ‘Integrated Theory of Desistance from Sex Offending’ (ITDS) that conceptualises desistance as an interaction between internal and external variables, and includes environmental, social, and psychological processes. This theory presents a temporal dimension to desistance, rather than a discrete outcome, by outlining the process in four stages: 1) decisive momentum (initial desistance); 2) rehabilitation (promoting desistance); 3) re-entry (maintaining desistance); and 4) ‘normalcy’ (i.e., successful maintenance of desistance over a long period of time). With this, Göbbels et al. (2012) assert that human agency,
natural desistance, as well as the mechanisms and processes underlining this complex phenomenon, are all accounted for.

*The concept of protective factors*

Further to these strengths-based approaches to the treatment of sexual offenders, positive preventive methods have recently been applied to structured evaluations, where personal and situational strengths are considered in risk assessments. According to Jessor, Van den Bos, Vanderryn, Costa and Turbin (1995), protective factors are variables that indicate involvement with, and attachment to society. These factors control against offending behaviour and refer to pro-social entities. In other words, protective factors are those that are associated with a reduced risk of recidivism (Thornton, 2013). A relationship between protective factors and desistance has been theorised. For example, de Ruiter and Nicholls (2011) consider that exploring such factors provides an opportunity to understand the individual’s capacity for recovery and to enhance motivation for change. Therefore, it is believed that protective factors are clinically meaningful, in that they provide a pathway to desistance. Significantly, de Vries Robbé et al. (2015) report that the literature references factors hypothesised to aid in desistance from sexual offending, and these can be categorised into eight protective domains (see Table 11). They include empathy in the ‘capacity for emotional intimacy’ domain, and motivation and treatment in the ‘constructive social and professional support network’ domain.
Table 11

*Proposed protective domains and evidence from de Vries Robbé et al. (2015)*

<table>
<thead>
<tr>
<th>Proposed protective domains</th>
<th>Healthy poles of risk factors</th>
<th>Desistance factors</th>
<th>General protective factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Healthy sexual interests</td>
<td>Moderate intensity sexual drive</td>
<td></td>
<td>Medication</td>
</tr>
<tr>
<td></td>
<td>Sexual preference for consenting adults</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Attitudes supportive of respectful and age-appropriate sexual relationships</td>
<td></td>
<td></td>
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<tr>
<td>2. Capacity for emotional intimacy</td>
<td>Preference for emotional intimacy with adults</td>
<td></td>
<td>Empathy</td>
</tr>
<tr>
<td></td>
<td>Capacity for lasting emotionally intimate relationships with adults</td>
<td></td>
<td>Secure attachment in childhood</td>
</tr>
<tr>
<td></td>
<td>Trustful and forgiving orientation</td>
<td></td>
<td>Intimate relationship</td>
</tr>
<tr>
<td></td>
<td>Positive attitudes toward women</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honest and respectful attitudes</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Care and concern for others</td>
<td></td>
<td></td>
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<tr>
<td>3. Constructive social and professional support network</td>
<td>Acceptance of rules and supervision</td>
<td></td>
<td>Motivation for treatment</td>
</tr>
<tr>
<td></td>
<td>Law-abiding social network</td>
<td></td>
<td>Attitudes toward authority</td>
</tr>
<tr>
<td></td>
<td>Honest and respectful attitudes</td>
<td></td>
<td>Professional care</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td></td>
<td>Living circumstances</td>
</tr>
<tr>
<td>4. Goal-directed living</td>
<td>Self-control</td>
<td>Enhanced sense of personal agency</td>
<td>Financial management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stronger internal locus of control</td>
<td>Life goals</td>
</tr>
<tr>
<td>5. Good problem solving</td>
<td>Effective problem-solving skills</td>
<td></td>
<td>Intelligence</td>
</tr>
<tr>
<td></td>
<td>Functional coping</td>
<td></td>
<td>Coping</td>
</tr>
</tbody>
</table>
Empathy

Empathy as a risk-mitigating dynamic has been extensively pursued in relation to sexual offending, both in research and in treatment. However, empirical results in support of this assumption are inconsistent at best. Barnett and Mann (2013a) note that numerous reviews of the literature on the association between empathy deficits and offending have been conducted, but only examine empathy as either cognitive (perspective taking) or affective (experiencing appropriate emotion). They further argue that the results from these reviews have not been useful for practitioners, largely because they have been flawed and conflicting. Instead, they believe that empathy is more complex than what has previously been examined, and thus, propose that it is an experience that involves three additional components. That is, they postulate that in addition to perspective taking and the ability to experience emotion, empathy also involves situational factors, a belief that others are worthy of compassion and respect, and an ability to manage personal distress. According to Barnett and Mann (2013a), empathy can be defined as “a cognitive and emotional understanding of another person’s experience, resulting in an emotional response for the observer which is congruent with a view that others are worthy of compassion and respect and have intrinsic worth” (p. 22). They further conceptualise victim empathy as a corresponding emotional response in an offender to
the experience of his/her victim that is separate from general empathy. This refers to the ability of an offender, regardless of internal and external circumstances, to accurately identify and understand what the victim was likely to have experienced as a result of the offence (Barnett & Mann, 2013b).

Offenders tend to attribute developing victim empathy as a positive outcome of treatment (e.g. Colton, Roberts, & Vanstone, 2009); however, meta-analyses have found no relationship between sexual reoffending and empathy (e.g., Hanson & Bussière, 1998). Nevertheless, Barnett and Mann (2013a) have identified hindrances to the process of empathy (in its five components), which they contend more appropriately contextualise offending in relation to empathy deficits. Moreover, they argue that in order for empathy to prevent reoffending, all five components must be present. Mann, Hanson and Thornton (2010) cited ‘lack of concern for others’ and ‘dysfunctional coping’ as ‘promising’ risk factors for sexual offending, as there is some supportive evidence and significant findings linking these factors to the prediction of recidivism. Barnett and Mann (2013a) expand this further by noting that these promising factors are akin to deficits in compassion and respect for others, as well as impairments in perspective taking and coping with negative emotions. Therefore, it is through these processes that empathy is compromised and thus, associated with offending. They conclude that lack of empathy should not be hypothesised as the cause of offending, but rather as a symptom of one or more of the stable characteristics among these offenders, that have been recognised as risk inducing. As such, it can be argued that empathy, as a protective factor, is not merely an antithesis to the related risk factor, but alternatively, a process by which the five components interact to mitigate antisocial behaviour.
Motivation and treatment

Motivation for, and engagement in treatment are considered to have protective values in strengths-based approaches (de Vogel, de Ruiter, Bouman, & de Vries Robbé, 2009, 2012). Although, empirically, lack of motivation for treatment has not been found to be associated with sexual recidivism (Hanson & Morton-Bourgon, 2005), motivation that is evidenced by insight and cooperation are seen as protective, as it works in tandem with other risk-mitigating structures that are involved in the treatment process (SAPROF; de Vogel, de Ruiter, Bouman, & de Vries Robbé, 2009, 2012). This further highlights that protective factors are not necessarily at the opposite end of the risk spectrum, but are complex processes that help to diminish offending behaviour.

Harkins and Beech (2007) acknowledge that motivation for treatment has been considered as a factor in successful treatment from a clinical perspective; however, few empirical studies have explored this and findings have been inconsistent. They also note that motivation for treatment can be conceptualised in different ways, including, acceptance of responsibility for offending and willingness to attend treatment. Further, motivation for treatment in sex offenders has been discussed in terms of Prochaska and DiClemente’s (1982) transtheoretical model of change, which involves a process that ranges from lack of acknowledgement of a problem, to beginning to acknowledge a problem and make changes, and continues to the maintenance of the changes made in treatment (Harkins & Beech, 2007). Despite the theoretical merits of motivation for treatment, the dearth of studies that have examined this and the inconsistency in findings demonstrate that there is scope to further examine the effect of this factor on reoffending rates.
Assessing protective factors

Recent demands to adopt a strengths-based approach in the treatment and management of offenders have led to the development of psychometric tools that incorporate, or are solely dedicated to protective factors (de Vries Robbé, de Vogel, & Douglas, 2013). The Structured Assessment of Protective Factors for violence risk (SAPROF; de Vogel et al., 2009, 2012) is one such measure that looks specifically at protective factors in adult male offenders. This is a Structured Professional Judgment (SPJ) tool, developed to be used in conjunction with SPJ risk assessment tools. It consists of 17 protective factors that are organised within three scales: 1) Internal factors, 2) Motivational factors and 3) External factors. The first two items on the Internal scale are static, while the other 15 items are dynamic and amenable to treatment. Each item is scored and an overall judgement on the level of protection for violent reoffending (de Vries Robbé et al., 2013). Research suggests that there is a relationship between the presence of protective factors and desistance from violence and that the assessment of protective factors provides additional value in the assessment of risk for future violence (de Vries Robbé, de Vogel, & de Spa, 2011). Nevertheless, de Vries Robbé et al. (2013) note that more research is needed to determine the empirical relevance of the SAPROF protective factors.

