Finding meaning in behavioural predictors of child sexual reoffending: The Offence Characteristic Meaning Framework (OCMF)

By

Oliver Kitto

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Abstract

In the field of static actuarial risk assessment for sexual offending, the role of theory has historically been undervalued. This is problematic, for only through gaining a better understanding of *why* risk factors are predictive can we enhance the criminal justice system's ability to reduce reoffending and protect our communities. To contextualise the importance of theory in risk assessment, we investigated *offence characteristics* (i.e., crime-scene behaviours); a theme of static risk factors that has shown promising statistical ability to predict risk of recidivism of child sex offenders, but suffers from a lack of theoretical elaboration. To understand why particular offence characteristics are statistically predictive of child sexual recidivism, we knitted together various pre-existing theories and findings in the literature; arguing that offence characteristics are static referents of psychological vulnerabilities and competencies. By abductively inferring what vulnerabilities and competencies underpin an offence characteristic, we can then use *offender exemplars* to hypothesise how these interact with each other, the potential goals and values of the offender, and contextual triggers to create and maintain risk of reoffending. Via this process, we argue we are able to better understand why the behaviour of interest is statistically predictive of child sexual reoffending. We then gathered the various threads of our theoretical arguments and wove them together into a robust, unifying model called the *Offence Characteristic Meaning Framework* (OCMF). The OCMF is a structured reasoning process the reader can use to aid in understanding why particular crime scene behaviours predictive of risk of child sexual reoffending. The OCMF is a novel, if somewhat indirect, contribution to the burgeoning literature on offence characteristics. An initial evaluation indicates that the OCMF's strengths outweigh its weaknesses, and is potentially the first theory to incorporate both competency-based and deficit-based models of risk

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Chapter 1: Introduction

1.1: Thesis overview

Over the past thirty years, the field of offender risk assessment[1] has become increasingly preoccupied with actuarial risk prediction. In the pursuit of this formidable task, a research tradition has developed where we use variables in actuarial risk assessment tools if they statistically predict recidivism, even when we do not have a theoretical understanding as to *why* they are able to do this. However, beginning in the early 2000s, researchers have challenged the view that having statistical significance is enough to justify the use of actuarial risk predictors; contending that by not seeking to understand causal relationships, we are essentially undercutting the progression of the field of offender risk assessment (Jones, 1996; Roberts, Doren, & Thornton, 2002). As a result, there has been a move towards understanding that causality is an essential part of actuarial risk assessment, and therefore should not be overlooked, brushed aside, or understudied.

Reviewing the traditional approach to detecting predictor variables for sexual offending, researchers have raised some concerns about the current state of offender risk assessment. For example, the conventional conceptualisation of risk factors has made it difficult to understand why empirically established predictor variables can predict reoffending (Thornton, 2015; Ward & Beech, 2014); there is still an enduring tendency to use outmoded, imprecise labels that create artificial boundaries and constrain better understanding (Mann, Hanson, & Thornton, 2010; Ward & Beech, 2006); and there are very few models or frameworks that can be used to guide researchers in explaining why particular variables can predict risk (Heffernan & Ward, 2015; Ward & Fortune, 2015).

[1] Within this thesis, we will be referring to the risk assessment of male offenders. This is because ongoing research is still determining if there are differences between female and male offenders in terms of recidivism risk factors (see Freeman & Sandler, 2008), and most research focuses on male offenders.

Firmly adhering to the aforementioned research tradition, there are a number of static (i.e., fixed, unchanging; see chapter two) risk predictors for sexual offending that have been derived through statistical means, and hence lack reference to a theoretical base. For the most part, these predictor variables are offender characteristics (e.g., age of the offender, marital status) or victim characteristics (e.g., male, unrelated to offender). Using statistical techniques, a group of researchers (e.g., Dahle, Biedermann, Lehmann, & Gallasch-Nemitz, 2014; Janka, Gallasch-Nemitz, Biedermann, & Dahle, 2012; Lehmann, Goodwill, Hanson, & Dahle, 2014) have recently found particular crime-scene behaviours, such as explicit planning and verbally coercing the victim, to predict sexual reoffending. Crime-scene behaviours belong to the category of *offence characteristics*. Offence characteristics is a term used throughout this thesis to broadly describe any action or behaviour, or aspect of action or behaviour, involved in the offence (see chapter three).

This finding by Dahle, Lehmann, and other colleagues is of particular interest for two reasons. Firstly, despite the centrality of behaviour to offending, there has surprisingly been little exploration of the utility of offence characteristics as statistical predictors of sexual recidivism. The large-scale meta-analyses that form the backbone of the subfield of sexual offence risk prediction (e.g., Gendreau, Little, & Goggin, 1996; Hanson & Bussiere, 1996) have neglected to test their predictive ability. Secondly, despite finding that some crime-scene behaviours can predict risk, there is very little discussion by Dahle and colleagues as to *why* this is the case. This is not surprising, given the lingering emphasis on the statistical robustness of actuarial risk predictors, and a tacit acceptance that underlying causal mechanisms are of lesser importance. As a result, offence characteristics may be a kind of variable that, in comparison to the offender and victim variables which populate well-known static risk assessment tools (see chapter two), have properties that make them uniquely useful as actuarial risk predictors of sexual recidivism.

With this in mind, the purpose of this theoretical thesis is twofold. Firstly, we set out to conceptualise some explanations for *why* offence characteristics can statistically predict *child* sexual recidivism. By concentrating on the offence characteristics of child sexual offenders, a subcategory of sexual offender which has been shown to have somewhat distinct patterns from adult rapists (Rebocho & Goncalves, 2012), we can emphasise depth over breadth when theorising reasons for predictive ability. Also, child sexual offending is a phenomenon that can cause serious, and in some cases lifelong, psychological and physical harm to victims; making it a justifiable focus of enquiry (see Ehring et al., 2014; Leclerc, Chiu, & Cale, 2014). Despite all the knowledge we have acquired over the past thirty years of research, we still lack a comprehensive understanding of child sexual offending; including why individuals reoffend. As a result, ongoing theoretical contributions are important to child sex offender risk prediction; only through the continued growth and refinement of the subfield are we able to enhance the criminal justice system's ability to prevent reoffending (Bengtson & Langstrom, 2007).

The second aim of this thesis is to make a new, and practically useful, contribution to the extant theoretical literature on child sexual offending risk prediction. Drawing on a number of existing theories and research from forensic, behavioural, and cognitive psychology, and environmental criminology, we offer a novel theoretical model; one that can be used to facilitate explanations for why a particular behaviour may be predictive (or not predictive) of child sexual reoffending. We have provisionally termed this model the Offence Characteristic Meaning Framework (OCMF). Although the OCMF may be applicable to a broad spectrum of criminal behaviour (e.g., adult rape, acquisitive offending), for the purposes of this thesis we will just focus on explaining it in relation to child sexual offending.

Through this thesis, we support the notion that theory is integral to the field of risk prediction, and should at all times guide the development and use of risk predictors. In this

way, we continue to advocate for a move away from the tradition that statistical significance by itself is adequate, and towards an approach where theory and statistics are held in more equal regard when developing risk factors and tools.

1.2: Chapter composition

In this section, we give a brief description of the composition of the six chapters to come. Chapter two functions as a general introduction and overview of offender risk assessment. We begin by elaborating on the negative consequences of child sexual offending; thereby strengthening our case for why this is a worthwhile subject to pursue. We then provide a brief history of offender risk assessment; looking at the benefits of an actuarial approach compared to unstructured clinical judgment. We then outline the conceptual distinction between static and dynamic risk factors (see Andrews & Bonta, 1994; Hanson & Bussiere, 1996) for sexual offending, and, in light of the perspective that dynamic factors are the future of offender risk assessment due to their variety of uses (see Brown, St Amand, & Zamble, 2009; Olver & Wong, 2010), make a case for the continued use of static factors in actuarial tools. This involves evaluating the predictive accuracy of individual static and dynamic risk factors and validated static and dynamic risk assessment tools for sexual offending, and describing other important strengths and weaknesses of each risk factor type.

In chapter three, we narrow down our focus onto offence characteristics. We begin by analysing the subtypes of static risk factors for sexual offending; describing the distinction between offender, victim, and offence characteristics. We then explore the evidence that suggests that offence characteristics can predict child sexual offending. We first review the theoretical literature on offender typologies (e.g., Groth, 1979; Hudson, Ward, & McCormack, 1999), and then examine the results of statistical investigations into the use of offence characteristics as actuarial risk predictors (e.g., Lehmann et al., 2014). Using this

evidence, we build a case that offence characteristics are an empirically useful subtype of static risk factor for sexual recidivism, and hence warrant further investigation at a theoretical level.

In chapter four, we make the case that offence characteristics can predict child sexual offending because they function as static referents of psychological vulnerabilities within the offender. To support this conceptualisation, we set the scene by reframing the static/dynamic distinction as proposed by authors such as Ward and Beech (2006) and Mann et al. (2010). We then demonstrate that offence characteristics can, somewhat uniquely, represent the underlying cognitive, emotional, interpersonal, and/or sexual psychological mechanisms that cause child sexual offending. To do this, we will examine the literature on dynamic risk factors for sexual offending, and review investigations which attempt to differentiate between their causal mechanisms and descriptive components (e.g., Ward & Beech, 2006; Ward & Beech, 2014).

We end chapter four by introducing the first part of the OCMF, which we have termed the *vulnerability strand*. The vulnerability strand is a structured reasoning process used to theorise the possible psychological vulnerabilities underpinning the offence characteristic of interest, and, at a deeper level of abstraction, the possible goals or values driving the maladaptive behaviour. Inferences about psychological vulnerabilities and underlying goals and values can then be used to guide hypotheses as to why the particular offence characteristic is able, or unable, to predict child sexual reoffending. The vulnerability strand specifically draws on processes from the Abductive Theory of Method (Ward, Vertue, & Haig, 1999) and Ward and Beech's (2014) exemplars strategy, and content from the Integrated Theory of Sexual Offending (Ward & Beech, 2006) and the Good Lives Model (Ward & Brown, 2004), to help make inferences about risk using offence characteristics.

In chapter five, we hypothesise that offence characteristics can also predict child sexual offending because they function as markers of expertise. We begin by elaborating on the concept of a competency based approach to risk, and then apply the concept of expertise to offending. Following this, we outline the elements of competency that can be found in offence characteristics. We then argue that offenders who highly value sexually offending against children, and are committed to successfully achieving the offending, show this through highly competent (i.e., expert) behaviour. We also make the case that the practice of expertise can fulfil ancillary goals; further contributing to its intrinsic value and maintain increased risk of reoffending.

We conclude chapter five by introducing the *competency strand* of the OCMF. The competency strand is a structured reasoning procedure used to infer how much value the offender places of their offending based on the degree of expertise shown by the offence characteristic. Inferences about the intrinsic value of sexual offending can then be used to guide hypotheses as to why the behaviour is able, or unable, to predict risk of child sexual recidivism. The competency strand specifically draws on Rational Choice Theory (Cornish & Clarke, 1986) and the Agency Model of Risk (Heffernan & Ward, 2015) to help make inferences about risk using elements of competency.

In chapter six, we bring the strands of the model outlined in chapters four and five together. We will explore how the vulnerability and competency strands work cohesively, rather than competitively, to facilitate deeper and broader possible explanations for why an offence characteristic is, or is not, predictive of child sexual offending. Following this, we will provide a fully worked through example of the OCMF in action.

In the final chapter, we critically evaluate the OCMF, and provide some closing comments on offender characteristics. We begin by evaluating the OCMF's strengths and weaknesses using Hooker's (1987) attributes of a good theory, then outline possible

applications of the model. Following this, we look at future directions, in terms of the future of both offence characteristics and the OCMF. Finally, we end by providing a final summary of the thesis; reflecting on the initial purpose of the piece of work and how this compares with the form of the final product.

Chapter 2: An overview of risk assessment for sexual offending

2.1: Why is predicting child sexual offending important?

As an especially vulnerable population, few crimes evoke as much shock, horror, and anger as sexual offending against a child. Immediately following a sexual offence, children have been shown to experience symptoms of posttraumatic stress disorder (PTSD), age-inappropriate sexualised behaviours, dissociative episodes and somatic problems (Lindauer et al., 2014). Following these serious, acute effects, child sexual abuse has the capacity to adversely affect children in multiple ways over their entire life-span. In the few years following the offending, Lindauer et al. (2014) note that half of children still fear retribution by the offender or worry about threats made to them, and half continue to experience PTSD symptoms. School-aged children have also been found to have poorer academic performance following sexual abuse, and higher rates of running away, drug and alcohol abuse, and risky sexual behaviour (Beitchman, Zucker, Hood, da Costa, & Akman, 1991).

Symptoms have also been found to persist into adulthood for many victims of childhood sexual abuse. Adult survivors often experience difficulty in establishing and maintaining relationships, lack trust in others, and have increased marital disruption (Jacob & Veach, 2005). Men, in particular, can experience difficulties with sexual orientation and gender identity due to victimisation as a child (Jacob & Veach, 2005).

Not only is child sexual offending an inherently harmful phenomenon, it is also a universal problem. Internationally, it has been estimated that nearly 20% of women and 8% of men in the community have experienced some form of sexual abuse prior to the age of eighteen (Pereda, Guilera, Forns, & Gomez-Benito, 2009). In New Zealand, this figure may be even higher; with investigations finding that 23.5% of women (Fanslow, Robinson, Crengle, & Perese, 2007) and 14% of men (Fleming et al., 2007) in the general population have been victims of child sexual abuse. Fanslow et al. (2007) also found that a quarter of

victimised children in New Zealand are revictimised multiple times. Economically, it is estimated that child sexual offending costs New Zealand $2.6 billion a year (Julich, 2004). This includes costs to the individual (e.g., the child, the offender, and their families), and costs paid on behalf of the survivor and the offender (e.g., health, welfare, and legal; Julich, 2004).

Given the serious, long-term sequelae of child sexual offending, both at the individual and societal level, reducing child sexual abuse has, understandably, become a major preoccupation of the criminal justice system.

2.2: How do we predict sexual reoffending?

In the fight to reduce child sexual abuse, researchers have endeavoured to develop methods to accurately assess the risk of known child sex offenders reoffending. By predicting which offenders are less likely and more likely to reoffend, agencies involved in the criminal justice system can allocate their resources to more effectively mitigate further threats of harm. Presently, sex offender risk assessments are used to help inform a range of decisions such as length of custodial sentence, conditions for release, supervision upon release, and suitability for rehabilitation programmes (Bengtson & Langstrom, 2007; Dahle et al., 2014).

Since the mid-1990s, sex offender risk assessment has increasingly turned away from the use of unstructured clinical judgement, a method where clinicians invoked educated intuition to judge an offender's risk of recidivism, and toward the use of actuarial techniques (Harris, 2006). Actuarial assessment refers to a mathematical approach of determining risk where projections are made about a future outcome based on factors that are empirically shown to affect the likelihood of that outcome occurring (Buchanan, 1999; McMillan, 2003). Originally used as a means to set insurance premiums, the actuarial approach has been appropriated by researchers in the field of psychological risk assessment who were interested

in utilising its most basic premise; that of an impartial, mathematical method to assess the risk of offenders reoffending (McMillan, 2003; Sjöstedt & Grann, 2002).

An actuarial approach to offender risk assessment derives an expected level of risk by combining individual variables that have been statistically shown to predict recidivism (Harris, 2006; McMillan, 2003). For the purposes of this investigation, we define risk assessment tools as actuarial when there are fixed items whose scores are mathematically combined to determine the level of risk (Buchanan, 1999). We include particular *structured professional judgement* (SPJ) tools, such as the Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997) within this definition. SPJ tools provide a guiding framework for assessment (e.g., important domains and criteria for severity), but, unlike purely actuarial tools, have not necessarily been constructed to provide an overall summation of risk. However, many researchers have utilised them in a purely actuarial manner, more or less to see if they indeed have statistical predictive power (see Stadtland et al., 2005).

The impartial, statistical nature of the actuarial approach was heralded by many researchers (e.g., Aegisdottir et al., 2006; Buchanan, 1999; Harris, 2006) as a vast improvement over unstructured clinical judgement. Using findings from 536 investigations, Hanson and Morton-Bourgon (2009) conducted a meta-analysis comparing the average predictive accuracy of unstructured clinical judgement and actuarial risk tools for different types of offending. They found the average predictive ability of actuarial risk tools (d = .67, *95% CI* = .63 – .72) to be superior to that of unstructured clinical judgement (d = .42, *95% CI* = .32 – .51) for sexual reoffending. In terms of predicting violent offending or any offending at all, actuarial risk tools similarly proved more effective than unstructured clinical judgement (Hanson & Morton-Bourgon, 2009).

Aegisdottir et al. (2006) also conducted a meta-analysis comparing predictive accuracy of actuarial and clinical judgement approaches. Examining 92 effect sizes from 67

studies, they concluded that using statistical methods increased accuracy by at least 13%. Harris (2006) theorises on why actuarial methods consistently outperform clinical judgement. She writes that unlike actuarial risk assessment tools, unstructured clinical judgement assessments fail to account for the fact that human judgement is an inherently error-prone process. When making decisions, like all people, clinicians are affected by faults such as cognitive heuristics and biased by past experiences which distort their ability to accurately estimate risk (Harris, 2006; McMillan, 2003). Actuarial risk assessment tools help to overcome human bias, and therefore provide a more accurate estimation of risk of reoffending.

2.3: Static and dynamic risk factors: An overview

In the formative years of offender actuarial risk assessment, Andrews and Bonta (1994) made a conceptual distinction between two entities of risk factors: static and dynamic. Static risk factors are fixed and unchanging markers of offending which typically pertain to historical information (e.g., number of previous convictions), or characteristics that cannot be changed through intervention (e.g., the age of the offender; Andrews & Bonta, 1994; Beech & Craig, 2012). Dynamic risk factors, on the other hand, are characteristics that can be demonstrably changed through intervention (Andrews & Bonta, 1994). These include psychological constructs such as impulsivity and hostility, and other offending-relevant features such as unstable lifestyle and maladaptive coping strategies (Harris & Hanson, 2010; McMillan, 2003).

Following its use by Andrews and Bonta (1994), the static/dynamic distinction was adopted by other early proponents of actuarial risk assessment; including those in the subfield of sexual offending. Among these were Hanson and Bussiere (1996), who conducted a meta-analysis summarising the findings from the litany of previous studies on predictors of sexual

recidivism. In this seminal piece of research, the authors conceptualised all of the variables of interest as static in nature; noting that identifying and testing dynamic risk factors should be a goal of further research. Gendreau, Little and Goggin (1996) similarly conducted a meta-analysis on risk factors; also dividing them into static and dynamic categories.

Hanson and Harris (1998) continued to expand on the static/dynamic distinction; differentiating dynamic factors into enduring *stable dynamic* factors which change slowly over months and years (e.g., impulsivity and poor cognitive coping strategies) and transient factors which can change rapidly over hours and days (*acute dynamic*; e.g., hostility and sexual preoccupation). These early studies, among others, formed the basis of the field that other researchers have continued to expand and build upon. By virtue of being adopted by several key researchers in the formative years of the field, the terms static and dynamic are now considered to be conventional terms to use when conceptualising risk factors for offending. For now, we too will adopt these terms for ease of reference.

2.4: Criticisms of static risk factors

In the early days of actuarial risk assessment for sexual offending, static risk factors were the primary target of research. Although proven to be a significant improvement over unstructured clinical judgement, researchers commonly point out two significant problems with static risk factors. Firstly, static risk factors are often criticised for being too blunt. Cauley (2007) notes that whilst they are able to derive an offender's baseline level of risk, static risk factors lack the ability to detect changes in short-term risk. This is problematic because it means that fluctuating factors such as anger, alcohol use, or victim access that can abruptly escalate an offender's risk of reoffending cannot be captured (Beech & Craig, 2012). Relatedly, static risk factors cannot account for changes in risk resulting from rehabilitation, making them less meaningful or informative for offenders who have engaged in treatment

programmes (Cauley, 2007). Finally, static risk factors are traditionally thought to be unable to indicate which factors should actually be targeted to reduce risk of reoffending (Beech, Fisher, & Thornton, 2003).