The current review

While examining risk factors for reoffending in known sexual offenders is crucial to the endeavour of achieving public safety, emerging responses have incorporated a more positive, strengths based approach in management initiatives. Risk factors for sex offending are well evidenced in the literature (e.g., Hanson & Bussière, 1998; Jespersen, Lalumière & Seto, 2009; Tharp et al., 2012); however, there is room for a systematic examination of protective factors that have been useful in mitigating risk (Whitaker et al., 2008). de Ruiter and Nicholls (2011) assert that much of the research on protective
factors have focused on adolescent offending (e.g., Borowsky, Hogan, & Ireland, 1997; Griffin, Beech, Print, Bradshaw, & Quayle, 2008; Varker, Devilly, Ward, & Beech, 2008). Evidence from these studies indicates that protective factors are able to moderate risk factors and predict desistance from reoffending in children and adolescents.

Tharp et al. (2012) undertook a qualitative systematic review of risk and protective factors in sexual violence perpetration. In this review, sexual violence included perpetration by and against adolescents, adults, males and females, as well as by those who offended against individuals of the same sex or opposite sex. They, however, did not include sexual violence perpetrated against children. It is reported that some studies found that deficits in empathy were related to sexual violence, while others suggested a complex association between empathy and other risk factors. Additionally, some studies found that the effects of empathy varied based on the aspect of empathy that was tested, the comparison group, as well as the victim type. No significant effects were found when variables (e.g. education) were controlled. This review did not examine treatment or motivation to desist as protective factors.

Additionally, Harkins and Beech (2007) reviewed various factors that may influence the effectiveness of sex offender treatment, taking into account risk level, dynamic risk domains, and individual characteristics. As discussed previously, they conclude that the lack of consistency in the limited literature available creates a demand for further examination regarding the role and impact of motivation on treatment success. Moreover, Harkins and Beech (2007) acknowledge that implementing a more positive framework, where individual characteristics such as motivation is considered, may be beneficial to treatment efforts.
In light of the factors highlighted in the eight protective domains hypothesised by de Vries Robbé et al. (2015), the current systematic review examines literature on offender management/treatment programmes that have addressed factors believed to be protective, in an effort to determine their impact, if any. Given the sparse research available on protective factors specifically, it is hoped that this review will add to the existing knowledge base. Beyond this, it is expected that it will provide a foundation from which to consider appropriate interventions for sexual offenders in Jamaica.

**Aims and objectives**

As noted in Chapter Three, Jamaican men often identify with traits such as physical strength and prowess, chauvinism, boldness, risk-taking, sexual dominance, and resilience (Plummer, 2009, 2013). Such characteristics have been associated with positive attitudes toward predatory sexual behaviours in men (O’Connell & Marcus, 2016). Further, Jamaican sexual offenders were observed to have a higher propensity for criminality than the comparison group, and were generally found to be at average risk of reoffending. Hanson et al. (2016) contend that sex offenders with average risk have criminogenic needs in a number of areas, and require structured interventions to decrease their recidivism risk. However, the Jamaican criminal justice system utilises a predominantly punitive approach to offender management (Harriott, 2000).

In view of these findings, this review sought to establish whether factors that have been found to have protective components by strengths-focused approaches relate to mitigating risk levels and reoffending (de Vries Robbé et al., 2015). This was done with the intention to further inform sex offender management efforts in Jamaica. The review concentrates on empathy (internal factor), motivation (motivational factor) and treatment (external factor) as mediators for future offending.
Selecting specific factors to review facilitated a focused approach, which was useful in achieving a systematic analysis of the literature. Further, empathy, motivation and treatment were chosen based on their potential relevance to the Jamaican context. Specifically, the relationship between characteristics of masculine identity and sexual violence in Jamaica creates a question of whether programmes that seek to challenge offence supportive attitudes and increase empathy could be worthwhile. It is also considered that motivation for treatment may present unique challenges in this setting, where departing from solely retributive methods to incorporate more psychologically informed strategies is likely to be met with resistance from offenders. Therefore, research findings on this construct will shed light on the larger implications of motivation, in terms of risk of reoffending. Finally, an investigation of the effect of treatment on desistance is useful to inform potential sex offender interventions. Although Jamaica has distinctive sociocultural features that will need to be considered when tailoring strategies, a review will provide preliminary evidence.

As such, objectives included:

- To determine if sexual offender treatment programmes have been effective in enhancing empathy and motivation in offenders, and;
- To determine if empathy, motivation and treatment have had a protective effect as it relates to sexual reoffending.
Method

Scoping search

Academic databases were searched for existing reviews in order to determine the demand for the current review, as well as to gain some insight into the general climate of existing literature on the topic, given its relatively new development. This scoping search was conducted using Cochrane Database of Systematic Reviews, Campbell Systematic Reviews, PubMed and Google Scholar, as well as a general Google search. Tharp et al. (2012) carried out a qualitative systematic review on risk and protective factors in sexual violence perpetration. However, as mentioned before, the authors did not include sexual violence perpetrated against children or examine treatment and motivation as protective factors in sexual violence perpetration.

Scoping search terms included:

- 'review of protective factors for sexual offending', 'systematic review of protective factors for sexual offending', 'motivation for treatment and sexual offenders', 'motivation in sexual offenders', 'empathy and sexual offending', 'empathy in sexual offenders'

As highlighted by de Ruiter and Nicholls (2011), scoping revealed that research specifically investigating protective factors has trended towards adolescent delinquency. Moreover, much of the literature reviews the conceptual validity of empathy and motivation, and how these should be assessed and measured, rather than the effect they have on reducing reoffending. Still, studies on treatment programmes that have addressed factors believed to be protective, and the effect they have on mitigating risk were available.
Search strategy

A search for relevant research was conducted using EMBASE, PsycINFO, National Criminal Justice Reference Service (NCJRS), PsychARTICLES and MEDLINE databases. Searches were conducted on April 4th and 5th 2015, and again on March 25th 2017. RefWorks citation manager was used to track references. Studies for the review were chosen based on exclusion/inclusion criteria and were subject to quality appraisal. Reference lists of the studies that met the inclusion criteria were also examined for other relevant articles.

Search terms

Free text and subject heading searches were conducted using all possible key words on the subject matter. Boolean operators were employed with the following search terms for the databases that were accessed via the OvidSP platform (PsycARTICLES, PsycINFO, EMBASE and MEDLINE):

protective factors.mp. OR exp Protective Factors/ OR empathy/ OR intersubjectivity/ OR mentalization/ OR psychological distance/ OR exp Treatment/ OR exp Readiness to Change/ OR exp Motivation/ OR exp Intervention/ OR exp Health Care Seeking Behavior/ OR motivation for treatment.mp. OR exp Treatment Outcomes/ OR supervision.mp.

AND

sex* offen* OR sex* abus* OR sex* assault* OR child moles* OR child sex* offen* pedophilia OR paedophilia

AND

(reoffen* OR recidivism).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures] OR rehabilitation.mp.
NCJRS was accessed via the ProQuest platform. The search strategy employed for this database included:

1. (protective factors) AND (sexual offending) AND (rehabilitation OR recidivism)
2. empathy AND (sexual offending) AND (rehabilitation OR recidivism)
3. (motivation for treatment) AND (sexual offending) AND (rehabilitation OR recidivism)
4. supervision AND (sexual offending) AND (rehabilitation OR recidivism)

**Inclusion and exclusion criteria**

Four hundred and thirty six articles were retrieved from the search. Duplicate references were removed ($n=166$), as well as studies not relevant to the current review due to not meeting fundamental inclusion criteria (e.g. articles on adolescent and female offenders; $n=248$). Given the previous empirical examination of adult male perpetrated sexual abuse in Chapter Three, female and child sexual offenders were excluded from this review in an effort to maintain consistency. The remaining references were assessed against an inclusion and exclusion criteria created for the purposes of this review ($n=21$).