The second limitation researchers often point to is the overreliance on statistical methods to derive predictors of sexual recidivism. Like using the terms static and dynamic to describe risk factors, this limitation is also a legacy of the early days of the field. In the 1990s there was an upsurge in the use of computerised techniques for data analysis. Among these was backwards logistic regression, a statistical method where large pools of variables are filtered in search of those that can uniquely account for the variance of a sample (Hanson & Bussiere, 1996). Given its ability to quickly and easily analyse data, statistical methods, and logistic regression in particular, came to dominate offender prediction research. What this meant, however, is that many items and tools were constructed without reference to any sort of theoretical framework or model (Beech et al., 2003). This is demonstrated by Hanson and Morton-Bourgon (2009), who state that none of the items of the Static-99 (Hanson & Thornton, 2000), a well-validated static risk assessment tool for sexual offending, were intended to measure psychologically meaningful constructs; they simply accounted for the most variance in the sample the tool was developed on.

Researchers in the field have been highly critical of this atheoretical approach. Early on, Jones (1996) argued there is a significant discrepancy between the way predictor variables are identified and how they *should* be identified. He contends that theory, rather than data availability, should drive the preliminary identification of predictor variables for offending (Jones, 1996). This is because a reliance on computerised methods constrains both conceptual and operational development of risk factors to what is routinely collected by criminal justice agencies or researchers. This is, in itself, problematic as many data sets are unsystematic, incomplete, or highly subjective, which leads to the possibility of inconsistent

conclusions being drawn (Hanson & Bussiere, 1996; Jones, 1996). For example, Hanson and Bussiere (1996) note in their meta-analysis that a history of psychosis was a significant predictor of sexual recidivism. Yet, they report considerable variability in this finding across their investigated studies, and concede that the effect is almost wholly attributable to one early finding by Hackett (1971) that had a sample size of 37 individuals.

Jones' (1996) early sentiments continue to be echoed by other researchers, who further elaborate on the crucial role of theory in the field of risk prediction. For example, Roberts et al. (2002) argue that theory is what links static variables to risk of sexual reoffending in a *meaningful* way. Furthermore, Ward and Beech (2014) suggest that only through the theoretical investigation of risk factors can we truly understand what the underlying causes of sexual offending are. Explanatory theories can fall into one of three categories (Ward & Hudson, 1998a). Level 1 theories are multifactorial explanations that provide an elaborate account of the causes of a phenomenon, level 2 theories are in-depth analyses of individual (possible) causes of a phenomenon, and level 3 theories are rich descriptions of the phenomenon itself (Ward, 2014).

When postulating *why* variables can predict reoffending, theories of all levels contribute to a better understanding. However, as Ward (2014) notes, the focus should remain on multifactorial explanations given the complex etiology of sexual offending. A statistical approach, when used improperly, has the effect of impeding the development of these crucial explanatory theories, and hence has the capacity to undermine progress in the field (Roberts et al., 2002).

A lack of theory also impacts how static risk factors can be used in an applied context. Craig, Brown, Stringer, and Beech (2004) argue that because of the atheoretical nature of static risk factors, it can be unclear whether the variables used in static tools should be assigned different weightings for different subgroups of offenders. Certain risk factors are

theoretically more meaningful for predicting risk of various subtypes of offenders, yet weightings within tools do not necessarily acknowledge the fact that offenders are a highly heterogeneous population (Craig et al., 2004; Whitaker et al., 2008).This is problematic as many static tools are employed to measure the risk of a variety of sex offenders, including adult rapists, child molesters, contact offenders, non-contact offenders, youth offenders, and older offenders. As a result, the full extent of static risk factors predictive power may be artificially constrained. Together, these arguments indicate that we cannot take a purely nomothetic (i.e., statistical, group-norm based) approach to the development of static risk factors; we need to use idiographic (i.e., clinical, individually based) strategies to drive the initial derivation of variables (Sreenivasan, Kirkish, Garrick, Weinberger, & Phenix, 2000).

2.5: Theory and static variables: Inherently incompatible?

It is crucially important to understand that static risk factors are not intrinsically atheoretical. Many researchers now emphasise theory as an essential component of the development of new static items and tools, and revisions of tools are increasingly taking theory into consideration (Hanson & Morton-Bourgon, 2009). For example, Smid, Kamphuis, Wever, and Van Beek (2014) wrote that the Static-2002 (Helmus & Hanson, 2007), an updated version of the Static-99, was created with the purpose of utilising items theoretically meaningful to recidivism risk.

Other authors, such as Allen and Pflugradt (2014) and Brouillette-Alarie, Babchishin, Hanson, and Helmus (2016) have retroactively linked conventional static items and tools to theory. They contend that because statistically derived static risk factors are measures of observed behaviour, they can be used to infer latent psychological constructs that are responsible for risk of sexual reoffending (Allen & Pflugradt, 2014; Brouillette-Alarie et al., 2016). Brouillette-Alarie et al. (2016) used exploratory factor analysis to identify three latent

constructs in the Static-99 and Static-2002; persistence/paraphilia, youthful stranger aggression, and general criminality. They argue that by using a latent variable model to link static risk factors to underlying theoretical constructs, we can, in fact, use static items to inform the selection of treatment targets.

Roberts et al. (2002) used principle components analysis to identify three major dimensions of static tool items; antisocial/violence, sexual repetitiveness, and detachment. The authors explored the surprising find of the detachment construct, which reflects offender immaturity and social disintegration, and used their findings to postulate ways in which static tools can meaningfully predict recidivism. Allen and Pflugradt (2014) were interested in Roberts et al.'s (2002) construct of detachment, and conducted a follow-up investigation using exploratory factor analysis. They too found support for a three factor model that included the construct of detachment, and suggested further lines of theoretical inquiry and research. In particular, they were interested in whether sexual recidivism is the result of psychological traits (represented by dimensions), a behavioural outcome culminating from complex interactions with the environment, or both.

These studies demonstrate that static risk assessment is not naturally devoid of theory; rather it is an artefact of the way in which tools have traditionally been constructed (Walters, Knight, & Thornton, 2008). When scrutinised, static items and tools can in fact be a rich source of relevant information, and can meaningfully contribute to the deeper understanding of risk of recidivism in sex offenders.

2.6: Static versus dynamic risk factors: Is there a clear winner?

So far we have demonstrated evidence that static risk factors are not atheoretical by nature, and can indeed be linked to theory. But how do they stack up against dynamic risk factors? As noted before, dynamic risk factors measure constructs that are theoretically

relevant to sexual offending, and have been shown to be able to statistically predict sexual recidivism. Because dynamic variables are changeable, they can be used repeatedly to net up-to-date information on an offender's risk of reoffending, and hence can fulfil important purposes that static items by nature cannot (Yesberg & Polaschek, 2014)**.** Given the arguments made by researchers that dynamic factors address the shortfalls of static factors, is there any point continuing the development, and, relatedly, the theoretical elaboration of static risk factors?

Firstly, we highlight that the core purpose of offender risk assessment is to predict the likelihood of reoffending as accurately as possible. Therefore, it is important to assess whether dynamic risk factors outperform static risk factors in terms of their predictive ability. At the individual item level, Hanson and Bussiere (1996) demonstrate that the best static predictors of sexual reoffending include history of sexual offences (d = .39), phallometric assessment showing sexual preference for children (d = .32), and victim was a stranger (d = .30). Interestingly, these are about as good as the best dynamic predictors, which include emotional identification with children (d = .42), sexual preoccupation (d = .39), and general self-regulation problems (d = .37; Hanson & Morton-Bourgon, 2005). Due to the complex aetiology of sexual offending, Hanson and Morton-Bourgon (2005) point out there is no single variable, static or dynamic, that has the ability to reliably predict risk of sexual reoffending by itself. This indicates the crucial need for risk assessment tools; collections of risk predictors that together are able to meaningfully account for the variance in sexual recidivism.

There now exists multiple well-validated risk assessment tools for sexual offending. Some are comprised purely of static risk factors, such as the Static-99 and the Minnesota Sex Offender Screening Tool-3.1 (MnSOST-3.1; Minnesota Department of Corrections, 2012); others are purely dynamic, including the Violence Risk Assessment – Sex Offender edition

(VRS-SO; Olver, Wong, Nicholaichuk, & Gordon, 2007) and the STABLE and ACUTE 2007 (Hanson, Harris, Scott, & Helmus, 2007). Lastly, there are some tools that include both static and dynamic risk factors, such as the Vermont Assessment of Sex Offender Risk-2 (VASOR-2; McGrath, Hoke, & Lasher, 2013) and the Sex Offender Risk Appraisal Guide (SORAG; Quisney, Harris, Rice, & Cormier, 2006). Development and validation studies have shown that all validated actuarial tools for risk of sexual reoffending, static and dynamic alike, tend to have *AUC*s that fall within the .65 - .75 range; there is no one tool that significantly outperforms all the others (e.g., Hanson, 2009; Langton et al., 2007; Stadtland et al., 2005).

Taken together, these arguments indicate that static risk factor are indeed useful; they are not inherently devoid of explanatory meaning, they are not made redundant by dynamic tool, and time and time again it has been shown their predictive accuracy is just as good as dynamic risk factors. As a result, they warrant further investigation and elaboration; both at the applied and theoretical level. The next chapter will focus on exploring static risk factors in more depth, and introduce the concept of offence characteristics as static predictors of sexual reoffending.

Chapter 3: Offence Characteristics

3.1: The current composition of static risk factors

Static risk factors for the assessment of sex offenders have existed in mainstream use for over 25 years now. This begs the question, what is there left to be explored? A brief review of nine empirically established static risk tools for sexual offending (Static-99, Rapid Risk Assessment of Sex Offence Recidivism [RRASOR; Hanson, 1997], Automated Sexual Recidivism Scale [ASRS; Skelton, Riley, Wales & Vess, 2006], Structured Anchored Clinical Judgement [SACJ; Thornton, 1997], Risk Matrix 2000 [RM2000; Thornton, 2010], SVR-20, MnSOST 3.1, SORAG, VASOR-2) reveals two primary themes in terms of item content: *offender characteristics* and *victim characteristics*. Of the 95 items identified from these nine tools, 82% (n = 78) referenced characteristics of the offender. Beech et al. (2003) further differentiate these offender characteristics into four subcategories: dispositional factors, historical factors, contextual antecedents to offending, and clinical factors.

Dispositional factors refer to characteristics of the offender himself. These include physical factors such as age or marital status, and psychological factors such as sexually deviant arousal or psychopathy (Beech et al., 2003). Historical factors refer to past events; common factors include number of past convictions, adverse developmental events, and instances of poor treatment compliance. These are the most populous type of factor within the theme of offender characteristics. Contextual antecedents to offending evaluate features which preceded the offence, such as anger, and clinical factors encompass offence relevant clinical phenomena such as substance use problems, major mental illness, and personality disorder (Beech et al., 2003). See table 1 for the distribution of offender characteristics by subcategory.

Table 1
Offender characteristic items by subcategory

Item subcategory	*n* (%)
Dispositional factors	21 (27%)
Historical factors	46 (59%)
Contextual antecedents	3 (4%)
Clinical factors	8 (10%)

In addition to offender characteristics, most of the actuarial tools reviewed use items which reference characteristics of the victim. This theme was not as prevalent as offender characteristics, comprising only 14% (n = 13) of the 94 items. However, these are commonly used throughout all the tools and, furthermore, consistently reference the same three victim characteristics; whether the victim was male, unrelated to the offender, or unknown to the offender.

3.2: Offence characteristics: A third theme of static risk factors?

The above review demonstrates that static risk tools use items that tap into an assortment of offender characteristics, and a select few items that tap into victim characteristics, to predict the risk of sexual reoffending. Thus, while we know that it is risk-relevant for an offender to be young, have victimised a male, and hold past convictions, does it matter, for example, if he manipulated his victim or planned or concealed his offending? Research has shown support for the use of *offence characteristics*, a third theme of static risk factors, for predicting risk of sexual reoffending. To reiterate our definition from chapter one, an offence characteristic is any behaviour or action, or feature of a behaviour or action, which is related to the offending prior, during, or following the offence itself. Below we will explore in detail three sources of evidence which suggest that offence characteristics are useful predictors of sexual reoffending. These are evidence arising out of theoretical and empirical studies on offender typologies, the (minimal) evidence found in currently popular static risk

tools, and, finally, evidence from recently developed static risk tools. Using these, we will make a case that offence characteristics are a theme of static risk factors that can meaningfully contribute to the risk prediction of sexual recidivism (and, in particular, child sexual recidivism).

3.3: Offender typologies, offence characteristics, and risk

Sex offenders were originally thought of as irrational individuals who, when an opportunity presented itself, simply could not inhibit their impulse to offend (Rebocho & Goncalves, 2012). As the fields of offender modus operandi and cognitive decision-making have grown, a plethora of evidence now suggests this view is far from the truth. Sex offenders are not a homogenous population; they are driven by varying motives, and have differing levels of complexity to their decision-making and actions when pursuing their goals (Rebocho & Goncalves, 2012). With this in mind, researchers over the years have posited a number of sex offender typologies; models used to class offenders by shared characteristics. These characteristics can include the victims they target, their demographic profiles, their underlying motives, and the behavioural strategies they use in their offending. In the following section, we will outline offender typologies by Groth (1979), Wortley and Smallbone (2006), Ward and Hudson (1998b), and Lehmann et al. (2014). These typologies have been specifically chosen because of the strong emphasis they put on the behavioural strategies used by child sex offenders, and also because they make suggestions about how these strategies can inform risk of reoffending.

3.4: Fixated versus regressed child sex offenders

The notion that child sex offenders have qualitatively different offending styles, and that these could have varying implications for risk of reoffending, was first popularised by Groth's (1979) fixated versus regressed typology. Fixated child sex offenders have enduring

paedophilic interests which begin during adolescence, and maintain a life-long compulsion to offend against children (Lehmann et al., 2014). They have few adaptive relationships with same-age peers; instead using children to meet their emotional and sexual needs (Bickley & Beech, 2002). Fixated offending is generally skilled and subtle, and characteristics include grooming the victim with attention or affection, actively seeking victims, and manipulating situations to isolate the victim. Because of their desire for a pseudo-relationship, fixated offenders try to "indoctrinate their victims into sexuality" (p. 1010) using immature forms of sexual behaviour such as touching, fondling and caressing the child (Lehmann et al., 2014). Salter (1988) notes that because of their enduring sexual interest in children, fixated offenders tend to chronically reoffend as they are less willing to desist.

Groth (1979) argues that regressed child sex offenders' behaviour arises as the result of intense external stressors, as opposed to a long-term compulsion to offend against children. Alcohol and drugs are often combined with sexual arousal to overcome inhibitions, which results in offences which are not explicitly planned nor carried out with precision. Regressed offenders view children as pseudo-adults during the offence, and as a result their offending is thematically more analogous to adult sexual behaviour (e.g., a focus on masturbation, oral sex and ejaculation; Lehmann et al., 2014). Because their offending is contextually based, some regressed offenders may only offend once as an isolated event, whilst others will offend episodically in response to stressors (Salter, 1988). Regressed offenders are thought to be more responsive to treatment because they can be taught to manage their negative emotionality in more adaptive and prosocial ways; thereby reducing their likelihood of reoffending (Lehmann et al., 2014; Salter, 1988).

Groth's (1979) fixated/regressed typology theorises that the nature of an offender's motivation manifests in distinct patterns of offending behaviour. By this logic, we can therefore use the characteristics of an offence (e.g., covert or overt sexual behaviour) to

hypothesise about the underlying nature (e.g., fixated or regressed) and course of offending (e.g., chronic or acute) of a sex offender. Using this information, we can then formulate and make predictions about their risk (e.g., increased or decreased) of sexual reoffending.

3.5: Predatory, opportunistic, and situational child sex offenders

Following Groth (1979), other researchers have elaborated on how offending behaviour may be used to identify the nature, course, and risk of sex offenders. Taking an environmental criminology perspective, Wortley and Smallbone (2006) theorised that child sex offenders can be typed as predatory, opportunistic, or situational. They argue there exists a "subtle and intimate relationship" (p. 8) between child sex offenders and their immediate environment, where the more *criminogenic* a space or situation is (e.g., victim unsupervised by caregiver, low level of natural surveillance), the more likely an offence is to happen (Wortley & Smallbone, 2006). However, Wortley and Smallbone (2006) note that offenders do not necessarily wait for criminogenic spaces to naturally occur, and delineate offenders by the degree to which they actively engineer situations to offend. The authors used an earlier dataset (Smallbone & Wortley, 2000), where 182 convicted child sex offenders were asked detailed questions about their behaviour before, during and after their offence, to substantiate their typology.

Predatory child sex offenders actively manipulate the environment to create opportunities to offend; even in the most challenging conditions. Wortley and Smallbone (2006) contend that because their motivations derive from the intrinsically rewarding nature of offending against children, they are willing to expend considerable time and effort to engineer criminogenic situations. For example, actively making friends with the child's parents and spending time with the child whilst the parent is present (i.e., trust building),

before gradually exposing the child to increasing levels of sexual touch (i.e., desensitisation; Smallbone & Wortley, 2000)

Wortley and Smallbone (2006) found that 23% of offenders in their dataset fit the profile of a predatory offender. The majority of these offenders (18%) had multiple previous sexual and nonsexual convictions, but a small percentage (5%) could be classified as *specialist* predatory offenders (i.e., only had previous convictions for child sex offending). Analysing trends in their offending behaviour, the authors found that specialist predatory offenders had on average longer and more frequent sexual contact with their victims when compared to *versatile* predatory offenders, which may reflect an interest in forming an emotional relationship with children (Wortley & Smallbone, 2006). Specialist predatory offenders were also found to carry out premeditated steps to acquire victims, and have developed a repertoire of skills and techniques to allow them to offend and remain undetected. For example, giving gifts and lavishing attention to gain compliance, rather than verbally threatening or physically coercing potential victims (Smallbone & Wortley, 2000). Analysing demographic information from the sample, specialist predatory offenders generally had their first sexual contact with a child at an earlier age, and offended against extrafamilial, male victims; all known static risk factors for child sexual offending (Wortley & Smallbone, 2006).

Opportunistic child sex offenders are theorised to offend due to similar motivations to predatory sex offenders. However, they abide by greater personal and social constraints and, as a result, do not actively engineer opportunities to offend. Rather when opportunistic offenders encounter possible criminogenic situations, they exploit them in their favour to offend (Wortley & Smallbone, 2006). Because they do not proactively seek to create criminogenic situations, their offending is thought to be relatively less frequent and the seriousness of the crimes to be lesser. Wortley and Smallbone (2006) found that 41% of their

earlier sample fit this profile. These offenders were non-recidivist child sex offenders (but had previous convictions for non-sexual offences), and had generally offended against intrafamilial, female victims. Analysing their patterns of offending, the authors noted that opportunistic offenders tended to have isolated, fleeting encounters with their victims. The nature of this interaction, combined with the infrequency of their offending, indicates opportunistic offenders experience general failures of self–inhibition when they do offend (Wortley & Smallbone, 2006). The authors also suggest that the lack of persistence in child sexual offending by opportunists demonstrates they are sexually ambivalent towards children. That is, the offender does not set out with an explicit intention to sexually offend against a child, but will do so if the situation presents itself (Wortley & Smallbone, 2006).

Where the opportunist exploits tempting situations, the situational child sex offender is thought to react to already criminogenic spaces. Wortley and Smallbone (2006) theorise that situational offenders are typically already in a position of power over a particular child, and hence have ongoing access to one victim. They do not have an enduring interest in children, but will offend in response to acute stressors as a means of relief. Analysing their sample, the authors found that 36% fit into this category. These offenders tended to be older, and have intrafamilial female victims whom they repeatedly abused at a low level (i.e., touching, fondling; Wortley & Smallbone, 2006).

Wortley and Smallbone's (2006) typology bears similarities to that of Groth's (1979). Fixated and predatory offenders are descriptively very similar, whilst the opportunist and situational offender seem to represent different aspects of the regressed offender. Like Groth (1979), Wortley and Smallbone (2006) theorise the existence of a distinct relationship between the type of goal an offender has, and the nature of the behaviour they engage in. Through the application of their typology to their earlier dataset, Wortley and Smallbone

(2006) are able to, albeit indirectly, evidence that predatory child offenders are more at risk of reoffending than opportunists or situational child sex offenders.

3.6: Self-Regulation Model and pathways to offending

Derived from Self-Regulation Theory, which posits that humans possess a fallible internal system which regulates their behaviours, Ward and Hudson (1998b) conceptualised the *Self-Regulation Model* of sexual offending. The Self-Regulation Model posits that offence pathways are fundamentally shaped by whether an offender's goal is approach (i.e., actively seeks to offend against a child) or avoidant (i.e., uses offending to reduce negative emotional states). The strategies selected and used by sex offenders before, during, and after their offending is a product of their goal and their individual regulative capacity. As a result, offence behaviour can reflect an underregulated, misregulated, or regulated (but deviant) internal system (Ward & Hudson, 1998b).

By cross-referencing the type of goal an offender has against the three possible self-regulative capacities, Ward and Hudson (1998b) posit a sex offender typology comprised of four possible pathways to offending; avoidant-passive, avoidant-active, approach-automatic, and approach-explicit. Unlike other offender typologies, the authors theorise that there are sex offenders who do not actually want to offend.

Avoidant-passive offenders view sexual offending as abhorrent, but, due to an underregulated self-regulatory system, become disinhibited in response to powerful negative affective states (Ward & Hudson, 1998b). These offenders then use implicit strategies that are ineffective at keeping them from offending, such as ignoring deviant thoughts or engaging in covert planning. Covert planning is described as small decisions that set up high risk situations, despite seeming innocent or unintentional (Ward & Hudson, 1998b). For example, a sex offender suffering from social isolation may decide to go for a walk in the local park in

order to ease the loneliness he is experiencing. Though seemingly irrelevant, such a behaviour implicitly puts him into contact with children, and serves only to reinforce his loneliness and increase his risk of reoffending to relieve that negative state.

Avoidant-active offenders also desire to avoid offending; however, a misregulated self-regulation style leads them to use explicit strategies that unintentionally increase risk of offending. These strategies, whilst possibly good intentioned, can lower inhibitions and lead to offending (Ward & Hudson, 1998b). For example, an individual who is sexually attracted to children may try and use alcohol to actively suppress his negative emotionality, or use internet child pornography to satisfy the deviant arousal he is experiencing. However, using alcohol unintentionally lowers the individual's inhibitions, whilst consuming child pornography reinforces his deviant attraction to children. In both cases, such actions unintentionally increase the individual's risk of offending or reoffending. Both types of avoidant offenders are viewed as using sex as a coping strategy, and hence are similar to the regressed and situational offenders posed by Groth (1979) and Wortley and Smallbone (2006), respectively.

Approach-automatic offenders desire to offend, and have an underregulated self-regulation style. As a result, they are sensitive to contextual or situational cues, which automatically activate antisocial cognitive schemas. These offenders are theorised to engage in rudimentary planning once they have made the decision that they will offend, and most closely resemble the opportunistic offender (Ward & Hudson, 1998b). For example, an individual who has been watching pornography might leave the house in an aroused mood. He subsequently sees an unsupervised child playing in the front garden of a nearby house. This situational cue, combined with his inability to inhibit his sexual arousal, activates negative automatic schemas regarding sexual entitlement and anticipation of positive feelings. Consequently, the individual's risk of offending or reoffending increases, and, on

the balance of probabilities, he decides to jump the fence and approach the child with the intent to engage him or her in sexual contact.

Akin to the concept of the fixated or predatory offender, the *approach-explicit* offender desires to offend and takes conscious, planned steps to achieve this goal. Thus, they have an intact self-regulatory system that they are using to purposefully engage in antisocial acts. Rather than using sexual offending to escape from negative mood states, they use it to maintain or enhance positive moods (Ward & Hudson, 1998b). This is theorised to occur because the offender's personal goals (e.g., intimacy, power, control, success) have become linked to maladaptive sexual behaviour, potentially through the individual witnessing or experiencing sexual abuse in their formative years (Ward & Hudson, 1998b). For example, an individual who consciously sees children as a means to experience intimacy and feelings of power (positive mental states) may reflect on past experiences or fantasise over possible victims. As a result, the individual will set out to make his memories or fantasies a reality; actively planning how to approach and offend against the victim and then maintain his or her silence following the abuse. The flood of pleasure that occurs in anticipation of the outcome, as well as the planning and mental rehearsal of the event, increases the individual's risk of offending or reoffending (Ward & Hudson, 1998b). Further, their desire to remain undetected also indicates a commitment to remain in the community to be able to satisfy their needs again through offending.

Hudson et al. (1999) applied the Self-Regulation Model to 86 child sex offenders; further elaborating on the behaviour typical of the differing pathways to offending. They found that 32.5 % of approach goal offenders fit into the approach-explicit pathway (Hudson et al., 1999). An in-depth examination revealed that these offenders engaged in calculated distal planning, deliberately initiated contact with a child for sexual purposes, and demonstrated mutuality during the offence by treating the sexual contact as being consenting

and enjoyable. They began the offence pathway in a positive affective state, and concluded the pathway by resolving to reoffend because they enjoyed it and could not see its harm (Hudson et al., 1999).

The largest proportion of avoidance goal offenders (24.4%) fit into the avoidant-passive pathway. These offenders engaged in implicit distal planning by opportunistically using situations to their advantage, and demonstrated a self-focus during the offence by concentrating on their own sexual gratification (Hudson et al., 1999). Offenders on this pathway began in a negative state due to factors such as loneliness or stress, and voiced an intention to avoid subsequent offending because of guilt, shame, or self-disgust (Hudson et al., 1999). A slightly lesser proportion of avoidance goal offenders (16.3%) fit into the avoidant-active pathway. This was thought to be prompted by the offenders thinking that offending would help to lift a negative mood state (Hudson et al., 1999).

These investigations further support the existence of multiple profiles of offence characteristics (e.g., explicit or implicit planning, self-focus or mutual focus), and that they can be used to make inferences about the nature (e.g., approach or avoidance) of their offending. However, can we use these pathways to offending to make inferences about risk? Subsequent correlational studies have linked the pathways of offending in the Self-Regulation Model to risk of reoffending. Bickley and Beech (2002) analysed the demographic characteristics of the offenders used in Hudson et al.'s (1999) sample, finding statistically significant differences in the offence demographics of approach and avoidant offenders. They found that approach child sex offenders were more likely to have offended against boys, have extrafamilial victims, not be in a relationship at the time of the offence, and have previous convictions for sexual offending; all static risk factors for sexual reoffending. Avoidant child sex offenders, on the other hand, were found to have primarily offended against girls, have intrafamilial victims, be in a committed relationship at the time

of offending, and not have previous convictions for sexual offending (Bickley & Beech, 2002).

In a similar vein, Kingston, Yates, and Firestone (2012) compared 275 sex offenders on the different pathways on offence related variables and static and dynamic risk assessment measures. They found that approach explicit-offenders had significantly more victims (M = 3.36, SD = 2.75) than avoidant-passive (M = 1.54, SD = .93), avoidant-active (M = 1.69, SD = .82), and approach-automatic offenders (M = 2.10, SD = 2.03), but there was no statistically significant differences between the latter three pathways. Approach-explicit offenders also scored significantly higher than avoidant-passive and avoidant-active offenders, but not approach-automatic offenders, on the Static-99 and Static-2002 (Kingston et al., 2012). Taken together, these studies provide some empirical support for the notion that different pathways have different implications for risk of reoffending.

3.7: Lehman et al.'s (2014) behavioural themes

Following the initial conceptualisation of typologies, empirical research has tended to link sex offender typologies to risk of reoffending indirectly. Lehmann et al. (2014), on the other hand, explicitly investigated whether four behavioural themes of child sexual offending, called (1) *fixation*, (2) *sexualised regression*, (3) *criminality*, and (4) *sexualised aggression*, could predict reoffending specifically in child sex offenders. *Fixation* and *sexualised regression* behavioural themes are essentially an updated restatement of Groth's (1979) typology. To briefly recap, the *fixated* theme of offending involves planned behaviour that is specifically orientated towards engineering sexual contact with a child. During the offence itself, fixated behaviour reflects the desire to build a relationship with the victim, for example showing affection, fondling without explicit sexual connotations, and kissing the victim. On the other hand, the *sexualised regression* theme of offending reflects reckless, emotive

behaviour that is poorly planned or impulsive. The offender tends to treat the victim like a pseudo adult, and focuses on attaining their own physical gratification.

The *sexualised aggression* theme of offending is thought to be motivated by anger, and thus is characterised by aggressive sexual acts which use violence beyond what is needed to ensure victim compliance. This includes injuring, humiliating or penetrating the victim, or engaging in ritualistic behaviour such as forcing the victim to pose (Lehmann et al., 2014).

The *criminality* theme reflects offending that is carried out when an offender sees an opportunity to satisfy their sexual urges without too great a cost to themselves. These offenders use threats, intimidation, and brandish weapons to ensure control, and their offending is usually conducted alongside or within the context of other types of criminal behaviour (Lehmann et al., 2014). As a result, it is thought that offenders solely in this theme are sexually ambivalent, rather than paedophilic.

In a sample of 424 sex offenders, the authors calculated scores on the four themes of behaviours. These were then tested to determine their relationship with differing recidivism types. They found fixated behaviours positively correlated with child molestation recidivism ($r = .17$, $p < .01$), criminality behaviours positively correlated with robbery ($r = .13$, $p < .01$), burglary ($r = .08$, $p < .05$) and rape ($r = .08$, $p < .05$), and sexually aggressive behaviours positively correlated with non-sexual violent recidivism ($r = .08$, $p < .05$; Lehmann et al., 2014). Sexually regressed behaviours were not significantly correlated with any recidivism outcome.

Lehmann et al.'s (2014) study demonstrates that themes of offence characteristics can have an explicit, statistical relationship with recidivism. Furthermore, these relationships support the recidivism outcomes previously hypothesised in the sex offender typology literature. Fixated behaviours are correlated with child sexual recidivism because they indicate the offender is motivated by a sexual interest in children. Criminality behaviours,

which are correlated with robbery, burglary, and rape, but not child sexual recidivism, indicate the offender has a propensity to use antisocial methods to obtain the things he desires. They do not indicate a specific underlying sexual interest in children; rather, the sexual offence may have been spurred by a criminogenic opportunity taken on a whim. Sexually regressed behaviours, which are not correlated with any recidivism, indicate no enduring underlying motive. Rather, they are the result of a momentary breakdown in self-regulation resulting from external stressors. Hence, the lack of enduring sexual interest in children does not compel any recidivistic behaviour.

3.8: Offence characteristics in popular static tools

Empirical investigations of offender typologies demonstrate that particular patterns of behaviour are differentially correlated with recidivism. However, as emphasised by Janka et al. (2012), there have been few investigations explicitly looking at offence characteristics as statistical predictors of sexual reoffending using non-correlational statistical means (e.g., Hanson & Harris, 1998; Hanson & Morton-Bourgon, 2005). As a result, Dahle et al. (2014) describe the current use of offence characteristics in actuarial risk assessment as underemphasised, insufficient and, in the few cases where items are included, disorganised. Of the nine actuarial tools revised, a mere 4% (n = 4) of items referenced characteristics of the offence. The SVR-20 included two of these items; *physical harm to victim* and *use of weapons/threats*. The former item refers to whether the victim suffered physical harm, and the latter whether a weapon was used or verbal threats were made during the offence. Using recidivism data from 493 offenders, Rettenberger, Boer, and Eher (2011) evaluated the predictive accuracy of the individual items of the SVR-20. They found modest predictive accuracy for both items for sexual reoffences involving physical contact with a victim (*AUC* = .53, *95% CI* = .40 - .66; *AUC* = .55, *95% CI* = .42 - .68).

The MnSOST-3.1 and VASOR-2 included one item each; *public place* and *address change* respectively. The former item measures whether any sexual offence was committed in an area maintained for or used by the community, whilst the latter item measures how many times the offender moved addresses in the year prior to their conviction (McGrath et al., 2013; Minnesota Department of Corrections, 2012). A study investigating the predictive accuracy of the MnSOST-3.1 by the Minnesota Department of Corrections (2012) found the endorsement of the item *public place* increased the odds of reoffending by 1.9 (p = .009), while McGrath, Lasher, Cumming, Langton, and Hoke (2014) found the item *address change* in the VASOR-2 to be significantly predictive of sexual recidivism; if only just (*AUC* = .56, *95% CI* = .51 - .61).

The VASOR-2 also contains a severity factors checklist; a separate component to the reoffence risk scale that is designed to describe characteristics of the sexual offence. The checklist identifies four factors; the severity of the sexual act, the severity of force used, the severity of physical harm to the victim, and level of vulnerability of the victim (i.e., under 11, over 65, or intellectual disability). Note that these items are not currently used in the actuarial calculation of risk of reoffending; they are meant to assist with correctional placement and management decisions. These examples demonstrate that there has been minimal integration of offence characteristics into actuarial risk assessment tools for sexual recidivism. However, more recently, concerted attempts been made to explore the utility of tools comprised of offence characteristics as predictors of sexual recidivism. The next section will explore these tools.

3.9: Offence characteristics in recently developed static tools

Using data from 612 child and adult sexual offenders, Dahle, Biedermann, Gallasch-Nemitz, and Janka (2010) examined whether crime-scene behaviours could predict sexual

reoffending within a 5 year follow-up period. Through backward step-wise logistic regression, the authors parsed 20 crime-scene variables significantly related to sexual reoffending down to 12 which explained 22% of the total variance of in their sample. The authors named this tool the Crime-scene Behaviour Risk (CBR) measure (see table 2). The CBR was found to have considerable predictive validity (*AUC* = 0.76, *r* = 0.34).

Table 2
The Crime-scene Behaviour Risk (CBR) measure (Dahle et al., 2010)

Predictor Variable	Predictor Description	*r*	*B*	*p*
Approach in external location	Approach the victim before the event (within 24 hours prior to the crime) outside of a building	.13	.626	.026
Trust-building approach	Offender became friendly with the victim prior to committing the crime, or endeared himself to the victim by offering amenities (money, sweets, drinks, etc.)	.17	.689	.009
Coaxing style of communication	Offender persuades (rather than forces) victim to join him	.14	1.458	.000
Multiple victims	Offender was convicted for crimes pertaining to at least two victims	.12	.466	.097
Co-offense (negative correlation)	More than one offender was involved in the crime	-.09	-1.690	.008
Drugged victim	The victim unwittingly or involuntarily was drugged (including alcohol)	.10	1.594	.036
Extended crime event	Single offence lasting for more than one hour	.12	1.153	.002
Crime committed in usual environment (negative correlation)	Offender is familiar with crimes scene (e.g., close to place of work or home)	-.07	-1.031	.002
Visual-sexual stimulation through the victim's actions	Victim was forced to masturbate and/or was filmed/photographed during the offence	.10	.773	.090
Anal penetration	Full anal penetration with penis	.09	.841	.043
Unusual criminal actions with a humiliating character	Vaginal/anal penetration with the fist, objects, or other degrading actions (e.g., fetishistic or sadistic actions, or forced sexual acts between victims)	.07	.937	.080
Planned crime	Clear indications of planning	.17	.668	.014

Furthermore, the authors found the CBR to have significant incremental validity above and beyond the Static-99 and the SVR-20.This supports the notion that offender characteristics not only can be utilised similarly to offender and victim characteristics, but actually provide a unique means of enhancing risk prediction (Dahle et al., 2010). In a similar vein, Lehmann et al. (2014) also tested whether the scales created for their fixation and sexualised aggression themes could contribute to the prediction of sexual recidivism over and above the Static-99. They similarly found incremental validity, with the probability of reoffending increasing by 27% for each one point increase on the fixation theme scale, and 34% per point on the sexualised aggression theme scale. This provides further support that offender characteristics may be uniquely useful for risk prediction.

The utility of offence characteristics has been explored in related studies. Janka et al. (2012) examined whether the predictive accuracy of the CBR could be improved by tailoring the items of the tool based on the age of offenders. Bivariate analyses found several offence characteristics, over and above what is already included in the CBR, uniquely predicted recidivism for different age groups. For example, offending against a victim living a high-risk lifestyle, such as a prostitute or runaway, significantly predicted recidivism for offenders aged 14 – 20 years, whilst engaging in sexualised talk with the victim significantly predicted recidivism of offenders aged 50 years and over. Overall, Janka et al. (2012) found the predictive validity of the CBR with age specific offending characteristics to be excellent; ranging from *AUC* = .74 (*r* = .28) for 35 – 49 year olds to *AUC* = .90 (*r* = .49) for 14 – 20 year olds. However, this has yet to be independently validated.

Dahle et al. (2014) looked to create a brief, economical CBR measure that could be easily used by agencies in the criminal justice system. Using multivariate Cox regression, the authors identified 10 crime-scene variables, which were largely different to those in the original 12 item CBR, that uniquely accounted for the variance in sexual recidivism in their

sample (n = 955). For brevity, overly redundant variables were then eliminated; leaving a seven item scale comprised of six offence characteristics and one victim characteristic (see table 3). The Hazard Ratio of the brief CBR measure was 1.89 (*95% CI*: 1.67 – 2.14; p <.001), indicating that the risk of reoffending increased by 89% per point increase (out of 7 possible points; Dahle et al., 2014). The authors note that, along with the Static-99R, the brief CBR measure is now being used by the State Office of Criminal Investigation in Berlin as a means to prioritise sex offenders for police supervision.

Table 3
The brief Crime-scene Behaviour Risk (CBR) measure (Dahle et al., 2014)

Predictor Variable	Predictor Description	HR (95% CI)	p value
Offended alone (offender young)	Single perpetrator and offender is under 21	4.58 (.64 – 32.88)	.046
Explicit planning	Offender shows planning (e.g., bringing tools, situates himself in opportunistic situations, brings gifts to lure victim	2.00 (1.32 – 3.02)	.001
Actively seeking stranger victim	Actively hunts victim in accessible areas (e.g., parks, arcades, red light districts)	1.67 (1.12 – 2.51)	.016
Approach-explicit	Offender ambushes, befriends, lures, or tricks victim to gain opportunity to offend (rather than relying on passive authority or power over victim)	1.74 (1.19 – 2.54)	.003
Male victim	Index offence was against a male	2.31 (1.66 – 3.21)	<.001
Hands off; Victim active	Offender uses the victim for visual stimulation (e.g., victim forced to masturbate/pose, the offender films the offence)	1.73 (1.11 – 2.32)	.023
Sexualised language	Offender uses sexualised language (e.g., dirty talk, sexual education of children, humiliating comments)	1.59 (1.09 – 2.32)	.021

3.10: Why are offence characteristics useful predictors of child sexual reoffending?

In this chapter, we have outlined the possible use of offence characteristics, a third theme of static risk factors, as predictors of child sexual reoffending. We have drawn on level 1 theories, rich descriptions of the offence process, from several authors in the form of sex offender typologies. Although these authors, and their contemporaries who expand and empirically test these typologies, all bring unique and useful concepts with their individual

iterations, they all converge on an underlying concept; particular profiles of behaviour (i.e., distinct groups of offence characteristics) of sexual offending can be used to make inferences about the underlying reasons for offending and their risk of reoffending. This notion has been further substantiated by recent investigations, which show that particular individual offence characteristics are statistically predictive of child sexual reoffending.