**Population, Intervention, Control/Comparator and Outcome (PICO)**

The PICO framework was used to outline the parameters for screening and selection. This framework was developed by Cochrane Collaboration to assist with the structuring of systematic review objectives. The PICO for this review is outlined below and Table 12 outlines the inclusion and exclusion criteria. Figure 5 represents a flowchart of the systematic selection process.
### Inclusion and exclusion criteria

#### Inclusion Criteria

- Studies that:
  - Examined adult male sexual offenders
  - Examined empathy, motivation or treatment among sexual offenders in relation to recidivism rates, desistance or relapse prevention
  - Included a follow-up period
  - Included a comparison/control group
  - Available in English

#### Exclusion Criteria

- Studies that:
  - Examined adolescent offenders
  - Examined female offenders
  - Examined non-violent/non-sexual offending
  - Risk focused studies
  - Reviews, meta-analyses, and commentaries
  - Non-English language studies

---

**Population:** Adult, male sexual offenders

**Intervention:** Treatment programmes that aim to enhance characteristics that have been empirically linked to desistance, specifically motivation and empathy and; forensic assessments

**Comparator:** Pre and post intervention with a follow-up period; recidivists and non-recidivists

**Outcome:** Reoffending/non-reoffending rates
Figure 5. Flowchart of the study selection process

436 citations identified through electronic searching
- EMBASE 105
- MEDLINE 60
- NCJRS 107
- PsycARTICLES 63
- PsycINFO 101

270 citations remained after duplicates were removed

270 citations screened for relevance

248 citations removed

22 full text citations examined for inclusion

15 full text citations excluded
- No follow-up (n = 5)
- Meta-analyses & systematic reviews (n = 3)
- Non-sexual offenders (n = 1)
- Lack of control/comparison group (n=1)
- Narrative (n = 4)
- Follow-up to previous study (n=1)

2 citations identified from hand searching

9 full text citations included
**Quality appraisal**

After applying the inclusion/exclusion criteria 15 articles were excluded, leaving seven studies for review. Two additional studies that met the inclusion criteria were found from hand searching references (n = 9). There was little variation in the research design of the included studies. Eight were cohort studies, with five being follow-up studies and three being retrospective. One study had a qualitative phenomenological design. The phenomenological study examined the process of desistance through the self-reported experiences of sexual offenders.

The Critical Appraisal Skills Programme (CASP, 2013) checklist tools for qualitative and cohort studies were employed to assess the quality of the citations that were included. These tools were adapted slightly to examine other elements of design that were considered meaningful to the current review. Please see Appendix G and H for the adapted tools. CASP (2013) is a widely accepted and used resource for the appraisal of research with different designs.

It is often difficult to conduct randomised control trials with offending populations where there are varying legal and ethical obligations. Therefore, follow-up cohort studies as well as the qualitative study (which included a comparison group) were considered acceptable for the current review and were assessed accordingly despite their limitations. The following scoring system was developed for the current review:

- **Yes** = 2 (criteria fully met)
- **Partially** = 1 (criteria met in part)
- **Can’t tell** = 0 (unclear or insufficient information)
- **No** = 0 (criteria not met)
Quality scores out of the total were reported for each article. A criterion was assessed as fully met if it was addressed in the methodological design and analyses of the study, and partially met if it there was some aspect of the criteria being met but a full analysis was absent. For example, a score of ‘0’ was given for ‘was the follow up of subjects complete enough and was the follow up of subjects long enough?’ when the study did not account for attrition/missing data and the follow-up was considered to be short term; while a score of ‘1’ was given if the follow-up was long-term but analyses of missing data was not accounted for. Given the limited number of included studies, no cut-off score for further exclusion was applied. However, it is noted that the lowest score for an article was 9 out of 20 and therefore, the articles were deemed to generally be of satisfactory quality.

Data extraction

A data extraction form was developed to gather data relevant to the current review (See Appendix I). This form covered the following areas:

- General Information (title, author, year, country)
- Study characteristics (design, aim, factors assessed, measures employed)
- Intervention (treatment characteristics; follow-up)
- Results (outcome, significance, conclusions)
Results

Overview of studies

Included studies spanned the period 1996 to 2016. Countries included Canada, the Netherlands, Austria and the UK. As mentioned previously, there was limited variability in the research design, with six of the studies following a cohort methodology with a community follow-up period and only one study being qualitative in nature. Two studies were retrospective cohort studies. Tables 13 and 14 outline the quality score of each included study and the key characteristics of each study, respectively.

Participants and interventions

All sample participants had committed sexual offences, with eight studies reporting that offenders engaged in a sex offender treatment of some sort. Four studies specifically reported that treatment followed a Cognitive Behavioural Therapy (CBT) format (de Vries Robbé, de Vogel, Koster & Bogaerts, 2015; de Vries Robbé, de Vogel & Douglas, 2013; Heaton & Murphy, 2013; Wilson, Stewart, Stirpe, Barrett & Cripps, 2000).

One study reported that treatment addressed sex education, cognitive distortions, offending cycle and relapse prevention (Craig, Stringer & Moss, 2006), while another cited group therapy that was designed to fit into an institutional work and job-site organisation (Barbaree, Seto, & Maric, 1996). Farmer, Beech and Ward (2012) reported that all participants engaged in Sex Offender Treatment Programme (SOTP).
Five studies included relapse prevention as a component of treatment (Barrett, Wilson & Long, 2003; Craig et al., 2006; de Vries Robbé et al., 2015; de Vries et al., 2013; Wilson et al., 2000). The mean age for participants ranged from 24.8 to 52 years. However, the age of participants for one study was not reported (Barbaree et al., 1996), though it was considered that the custodial and treatment interventions described implied that the offenders were adults. Two studies focused on sexual offenders with learning difficulties (Craig et al., 2006; Heaton & Murphy, 2013).

**Objectives and follow-up**

Five studies examined the effectiveness of treatment with observed outcomes considering: changes in motivation, changes in knowledge, attitudes and beliefs; community-based maintenance, reoffending rates; minimisation, denial, victim blaming and victim empathy; as well as, factors associated with recurrence of sexually abusive behaviour (Barbaree et al., 1996; Barrett et al., 2003; Craig et al., 2006; Heaton & Murphy, 2013; Wilson et al., 2000). Three studies examined desistance from the perspective of the predictive validity of the SAPROF (de Vries Robbé et al., 2015; de Vries Robbé et al., 2013; Yoon, Turner, Klein, Rettenberger, Eher, & Briken, 2016), while one study investigated the process of desistance from sexual offending by comparing two groups of child molesters using a phenomenological design (Farmer et al., 2012). Follow-up periods ranged from an average of six months to 15.1 years.

**Protective factors examined**

Heaton and Murphy’s (2013) study examined victim empathy among sex offenders with learning disabilities using the Victim Empathy Scale – adapted (VESA). Craig et al. (2006) examined victim empathy, socialisation skills, which included interpersonal
skills and relapse prevention. Farmer et al. (2012) assessed offenders’ ability to control, or master, aspects of their lives (agency) as well as love, friendship, reciprocal dialogue or communication, and a sense of unity or togetherness (communion) in relation to desistance.

Wilson et al. (2000) assessed the effectiveness of community-based sexual offender management with parole supervision and relapse prevention treatment. Barbaree et al. (1996) considered social competence and motivation for treatment in their risk assessment process, as well as the effectiveness of treatment, and compared recidivism rates between treatment acceptors and those who refused treatment. Barrett et al. (2003) investigated changes in motivational levels occurring during institutional and community stages of treatment, and the correlation between motivational variables and treatment outcome. Three studies tested protective factors as outlined in the SAPROF in relation to predicting desistance (de Vries Robbé et al., 2015; de Vries Robbé et al., 2013; Yoon et al., 2016).

**Quality of included studies**

Quality appraisal scores ranged from 9 to 18 out of a total of 20. Therefore, studies were generally considered to be of satisfactory quality. Specifically, studies with a score of nine to 14 were considered ‘fair’, while 15 to 18 were considered ‘good’. Threats to quality mainly related to attrition bias issues and length of follow-up. Sample sizes ranged from six to 450, with most studies recruiting a relatively large sample. Where small sample sizes were studied, this was factored into the analyses and discussed in the study’s limitations.
Table 13

Quality assessment scores for included studies

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Authors and year of publication</th>
<th>Clear aims</th>
<th>Appropriate methodology</th>
<th>Appropriate design</th>
<th>Suitable recruitment of sample</th>
<th>Research issue addressed</th>
<th>Research/participant relationship considered</th>
<th>Ethical issues been taken into consideration</th>
<th>Data analysis sufficiently rigorous</th>
<th>Clear statement of findings</th>
<th>Valuable research</th>
<th>Total quality score</th>
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<td>Farmer et al. (2012)</td>
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<tr>
<th>Cohort</th>
<th>Authors and year of publication</th>
<th>Clearly focused study</th>
<th>Suitable recruitment of sample</th>
<th>Bias minimised at exposure</th>
<th>Bias minimised at outcome</th>
<th>Confounding factors identified and accounted for</th>
<th>Complete and adequate follow-up</th>
<th>Measures valid</th>
<th>Supported conclusions</th>
<th>Results consistent with previous studies</th>
<th>Attrition considered</th>
<th>Total quality score</th>
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<tr>
<td>Authors and year of publication</td>
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<td>Suitable recruitment of sample</td>
<td>Bias minimised at exposure</td>
<td>Bias minimised at outcome</td>
<td>Confounding factors identified and accounted for</td>
<td>Complete and adequate follow-up</td>
<td>Measures valid</td>
<td>Supported conclusions</td>
<td>Results consistent with previous studies</td>
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Table 14

Data extraction of included studies

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<thead>
<tr>
<th>Author, year &amp; country of publication</th>
<th>Aim &amp; design of study</th>
<th>Characteristics of sample</th>
<th>Comparison</th>
<th>Intervention</th>
<th>Measures, validity &amp; reliability</th>
<th>Findings in relation to protective factors &amp; reoffending rates/desistance</th>
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<tbody>
<tr>
<td>Barbaree et al. (1996) Canada</td>
<td>Evaluation of the clinic’s risk assessment process &amp; effectiveness of the approach to treatment.</td>
<td>250 offenders who had received treatment; 123 rapists, 56 incest offenders, 56 extra-familial child molesters &amp; 15 offenders convicted of a sex-related homicide; age of offenders not reported.</td>
<td>Treatment refusers and accepters; 1-6 year follow-up.</td>
<td>A group therapy format designed to fit into an institutional work and job-site organisation.</td>
<td>Measures not reported. Pre-treatment assessment considered history of sexual offending, deviant sexual arousal, antisocial behaviour &amp; other indicators of antisocial personality &amp; social competence problems; combined with motivation for treatment &amp; degree of behaviour change during treatment.</td>
<td>No association was found between completion of treatment and recidivism; no difference between treatment refusers &amp; those who accepted. However, follow-up time differed.</td>
</tr>
<tr>
<td>Barrett et al. (2003) Canada</td>
<td>Assess the changes in motivational levels occurring during various stages of treatment (institutional and community) and; the correlation between motivational variables and treatment outcome.</td>
<td>101 federally sentenced male sexual offenders on conditional release over a 7-year period.</td>
<td>Average follow-up was 2.3 years; recidivism determined as charge or conviction.</td>
<td>A structured programme offered at a local psychiatric hospital and; a relapse prevention maintenance programme. All participants had previously been involved in institutional sex offender treatment.</td>
<td>Treatment reports were rated using the Goal Attainment Scaling protocol. High inter-rater reliability found ($r = 0.71, p &lt; .001$)</td>
<td>Acceptance of responsibility and acceptance of guilt, at community treatment were correlated with treatment outcome. Correlations of treatment outcome with disclosure of personal information, motivation to change behaviour, and participation in treatment approached significance.</td>
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<tr>
<td>Author, year &amp; country of publication</td>
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<td>Characteristics of sample</td>
<td>Comparison</td>
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<td>Craig et al. (2006) UK</td>
<td>Evaluation of a community-based treatment programme for sexual offenders with learning disabilities. Cohort follow-up</td>
<td>6 men (mean age of 24.8 years; $SD = 7.46$ years) who had committed at least one previous sexual offence with two having committed two previous sexual offences.</td>
<td>Pre and post treatment comparison; 12 month follow-up.</td>
<td>7-month treatment comprising of four main components: sex education, cognitive distortions (including victim empathy), offending cycle &amp; relapse prevention</td>
<td>Multiphasic Sex Inventory (MSI), the Coping Response Inventory (CRI), the Psychiatric Assessment for Adults With a Developmental Disability (mini–PAS-ADD), &amp; the VABS</td>
<td>Improvements in socialisation skills (leisure time and interpersonal skills) were significant. No further incidents of sexual offending have been reported during a 12-month follow-up.</td>
</tr>
<tr>
<td>de Vries Robbé et al. (2013) The Netherlands</td>
<td>Investigation of whether offence type has a moderating effect on the relationship between protective factors and desistance; Investigation of interaction effects between risk and protective factors; Examination of the predictive validity of the SAPROF and HCR-20. Cohort retrospective</td>
<td>105 patients who had a history of general violent offending (without a history of sexual offending) &amp; 83 patients who had a sexually violent index offence; average age at release was 32 years ($SD = 7.3$, range=18–56)</td>
<td>Fixed 3-year follow up &amp; maximum follow-up time available (M = 15.1 years for sexual offenders, range 3–24).</td>
<td>Intensive inpatient CBT &amp; relapse prevention as well as community reintegration. The average treatment length of the total sample was 5.5 years ($SD = 2.3$, range=1–16).</td>
<td>Historical Clinical Risk Management (HCR-20); SAPROF Good to excellent inter-rater reliability and moderate to large associations between the HCR-20 and violence reported; SAPROF total score showed good predictive validity (AUC one year = .85; AUC three year=.75; AUC long-term=.73)</td>
<td>Good predictive validity was found for the protective factors in the SAPROF; dynamic factors proved to be good predictors of desistance from future violence.</td>
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<tr>
<td>Author, year &amp; country of publication</td>
<td>Aim &amp; design of study</td>
<td>Characteristics of sample</td>
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<tr>
<td>de Vries Robbé et al. (2015) The Netherlands</td>
<td>Validation for the SAPROF protective factors for assessing the risk of future general violence and of future sexual violence in sexual offenders.</td>
<td>83 male sexual offenders who had been admitted to two different Dutch forensic psychiatric hospitals and were discharged between 1984 and 2006; Median age at release was 30 years ($SD = 7.5$)</td>
<td>1-3 year follow-up &amp; 15 year follow-up.</td>
<td>Intensive inpatient CBT &amp; relapse prevention model through an eclectic approach.</td>
<td>SAPROF, HCR-20, SVR-20 Interrater reliability was found to be good for the 3 tools; good predictive validity found for the SAPROF &amp; HCR-20; SVR-20 was not found to predict long-term violence.</td>
<td>Predictive validities of the SAPROF protective factors for reconvictions of sexual violence were good for 1-3 year follow-up &amp; 15 year follow-up.</td>
</tr>
<tr>
<td>Farmer et al. (2012) UK</td>
<td>Investigation of the process of desistance from sexual crime by comparing two groups of child molesters. Establish whether desisting offenders are different from those who are suspected of persisting in risky behaviours.</td>
<td>10 sex offenders against children identified from a group of over 100 sex offenders undertaking sex offender treatment in the UK. 5 sex offenders deemed to be potentially active offenders (average age = 41.00 years, $SD = 14.49$), and 5 deemed to be desisters (average age = 35.40 years, $SD = 5.59$).</td>
<td>All participants engaged in SOTP. Details on this treatment were not reported.</td>
<td>Clinicians rating schedule; Risk Matrix 2000 (RM2000); Beech’s deviance system; McAdams’ (1995) Life Story Interview schedule.</td>
<td>AUC of .77 for a 2-year follow-up on a sample of 647 men; AUC of .75 on a sample of 429 men over an 18-year follow-up reported for the RM 2000; internal consistency &amp; test-retest reliability of the measures in Beech’s deviance system were reported.</td>
<td>Agency and communion were clearly identified in the desisting group. All desisters identified treatment at the key turning point.</td>
</tr>
<tr>
<td>Author, year &amp; country of publication</td>
<td>Aim &amp; design of study</td>
<td>Characteristics of sample</td>
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<td>Heaton &amp; Murphy (2013) UK</td>
<td>Investigation of changes in sexual attitudes &amp; knowledge, degree of minimisation, denial for the offences, blame for the victim &amp; degree of victim empathy since the last follow-up; investigation of the recurrence of sexually abusive behaviour during follow-up &amp; factors associated with this.</td>
<td>34 men who attended SOTSEC-ID groups at 7 treatment sites; Mean age was 39.6 years ($SD = 12.1$).</td>
<td>Average follow-up was 44 months ($SD = 28.7$, range 15–106 months)</td>
<td>CBT for sexually abusive behaviour.</td>
<td>SAK; QACSO; SOSAS and; VES-A</td>
<td>Statistically significant improvements in sexual knowledge, empathy &amp; cognitive distortions during treatment &amp; at follow-up; 11 of the 34 men showed further sexually abusive behaviour, only two were convicted. No significant differences between the men who reoffended during follow-up &amp; those who did not, in terms of victim empathy.</td>
</tr>
<tr>
<td>Wilson et al. (2000) Canada</td>
<td>Examination of a community-based sexual offender management with parole supervision &amp; relapse prevention treatment. Presentation of outcome data on community-based maintenance.</td>
<td>107 sexual offenders who had participated in community-based sexual offender programs &amp; released to the Central Ontario District</td>
<td>Follow-up ranging from 13 months to 8 years &amp; 7 months; 2 treatment groups: high risk offender programme (average age = 46.1, $SD = 11.2$) &amp;; maintenance programme (average age = 45.9, $SD = 11.5$)</td>
<td>High Risk: cognitive behavioural group focused on four themes: Feelings, Fantasy, Future Planning &amp; Follow Though. Maintenance: individual &amp; group therapy focused on relapse prevention and risk in the community.</td>
<td>General Information on Recidivism Scale (GSIR). Validity and reliability not reported.</td>
<td>No significant difference between the maintenance programme and the high risk programme on sexual reoffending; sexual reoffending rate was 3.7%</td>
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<tr>
<td>Author, year &amp; country of publication</td>
<td>Aim &amp; design of study</td>
<td>Characteristics of sample</td>
<td>Comparison</td>
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<tr>
<td>Yoon et al. (2016) Austria</td>
<td>Validation of the German version of the SAPROF for violence risk in a representative sample of incarcerated adult male sexual offenders.</td>
<td>450 male sexual offenders in the Austrian Prison System, who had undergone clinical diagnostics and forensic risk assessment between 2001 and 2007; Mean age at release was 42 years (SD = 12.7)</td>
<td>Mean follow-up = 5.8 years</td>
<td>Clinical diagnostics and forensic risk assessment. This study did not take into consideration treatment data.</td>
<td>SVR-20; SAPROF Total scores and scores for the Internal and Motivational subscales indicated a reasonable raters’ agreement (ICC = .72-.79**). Coping revealed the weakest reliability that was even below chance level.</td>
<td>Predictive validities for the SAPROF were found to be small to moderate. The sum score of protective factors was found to be a reasonable predictor for desistance from general, nonsexual, and sexual violent recidivism in sexual offenders. The predictive power for the sexual recidivism category was not significant.</td>
</tr>
</tbody>
</table>