However, despite the centrality of behaviour to sexual offending, more effort needs to be made to explain *why* particular behaviours are predictive of risk of sexual reoffending in terms of potential causal processes. Dahle et al. (2014) actually state that "it seems worthwhile speculating about how to integrate the current findings into the literature on sexual offender recidivism" (p. 575), but nonetheless tend towards correlational explanations. For example, they write that the CBR items *sexualised language* and *hands off: victim active* seem to indicate offence-related sexual preferences, which have predicted sexual recidivism in previous meta-analyses. Although a useful starting point, deeper conceptual elaboration would have possibly made the link between the etiology of risk and these particular items clearer. In this way, we see the propagation of the norm of treating statistical robustness as more important than theoretical understanding. However, as Hanson (2009) argues, risk assessment "responds better to the needs of decision makers and those being assessed (and to science) when the evaluation also *explains* the source of risk" (p. 177). We support this notion that theory is integral to the field of offender risk prediction, and at all times should guide the development and use of risk predictors. In the next chapter, we will draw on contemporary arguments in the literature in an attempt to clarify why particular offence characteristics are able to predict child sexual recidivism. By exploring the *why*, we hope to support the move away from the tradition that statistical significance by itself is adequate, and towards an approach where theory and statistics are held in equal regard when developing risk factors and tools.

Chapter 4: Psychological Vulnerabilities

4.1: Moving past the static/dynamic distinction

Throughout this investigation, we have referred to offence characteristics as a category of static risk factors. From a practical perspective, this has been a useful label because it identifies them by their focus on historical, unchangeable entities as the source for assessing risk. However, as the field of sex offender risk assessment has continued to evolve, it has become increasingly evident that sexual recidivism is a highly complex construct, and the original conceptualisation of static and dynamic risk factors may not be the best fit (Allen & Pflugradt, 2014). As Brouillette-Alarie et al. (2016) contend, the static/dynamic distinction has proved to have heuristic value, but there is little evidence to suggest that they are assessing fundamentally different psychological phenomena.

Therefore, to better understand potential reasons for why offence characteristics demonstrate utility in predicting sexual recidivism, we suggest adopting other conceptualisations of risk that move past the conventional static/dynamic distinction. For example, rather than construing static and dynamic factors as distinct entities, Beech and Ward (2004) propose that it is more useful to frame static factors and stable dynamic factors as representations of underlying *psychological vulnerabilities*.

Other authors have supported the shift away from the static/dynamic distinction; some have espoused Beech and Ward's (2004) conceptualisation (e.g., Casey, 2015; Klepfisz, Daffern, & Day, 2015), while others have chosen to frame it using their own variation. For example, Mann et al. (2010) argue that risk factors should be termed as individual *propensities*; characteristics which lead to the "predictable expressions of thoughts, feelings, or behaviours" (p. 194). The authors argue that through consistency of actions, offenders with the propensity to gravitate towards criminogenic situations are inherently more at risk of reoffending than those that can refrain from ending up in such situations. Similarly, Thornton

(2015) calls dynamic risk factors *long-term vulnerabilities* (LTVs), and theorises that static risk indicators have predictive power because they indirectly reflect these LTVs. Although these conceptualisations bear similarities in their fundamental tenet, we have chosen to explore offence characteristics in relation to Ward and Beech's (2004) model because it has had the most conceptual elaboration and critical analysis (e.g., Heffernan & Ward, 2015; Ward, 2015; Ward & Beech, 2006).

4.2: Psychological Vulnerabilities

In Beech and Ward's (2004) view, some stable dynamic risk factors, such as sexual dysregulation, distorted cognitions, and problematic interpersonal functioning, are better thought of as representing underlying psychological vulnerabilities or core problematic traits of the individual (Beech & Ward, 2004). These vulnerabilities contribute to risk by interacting with each other and the environment to produce transient mental states, such as distress, sexual arousal, or need for control, that lead to dyscontrol and put the offender at an acute risk of reoffending (Beech & Ward, 2004). Psychological vulnerabilities are abstract constructs and hence cannot be observed, but their existence can be inferred from behaviour. As Allen and Pflugradt (2014) note, the notion that observable phenomena are influenced by underlying, unobservable, causes or traits is a long held assumption in psychology, and one that is often drawn on in explanations of offending. Because static risk factors capture physical events (e.g., number of sexual or violent offences) and concrete behaviours (e.g., bringing lollies to lure a victim or grooming the victim over a period of time), they can be seen as the surface representations of the problematic traits that underlie sexual offending (Beech & Ward, 2004).

As psychological vulnerabilities are enduring, having knowledge of their existence in an individual can help to predict their future behaviour (Ward & Beech, 2006). We can also

use such knowledge to inform treatment targets and the management of offenders in the community. Furthermore, unless the offender has undergone treatment to address their problematic traits, we can reasonably expect that an assessment of psychological vulnerabilities using historical (i.e., static) markers will remain fairly valid across time (Beech & Ward, 2004).

This conceptualisation presents static and stable dynamic risk factors as more akin to different manifestations of the same core trait, and helps to explain why static markers are useful for explaining the variance in sexual reoffending. Preliminary empirical investigations have shown support for Beech and Ward's (2004) model. For example, Lofthouse et al. (2014) analysed data from 212 offenders with an intellectual disability, investigating how static and dynamic risk factors from the Violence Risk Appraisal Guide, Emotional Problems Scale-Behaviour Rating Scale, and Short Dynamic Risk Scale work together to predict violent offending. They used three criteria for establishing the relationship between dynamic and static risk factors; correlation (are the risk factors correlated?), dominance (are particular risk factors dominant to others?), and temporal precedence (do particular risk factors temporally precede others?). The authors found that static and dynamic risk factors for violence appeared to capture elements of the same underlying risk, and concluded that future risk assessment should focus on unified psychological vulnerabilities (Lofthouse et al., 2014).

4.3: Psychological vulnerabilities and dynamic risk factors: A cautionary note

In terms of understanding the relationship between concrete static risk factors and abstract dynamic risk factors for sexual offending, conceptualising all risk factors as representations of underlying psychological vulnerabilities is a theoretical step forward. However, one substantial problem that researchers have had is trying to specifically identify what traits or underlying vulnerabilities are *causally* related to sexual recidivism. In the

minds of some researchers and practitioners (e.g., Mann et al., 2010), stable dynamic risk factors are essentially thought of as the causal, underlying psychological vulnerabilities themselves – not a representation of them. However, other authors (e.g., Ward & Beech, 2006) have contended that this is not the case.

A critical evaluation by Ward and Beech (2014) demonstrates that stable dynamic risk factors for offending are a conceptual tangle of symptom description, mental states, psychological processes, social factors, and potentially legitimate psychological mechanisms. For example, the dynamic risk factor of intimacy deficits is determined by a range of criteria such as emotional identification with children, incapacity for intimacy with adults, immaturity in relationships, and aggression. Although these are all purported to be features of changeable dynamic risk that cause intimacy deficits, a closer analysis reveals they are quantitatively different entities (Ward & Beech, 2014). Emotionally identifying with a child could be a psychological process, whilst aggression may be better classed as an acute mental state. Incapacity for intimacy with adults could be a symptom (i.e., problem description), as could the presence of immature relationships. As a result, we get the dynamic risk factor of intimacy deficits being determined by a series of disparate, heterogeneous sub-aspects that have been collapsed into a single item. Thus, we end up with dynamic risk factors that are poorly specified, too broad, and lack clear boundaries.

This poorly specified nature of dynamic risk factors is the result of the traditional emphasis on prediction over explanation in the field of offender risk assessment. As we have previously noted, dynamic risk factors have been constructed with the purpose of predicting, not explaining, offending. As a result, statistical methods have been used to find variables that account for as much variance of risk of reoffending as possible. Given this approach pays no heed to the types of variables it parses, it is no wonder that dynamic factors are made up of disparate entities (Ward, 2015).

Ward (2015) therefore contends that it is not theoretically defensible to relabel dynamic risk factors from *predictors* to *explainers* of offending. To accomplish such a task, they would need to be significantly reworked. Fundamentally, as composite constructs, dynamic risk factors lack the theoretical coherency required to have rich explanatory power to account for crime (Ward, 2015). There is the possibility that within these composite constructs lie potentially legitimate causal elements of sexual offending, however in their current state these are difficult to identify and elaborate on. Furthermore, not only are there disparate variables subsumed under the same domain or title, but the potential variables within that domain are of different levels of causality (Ward, 2015). For example, a higher level psychological vulnerability of child sex offenders may be lack of emotional competencies. This is likely comprised of lower level causal variables such as poor identification of emotions, inability to control negative emotions, and faulty emotion due to secondary appraisals. Currently, there is no effort made to chain possible causal variables; they are all seen as belonging to the same level (Ward, 2015).

As a result, Ward and Beech (2014) argue that dynamic risk factors are a "theoretical dead-end" (p. 1); their conceptualisation is currently so messy that they cannot effectively *explain* sexual reoffending, and by conflating description and cause they more easily mislead clinicians and researchers into accepting superficial (i.e., correlational) explanations for why sexual reoffending occurs.

We readily acknowledge that the causal mechanisms of sexual offending, including child sexual offending, are not clearly defined at this point in time. We do however believe that linking offence characteristics to domains of psychological vulnerabilities, and making attempts to disentangle the *potential* causal vulnerabilities from the *likely* descriptive phenomena, is still a worthy endeavour. Of course we run the risk of conflating causal and descriptive components, but, for researchers, such a practice makes us think more deeply

about why particular offence characteristics can statistically predict sexual reoffending. At the heart of this thesis is a commitment to bridging the gap that has traditionally existed between statistics and theory in the field of offender actuarial risk assessment. Towards this end, we will take what we understand thus far, and utilise it going forward (whilst remaining mindful of the limitations such an approach may present).

What we encourage by discussing the above points is the crucial need to be aware that dynamic risk factors are not as straight forward as they may first appear. There is the possibility of hitting the theoretical dead-end Ward and Beech (2014) caution of, especially if we superficially attribute offence characteristics as markers of symptoms and do not hypothesise what risk relevant psychological vulnerabilities they might give insight into. In the next section, we will look at attempts to sort proposed risk factors into more manageable categories. Within this, we will also look to differentiate between components of dynamic risk factors that are possibly causal and those which are possibly descriptive. This will not be an exhaustive process, as we do not have the scope within the current thesis to accomplish such as large endeavour. We instead offer an overview to demonstrate how offence characteristics may reflect the causal and descriptive components, and how we can use these to make inferences about why particular factors can predict risk of reoffending.

4.4: Domains of psychological vulnerabilities

Beech and Ward (2004) posit that psychological vulnerabilities and their associated outcomes (i.e., effects) can be organised into four domains: emotional (self-regulation), cognitive, interpersonal (relational), and sexual. These four domains are most often implicated in both etiological theories and dynamic risk assessment tools for sexual offending. To discuss the symptoms and psychological processes captured by these domains,

we draw on multiple meta-analyses and studies, including those by Thornton (2013), Mann et al. (2010), Ward and Beech (2006), and Hanson and Harris (2000).

The first psychological vulnerability domain is general self-regulation. This can alternatively be conceptualised as vulnerabilities related to emotion. Drawing on earlier work by Luria (1966) and Pennington (2002), Ward and Beech (2006) propose in their Integrated Theory of Sexual Offending (ITSO) that vulnerabilities in this domain are rooted in the *action selection and control system*; a neuropsychological system associated with the frontal cortex, basal ganglia, and parts of the thalamus. Deficits in the action selection and control system are hypothesised to lead to particular psychological vulnerabilities (i.e., internal processes) that are implicated in the causation of child sexual offending. These include impaired problem solving abilities (e.g., lack of relevant knowledge, difficulty integrating information, and problems anticipating outcomes; Ward & Beech, 2014), and lack of emotional competencies (e.g., poor identification of emotions, inability to tolerate negative emotionality, faulty emotion related secondary appraisal; Hanson et al., 2007; Ward & Beech, 2014). These psychological processes lead to symptoms such as social instability and poor coping (i.e., using drugs and alcohol), traits such as impulsivity and recklessness, and facilitate the onset of mental states such as intense negative emotionality and anger (Hanson & Harris, 2000; Thornton, 2013).

The second psychological vulnerability domain is interpersonal. Interpersonal, or relational, vulnerabilities are hypothesised to be due to disturbances with the *motivational/emotional system*. This neuropsychological system is associated with cortical, limbic, and brainstem brain functions, and is responsible for modulating responses to complex and rapidly changing stimuli; such as interactions with others (Ward & Beech, 2006). Deficits in the motivational/emotional system are thought to lead to offence related psychological processes. For example, a strong relational style with children (e.g., emotional

congruence with children; Mann et al., 2010; Thornton, 2013) and a problematic relational style with adults (e.g., callous interpersonal style, negative selective abstraction/grievance thinking; Thornton, 2013). These vulnerabilities may lead to symptoms such as lack of sustained relationships, relationships marred by violence or infidelity, traits such as low self-esteem, feeling more comfortable around children and rejecting supervision, and facilitate mental states such as loneliness and suspiciousness (Hanson & Harris, 2000; Heffernan & Ward, 2015; Thornton, 2013).

The third psychological vulnerability domain is cognitive. Ward and Beech (2006) hypothesise that cognitive vulnerabilities are caused by problems with the *perception and memory system*. This system is tasked with processing incoming sensory information and constructing representations of objects and events, and is located in the hippocampus and posterior neocortex (Ward & Beech, 2006). Deficits in the perception and memory system may lead to psychological processes implicated in child sexual offending. These include cognitive distortions (e.g., sees self as entitled and uncontrollable, sees children as sexual beings, holds inappropriate sexual scripts; Heffernan & Ward, 2015; Thornton, 2013) and cognitive skill deficits (e.g., poor metacognitive abilities, poor cognitive problem solving, disconnection between cognitive and emotional systems; Hanson et al., 2007; Ward & Beech, 2014). These psychological processes may lead to pro-offending attitudes and beliefs and factor into the genesis of all the aforementioned traits and mental states (Mann et al., 2010).

The final psychological vulnerability domain is sexual self-regulation. Unlike the previous domains, Ward and Beech (2006) do not posit a dominant neuropsychological system for this domain. Rather, vulnerabilities in sexual self-regulation are the result of an interaction between the three aforementioned systems. For example, a child sex offender may become sexually disinhibited due to mood or interpersonal problems (disturbances in the motivation/emotional system) interacting with dysfunctional cognitions (problems in the

perception and memory system). An inability to regulate this sexual disinhibition (deficits in the action selection and control system) in the face of acute triggering mental states, such as anger or sadness, or contextual cues, such as a criminogenic environment, may facilitate the onset of another offence (Ward & Beech, 2006). Specific deficits in the sexual self-regulation domain may include intense sexual preoccupation (e.g., high sex drive, intense impersonal sexual interests, sexualised coping; Hanson & Harris, 2000; Thornton, 2013) and offence related sexual interests (sexual interest in children, sexualised violence; Mann et al., 2010; Thornton, 2013). These psychological vulnerabilities may lead to symptoms such as excessive masturbation and high consumption of pornography, traits such as using sex to alleviate life stressors and having paraphilic and/or paedophilic interests, and states such as deviant arousal (Hanson & Harris, 2000; Thornton, 2013).

4.5: Mapping static factors onto psychological vulnerabilities

Because static risk factors are conceptualised as historical markers of psychological vulnerabilities, they can be mapped onto these four domains. For example, the Static-99's item *ever lived with an intimate partner for more than two years* can be seen as representing a vulnerability in the interpersonal domain, whilst the SORAG's item *failure on prior conditional release* can be mapped to the domain of general self-regulation. Mapping in this fashion requires a somewhat simplified method of abductive inference; a scientific method proposed by Haig (2005; 2014) for moving from observable data to scientific phenomena to underlying causal mechanism(s). According to Haig (2005), data are recordings or reports that are observable. They are ephemeral and pliable by nature, and idiosyncratic to particular investigative contexts. Phenomena, on the other hand, are relatively stable, abstract features or entities that we seek to explain. In this case, the phenomena of interest are the symptoms, traits, and states implicated in child sexual offending. The existence of phenomena can be

inferred from data; a process Haig (2005) describes as extracting "a signal (the phenomenon) from a sea of noise (the data)" (p. 374). Depending on how the individual item is framed, static risk factors are either the data that evidence the existence of phenomena (e.g., the VASOR-2's *substance use problems*), or the phenomena themselves (e.g., the SVR-20's *deviant sexual arousal*).

A fundamental tenet of the abductive method is *inference to the best explanation* (IBE; Haig, 2014). IBE argues that we should only accept a theory about the hidden causes of phenomena when we judge it to be the *best* explanation of that phenomena. By using this approach, qualitative explanatory reasoning becomes the basis for determining the best explanation, as opposed to other methods (e.g., Bayesian) which focus on using statistical methods to assign probabilities to different theories (Haig, 2014). Lipton (2004) notes that the primary task of IBE is therefore to determine if a particular theory provides a better explanation of the data and phenomena than its rivals. In his view, the best explanatory theory will be the *loveliest* theory; that is, it can seamlessly integrate the theoretical and empirical evidence in the literature to plausibly account for the objects of interest (Lipton, 2004).

4.6: Reasoning from data to phenomena

In order to make inferences to the best explanation, Ward and Beech (2014) suggest the strategy of drawing on *clinical exemplars* as an evidence base. For the purposes of this thesis, clinical exemplars may be better described as *offender exemplars*; rich descriptions of typical offence pathways that have been constructed from the content of offender typologies, etiological theories, and meta-analyses on static and dynamic risk factors for sexual offending (much like the descriptions in section 4.4. above, fleshed out with the typologies described in chapter three). Offender exemplars are idealised representations; that is, they may not fit any

one individual perfectly, but they capture a typical offender of that category in general (Ward & Beech, 2014). It is also important to note that as new information and knowledge comes to light, exemplars can, and should, change. At this point in time we are drawing on contemporary research to propose exemplars composed of possible psychological vulnerabilities and their effects, but as the field of offender risk assessment progresses, these might be reshaped or even done away with entirely.

Abductively moving from data to related phenomena is relatively straightforward when using exemplars. Taking the above example, we observe that the offender of interest is using substances. We construe this behaviour as a symptom, and then construct or consult relevant exemplars of what offenders who have substance use problems typically demonstrate in terms of traits, states, and others symptoms. Constructing exemplars from the information contained in section 4.4 and chapter three, we use the presence of substance use problems to abductively infer the existence of risk relevant phenomena in the domain of general self-regulation vulnerabilities. We make this inference based on studies that have shown that individuals who use alcohol and drugs may be doing so as a maladaptive coping mechanism for negative mental states, such as frustration, boredom, or anxiety, and that using substances lowers inhibitions and therefore may facilitate the commission of an offence (McHugh & Otto, 2012; Ward & Beech, 2006). Although making inferences about related phenomena does not fully explain the predictive power of a variable, it helps to provide more context to the variable that can then be drawn on in the hypothesising of possible causal (i.e., internal) psychological processes.

Like other static risk variables, we suggest that offence characteristics are useful for predicting sexual reoffending because they can operate as markers of underlying psychological vulnerabilities. Furthermore, we suggest offence characteristics are particularly useful for predicting reoffending because of the *type* of vulnerabilities they mark. Although

most static risk factors can be mapped onto the aforementioned domains to represent deeper psychological vulnerabilities, in reality there is marked variability in the degree to which these vulnerabilities are actually tapped into by current static risk assessment tools for sexual offending. Analysing four static risk assessment tools (Static-99, SORAG, MnSOST-R [Minnesota Department of Corrections, 2003], SVR-20), Beech and Ward (2004) found that the majority of items (total $n = 60$) were markers of vulnerabilities in the domains of sexual self-regulation (35%) and general self-management (38%). We conducted a similar analysis but on a larger scale; mapping the items from the nine tools used in the previous static tool analysis from chapter three. We found a similar trend, where of the total items ($n = 98$), 39% could be attributed as markers of vulnerabilities in the sexual self-regulation domain and 41% as markers in the general self-regulation domain. Only 7% could be construed as markers of cognitive vulnerabilities and 13% as markers of interpersonal vulnerabilities.

We suggest that offence characteristics are able to tap to a greater extent into vulnerabilities in the cognitive and interpersonal domains of vulnerability. We have organised the bulk of the items from the CBR family of measures into the four domains based on their potential best fit, and these show more equal representation across the domains (see table 4). As a result, many offence characteristics may be construed as static referents of psychological vulnerabilities that *are not necessarily being captured by other static factors*. This may potentially explain Lehmann et al.'s (2014) finding that when compared to the Static-99, offence characteristics have unique predictive power.