**List of additional abbreviations:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>VABS</td>
<td>Vineland Adaptive Behavior Scales</td>
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<tr>
<td>SAK</td>
<td>Sexual Assault Kit Testing</td>
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<tr>
<td>SOSAS</td>
<td>Sex Offenders Self Appraisal Scale</td>
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<td>SOTSEC-ID</td>
<td>Sex offender treatment services collaborative- Intellectual Disabilities</td>
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<td>VES-A</td>
<td>Victim Empathy Scale- Adapted</td>
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<tr>
<td>QACSO</td>
<td>Questionnaire on Attitudes Consistent with Sexual Offenders</td>
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</table>
Data synthesis and key findings

A narrative data synthesis was undertaken to report the meaningfulness of key findings in relation to the review’s objectives. Specifically, results are discussed in relation to empathy, motivation and treatment, and their effect on recidivism. Quality of studies is also acknowledged. Findings were as follows:

Are sexual offender treatment programmes effective in enhancing empathy and motivation among sexual offenders?

One of the two studies that examined victim empathy before and after treatment found statistically significant improvements among participants with learning disabilities during treatment and at short-term and long-term follow-up (Heaton & Murphy, 2013; follow up range one year to nine years). Craig et al. (2006) found no significant differences in attitudes toward sexual offending following treatment, but noted that psychometric assessments specialised for offenders with learning disabilities, including the Victim Empathy Scale- Adapted, were not available at the time of the study and, therefore, this may have skewed the results. These studies were considered to be between fair and good quality; therefore, they are believed to make a notable contribution to the knowledge on sexual offending in persons with learning disabilities.

Farmer et al. (2012) observed that agency in relation to ability to control or master aspects of one’s own life, as well as communion in terms of love, friendship, reciprocal dialogue or communication, and a sense of unity or togetherness were clearly identified in the desisting group. Further, desisters identified treatment as the key turning point. Barrett et al. (2003) found that motivation for treatment changed throughout stages of treatment, where an increase was noted within institutional treatment for all offender
groups (i.e., intra-familial child molesters, extra-familial child molesters, and sexually aggressive offenders), but declined for all groups following release to the community. Still, community motivation levels were higher than they were at pre-treatment. Given the good quality of these studies, these results are encouraging.

Overall, these findings trend toward programmes being effective in enhancing empathy and motivation among offenders. However, given the limited studies that explicitly examined these factors pre and post intervention and follow-up, no definitive conclusion on treatment effectiveness can be made from this review. Further, the differences in how motivation and empathy were defined, as well as the disparities among the types of treatment programmes and assessment procedures across the studies serve to limit the extent to which definitive conclusions can be made.

Do empathy, motivation and treatment factors have a protective effect as it relates to sexual reoffending?

Two studies that examined desistance from the perspective of the predictive validity of the SAPROF following intensive inpatient CBT and relapse prevention found protective factors to be good predictors of desistance from future sexual violence (Vries Robbé et al., 2015; de Vries et al., 2013). It is important to note however, that Yoon et al. (2016) found only low to moderate predictive accuracy in sexual recidivism for the SAPROF. They considered that this may have been due to their SAPROF ratings being based on archival information from high risk offenders who were in the early stage of incarceration, and did not include treatment-relevant information. It is acknowledged that the SAPROF is described as an instrument that is useful for observing treatment changes and for predicting recidivism risk when used in combination with other SPJ
risk assessment tools. These results, therefore, suggest a correlation between protective factors and desistance, at least within the context of treatment. Moreover, despite inconclusive results, these studies received the highest appraisal scores. Therefore, results are regarded as promising.

Similarly, Barrett et al. (2003) examined motivation to change and found that motivation during community treatment was correlated with treatment outcome (i.e., successful outcome, sex related suspensions/revocations, non-sex related suspensions/revocations, new nonsexual offence, and new sexual offence) at the two-year follow-up. They further highlighted that correlations in treatment outcome with disclosure of personal information, motivation to change behaviour, and participation in treatment approached significance. Results from Farmer et al. (2012) indicated that desisters reported feeling in control of their lives, as well as experiencing love, friendship, reciprocal dialogue or communication, in comparison to a prevalence of pessimistic attitudes and external blaming among offenders who persisted in antisocial behaviour.

Four out of five studies that assessed reoffending found that the majority of their sample had not engaged in offending behaviour during follow-up (Barrett et al., 2003; Craig et al., 2006; Heaton & Murphy, 2013; Wilson et al., 2000). On the other hand, Barbaree et al. (1996) found no significant association between completion of treatment and recidivism. It is important to note that this study received the lowest rating; thus, the outcome should be considered alongside the findings from other studies. Heaton and Murphy (2013) reported that 11 offenders had engaged in sexually abusive behaviours during treatment but only two had been convicted. They also found no significant differences between the men who reoffended during follow-up and those who did not,
in terms of victim empathy. Barrett et al. (2003) reported consistent results to previous studies, where relatively lower recidivism rates were found in comparison to international norms (e.g., Hanson & Bussière, 1998). They expressed that this suggests an advantage of a management strategy that combines community-based sex offender treatment with dynamic case management supervision.

Generally, these findings suggest an association between empathy, treatment and by extension, motivation and desistance from offending. However, given the small number of studies, these interpretations are made with caution.
Discussion

This review examined empathy, motivation and treatment as protective factors for sexual offending. Based on the results, it is evident that limited published research has specifically examined protective factors in relation to desistance. Therefore, some publication bias is likely, although it has been established in the literature that the examination of protective factors is relatively new and uncharted in terms of empirical investigation (Boer, 2013; de Vries Robbé et al., 2013). Nonetheless, major databases were searched for relevant articles and reference lists were also examined for other appropriate articles in an effort to achieve a comprehensive review.

A quality appraisal was conducted and studies were generally found to be satisfactory. Threats to quality mainly related to attrition bias issues and length of follow-up. The studies that examined sexual offenders with learning disability (Craig et al., 2006; Heaton & Murphy, 2013) were found to be between fair and good quality. Therefore, these studies were thought to make a notable contribution. The highest rated studies were those that investigated the predictive accuracy of the SAPROF (Vries Robbé et al., 2015; de Vries et al., 2013; Yoon et al., 2016). Despite divergent results, where good and low to moderate predictive accuracy were found, the quality of studies suggests that results are promising. The lowest rated study found no significant association between completion of treatment and recidivism (Barbaree et al., 1996). It was considered that this outcome should be considered alongside the findings from other studies.

Review results

Findings suggest that treatment programmes have had some effect on empathy and motivation among offenders (Barrett et al., 2007; Farmer et al., 2012; Heaton &
Murphy, 2013). Barrett et al. (2003) discovered that although motivation increased during institutional treatment, this declined during community treatment. Nonetheless, they maintain that these levels remained higher than they were at pre-treatment.

Farmer et al. (2012) reported that agency as it relates to ability to control or master aspects of one’s life was found in the narrative of the desisting group, and that participants attributed their success to treatment. Interestingly, Yoon et al.’s (2016) findings regarding the low to moderate predictive validity of the SAPROF when non-treatment data were coded appear to indirectly present a case in support of treatment interventions, where they hypothesise that this may have been the cause for these results. If the thinking is that treatment programmes have a positive effect on empathy and motivation, and these factors are associated with desistance, then it can be argued that predicting desistance and reoffending may, therefore, be enhanced in treatment settings.

Evidence of this was found, as results indicate an association between the factors examined and desistance from sexual offending when treatment relevant data were evaluated. This was demonstrated in the good predictive validity of the SAPROF (de Vries Robbé et al., 2015; de Vries Robbé et al., 2013), as well as the correlation found between some motivational variables and treatment outcome in Barrett et al.’s (2003) study. However, it is acknowledged that the predictive validity of the SAPROF does not inform in detail what factors are most related to desistance and whether these include the factors examined in this review. Further, treatment programmes differed in their focus and structure and, therefore, confounding variables may have influenced some of the results. Similarly, definitions and measurements of sexual reoffending varied in the
included studies, with some using official and unofficial records as well as clinical perception. Still, a noteworthy case is made for the value of protective factors in desistance, with Barrett et al. (2003) asserting that the relatively low levels of recidivism found in the literature implies an advantage of a management strategy that combines community-based sex offender treatment with dynamic case management supervision.

It is important to note that empathy was mostly examined in relation to victims and as highlighted previously, meta-analyses have found no relationship between this and sexual reoffending (Barnett & Mann, 2013a; Hanson & Bussière, 1998). Further, lack of motivation for treatment has not been found to be associated with sexual recidivism (Hanson & Morton-Bourgon, 2005). However, de Vogel et al. (2009; 2012) contend that motivation that is evidenced by insight and cooperation has protective values when other risk-mitigating structures that are involved in the treatment process interact. Further, given Barnett and Mann’s (2013a) definition of empathy as a cognitive and emotional understanding of another person’s experience as well as an acknowledgement that others are worthy of compassion and respect, research in this area will have to look at the process of empathy and desistance on a deeper level. Relatedly, the literature extensively references factors that relate to recidivism in terms of risk, rather than from a positive, desistance perspective. That is, empathy is usually examined in relation to whether or not a lack thereof increases or decreases risk.

In light of Barnett and Mann’s (2013a, 2013b) notion that empathy is a complex concept that involves five components, it can be argued that the examination of empathy as a protective factor will need to involve more than just measuring victim
empathy. Two studies included in this review have cited improvements in interpersonal skills and experiences of love, friendship, reciprocal communication and a sense of togetherness as positive outcomes of treatment, and related to desistance (Craig et al., 2006; Farmer et al., 2012). These appear to be parallel concepts to those proposed by Barnett and Mann (2013), including: perspective taking, ability to experience emotion, a belief that others are worthy of compassion and respect. Therefore, the results from this review provide some insight on the possibility of empathy having a protective effect if the concept is expanded.

**Strengths and limitations of the review**

The main limitation of this review is the small number of studies that met the inclusion criteria. Given this and the conceptual variations in empathy, motivation and treatment programmes among the studies identified, conclusive determinations cannot be made regarding the protective factors examined and sexual offending. Specifically, few studies examined these factors explicitly within a strengths-based, protective framework, and thus assumptions were made where variables appeared to be related to the factors relevant to this review.

Importantly, no study employed a randomised control trial (RCT), which involves participants being allocated at random to receive a clinical intervention, and the control receiving no intervention. As such, it cannot be said that empathy, motivation and treatment have a causal effect on desistance. In fact, evidence of the protective effect of these factors was primarily demonstrated in the predictive validity of the SAPROF, which does not explicitly outline what factors are most related to desistance and whether these include the factors examined in this review. However, it is noted that
such studies offer the most rigorous and empirically sound research that can reasonably be conducted, as denying offenders necessary treatment would present ethical issues.

The retrospective nature of some studies means that treatment received by participants may not have incorporated current best-practice approaches. It is also considered that such studies required researchers to code past events into current constructs (i.e., the SAPROF domains), therefore, findings are likely to reflect what could be extracted from available data, with little opportunity to access missing information. Relatedly, the SAPROF assesses general violence risk, which includes sexual violence but is not exclusively used to measure this type of violence. Thus, the development of a tool to measure protective factors specific to sexual violence risk may prove to be valuable.

A further limitation of this review is that three studies investigated the effects of treatment on sexual offenders with learning disabilities and therefore, these findings cannot be generalised to the larger sexual offending population. Furthermore, quality appraisal followed a subjective approach although CASP checklist tools were implemented, and steps to achieve inter-rater reliability were not possible at the time of the review.

Nevertheless, this review presents findings for an under-examined area of the research and highlights the need for future research in this area. It has explored the way in which protective factors have been examined in the literature, and in so doing, presents targeted areas for improvements.

**Implications for practice and future research**

The present review further highlights the value of considering protective factors in the treatment and assessment of sexual offenders. This positive approach, as theorised by
the GLM and desistance approaches, may encourage offenders to not only invest and engage in treatment programmes, but to also acknowledge their own role in desistance. This review also highlights a need to expand research on the influence and process of protective factors in relation to mitigating recidivism. Specifically, how protective factors are conceptualised and measured, taking into consideration that some factors cannot merely be viewed as opposites to risk factors, need to be addressed in order to gain valuable results from empirical endeavours. Moreover, prospective investigations of the value of dynamic protective factors as treatment targets and considerations for risk management planning in clinical and community follow-up studies are needed.

**Conclusions**

Although there has been a recent shift in the assessment and management of offenders, where a strengths-based approach that includes the consideration of protective factors is used to address offending, inconsistency still exists in the definition and nature of these factors. Few studies have examined the protective factors that have been useful in managing adult male sexual offenders; therefore, this review sought to establish whether empathy, motivation and treatment had mitigating effects on reoffending. The results from this review suggest a possibility that these factors have a protective effect, however, a closer look at how these factors work together to enhance desistance is needed. Specifically, the concept of empathy needs to be expanded and research going forward should seek to examine protective influences rather than risk. Finally, it is acknowledged that the applicability of such recommendations in the Jamaican context will require further research to better understand what types of interventions and management efforts would best fit this socio-cultural environment.
CHAPTER FIVE

DISCUSSION AND CONCLUSIONS
Discussion

This thesis will close with a review of its aims and key findings in relation to the research questions and the literature outlined. Recommendations will also be made concerning future directions for research and practice.

Key findings

The aim of this thesis was to present a cross-cultural perspective on sexual offending through a comparison of static risk factors between British/Canadian and Jamaican sex offenders. The thesis was conducted in light of the absence of empirical studies on sexual offending in Jamaica, as well as the need for further research on risk factors among offenders from diverse cultural backgrounds. It was believed that efforts to manage the problem of sexual violence in Jamaica could benefit from an investigation of the risk factors and characteristics of sex offenders in this country.

The investigation began with a critique of the Static-99 Revised (Hanson & Thornton, 2000) in Chapter Two, which was the risk assessment measure employed in the empirical study. The chapter was introduced with an overview of the application of forensic assessments in the criminal justice system, and the advancement of risk assessment tools to meet growing requirements for efficient offender management. Next, the psychometric properties of the instrument were outlined, and strengths and limitations highlighted. Strengths of the tool included the improved method of assessment to the ad hoc nature of purely clinical judgements, and its role in enhancing research designed to aid in the understanding and prediction of sexual risk. In terms of scientific properties, the main strengths of the Static-99R included the inter-rater reliability and the predictive validity in comparison to other similar tools. However,
limitations were identified as it relates to the use of the tool within forensic practice. This involved inconsistencies in scoring across evaluators, the discrepancies in recidivism rates as well as the reduced predictive efficacy in ethnic minority groups.

Although efforts have been made to develop standardised risk categories that are empirically sound and conceptually coherent, further research is needed to underscore the effectiveness of these risk categories. It was also noted that Structured Professional Judgement tools might be more appropriate in treatment settings, as they provide valuable insight into the treatment needs of offenders. Nonetheless, the scientific strengths that were highlighted made this tool appealing for the purposes of research, and therefore, it was deemed appropriate for the empirical study conducted in Chapter Three.

The empirical study presented in Chapter Three endeavoured to answer the following research questions: Are Jamaican sex offenders more at risk of reoffending than British/Canadian sex offenders? Do Jamaican sex offenders have similar risk profiles to British/Canadian offenders, with regard to antisocial lifestyle/criminality and sexual deviance? Are the groups different in terms of individual risk factors such as number of prior sexual offences? In order to answer these questions, it was necessary to first contextualise sexual violence in Jamaica. Therefore, an overview of the socio-cultural facets of sexual offending in this setting was provided. Subsequently, an examination of static risk among Jamaican sex offenders in comparison to British/Canadian offenders was conducted. The study also sought to explore how the socio-cultural context of Jamaica may impact on the outcome of static risk assessment and, thus, addressed
considerations for the applicability of actuarial risk assessment in this context. The study represented the first known empirical examination of sexual offenders in Jamaica.

A significant difference in the level of risk between British/Canadian and Jamaican sex offenders was not found. Interestingly, most offenders had average risk of reoffending in both samples. According to Hanson et al. (2016), sex offenders with average risk have criminogenic needs in a number of areas and require structured intervention to decrease their propensity to reoffend. Given this finding and the unique context outlined, it was suggested that cultural and socio-economic factors should be taken into account when seeking to develop interventions to manage criminogenic needs. For instance, an awareness of the association between masculine identity in Jamaica and supportive attitudes toward sexually harmful behaviours could be useful when considering intervention strategies (O’Connell & Marcus, 2016; Plummer, 2009, 2013).

In terms of the performance of Static-99R across samples, underlying factors that illustrate differences between Jamaican sexual offenders and British/Canadian offenders on Static-99R were not found. Results indicated that the empirical relationships between the items were similar across both samples. Further, observations regarding the multidimensional nature of sexual violence risk were found to be consistent with the literature, although the limited number of test items appeared to have affected clustering. In view of issues relating to test reliability, where Static-99R was found to have low internal consistency, it was considered that the applicability of risk instruments in diverse populations should be carefully examined.