Table 4
Offence characteristics categorised by domains of vulnerability

	Domains of vulnerability			
	Sexual self-regulation	Cognitive	Interpersonal	General self-regulation
CBR items	Multiple victims	Visual-sexual stimulation through the victim's actions	Extended crime event	Crime committed in (non-)usual environment
	Anal penetration		Coaxing style of communication	Approach in external location
	Unusual criminal actions with a humiliating character		Trust building approach	Drugged victim
			Co-offense	
Short CBR items	Actively seeking stranger victim	Sexualised language	Offended alone (offender young)	Victim with high lifestyle risk
	Hands off; Victim active			
	Male victim			
	Approach-explicit			
Age adjusted CBR items	Situation created proactively	Sexualised speech	Making amends	
	Cruising	Situation created proactively	No use of physical violence	
	Vaginal intercourse	Hands off offence	Communication-based approach	
	Actively seeking stranger victim		Extended stay at crime scene	

4.7: Reasoning from phenomena to causal mechanisms

The ability to effectively reason from phenomena to potential causal mechanism(s) is crucially influenced by the kind of static risk factor that forms the data point; making the process less straightforward than the initial inference from data to phenomena. Static risk factors, by nature, are either quantitative or qualitative variables. Quantitative static risk variables include items such as the RM2000's *number of violent appearances in court* and the Static-99's *number of prior sex offences.* These are useful for broadly identifying the existence of phenomena within domains of vulnerabilities. For example, if an offender scores a 2 for *number of prior sex offences* (4+ previous sex offences), it indicates that they are likely to have vulnerabilities within the sexual domain. Based on the constructed offender exemplars, relevant phenomena could be sexual preoccupation or deviant sexual arousal. To demonstrate another example, scoring a 3 on *number of violent appearances in court* (4+

previous appearances) may indicate vulnerabilities in the domain of general self-regulation. Consulting the exemplars, associated phenomena in this case may be impulsivity or anger.

However, by virtue of discerning risk using quantitative information, we run the risk of lacking the necessary detail to infer the particular potential psychological vulnerabilities (i.e., internal processes) within the vulnerability domain. We can assume that having a number of sexual offences indicates sexual vulnerabilities exist, but what deeper, potentially causal processes are they markers of? Even with the use of exemplars, jumping from the probable phenomena the static factor alludes to, and then to the potential underlying mechanism(s), is difficult. Of course, we can draw abductive inferences straight from the exemplars, but that becomes more representative of a completely idealised relationship, rather than the particular relationship between this specific item and the potential psychological vulnerabilities it may be marking.

On the other hand, quantitative static risk variables provide more detail to make these deeper level inferences. Quantitative variables include the SVR-20's *escalation in severity or frequency of sexual offending*, the Static-99's *male victim,* and the SORAG's *ever married.* These static items contain more breadth or depth of information in comparison to quantitative variables, which tend to measure quantities of broad events. Therefore, with the assistance of exemplars, we may be able to better infer the psychological processes that are potentially causal, which improves our understanding of why this item is predictive of risk of child sexual reoffending. For example, if a child sex offender has shown escalation in the severity or frequency of their sexual offending, we can infer that there are problems within the domain of sexual self-regulation. Drawing on offender exemplars, the offender may be experiencing phenomena such as sensitivity to deviant sexual arousal. With this relevant phenomena in mind, an escalation in sexual offending may be underpinned by potential psychological vulnerabilities such as intense sexual preoccupation and paedophilic sexual interests. These

may be becoming repeatedly activated in the face of contextual triggers such as victim availability and/or sexual arousal, which indicates an increased risk of reoffending (Beech & Ward, 2004; Mann et al., 2010).

It is important to note that we have used a relatively simplified example here in order to introduce the reader to the process. In reality, due to the complex nature of human behaviour, offence characteristics are inevitably underpinned by multiple psychological vulnerabilities across multiple domains. In our quest to create the best theoretical explanation for the predictive nature of an item, it is important to consider what all the potential psychological vulnerabilities might be at play. We then formulate how these are interacting with each other, and the environment, in order to cause the offending behaviour. This approach speaks to the multifaceted and complex nature of the etiology of sexual offending, and allows us more scope to consider why a variable may be predictive.

Taking an aspect of the above example, an increase in the severity of sexual offending might also signal the presence of pro-offending attitudes; which are vulnerabilities in the cognitive domain. In reference to our offender exemplars, these may be underpinned by the offender distortedly seeing himself as unable to control his sexual behaviour (Bartels & Merdian, 2016). When this is combined with the sequelae of intense sexual preoccupation and paedophilic interests (e.g., increase in child pornography consumption, sexually fantasising about children, low level sexual offending), it can cause desensitisation to sexual stimuli (Bensimon, 2007). As a result, the offender may be compelled to seek more severe types of offending (e.g., penetration, violence) in order to successfully satisfy himself. Due to his self-perception as uncontrollable, he does not inhibit himself but rather accepts it as a necessary fact. This explanation draws on various psychological mechanisms across domains to help explain why an escalation in the severity of offending is predictive of reoffending. It

demonstrates the continuous reactivation of psychological vulnerabilities when the offender becomes aroused; a psychological state elicited by contextual triggers.

Offence characteristics tend to fall into the category of qualitative variables and, as such, provide a rich source of information that allows for useful inferences to be drawn. This, in turn, allows us to better understand *why* the variable is predictive. By way of an example, we will consider the Short CBR's *sexualised language*; a variable which has been shown to statistically predict sexual recidivism (including child sexual recidivism). This item is described by Dahle et al. (2014) as using language (e.g., dirty talk, verbal sex education of children, sexual humiliating comments) during the offence that is over and above any necessary sexual instructions. Based on our offender exemplars, an associated phenomena with this item may be attitudes and beliefs that endorse sexual contact with children. The psychological processes underpinning the variable may therefore be distorted cognitions; in particular, that the offender holds inappropriate scripts where he believes the child has the capacity to understand and/or enjoy sexual communication (Bartels & Merdian, 2016). Therefore, *sexualised language* may be predictive of risk of sexual reoffending because it captures disordered thought patterns which justify sexual contact with a child, and hence the offender is likely to engage in that behaviour again.

4.8: Reasoning from psychological vulnerability to value base?

By itself, a psychological vulnerability does not constitute offending. As the name suggests, it simply makes the individual more susceptible to committing a sexual offence. There is another aspect to offending that has been historically overlooked in conceptualisations of risk of offending, but researchers are increasingly seeing it as crucial in the process; personal agency (Thornton, 2015). Psychological vulnerabilities must interact with the goals, values and context of the offender to motivate them to offend. Assuming the

dual importance of agency and psychological vulnerabilities in the commission of an offence, how do these fit together? As Thornton (2015) writes, an attractive account is contained within the Good Lives Model of rehabilitation (GLM; Ward & Brown, 2004).

In the GLM, Ward and Brown (2004) conceptualise values as *primary goods*; aspects of human functioning and living that are sought by individuals to lead a fulfilling and valued life. Examples of primary goods include mastery, intimacy, pleasure, and knowledge (Ward & Brown, 2004). Individuals create strategies to ascertain these goods; for example pursuing mastery through work and intimacy through sexual relationships. Successfully attaining primary goods provides the person with a source of pride and fulfilment, as well as acting as a marker of competency and success (Ward & Brown, 2004). In the GLM, it is posited that offending occurs when individuals are blocked from attaining primary goods through legitimate means, and instead turn to maladaptive or problematic strategies (Ward & Brown, 2004). For example, an individual may strongly value the goods of intimacy and pleasure. However, if they struggle with creating or maintaining intimacy, and hence are unable to procure or hold a consenting sexual relationship with another adult, they might seek sex with a child to realise these primary goods.

With this conceptualisation in mind, we argue that static risk factors are the surface representations of a chain of internal, psychological events. This chain begins with the personal agency of the offender, which in itself is comprised of the individual's core beliefs, goals, values, and contexts. These then inform the offender's actions and behaviours as they try to realise the primary goods that are important to them (Heffernan & Ward, 2015). If the offender has risk relevant psychological vulnerabilities, then they may (or may not) be activated in the pursuit of goals. Hence, without the personhood of the offender, no goal directed behaviour, prosocial or antisocial, would occur.

An offender's underlying goal/value base may have implications for risk, and hence help to better explain why static risk factors are predictive of child sexual recidivism. Adopting Ward and Hudson's (1998b) terminology, an individual's behaviour may be driven by approach goals or avoidance goals. Approach goals are intimately tied to an individual's values, as they are derived from the primary goods that they desire to have. Since approach goals involve gaining something, failure may not be off-putting, but rather function to increase an individual's effort to succeed. Ward and Hudson (1998b) note that as attention is focused on information signalling success rather than failure, the individual is more likely to associate positive feelings and cognitions with the actions, and seek to engage in them again. Given the importance of primary goods to the wellbeing of a person's life, trying to force an individual to stop seeking them using the strategies they are familiar with is ineffective. Unfortunately, this is exactly the approach the criminal justice system takes to stop offending. Ward and Brown **(2004)** therefore posit that unless steps are taken to replace maladaptive or harmful (i.e., offending) strategies with prosocial strategies, offenders are going to reoffend.

Avoidance goals, on the other hand, are concerned with escaping or alleviating an aversive stimulus, such as a negative mental state. As a result, these types of goals do not focus on gaining something additional (i.e., the acquisition of a primary good), but returning to a tolerated baseline (Ward & Hudson, 1998b). We suggest that values influence avoidance goals, but more subtly compared to approach goals. This is because the tolerated baseline for a valued primary good may be lower than for other goods. For example, if an individual was to highly value relatedness, they may not tolerate loneliness as well as someone who did not value that particular good to the same degree.

Individuals whose behaviour is guided by avoidance goals are hypothesised to be much more sensitive to the negative effects of failure. This is especially problematic, as avoidance goals are more difficult to achieve than approach goals. Simply put, there are just

so many ways in which a person can fail to inhibit the negative state or event from occurring or continuing (Ward & Hudson, 1998b). If the behaviour does not have the intended effect, then they may be more likely to desist from that behaviour in the future. For example, if an individual is experiencing a negative emotional state (e.g., stress, anger, sadness), and attempts to self soothe using sexual offending as a strategy that is ineffective or serves to cause other adverse consequences (e.g., getting caught, experiencing regret), then they are more likely to desist because of the stronger focus on the negative aspects of the outcome (Ward & Hudson, 1998b). Because offending is not an intractable strategy for gaining valued primary goods, offenders driven by avoidance goals are therefore much more likely to desist from reoffending.

4.9: A typology of goals

Goals that are approach by nature *and* are driven by values that are specifically geared towards (emotional) intimacy and/or (physical) sexual contact with a child, likely due to particular psychological vulnerabilities, suggest an increased risk of child sexual reoffending. In essence, these are the approach goal offenders who, because the act acquires them primary goods that may not be achievable via other strategies, set out with the intention to sexually offend against a child. An example of this is a child sex offender who has paedophilia, and hence may not be able to gain the good of (sexual) pleasure through physical intimacy with an adult. Synthesising information from the sex offender typology literature, this type of goal/value base may be best described as *fixated* (Groth, 1979; Lehmann et al., 2014). Given the intrinsic reward he can gain from child sexual offending, the fixated child sex offender may find it difficult to desist from reoffending in the future.

Goals that are approach oriented and interact with other types of psychological vulnerabilities in the pursuit of primary goods may increase the risk of reoffending in general

(rather than child sex offending specifically). Borrowing from Lehmann et al.'s (2014) terminology, this may be best described as a *criminality* goal/value base, in that it is a general inclination toward offending as a strategy to procure primary goods. An example may be an offender who is more or less ambivalent towards sexually offending against a child, but impulsively does so due to a child being on hand when a mental state such as arousal, anger, or intoxication triggers them to attain a primary good such as pleasure (i.e., victim access interacting with psychological vulnerabilities). This goal/value base may therefore account for Wortley and Smallbone's (2006) opportunistic offender type.

Goals that are inhibitory do not suggest an increase in the likelihood of child sexual reoffending. This may be best conceptualised as a *sexually regressed* goal/value base, which captures the premise of sex being used as a (primarily unhelpful) way to alleviate negative mental states, and does not involve goals or values specifically related to sex with a child. This conceptualisation is supported by Lehmann et al.'s (2014) findings that sexually regressed behaviours are not statistically predictive of reoffending. Such behaviours include the victim being forced to masturbate the offender or perform oral sex on the offender, or the offender offering compensation to the victim which was not announced beforehand. This goal/value base may account for reactive offenders; those who have offended under extreme circumstances (Wortley & Smallbone, 2006). These individuals view child sexual offending as abhorrent, but due to a particular mix of external criminogenic circumstances and transient, intense inner mental states, offend against a child. These men may experience a temporary sexual regression, but desist from reoffending due to the negative consequences their actions have both internally (e.g., guilt, shame) and externally (e.g., negative effect on relationship with victim; Ward & Beech, 2006).

We suggest that offence characteristics, due to their qualitative nature, are particularly useful for predicting child sexual offending because they can capture manifestations of the

goal/value base of the offender. For example, the CBR item *actively seeking stranger victim* and the age adjusted CBR item *cruising* may be predictive because they capture a fixated goal/value base. Following our exemplars, these behaviours may indicate the presence of relevant phenomena such as sex as an interest or a coping mechanism, and deviant sexual arousal. Underpinning these phenomena may be internal psychological processes such as high sex drive and paedophilic interests. As a result, the offender may highly value physical sexual contact with a child, and his actions of actively seeking a victim reflect a strategy to acquire this primary good. From the perspective of risk of reoffending, an offender who engages in such a behaviour is at a higher risk of reoffending because the sexual offending is an inherently valued behaviour. Desisting may mean losing access to pleasure or intimacy, a contingency which the offender wishes to avoid (Ward & Brown, 2004).

Examining the possible goal/value base implicated by a static risk factor not only facilitates better understanding of why some behaviours have predictive power, but it can also be used to hypothesise why other behaviours do not. For example, we can hypothesise that Lehmann et al.'s (2014) finding that forcing the victim to perform oral sex is not statistically predictive of risk because the behaviour captures a sexually regressed goal/value base. Based on our constructed offender typologies, we infer that such a behaviour is more analogous to adult sexual scripts being applied to a maladaptive context, and that the focus is on the offender attaining pleasure rather than on the relationship between the adult and child (Groth, 1979; Hudson et al., 1999). Therefore, although there may be some psychological vulnerabilities at play (e.g., sex as a coping mechanism), the offender's goal may be avoidance in nature (e.g., due to experiencing negative emotionality). As a result, his values may not necessarily reflect the involvement of a child as a crucial part of attaining the primary goods he seeks. Therefore, the offender's risk of reoffending against a child may be diminished if the avoidance goal is not accomplished by the action the first time.

4.10: Summarising the chapter: The content strand

In seeking to better understand why offence characteristics are useful predictors of risk of reoffending, we have undertaken a form of *theory knitting*. Gannon, Terriere, and Leader (2012) describe theory knitting as the method of "extracting good parts of pre-existing theories and then interweaving them together into an overarching comprehensive theory" (p. 129). We have taken concepts and findings from offender typologies, the GLM, and the ITSO, and processes from Haig's (2005) abductive method and Ward and Beech's (2014) exemplars strategy. We have then knitted these together with findings from other various authors in the field to create a process that facilitates deeper thinking of why particular static risk factors may be predictive of child sexual reoffending.

As we mentioned earlier, given the current constraints we have not attempted to detail what all offence characteristics, and, more generally, what all static risk factors may be representing in terms of possible descriptive phenomena and potential psychological vulnerabilities. We also note that there currently exists no structured frameworks for applying meaning to statistically derived static risk factors in the extant literature. With these two crucial points in mind, we present our product of theory knitting in a pictorial form, which we call the vulnerability strand of the Offence Characteristic Meaning Framework (OCMF), for those who wish to use the process themselves (see figure 1).

The pictorial form of the vulnerability strand is comprised of four boxes that crystallise the abductive processes we have outlined in this chapter. The first box is labelled *physical manifestation*. This is the statistically predictive offence characteristic that we are interested in explaining. The box is labelled as such because we construe the offence characteristic as an external, physical manifestation (i.e., concrete, but ephemeral, data point) of a combination of internal psychological processes, values, and contexts.

From the *physical manifestation* box, we can travel directly or indirectly to the *psychological processes* box. By taking the indirect pathway, we pass through the *related phenomena* box. Here, we consult relevant, up-to-date offender exemplars to help determine what other risk relevant attributes or symptoms we can abductively infer from the offender performing the behaviour of interest. For the most part, these will be relatively enduring phenomena; not just ephemeral data. By building a bigger picture based on known patterns of offending, we are able to make stronger inferences to the best explanation when it comes to inferring potential psychological vulnerabilities.

The *psychological processes* box prompts us to consider the potential psychological mechanisms (i.e., vulnerabilities) from the four domains that may be responsible for the offence characteristic (and related phenomena) occurring. Once these have been hypothesised, the researcher then consults their offender exemplars to determine how these specifically interact with each other and the environment to not only cause the offence characteristic, but explain why this particular pattern maintains risk of child sexual reoffending.

Acknowledging the importance of agency, and the role that particular goals and values can play in explanations of risk, the *psychological processes* box is linked to the *goal/value base* box. Here, we use the offence characteristic itself, the related phenomena, and/or the potential underlying psychological mechanisms to abductively infer what goals and values might be implicated in the commission of the offence characteristic, and what general goal/value base these belong to (e.g., fixated, criminality, regressed). We then consider how this informs risk of reoffending, which allows us to better explain why the offence characteristic of interest is statistically predictive of reoffending.

Note that all the arrows in the OCMF's vulnerability strand are bidirectional. This reinforces the assumption that if we knew the offender's values and psychological

mechanisms, we could (1) reasonably predict the offence characteristic, and related phenomena, as occurring as the result of these interacting with each other, and (2) understand why that particular offence characteristic is statistically predictive (or not predictive) of child sexual recidivism.

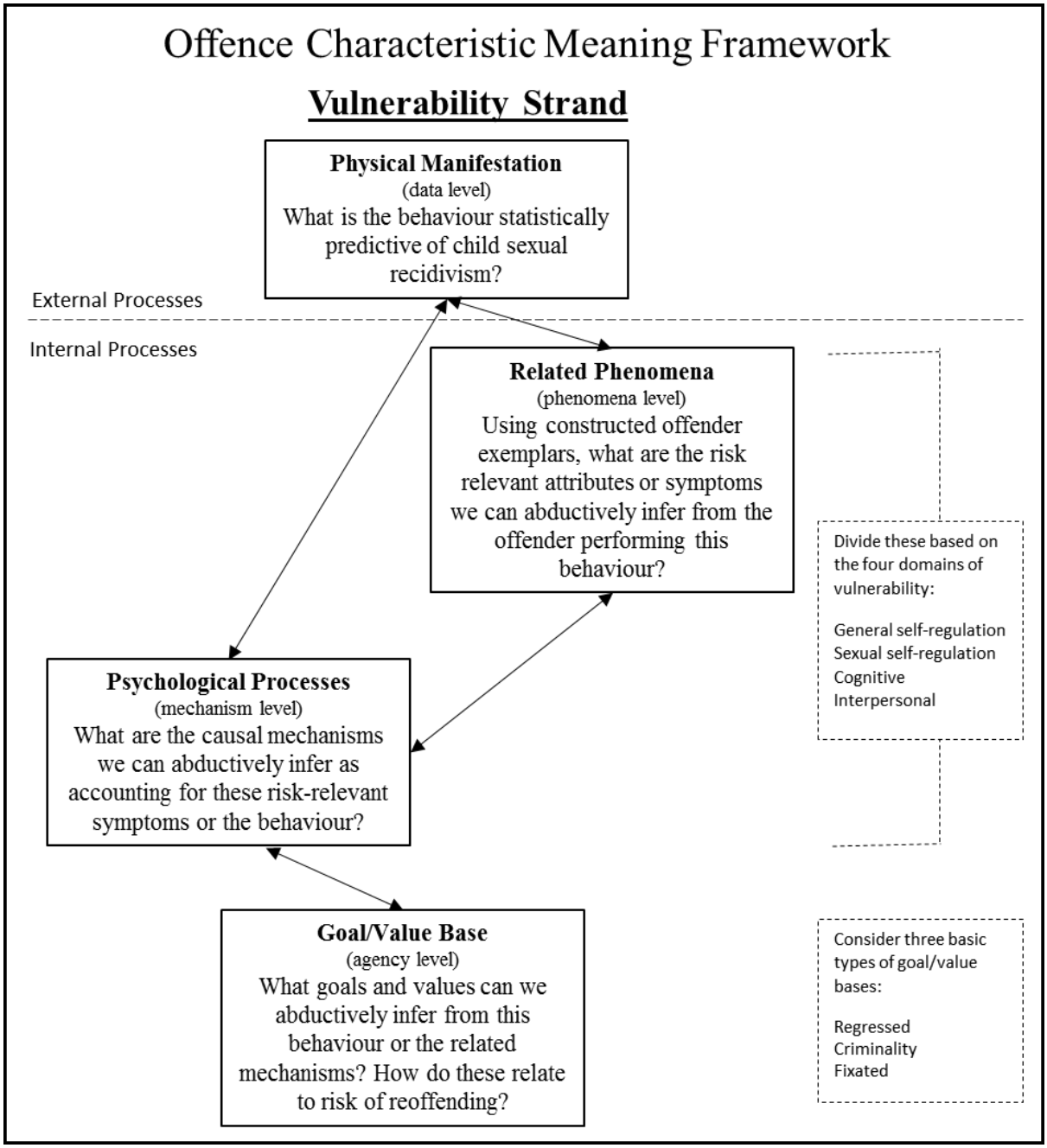

Figure 1. The vulnerability strand of the Offence Characteristic Meaning Framework

4.11: Psychological vulnerabilities: The full picture?