Unsurprisingly, Jamaican sex offenders were found to score higher on items related to criminality. This was interpreted as being a function of the cultural and socio-economic
undertones of crime in the country, where criminality has been a social response to inequality and poverty. Based on this, it was highlighted that interventions which challenge offence supportive attitudes and assist sex offenders in gaining skills to achieve personal goals such as solvency, connectedness and respect, may be valuable. Further, the tendency for Jamaican sex offenders to have an antisocial orientation was thought to present a crucial aspect of management efforts, due to the impact this may have on their propensity to reoffend. Hence, supervisory strategies following release from prison are essential.

Lastly, no significant difference in the risk scores of rapists, extra-familial child molesters and incest offenders was found within the samples. This result suggested that such offenders are similar in terms of sexual deviance, criminality, range of victims, and risk of reoffending. However, the literature points to notable differences between sex offender types on these factors. Therefore, it was theorised that limitations exist in Static-99R’s capacity to distinguish the criminogenic needs of different types of sexual offenders.

Limitations of this study were also identified. Significantly, the institutional challenges that were experienced when conducting this research in Jamaica influenced the extent to which data could be gathered. For example, efforts to undertake face-to-face interviews with sex offenders in Jamaica were not supported. Therefore, data were limited to the information collected by the Department of Correctional Services and could not be corroborated. Interviewing British/ Canadian offenders was also not possible, as this sample was scored for previous research purposes, using Static-99R. Sampling bias was identified where the exclusion of offenders not known to the police, or those who have
been charged but not convicted may have led to less generalisable results. It was, therefore, believed that a more representative method of measuring the amount of sexual crime in Jamaica should be considered (e.g. national victim surveys). Lastly, missing data may have led to unreliable scoring and limited the extent to which definitive conclusions could be made from findings.

In Chapter Four, a systematic review of the literature on protective factors was conducted in an effort to determine whether empathy, motivation and treatment have protective effects on sexual offending. It was considered that examining protective factors would further inform future assessment and treatment interventions in Jamaica. This also facilitated a balanced exploration of management efforts, where identifying strengths and protective features alongside risk factors have been encouraged (Department of Health, 2007).

Findings from the review would suggest that treatment programmes have had some effect on empathy and motivation among offenders, and these have been found to be associated with desistance. For example, desisters reported that achieving agency as it relates to their ability to control or master aspects of their lives was the primary benefit of treatment. Furthermore, evidence of the protective effect of empathy, motivation and treatment was mainly demonstrated in the good predictive validity of the Structured Assessment of Protective Factors for violence risk (SAPROF; de Vogel et al., 2012, 2009) tool, as well as the correlation found between motivational variables and treatment outcome. However, limitations of the review existed where only a small number of studies met the inclusion criteria, and where variations were found in the definitions of empathy, motivation and treatment programmes among the studies.
identified. In spite of this, it was certain that examining protective factors along with risk helps to enhance considerations for the treatment and management of sexual offenders. Overall, the review presented findings for an under-examined area of the research on recidivism.

**Future directions**

Notwithstanding the novelty of the current research on sexual offending in Jamaica, there is considerable scope for expanding on the findings provided. Firstly, Goldsmith et al. (2005) argue that research regarding sexual offending has often neglected cultural aspects, and most research on sexual offending among ethnic minorities concentrate on victims. In addition, it has been observed that theoretical models primarily consider Europeans and Americans but have not been sufficiently explored in other populations (Hall et al., 2002). As such, more research on sex offenders in culturally diverse populations should be carried out.

Furthermore, in terms of the assessment of risk in ethnic minority populations, widely accepted ethical standards underscore the importance of appropriate test selection and application in order to achieve representativeness. Based on the evidence offered in this thesis, it may be worth developing risk assessment methods that are relevant to the socio-cultural context of Jamaica. While it is acknowledged that Static-99R represents one of the significant enhancements in sexual risk assessments, the distinctive nature of sexual violence in Jamaica presents a worthwhile basis for further examination of the treatment needs of offenders. In fact, Brouillette-Alarie et al. (2015) highlight that scores from static risk instruments do not provide enough insight into treatment needs or progress. Therefore, it is considered that constructs that measure sexual deviance,
antisocial orientation, range of victims and persistent sexual offending can be extended in accordance with the cultural and socio-economic factors that have been outlined.

It is believed that comparing Jamaican sex offenders to other types of offenders in this country will provide further insight into treatment and management needs. Moreover, with the findings that more Jamaican sex offenders demonstrated antisocial orientation, research that utilises a follow-up method for investigating rates of recidivism is needed. This thesis is also limited in its focus on adult sexual offenders. It is noted that females and children also perpetrate sexual violence; hence, in terms of attempting to reduce its prevalence, there is value in investigating samples that are more reflective of the wider population of sexual offenders.

A significant focus of this thesis has also been protective factors. Few studies have examined the protective factors that have been useful in managing adult male sexual offenders. Therefore, research on how these factors work together to enhance desistance is necessary. In terms of the Jamaican context, protective factors that are meaningful in this setting will need to be ascertained before they can be applied to treatment efforts; as such, future research can also be extended in this direction. Particularly, it is acknowledged that the applicability of recommendations for policy and practice in the Jamaican context will require further research to better understand what types of interventions and management efforts would best fit this socio-cultural environment. Based on discussions in the current thesis, it is likely that cultural and economic influences will affect what factors will be protective. The distinctive sociocultural features that have been related to risk (e.g., masculine identity, gender inequality and
poverty) will need to be examined in order to ascertain underlying psychological needs that can be addressed through positive rehabilitative efforts.

Nevertheless, these directions for future research should not overshadow the value and practical implications of the current thesis. This study is unique in its account of the interaction between sociocultural factors and risk of reoffending. Undeniably, the Jamaican cultural and socio-economic systems outlined are essential to understanding what risk-mitigating efforts might be relevant for management programmes. It is suggested that Jamaican sex offenders have a propensity for antisocial behaviour, and this has been linked to the economic constraints and glorification of criminality in this country. Positive rehabilitative methods offer an alternative to the retributive approach, in that they seek to support offenders in developing skills to achieve desires such as economic stability and connectedness in prosocial ways. More importantly, by focusing on the offender’s circumstance, this model allows for the consideration of criminogenic needs in light of the sociocultural context. Further, it is believed that training correctional service professionals to conduct risk assessments and administer interventions when these have been developed will have sustainable effects in the response to the problem of sexual violence. However, it is important to state that the limitations on generalisability due to sampling and reporting bias, as well as missing data restrict the extent to which definitive claims can be made.
Conclusions

The literature has focused extensively on understanding and managing sex offenders in Europe and North America. As such, there is need for further empirical investigation of risk factors among offenders from diverse cultural backgrounds. This thesis contributes to a cross-cultural understanding of static factors in relation to risk of reoffending.

Sexual offending in Jamaica can be understood in light of the socio-cultural context, where these offenders were found to have more of an antisocial orientation, despite having a similar overall risk level to British/Canadian sex offenders. Generally, Jamaican sex offenders were found to be less sexually deviant than British/Canadian offenders. This mirrors the criminal response to inequality and poverty, and illustrates a possible effect of the stigma associated with more deviant forms of sexual abuse (e.g., male to male sexual abuse). However, it is acknowledged that under-reporting of sexually deviant offences and limitations in the Static-99R may have contributed to these findings.

Further, it is suggested that an awareness of the cultural and socio-economic themes concerning sexual violence in Jamaica will be useful when considering intervention strategies. Positive rehabilitative approaches to sex offender management propose that sexual offending results from an attempt to achieve natural desires in harmful ways. Therefore, interventions that challenge offence supportive attitudes and help sex offenders gain skills necessary to achieve personal goals may be worthwhile. Likewise, assessment methods that are sensitive to underlying socio-cultural factors and discern the treatment needs of varying types of offenders are likely to be beneficial in Jamaica. It is also thought that training and continuous research are essential for the successful
management of sexual offenders. With this, constructs such as antisocial orientation and sexual deviance can be expanded. Moreover, the influence of socio-cultural factors in the process of desistance can be empirically tested through management efforts that take this into account.