When we examine empirically identified offence characteristic predictor variables, we note that some do not seem to represent a psychological vulnerability, or do so only partly. In fact, some items seem to capture processes that show elements of *competency*. For example, the CBR item *explicit planning* indicates forethought, whilst *hands off: victim active* indicates skill in verbal manipulation. Therefore we suggest that although the concept of psychological vulnerabilities can account for a large part of the predictive utility of static risk factors, it does not by itself adequately capture the whole picture. To further understand why offence characteristics have predictive power, we need to consider what information relevant to risk can be derived from examining the *competency* of the offender's behaviour. This will be the subject of the next chapter.

Chapter 5: Expertise as an explanation of risk

5.1: The competency-based model of offending: A useful conceptualisation of risk?

In chapter four we posited that individual offence characteristics act as markers of the underlying psychological vulnerabilities and values of an offender, and we can use this relationship to make inferences about why particular behaviours are able to predict risk of reoffending. The arguments contained within that chapter are predicated on the *deficit-based model of offending*, where offending occurs due to weaknesses within the individual interacting with external triggers (Ward, 1999). This has been the dominant approach taken to risk in criminal psychology, and is reflected in all the actuarial risk tools we use for sexual offending. However, as Lussier, Bouchard, and Beauregard (2011) argue, the hegemony of the deficit model has somewhat constrained researchers from exploring alternative etiologies of sexual recidivism. Particularly, it has meant that comparatively little attention has been paid to the notion of a competency-based model to explain risk (Ward, 1999).

The *competency-based model of offending* posits that offenders are human agents who make decisions based on their values, goals, and repertoire of skills. The model acknowledges that offenders exist on a spectrum of cognitive and behavioural skilfulness. At one end are low-competency offenders who use simplistic or rudimentary tactics to offend, possess basic knowledge structures about offending, and have poor decision-making skills. At the other end are high-competency offenders who carefully plan and skilfully enact criminal actions, have complex knowledge structures relating to offending, and are highly effective decision makers (Fortune, Bourke, & Ward, 2015; Ward, 1999). Offenders at the high-competency end of the spectrum are often referred to using the term *expert*. The competency-based model of offending has been used to better understand how some offenders manage to evade detection over an extended period of time and/or offend against multiple victims (e.g., Bourke, Ward, & Rose, 2012; Lussier et al., 2011). We suggest that in

addition to this, the competency-based model of offending, and in particular the concept of expertise, provides a unique perspective that helps to better understand why particular offence characteristics can predict child sexual recidivism.

5.2: What is expertise?

Before discussing how the concept of expertise may be useful in explaining the predictive utility of offence characteristics, it is important to first define what the term encompasses, how it is developed, and what it looks like in the context of child sexual offending. The term *expert* is most often applied in sporting, vocational, or academic pursuits to denote someone who is very skilful in one particular, often non-generalisable, domain (Ward, 1999). Nee and Ward (2015) write that expertise refers to both cognitive processes and behaviours that are demonstrably superior in a given domain because they have desirable properties such as efficiency, effectiveness, and automaticity. Expertise is acquired with considerable experience and intentional honing of skills, mental rehearsal or simulation (i.e., through studying and researching), or, most often, a combination of the two (Bourke et al., 2012; Vernham & Nee, 2015).

Expertise is acquired through the development of advanced cognitive processes. These include chunking in memory to simplify decision-making and free up working memory capacity, automaticity in cue recognition and subsequent implementation of particular actions, effortless situational scanning and encoding of relevant information, and efficient multitasking (Nee & Ward, 2015). Together, these processes allow the expert to unconsciously appraise the environment and automatically recognise cues that are meaningful to his goal. The expert can then rapidly activate complex cognitive schema and advanced knowledge structures, which allow them access to a rich number of exemplars and heuristics from memory (Nee & Ward, 2015).

Rational Choice Theory posits that all individuals who engage in goal directed behaviour undertake a process of cost/benefit analysis, where they attempt to maximise payoffs whilst avoiding costs (Scott & Marshall, 2009). The advanced cognitive skills of an expert allow them to rapidly select and implement behavioural strategies that effectively minimise costs and maximise benefits in their particular domain of expertise (Lussier et al., 2011). This is because the rational agent, who is assumed to take account of all available information and their repertoire of behaviours when assessing the best way to accomplish a goal, is able to do so quickly and effectively when they are an expert in a particular area (Scott & Marshall, 2009).

5.3: The costs, benefits, risks and rewards of child sexual offending

Whilst expertise is a term usually reserved for socially accepted domains, Ward (1999) cautions that high levels of skill "can be used in the service of any number of values or social goals, for good or evil" (p. 298). Like a chess player, a child sex offender can exhibit cognitive alacrity and behavioural skilfulness within his domain of interest. Rational Choice Theory has also been used to help understand how expertise in the context of offending is developed (e.g., Cornish & Clarke, 1986). This framework best relates to approach-goal offenders, as it operates on the assumption that offenders set out to achieve a particular goal by offending, which is derived from the values they hold. These offenders therefore weigh the initial costs versus the rewards, and then take steps to maximise their payoff (i.e., benefits) whilst avoiding sanction (i.e., costs; Bouffard, 2007).

Bouffard (2007) notes that sex offenders vary by what outcomes they perceive as the most rewarding, and these are contingent on their personal values. For example, an investigation by Lussier et al. (2011) found that some child sex offenders highly value frequently engaging in low-level sexually offensive behaviours (e.g., seemingly innocent

touching, fondling), whilst others value engaging in more extreme offending behaviour (e.g., sexual intercourse) but less frequently. Individual variation also exists in what offenders deem to be costly; with Bouffard (2007) finding that some sex offenders perceived a loss of morality as a cost of offending, whilst others viewed catching a sexually transmitted infection as a potential cost. However, the most serious cost that sex offenders report is being detected and externally sanctioned for their offences.

Risk of detection is perceived as so costly due to the severe legal and social sanctions of sexual offending. According to the New Zealand Crimes Act 1961, a conviction for engaging in sexual contact, or attempting to engage in sexual contact, with an individual under the age of 16 can lead to terms of imprisonment up to 14 years. From a societal perspective, child sex offenders tend to be dehumanised and viewed with "fear, loathing, distain and resentment" (Willis, 2014, p. 3). This leads to public sentiments that child sex offenders are undeserving of reintegration opportunities, and results in them being ostracised from the community through denial of social and work opportunities (Ferguson & Ireland, 2006; Willis, Levenson, & Ward, 2010).

Because the initial costs of sexually offending against a child are so high, it is within the best interests of the offender to take steps to minimise his likelihood of being detected. However, given that sexually offending is a complex task comprised of many steps, this is difficult. In planning an offence, an offender must make a series of decisions. These include determining the best time and location to encounter potential victims without arousing suspicion, and deciding on a location where he can commit the offence with minimal risk of interruption (Fortune et al., 2015). The offender must also decide on what type of victim he will seek, taking into account their erotic value (age, gender, and other physical characteristics), accessibility (stranger or known victim), and likely compliance (Beauregard & Leclerc, 2007). Further, he must select the strategies he will use to approach the victim and

coerce them into sexual activity. This may be planning an attack on a stranger victim, or building up trust with a known victim over time before offending against them (Ward, 1999). Finally, an offender must decide how he will maintain the victim's silence post the offence (Fortune et al., 2015).

Even a small error in any of these steps can result in the best laid plans coming undone, and lead to the offender being detected (Rebocho & Goncalves, 2012). Whilst undertaking this complex process, the offender is further tasked with maximising their enjoyment of the offence to ensure their overall goal (i.e., pseudo-intimacy or sexual gratification) is actually achieved. To successfully execute this dual process, the offender must acquire an array of competencies, which is accomplished through the refinement of mental processes and subsequent behaviour (Fortune et al., 2015). Bourke et al. (2012) note that offenders may draw on their own experiences of being groomed to derive initial offence scripts and schemas, or seek information from other sources (e.g., online interactions with other sex offenders). These scripts and schemas are then refined via repetitive practical and/or mental rehearsal, where if a behaviour is found to be ineffective or unsuccessful, the offender may learn from that experience; overtly or subtly changing their behaviour in order to reduce costs and increase benefits (Beauregard & Leclerc, 2007; Ward & Hudson, 1998b). Through this gradual process of refinement, the offender develops advanced knowledge structures, rich schemas, and varied offending scripts that allow them to achieve their goal effectively and efficiently (Ward, 1999).

5.4: The expert child sex offender

Investigations of competency in sexual offending have produced descriptive accounts of the skilled behaviour performed by expert child sex offenders before, during, and after an offence. By analysing the hunting patterns of 39 child and mixed target sex offenders,

Beauregard, Proulx, Rossmo, Leclerc, and Allaire (2007) found that highly competent child sex offenders invest a great deal of time preparing for their crimes and selecting their targets. Some offenders prefer to create opportunities to offend against known victims. Rather than impulsively offending, these men bide their time; subtly creating criminogenic environments and situations where they can offend with minimal risk of detection (Beauregard et al., 2007). For example, the authors found that some child sex offenders had engaged in occupations or volunteer roles that allowed them to gain the trust of a victim and provided a favourable context for sexual activity (e.g., babysitting for a solo mother, staying after school, going on camping trips).

On the other hand, highly competent child sex offenders who prefer unknown victims plan what Beauregard et al. (2007) term the *raptor* attack. In this approach, the offender strategically plans how to access a child and offend against them in a short period of time. Typically, this involves using contextual clues to determine an already established criminogenic environment; for example, a child playing in a public outdoor area that has low supervision and multiple escape routes (Beauregard et al., 2007).

Once an opportunity has been created and seized by the expert child sex offender, a number of skilful techniques may be used to commit the offence. For example, through semi-structured interviews with 47 male child sex offenders, Bourke et al. (2012) found that highly competent offenders engage in masking behaviours, where they start off innocuously touching the victim (e.g., hugging, sitting on lap), before slowly escalating the sexual intrusiveness of the behaviour (e.g., fondling, kissing, intercourse) over an extended period of time (e.g., days, weeks, months). This script normalises the sexual behaviour, thereby reducing the child's risk of becoming suspicious of the offender's actions and reporting them to another person (Bourke et al., 2012). Vernham and Nee (2015) note that some expert offenders engage in emotional manipulation of the victim, creating what seem to be mutually

rewarding relationships with the child by spending time with them, buying them gifts, and sharing feelings with them. When these emotional bonds have been adequately strengthened, they are then exploited to coerce the child into performing sexual acts. This technique leaves the child reluctant to disclose abuse for fear of losing their privileges and/or getting the offender in trouble.

Skilled chains of behaviours are enacted fluidly and automatically by expert sex offenders. That is, the offender unconsciously engages their preferred offence scripts until there is a threat to achieving the goal (Fortune et al., 2015). At this point, the offender reasserts active cognitive control; drawing on his knowledge structures and stored schemas to quickly appraise the situation and generate a solution (Fortune et al., 2015). For example, if the expert offender picks up cues that signal the child is becoming distressed or noncompliant, he may rapidly shift the way in which he provides reassurance or requests the child to engage in sexual acts. Similarly, highly competent offenders targeting an unknown victim may attempt to verbally disarm a child by asking questions or showing them tricks or games (Beauregard et al., 2007). Based on the contextual cues from the victim's response, the offender makes snap decisions as to whether to continue to verbally engage the child further, physically snatch the child, or abandon the objective if the subjective costs outweigh the benefits (Beauregard et al., 2007; Lussier et al., 2011).

Following the offence, expert child sex offenders exhibit an enhanced ability to remain undetected. This is accomplished in three ways. Firstly, the expert offender is able to use subtle techniques to manage their victim post-offence. For example, Bourke et al. (2012) found that expert offenders subtly seek to keep the child quiet; for example, by asking them to keep a secret rather than threatening them. Secondly, expert offenders take the time to reflect on the offence; assessing whether amendments should be made to their offending scripts to maximise benefits and minimise costs for future offences (Vernham & Nee, 2015).

Finally, because expert child sex offenders are more capable of competently regulating their emotional states, they are able to lead what appear to be seemingly normal lives. As Lussier et al. (2011) note, the most successful offenders were older, in a relationship, employed, did not have drug problems, were non-violent, and had not spent previous time in prison. Competent behaviours, such as those outlined above, allow offenders to lead prolific lives of crime. For example, two expert participants of Bourke et al.'s (2012) study disclosed having between 70 and 100 victims each.

5.5: Expertise and risk

So far we have provided an overview of the concept of expertise, how it is developed, and what it looks like in terms of child sexual offending. But how does the concept of expertise relate to risk of reoffending? Pre-existing conceptualisations in the literature contend that once expertise has been developed, it has enduring consequences for risk of child sexual recidivism. Drawing on the work of Vernham and Nee (2015) and Heffernan and Ward (2015), we outline three of these arguments below.

5.6: Expertise as automating offending

Vernham and Nee (2015) postulate that once automatic, dysfunctional cognitive processes have been intentionally built up to offend effectively and efficiently, it becomes highly difficult for an offender to desist if he chooses to do so. This is because cues for offending are automatically recognised through the activation of antisocial scripts from long-term memory. These trigger an innate desire to offend because the cues are strongly linked to previous reward and positive affect (Vernham & Nee, 2015). Preconscious automatic scanning cannot be turned off, and thus the offender is likely to continuously become motivated to offend when their goals are unconsciously activated (Nee & Ward, 2015). Because offending is an effective strategy for accomplishing a goal, the expert offender

instinctively selects and uses it. In sum, the expert child sex offender is at an increased risk of reoffending because he is simply unable to inhibit himself from using offending as a behavioural strategy.

5.7: Expertise as a means to realise other primary goods

Heffernan and Ward (2015) note that it is important to acknowledge that child sex offenders are humans whose existence does not solely revolve around offending. Like all humans, men who have sexually offended against a child are complex beings who strive for primary goods that generally lie outside the domain of offending. Drawing on the GLM, these can include goods such as knowledge, mastery in work or leisure, relatedness, community, and creativity (Ward & Brown, 2004). However, when offending is perceived as a long-term strategy to realise primary goods commonly associated with sexual offending, such as pleasure and intimacy, the process of offending may take on its own importance and in itself becoming a source of other primary goods (Bourke et al., 2012). In other words, rather than being a means to a valued end, the sexual offending itself becomes intrinsically valued because of the goods the process itself provides. For example, if an offender lacks other sources of mastery or knowledge in their life, they may focus on developing expertise in offending as the primary strategy to realise these goods (Heffernan & Ward, 2015).

Bourke et al. (2012) evidence this, with one participant in their study recounting that he was immensely proud of his ability to tell which victims are and are not worth approaching. An individual is less likely to desist from a behaviour if it comes to function as the source of multiple primary goods; it is simply perceived as too costly to give it up. Therefore, realising multiple primary goods via offending increases risk of reoffending.

5.8: Expertise as changing the offender's ecology

When the individual draws on offending as a strategy to satisfy other primary goods, they implicitly alter their ecologies to normalise or encourage their sexually abusive actions. This may be best demonstrated using the example of online networks of child sex offenders, which are used to share sexually exploitative material of children and communicate with like-minded individuals (Kloess, Beech, & Harkins, 2014). These networks have allowed offenders to interact and find others with the same interests, whilst remaining relatively safe from detection due to the anonymity of the internet. Within these networks, offenders may seek the primary good of connectedness through chatrooms or instant messaging services, where they are exposed to a social environment that is supportive of pro-offending attitudes and dysfunctional sexual norms (Kloess et al., 2014; Ward & Beech, 2006). Such sites may also be used by offenders to demonstrate their mastery by providing massive collections of child pornography, which is met with praise and admiration by others (Bartels & Merdian, 2016; Kloess et al., 2014). Some offenders may even use offender networks to pass on skills to novices, thereby demonstrating knowledge and mastery whilst obtaining connectedness via the development of a didactic relationship (Quayle & Taylor, 2002).

The Agency Model of Risk (AMR; Heffernan & Ward, 2015) allows us to understand how developing a pro-offending ecology may increase risk of reoffending. The AMR proposes three levels of agency: The *personal* agency level encapsulates the individual's self-concept, beliefs, personal values, and life priorities. From this level, the individual derives who they are, what they want, and how they plan to achieve it (Heffernan & Ward, 2015). The *social role* agency level refers to the self in relation to others; capturing the interactions between the individual and other people, as well as interactions between the person and the community/society (Heffernan & Ward, 2015). At this level, the individual's behaviour is modified via cultural norms, which are learnt through social interactions; both positive and

negative. These responses can reinforce or discourage particular strategies for achieving goals. The final level is the *systems* level, which directs behaviour through the activation of biological needs (e.g., hunger or sexual arousal) or by altering cognitive processes (e.g., loss of inhibition through intoxication; Heffernan & Ward, 2015). Within the AMR, psychological vulnerabilities are the mechanisms that reduce an individual's ability to achieve a goal in a prosocial manner, and are distributed across the levels of the model. For example, the presence of cognitive distortions that normalise or justify sexually offending against a child is located at the personal level of agency, whilst deviant sexual arousal is located at the systems level of agency (Heffernan & Ward, 2015).

From the perspective of the AMR, engaging in behaviours which alter an offender's ecology increase the risk of child sexual reoffending because the social level, which is possibly the strongest inhibitor of people who use antisocial strategies to achieve their goals, shifts from being an inhibitory influence to a supportive one. Therefore, the consequences of seeking other goods through sexual offending can "modify, entrench, or worsen the personal circumstances of an offender and in this way, increase or maintain the offending behaviour" (Ward & Beech, 2006, p. 50).

5.9: Expertise as a manifestation of values: An alternative approach?

The above arguments tend to focus on how risk of reoffending increases once high competency behaviours have been developed. As a result, these types of explanations do not necessarily explain why offenders would dedicate time and effort, and risk experiencing highly damaging costs, to developing expertise in the first place. Below we posit an alternative approach, where expertise is related to risk by the values and goals the construct inherently *represents.* We believe this conceptualisation complements the pre-existing

explanations of risk and expertise outlined above, and can be utilised to help explain the predictive power of particular offence characteristics.

As discussed in chapter four, the underlying values of a child sex offender may help to determine their risk of reoffending. Through a synthesis of the offender typology literature, we provided a basic outline of three possible goal/value bases that direct behaviour and influence risk of child sexual reoffending; a fixated goal/value base increases the risk of child sexual recidivism, a criminality goal/value base increases the risk of general reoffending, but not necessarily child sexual reoffending, and a regressed goal/value base does not increase risk of child sexual recidivism. Like behaviours that signal psychological vulnerabilities, we suggest that expert behaviours provide an insight into what the offender's values and goals are. This is achieved by looking at properties of a behaviour, such as skill, knowledge, and commitment, which allow us to infer how important successfully undertaking the sexually abusive act is to the individual. To explain this conceptualisation, we draw on the AMR and the abductive method of reasoning.

In making the decision to offend, the approach goal child sex offender's personal and systems levels of agency become highly activated (Vernham & Nee, 2015). We note that this may differ from the avoidance goal offender, where it is proposed that only the systems level of agency becomes activated, momentarily overrides the self-regulatory system of the individual, and leads to lapses in behaviour (Heffernan & Ward, 2015; Ward & Hudson, 1998b). If the offender strongly values offending as a strategy to achieve a primary good (e.g., pleasure) due to psychological vulnerabilities (e.g., paedophilia) blocking prosocial paths, he will not be discouraged by the potentially high costs associated with the social level of agency (e.g., social and legal sanctions). Instead, he will dedicate time and effort to developing expertise which allows him to increase the perceived benefits and decrease the costs of his sexually abusive behaviour.

Given the high degree of effort, dedication, and practice that goes into developing expertise, the presence of highly competent sexual offending behaviours may allow us to abductively infer that the offender has a fixated goal/value base. He strongly values child sexual offending due to the intrinsic reward the behaviour provides, and is therefore willing to go to lengths to reduce the high costs, for what he perceives as high reward (Lussier et al., 2011). Because of the importance placed on the offending, he is unlikely to desist even if sanctioned; hence putting him at an increased risk of reoffending sexually against a child.

5.10: Expertise as an explanation of offence characteristics

We mentioned at the end of the last chapter that there are some offence characteristics which predict child sexual recidivism that do fit well into the psychological vulnerabilities model, or do so only partially. Bringing together the strands from the above theoretical arguments, we suggest that offence characteristics that are predictive of child sexual reoffending, but cannot be fully explained by the psychological vulnerabilities model, are static referents or markers of competency. Due to the innate properties of expertise, we can use the presence of highly competent behaviours to abductively infer that the offender holds a fixated goal/value base. To restate our argument from chapter four, by inferring the existence of the goals and values directing a behaviour, we can better explain why it is predictive of child sexual recidivism (Heffernan & Ward, 2015). Given that no other theme of static risk factors tend to capture the construct of expertise, this may be the most unique quality of offence characteristics.

From the above literature review, which essentially functions as an offender exemplar for the expert child molester, we can surmise four broad properties of behaviours that mark high competency in child sexual offending. From the perspective of the abductive method, these properties function as phenomena; stable features which we seek to explain because

they may hold some sort of relationship with risk of child sexual reoffending. Properties of expertise are not mutually exclusive and have semi-permeable boundaries; that is, a behaviour might contain multiple properties of expertise, and those properties may fit into one or more categories. As a result, we have endeavoured to categorise static items by their primary property of expertise.

The first property of expertise is *detection sensitivity*, which is found in cost minimisation behaviours that reduce the likelihood of the offender getting caught in the act, or having the offence linked back to them. This can include, for example, offending in a criminogenic environment (e.g., the CBR's *approach in external location* and *crime committed in non-usual environment*), securing the crime scene (e.g., the age adjusted CBR's *securing the crime-scene* and *avoiding/removing evidence*), or taking steps to mask or obscure identification (e.g., the VASOR-2's *address change* or the CBR's *drugged victim*). The property of detection sensitivity indicates advanced knowledge structures and rich schemas of sexual offending (Lussier et al., 2011; Nee & Ward, 2015).

The second property is *delayed gratification*. This property demonstrates the offender is willing to delay instant gratification or pleasure to ensure the odds of success are more in their favour, and is present in items such as the short CBR's *explicit planning* and the age adjusted CBR's *situation created proactively*. The property of delayed gratification indicates competency in mental processes such as inhibitory control (i.e., preventing impulsive behaviour) and executive functioning (i.e., predicting outcomes of alternative approaches and reduced delay discounting; Reynolds & Schiffbauer, 2005; Weatherly & Ferraro, 2011).

The third property is *skilful manipulation*. This property captures the offender's ability to maximise the benefits they receive from the act. Primarily, this property is found in behaviours that subtly coerce the victim into increasing levels of sexual exploitation, whilst maintaining compliance by presenting the offender as nonthreatening (Fortune et al., 2015;

Ward, 1999). Examples include the CBR's *trust building approach* and *coaxing style of communication*, the short CBR's *hands off; victim active*, and Lehmann et al.'s (2014) *fondle* and *offender makes promises.* Skilful manipulation indicates the offender has developed detailed offence scripts and a range of heuristics that allow him to respond robustly to contextual cues from the victim; thus allowing him to better ensure victim compliance (Nee & Ward, 2015; Vernham & Nee, 2015).

We also contend there is a fourth, somewhat distinct, property of expertise called *displays of other primary goods*. This property is located in behaviours that show the offender may be using sexual offending to achieve multiple primary goods; for example connectedness or mastery. This property is not present in any items from the CBR family of measures, but other research focusing purely on adult sex offenders demonstrate it may be worthy of further exploration. For example, Jones, Harkins, and Beech (2015) investigated the predictive utility of a new static risk assessment tool called The Threat Matrix, which has been derived from the RM2000. One of the items contained within The Threat Matrix is *joint offending and/or association with registered sex offenders*, which may be tapping into the primary good of connectedness through sexual offending. Other examples have been noted by Lehmann, Goodwill, Gallasch-Nemitz, Biedermann, and Dahle (2013), who found that stealing clothing and other personal items (e.g., jewellery) is predictive of sexual recidivism in adult stranger rapes. From this type of behaviour, we may be able to infer that the adult rapist is using their sex offending to tap the primary good of mastery. Based on the lack of research of this property in the context of child sexual offending, we tentatively put it forward as a promising area that needs further exploration.

Conversely, behaviours that have properties that are diametrically opposite to those listed above should also be taken into consideration for the insights they might provide. These types of behaviours includes those that are impulsive, poorly planned, and/or overtly

coercive (i.e., physically aggressive, commanding, verbally threatening), or demonstrate little regard for detection before, during or after the offence (e.g., repeatedly hunting for victims in the same area). Some behaviours may speak more to a sexually regressed goal/value base via their properties of recklessness, which indicate an impulsive need to offend rather than a planned assault. Other behaviours which have properties of coercion and explicit control may indicate a criminality goal/value base. This is because such properties may indicate the offender is disinterested in maintaining an abusive, manipulative relationship in which he is able to repeatedly access and reoffend against that particular victim (Rebocho & Goncalves, 2012).

5.11: Summarising the chapter: The competency strand

In this chapter, we have sought to use a competency-based model of risk to further understand why offence characteristics are useful predictors of recidivism. We have knitted together a number of pre-existing arguments and conceptualisations about the nature of expertise in sex offending and its relationship to risk. Then, with the help of the abductive method and the exemplars strategy, we postulated that behaviours can hold properties of competency. Like the presence of psychological vulnerabilities, we can use these to make inferences about the underlying goals and values of a child sex offender. We present this process, which we call *the competency strand* of the OCMF, below in pictorial form (see figure 2).

The pictorial form of the competency strand is comprised of three boxes that crystallise the abductive processes we have outlined in this chapter. Like the vulnerability strand, we begin with the *physical manifestation* box. To reiterate, this is the statistically predictive offence characteristic that we are interested in explaining. It is a concrete, but ephemeral, data point.

In the competency strand, the *physical manifestation* box is linked to the *properties of competency* box, indicating that we can examine the data point (i.e., the behaviour of interest) and, with the assistance of offender exemplars, abductively infer the offender's degree of competency. As described in section 5.10, domains of competency include the level of detection sensitivity, willingness to delay gratification, ability to skilfully manipulate, or the ability to use offending to satisfy multiple primary goods. Whilst the data point is transient, the underlying properties are relatively enduring. Hence, it is analogous to psychological phenomena (and labelled as such).

Finally, the *properties of competency* box is linked to the *goal/value base* box. Here, we use the presence (or absence) of the offence characteristic's properties of competency to abductively infer the importance the offender places on successfully offending against a child. We then consider the likely underlying goal/value base of the offender (e.g., fixated, criminality, regressed), and how this informs risk of reoffending. Integrating this information together, we are then able to better explain why the offence characteristic of interest is statistically predictive of reoffending.

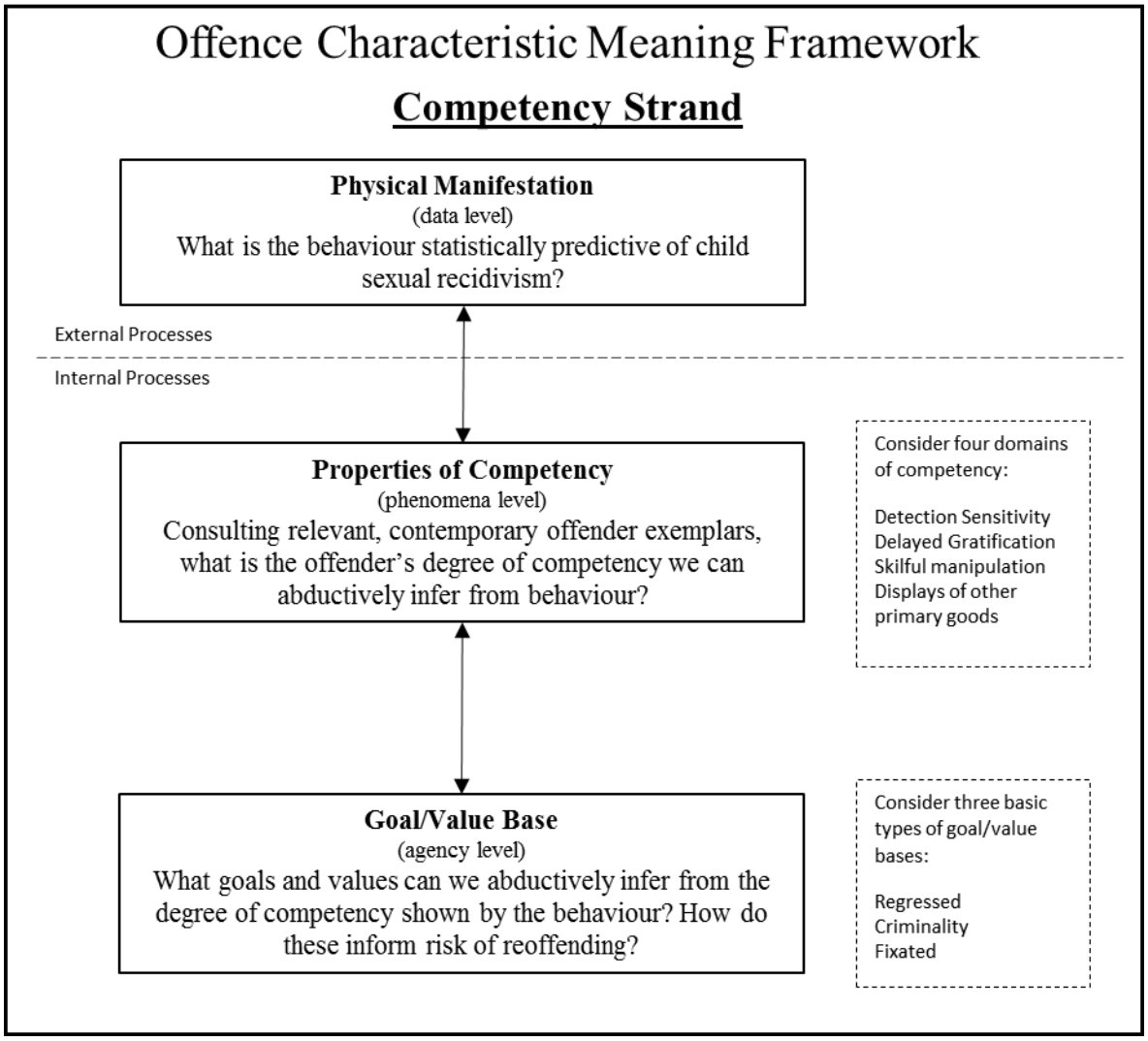

Figure 2. The competency strand of the Offence Characteristic Meaning Framework

5.12: Vulnerabilities and competencies: Two sides of the same coin?

As we mentioned above, a behaviour may contain multiple properties of expertise. For example, we have categorised *planning* as delayed gratification, but it also inherently contains the property of detection sensitivity. However, several offence characteristics seem to capture elements of expertise *and* psychological vulnerabilities. For example, we can use the CBR's *hands off; victim active* to abductively infer vulnerabilities in sexual self-regulation and competencies in skilful manipulation. This leaves the question; how do we account for both? The final chapter explores how we can bring the vulnerability and competency strands of the OCMF together to provide a comprehensive framework for

explaining why offence characteristics are useful predictors of child sexual recidivism. Within this chapter, we will explore the strengths and weaknesses of this preliminary model, outline practical applications of the model, provide future directions, and draw some final conclusions about the nature and usefulness of offence characteristics as a whole.

Chapter 6: The final OCMF model

6.1: Bringing the vulnerability and competency strands together

Drawing on contemporary literature, we have outlined two conceptual strands in order to better understand why offence characteristics are predictive of sexual reoffending. Despite approaching child sexual recidivism from two different theoretical angles, we contend that the vulnerability and competency strands are actually mutually reinforcing. As a result, they can be used cooperatively, rather than competitively, to comprehensively understand why offence characteristics are predictive. This is because the psychological mechanisms posited by the vulnerability strand are likely responsible for the offender perceiving offending as a legitimate behaviour they can hone to perfection. In turn, progressing along this pathway of maladaptive expertise provides the individual with positive feelings, which allows them to perceive their psychological vulnerabilities as positive facets of their personality or being.

For example, if an offender was to skilfully use emotional manipulation to coerce a child into passively accepting sexual activity, it may reinforce distorted beliefs that children are sexual beings (Bartels & Merdian, 2016). The offender may then justify their behaviour as acceptable; believing that children just need to be 'successfully' seduced (i.e., with gifts, attention, emotional manipulation) before initiating physical sexual contact. This reasoning errantly supports the offender in honing his abusive actions, and reinforces his likelihood of offending again given the positive outcome for the offender. These relationships are represented in the final model of the OCMF below (figure 3), with bidirectional arrows linking the *psychological processes* and *properties of competency* boxes.

Furthermore, the competency and vulnerability strands are both underpinned by the offender's personal agency. As we have mentioned, psychological vulnerabilities do not constitute offending; they merely steer the individual down antisocial pathways in their quest to fulfil their goals or values. Similarly, the very notion of maladaptive expertise is built on

the assumption that the individual highly values the outcome of offending (or the offending itself), and hence desires to increase their skills to increase the perceived benefits. This also puts their goals and values at the forefront of their offending. Therefore, even though the strands of the OCMF are informed by different theoretical concepts, the individual vulnerability and competency elements of a behaviour can both help to determine the offender's goal/value base level. This is depicted in the final model of the OCMF by the strands starting off as separate entities, and then converging at the *goal/value base* box.

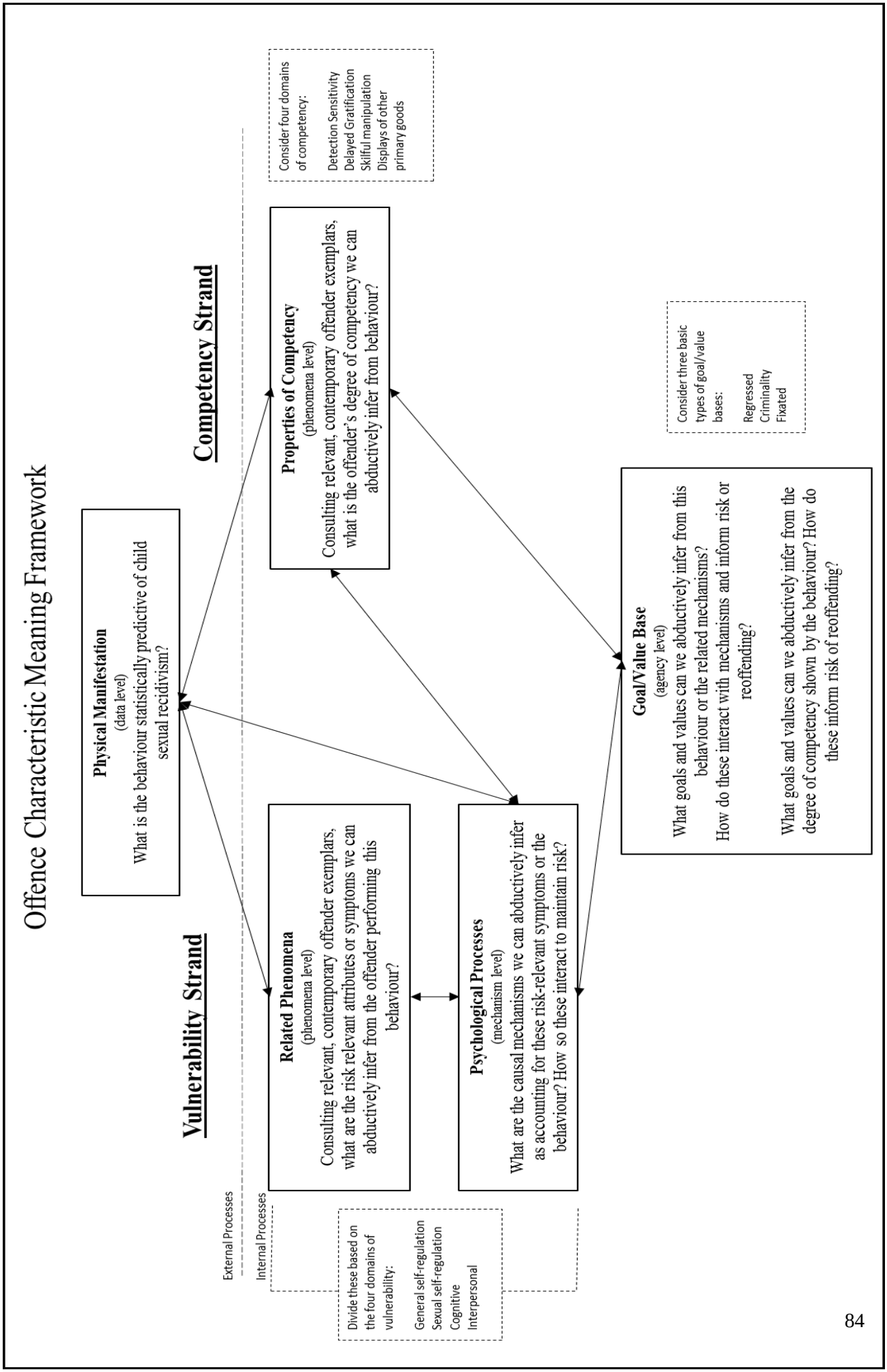

Figure 3. The Offence Characteristic Meaning Framework

6.2: The OCMF: A demonstration

By way of a more complex example, we will use the OCMF to facilitate our understanding of why the CBR's *extended crime event* is statistically predictive of child sexual recidivism (see figure 4 below for the pictorial depiction of the OCMF steps). This item captures a crime event that has lasted for over an hour (Dahle et al., 2014). We construe this behaviour as a symptom of underlying psychological processes, and then consult our offender exemplars to elaborate on what other descriptive phenomena (i.e., traits, states, signs, symptoms) that offenders who engage in lengthy offences might demonstrate. Based on the information in our exemplars, offenders who demonstrate this type of behaviour tend to exhibit interpersonal phenomena such as loneliness (a state), feeling more comfortable around children (a trait), and a history of failed adult relationships (a symptom). They also tend to demonstrate phenomena in the sexual self-regulation domain, including deviant sexual arousal (a state) and sexual interest in children (a trait). Remember that the purpose of making inferences about related phenomena is not to explain the predictive power of the variable, but to provide more context that can then be drawn on in the hypothesising of possible psychological mechanisms.