Significantly, the value of considering protective factors in the treatment and assessment of sexual offenders has been outlined in this thesis. This positive approach may encourage offenders to not only invest and engage in treatment programmes, but to also acknowledge their own role in desisting from crime. However, it is recognised that applying this approach in the Jamaican context will require further research to better understand what types of interventions and management efforts would best fit this socio-cultural environment.
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Appendix A

Static-99R – TALLY SHEET
Appendix B

Static-99R Item Description and Scoring
<table>
<thead>
<tr>
<th>Offence</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>Rape</td>
<td>5</td>
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<td>5.6</td>
</tr>
<tr>
<td>Indecent assault &amp; rape</td>
<td>23</td>
<td>25.6</td>
<td>31.2</td>
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<tr>
<td>Carnal abuse</td>
<td>27</td>
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<td>Sexual touching of a child</td>
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<td>65.6</td>
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<tr>
<td>Buggery</td>
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<td>68.9</td>
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<tr>
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<td>3.3</td>
<td>72.3</td>
</tr>
<tr>
<td>Incest</td>
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<td>78.9</td>
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<td>80</td>
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<tr>
<td>Forcible abduction, illegal possession of firearm, illegal possession ammunition, rape, robbery with aggravation</td>
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<td>1.1</td>
<td>81.2</td>
</tr>
<tr>
<td>Malicious destruction of property &amp; indecent assault</td>
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<td>83.4</td>
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<tr>
<td>Indecent assault &amp; grievous sex assault</td>
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<td>1.1</td>
<td>84.5</td>
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<tr>
<td>Grievous sexual assault</td>
<td>3</td>
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<td>87.8</td>
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<td>Illegal possession of firearm &amp; rape</td>
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<tr>
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<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Rape &amp; unlawful wounding</td>
<td>1</td>
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<td>94.5</td>
</tr>
<tr>
<td>Abduction, indecent assault rape, robbery with aggravation, illegal possession of firearm</td>
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<td>3.3</td>
<td>97.8</td>
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<tr>
<td>Abduction &amp; sexual touching of a child</td>
<td>1</td>
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</tr>
<tr>
<td>Illegal possession of firearm, robbery with aggravation, rape &amp; grievous sex assault</td>
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<td><strong>Total</strong></td>
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Appendix E

Operational definitions for sexual offences in Jamaica

Rape
This sexual assault involves penile penetration of the vagina, without consent.

Indecent Assault.
This is a common law offence not defined by the SOA (2009), but refers to inappropriate sexual contact with another person, exclusive of rape. It also includes any indecent act involving a person under the age of sixteen.

Grievous Sexual Assault
This sexual assault is said to occur if the victim does not give consent or, is under the age of 16 years, and involves the following:

1. Penetration of the vagina or anus of the victim with:
   (a) A body part other than the penis of the offender; or
   (b) An object manipulated by the offender;
2. If the offender causes another person to penetrate the vagina or anus of the victim by:
   (a) Using a body part other than the penis of that person; or
   (b) An object manipulated by that other person;
3. If an offender places his penis into the mouth of the victim;
4. If the offender causes another person to place his penis into the mouth of the victim;
5. If the offender places his or her mouth onto the vagina, vulva, penis, or anus of the victim; or, causes another person to place his or her mouth onto the
vagina, vulva, penis or anus of the victim.

Carnal Abuse

This offence is committed if a person has or attempts to have sexual intercourse with another person who is under the age of sixteen years.

Sexual Touching of a Child (under age 16)

An adult commits an offence where he or she, for a sexual purpose:

(a) Touching directly or indirectly, with a part of his or her body or with an object, any part of the body of the child; or

(b) Inviting, counselling or inciting a child to touch, directly or indirectly, with a part of the body or with an object, the body of any person, including the body of the adult who so invites, counsels or incites; or the child.

Sexual Grooming

An adult is said to commit this offence if:

(1) Having met or communicated with a child on at least two earlier occasions, he or she-

(a) Intentionally meets the child; or

(b) Travels with the intention of meeting the child in any part of the world;

(2) The child is under the age of sixteen years; and

(3) At the time of the meeting or travel, he or she:

(a) Intends to do anything to or in respect of the child, during or after the meeting, in any part of the world, which, if the act were done in Jamaica, would amount to the commission by any person of a sexual offence
under the Sexual Offences Act; and

(b) Does not reasonably believe that the child is of or over the age of sixteen years.

(4) An adult commits this offence if he or she causes another person to carry out the offence specified above.

_Incest_

This offence is committed by a male or female person who willingly has sexual intercourse with another person, knowing that the other person is his grandparent, mother, father, sister, brother, daughter, son, aunt, niece or grandchild.

_Buggery_

This refers to anal intercourse committed either with mankind or any animal.
Appendix F

Predictive Recidivism Rates For Risk Scores At Five-Year Follow-Up, Hanson et al. (2016)

<table>
<thead>
<tr>
<th>Score</th>
<th>Recidivists/total</th>
<th>Observed recidivism rate (%)</th>
<th>Predicted Recidivism Rate</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>0/61</td>
<td>0.0</td>
<td>0.9</td>
<td>0.6-1.3</td>
</tr>
<tr>
<td>-2</td>
<td>1/90</td>
<td>1.1</td>
<td>1.3</td>
<td>1.0-1.8</td>
</tr>
<tr>
<td>-1</td>
<td>10/357</td>
<td>2.8</td>
<td>1.9</td>
<td>1.4-2.5</td>
</tr>
<tr>
<td>0</td>
<td>13/468</td>
<td>2.8</td>
<td>2.8</td>
<td>2.2-3.5</td>
</tr>
<tr>
<td>1</td>
<td>23/590</td>
<td>3.9</td>
<td>3.9</td>
<td>3.3-4.7</td>
</tr>
<tr>
<td>2</td>
<td>24/661</td>
<td>3.6</td>
<td>5.6</td>
<td>4.8-6.5</td>
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<tr>
<td>3</td>
<td>48/675</td>
<td>7.1</td>
<td>7.9</td>
<td>7.0-8.8</td>
</tr>
<tr>
<td>4</td>
<td>58/576</td>
<td>10.1</td>
<td>11.0</td>
<td>10.0-12.1</td>
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<td>5</td>
<td>52/365</td>
<td>14.2</td>
<td>15.2</td>
<td>13.8-16.6</td>
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<td>6</td>
<td>47/231</td>
<td>20.3</td>
<td>20.5</td>
<td>18.4-22.8</td>
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<td>7</td>
<td>36/133</td>
<td>27.1</td>
<td>27.2</td>
<td>24.0-30.7</td>
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<td>8</td>
<td>29/79</td>
<td>36.7</td>
<td>35.1</td>
<td>30.5-40.0</td>
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<tr>
<td>10</td>
<td>5/10</td>
<td>50.0</td>
<td>53.0</td>
<td>45.6-60.3</td>
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<tr>
<td>11</td>
<td>2/3</td>
<td>66.7</td>
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<tr>
<td>Total</td>
<td>358/4,325</td>
<td>8.3</td>
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## Appendix G

### Quality Appraisal Checklist- Qualitative Studies

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Yes (2)</th>
<th>Partially (1)</th>
<th>Can't Tell (0)</th>
<th>No (0)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was there a clear statement of the aims of the research?</td>
<td></td>
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<tr>
<td>2. Is a qualitative methodology appropriate?</td>
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<tr>
<td>3. Was the research design appropriate to address the aims of the research?</td>
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<tr>
<td>4. Was the recruitment strategy appropriate to the aims of the research?</td>
<td></td>
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<tr>
<td>5. Was the data collected in a way that addressed the research issue?</td>
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<tr>
<td>6. Has the relationship between researcher and participants been adequately considered?</td>
<td></td>
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<tr>
<td>7. Have ethical issues been taken into consideration?</td>
<td></td>
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<tr>
<td>8. Was the data analysis sufficiently rigorous?</td>
<td></td>
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<tr>
<td>9. Is there a clear statement of findings?</td>
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<tr>
<td>10. How valuable is the research?</td>
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<td>TOTAL</td>
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## Appendix H

### Quality Appraisal Checklist - Cohort Studies

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Yes (2)</th>
<th>Partially (1)</th>
<th>Can’t Tell (0)</th>
<th>No (0)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did the study address a clearly focused issue?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Was the cohort recruited in an acceptable way?</td>
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<tr>
<td>3. Was the exposure accurately measured to minimise bias?</td>
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<td></td>
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<tr>
<td>4. Was the outcome accurately measured to minimise bias?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. (a) Have the authors identified all important confounding factors?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(b) Have they taken account of the confounding variables in the design and analyses</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. (a) Was the follow up of subjects complete enough?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(b) Was the follow up of subjects long enough?</td>
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<tr>
<td>7. Are the measures used valid?</td>
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<tr>
<td>8. Are conclusions supported by the results?</td>
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<tr>
<td>9. Do the results of this study fit with other available evidence?</td>
<td></td>
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<tr>
<td>10. Has attrition bias been considered?</td>
<td></td>
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</table>

**TOTAL**
## Appendix I

### Data Extraction Form

<table>
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<tr>
<th>General Information</th>
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<tbody>
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<td>Title, Author &amp; Year</td>
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<td>Country of Study</td>
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<tr>
<td>Aim</td>
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<tr>
<td>Characteristics of Study</td>
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<td>Follow-up Period</td>
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<td>Results</td>
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<td>Outcome and Significance</td>
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<tr>
<td>Conclusion</td>
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</table>