In consultation with our offender exemplars, we now abductively infer the causal mechanisms that are potentially underpinning the offender's behaviour of engaging in an extended crime event. We infer that the offender may have distorted beliefs that physical sexual contact equates to intimacy, emotional congruence with children, an intense sexual preoccupation with children, and sexualised coping for negative mental states such as loneliness. We then consider how these mechanisms possibly interact to maintain each other, which allows us to better understand why the behaviour is predictive of reoffending.

In this case, an extended crime event may occur because the offender wishes to establish and experience enduring intimacy, which, in his mind, can be accomplished through

forced, sustained sexual contact. The offender targets children because he emotionally identifies with them and sexually desires them. Based on this explanation, endorsement of the item is associated with risk of reoffending because it indicates the presence of (potentially) multiple, longstanding psychological vulnerabilities that, without intervention, are likely to repeatedly activate in the face of contextual triggers such as victim availability, sexual arousal, or loneliness; thereby driving the offender to reoffend.

Together, we use our offender exemplars in tandem with our hypothesised mechanisms and phenomena to abductively infer that the offender's goals and values are of a *fixated* nature. This is because, based on the likely vulnerabilities underpinning the item *extended crime event*, we infer that the offender may be unable to satisfy the primary goods of connectedness and pleasure through intimacy with adult, consenting partners. As a result, the offender possesses specific approach goals to offend against children in order to satisfy their primary goods. We infer that because sexual offending is providing the offender with a source of wellbeing, self-esteem, and happiness, they focus on information that signals success. Hence, they are likely to repeatedly seek to engage in offending and increase their efforts, rather than desist, in the event of failure (i.e., detection, interruption). This explanation at the agency level supports the hypotheses we drew at the mechanism level regarding risk, and helps to elaborate on our understanding of why the item *extended crime event* is predictive of child sexual recidivism.

Moving to the competency strand, we abductively infer that there is at least a moderate degree of competency demonstrated by carrying out an extended crime event. More detail is needed, but we use our offender exemplars to assume that in order to maintain contact with the victim for over an hour, there had to be elements of detection sensitivity (e.g., planning offence location to avoid interruption or detection, measures taken to reduce likelihood of victim escape), and possibly skilful manipulation by the offender to keep the

victim compliant throughout the offence. Using the presence of these elements, we infer that the offender strongly values the offending; having gone to (at least some) effort to minimise the costs and increase the perceived benefits of the sexually abusive behaviour. Hence, we infer that the item *extended crime event* is underpinned by a fixated goal/value base. Because of the importance placed on offending, the offender is unlikely to desist even if sanctioned; hence putting him at an increased risk of reoffending sexually against a child. This further helps us to understand why the item is predictive of child sexual recidivism.

We note while this particular item contained elements of vulnerability and competency, not all items do. For some predictors, the emphasis will be on the vulnerability strand, whilst for others the emphasis will be on the competency strand. We think it is important that one should not make an inference about a vulnerability or competency if they have no evidence (either based on the content of the item itself or relevant exemplars) supporting that assumption.

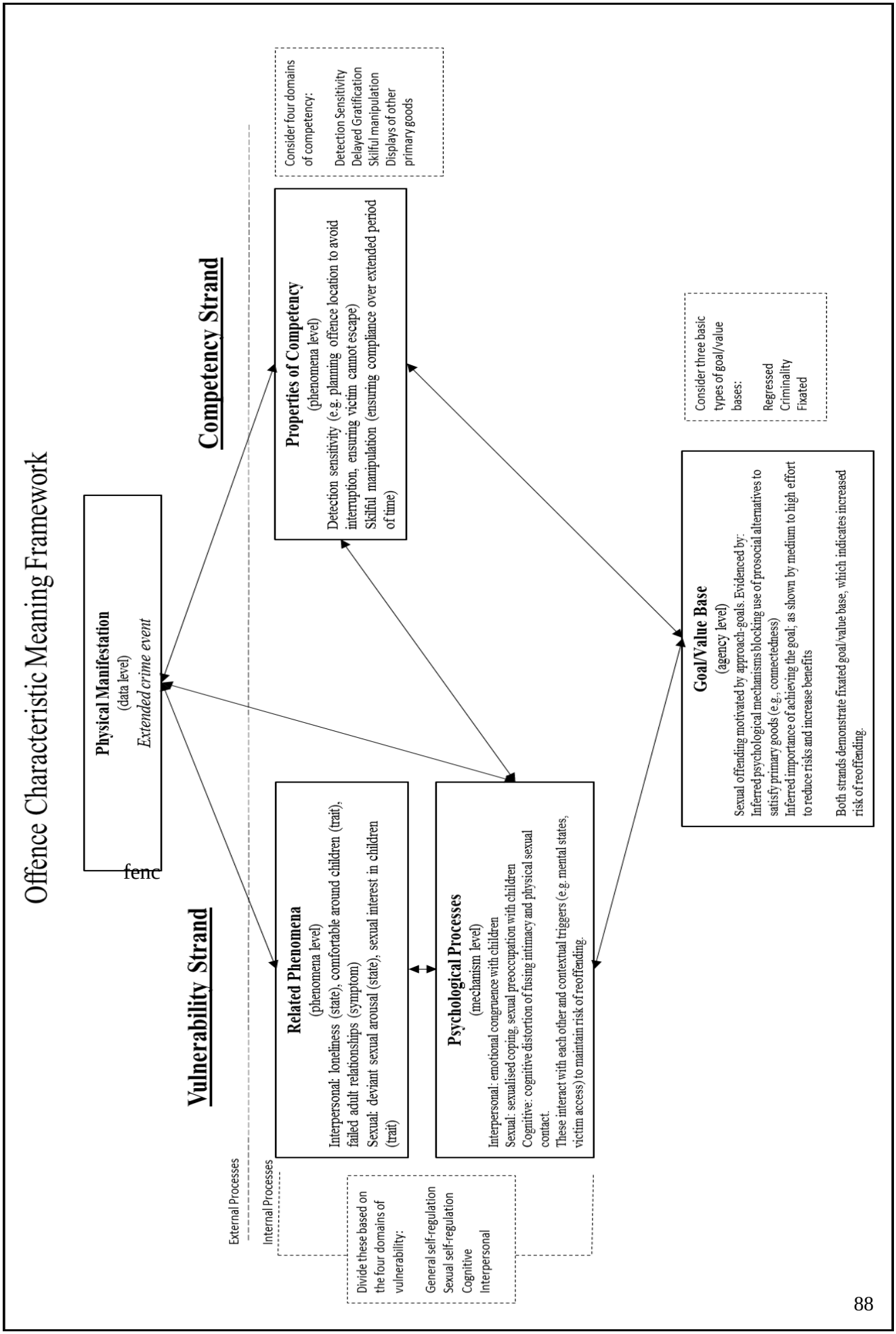

Figure 4. Worked example of the Ofe Characteristic Meaning Framework

Chapter 7: Evaluating the OCMF

7.1: Evaluating the OCMF: Hookers (1987) attributes of a good theory

Following the initial conceptualisation of a new scientific theory or framework, it is crucially important to evaluate it against a set of normative criteria to determine its strengths and weaknesses. Hooker (1987) argues there are nine attributes of a good theory; *predictive accuracy*, *empirical adequacy*, *scope*, *internal coherence*, *external consistency*, *unifying power*, *fertility*, *simplicity*, and *explanatory depth*. Adequately meeting these criteria suggest that the theory can provide deeper and more meaningful explanations (Hooker, 1987). As such, we will briefly explain each criterion and then evaluate the OCMF against it.

The first three criteria are *predictive accuracy*, *empirical adequacy* and *scope*. Collectively, these criteria evaluate whether the theory can account for existing findings and the range of phenomena that needs to be explained. Given that the OCMF is a framework for explaining the results of other studies (i.e., those that have statistically investigated the predictive power of offence characteristics), it is by nature able to account for existing findings in the literature. This is a strength, because the model is not artificially selective about what it will and will not cater to, and its dual vulnerability and competency approach means that it is able to account for virtually any finding about any conceivable offence characteristic.

However, this approach also means that we are guided by the results of statistical investigations; either those that have been done retroactively (e.g., explaining statistically derived risk predictors) or proactively (e.g., testing theoretically derived risk predictors). Although this gives the model empirical credibility, such an approach can be problematic; if our statistical techniques are not sensitive enough to reveal an offence characteristic's true predictive nature, we may be led to make wrong inferences. Another related difficulty is that the OCMF is constrained by what factors we can test in a hypothetico-deductive manner. For

example, Lussier et al. (2011) muse there are likely to be particular predictive behaviours unique to extremely skilled sex offenders. However, we do not know what these are because these offenders are never caught, and, hence, their offending behaviours never studied. With this in mind, we would consider that while the OCMF has extensive scope and sets itself up to be empirically testable, its predictive accuracy is somewhat at the mercy of the quality of the ongoing investigations on risk factors. Hence, we consider this to be a relative weakness of the model.

The fourth criterion is *internal coherence*. This refers to whether the theory contains logical gaps, or whether aspects of the theory are inherently contradictory. Firstly, because the OCMF is built around the idea of using logical abductive inferential reasoning to move through levels of explanation, we do not think gaping logical gaps exist in the framework itself. Secondly, we demonstrated the internal coherency of the OCMF above, where we showed how the vulnerability and competency strands work in tandem to facilitate better understanding of risk predictive behaviours. We would consider the internal coherency of the OCMF to be one of its strengths.

The fifth criterion is *external consistency*, which refers to whether the theory is consistent with other pre-existing theories. As the OCMF is built upon currently accepted theories in the field of offender risk assessment, it has a good degree of external consistency. For example, it assumes that there is no real distinction between static and dynamic risk factors, and there are particular psychological processes that cause individuals to be vulnerable to offending. These assumptions permeate much of the current thinking on risk factors, and, as a result, the OCMF is highly compatible with much of the contemporary research in the field.

The sixth criterion is *unifying power*. This refers to whether the theory draws pre-existing theories together in an innovative way. We believe that the OCMF is the first theory

to explicitly argue that a competency based model of risk should be used in tandem with a deficit based model of risk to facilitate deeper understanding of risk factors for child sexual offending. As such, we would consider the unifying power of the OCMF to be a defining strength.

The seventh criterion is *fertility*, which refers to the capacity of the theory to open up new avenues of inquiry. The OCMF is a fertile framework; it not only promotes the user to consider multiple levels of explanation (e.g., phenomena, mechanisms, values), but how these levels interact horizontally and vertically to produce risk-relevant offending behaviour. As a result, the structure of the OCMF fosters the user's curiousness; encouraging them to consider multiple domains of explanation, elaborate on how phenomena and potential mechanisms interrelate, and explore the role of competency; an avenue of explanation that may not have otherwise been explored.

The eighth criterion is *simplicity*. Hooker (1987) notes that the best theories are also the ones that make the fewest number of theoretical assumptions. Unfortunately, because risk factors are complex constructs that are still not well understood, we are generally reliant on research that makes multiple assumptions for the OCMF to have any potential use. As previously outlined, this is because specific cause-and-effect relationships are difficult to clarify, and hence hypotheses can often be challenging to test using quantitative scientific methods. Thus, we have to make assumptions in the form of offender exemplars; schematics comprised of a mishmash of modern neurobiological, social, clinical, and forensic findings which are drawn together to make logical conclusions about the relationships between offence characteristics (i.e., the concrete data points), psychological mechanisms, and values. Although indeed a weakness, the lack of simplicity in the OCMF is not an inherent design fault in the framework. Rather, it is an inevitable product of trying to explain sexual offending; a phenomenon that we still do not have precise, clear aetiological formulations for.

The final criterion is *explanatory depth*, which refers to the theory's ability to describe deeper causes and processes. The OCMF has been constructed with the intent to think more deeply about why particular offence characteristics are predictive of child sexual recidivism by examining potential underlying mechanisms. Given this focus, we believe the OCMF not only meets this criteria, but exceeds it.

7.2: Applications of the OCMF

Throughout this thesis, we have concentrated on how we can use the OCMF to better understand why statistically derived offence characteristics are predictive of child sexual reoffending. We propose that this method can be applied to two practical contexts. Firstly, the OCMF may be a useful tool for personnel who work in the criminal justice system, but do not necessarily have formal training in the etiology of sexual offending. This may include frontline police attached to specialised child protection units, who dedicate their careers to monitoring and managing child sex offenders to keep the community safe. These frontline staff gain invaluable insights and experience through their routine dealings with sex offenders, but may lack a theoretical framework in which they can hang their accumulated knowledge on. The OCMF may fill this purpose; not only providing a means to standardise and organise the reasoning processes of frontline staff, but potentially provoking new ways of perceiving and understanding how the behaviour they encounter on an everyday basis relates to risk of reoffending.

Secondly, the OCMF may be a useful tool for guiding correctional psychologists in their treatment and rehabilitation of child sex offenders. Whether it is through a risk assessment tool or a general clinical assessment, the clinician will likely be presented with an array of potentially informative offence characteristics by the client. The OCMF may facilitate the clinician in abductively inferring potential psychological vulnerabilities and

values of the offender based on their behaviours during the offence. This can help to form (or enhance) a clinical formulation that can then be used to inform treatment goals. As Ward et al. (1999) note, articulating the problem (i.e., the underlying mechanisms driving behaviour) effectively points the inquirer to the solution. It illuminates what components need to be focused on during treatment to effect change and reduce the offender's risk of reoffending. The same process can also be said for expertise, which, although it may not be a typical area of inquiry, may need to be addressed to reduce risk (Bourke et al., 2012; Ward, 1999). Authors, such as Vernham and Nee (2015), have posited techniques for reducing the risk bought on by expertise. For example, retraining automaticity in behaviour and funnelling competencies into prosocial activities and strategies.

Finally, the OCMF also provides a useful framework for positing theory driven, rather than data driven, risk factors. This method may be useful for researchers who are interested in fleshing out a theoretical argument for a new risk factor they believe may be predictive of child sexual reoffending. We note that with the addition of a few extra steps, the OCMF can become a model for hypothetico-deductive testing. For example, once the researcher has run through the steps of the OCMF using the potential risk factor, they could then test it using approved statistical methods. They could then retest using a different sample to establish further validity for or against the potential risk factor, and then use the outcomes to strengthen or reshape theoretical arguments. Given the continued importance of empirical testing in establishing the predictive ability of risk factors for reoffending, such an approach may help to strike a more even balance between theory and statistics, as opposed to having one dominate the other.

7.3: Where to from here?

In this thesis, we began by reviewing the psychological literature to determine that offence characteristics are a potentially useful, if not somewhat underused, theme of static risk factors. Drawing together theoretical arguments and empirical investigations from the fields of correctional psychology and criminology, we found that offence characteristics contribute to understanding risk of reoffending, and, due to their predictive abilities, have the capacity to be used in standardised static risk assessment tools. Whilst it seems that a small group of researchers (e.g., Lehmann and colleagues) have specifically taken on the task of bringing offence characteristics into mainstream risk assessment, we note there is generally increasing interest in exploring the utility of offence characteristics; both in relation to sexual and acquisitive offending. Most recently, for example, Fox and Farrington (2016) have linked developmental factors to the crime-scene behaviour of burglars, and devised a fledgling typology of differing crime pathways.

We believe that the research on offence characteristics, especially in relation to risk of reoffending, will continue to develop and evolve. Given the importance of actuarial risk assessment to the current state of correctional psychology, we think it is possible that offence characteristics will increasingly feature in static tools, provided that robust scientific investigations continue to deem them worthy of inclusion. This may take the form of schedules comprised fully of offence characteristics such as the CBR, or, more likely, a hybridised approach that incorporates offender characteristics, victim characteristics, and offence characteristics. Unlike most investigations in the area, this thesis has not focused on discerning what crime scene behaviours are and are not predictive of child sexual offending. Rather, we have somewhat indirectly contributed to the burgeoning literature by reminding the reader of the crucial role theory needs to play in understanding risk predictors; both statistically derived and hypothesised.

But what about the OCMF itself? What should the next steps be for this initial prototype? Broadly, we would expect interested individuals to take the framework and test drive it; using offender exemplars to assist with inferring phenomena, mechanisms (both deficit-based and competency-based), and values that may help to explain the predictive ability of offence characteristics. Whilst we have determined that the OCMF initially meets most of Hooker's (1987) criteria, we inevitably expect that alterations will occur when it is tested. For example, existing threads may be reworked, and possibly whole new strands or sub-strands may be added to the OCMF.

As the field of offender risk prediction continues to move forward, greater emphasis is being put on (1) accounting for the origins of mechanisms, and (2) clarifying common mechanisms of risk predictors. We recommend that particular efforts should be made to account for these facets in the OCMF, as their inclusion will facilitate even better understanding of why particular behaviours are predictive of reoffending. For example, Ward and Fortune (2015) speak of the importance of taking a *transdiagnostic* approach to risk factors. This model posits that mechanisms are shared across diverse risk factors, with some being common (i.e., endemic to multiple risk factors) whilst others being rare (i.e., idiosyncratic to a few, or even just one, risk factor).

Once the prevalence of different causal processes have been initially hypothesised through research, this would be a potentially useful model to incorporate into the OCMF. This is because if we could successfully pick out the potential causal mechanisms of a risk-relevant behaviour, we could generate and test behaviour that share those mechanisms as a starting point for identifying other risk predictors. Such an approach would also allow us to strengthen our convictions about what the processes are that cause behaviours to be predictive of risk. Though this notion needs more elaboration, it could potentially take the

form of a sub-strand that accounts for commonalities between different offence characteristics (intra and/or inter-individually).

We believe that future efforts should also be focused on accounting for the origins of mechanisms in the OCMF. Although we have yet to progress to the point where we are completely comfortable in our social and neurobiological explanations of crime, researchers are continuing to make headway in the field. For example, Simons and Burt's (2011) *Social Schematic Theory* (SST) focuses on how repeated exposure to antisocial interactions shape maladaptive psychological processes, whilst a meta-analysis by van der Gronde, Kempes, van El, Rinne, and Pieters (2014) integrates findings on brain region functioning and neurotransmitter and hormone levels associated with different types of offending.

With continued research, we may reach the point where we can construct highly elaborate offender exemplars that allow us to make potential inferences about what influences have caused psychological mechanisms of offending to occur. Such an approach would further aid us in understanding why particular behaviours can predict recidivism, and may take the form of a sub-strand branching off from the vulnerabilities box in the OCMF.

7.4: Final Summary

In the beginning, we argued that theory is a crucially important, yet historically undervalued, aspect of static risk factor development. We also recognised, like many authors before us, that this is problematic; only through gaining a better *understanding* of risk factors can we continue to grow and refine the subfield, and hence enhance the criminal justice system's ability to reduce reoffending and protect our communities.

To contextualise the importance of theory in risk assessment, we investigated offence characteristics (i.e., crime-scene behaviours); a theme of static risk factors that has shown promising statistical ability to predict risk of recidivism of child sex offenders, but suffers

from a lack of theoretical elaboration. We first outlined the most recent conceptualisation of static and dynamic risk factors; namely that they are not distinct entities, but different representations of the same construct. This approach helps to overcome some of the limitations traditionally thought to be posed by static risk factors (e.g., unable to be used to use in the context of treatment), and allows for them to be seen in a new light.

Then, to understand why particular offence characteristics are statistically predictive of child sexual recidivism, we knitted together various pre-existing theories and findings in the literature; arguing that offence characteristics are static referents of psychological vulnerabilities and competencies. By abductively inferring what vulnerabilities and competencies underpin an offence characteristic, we can then use offender exemplars to hypothesise how these interact with each other, the potential goals and values of the offender, and contextual triggers to create and maintain risk of reoffending. Via this process, we argue we are able to better understand why the behaviour of interest is statistically predictive of child sexual reoffending.

In the end, we gathered the various threads of our theoretical arguments and wove them together into a robust, unifying, level 1 theory called the Offence Characteristic Meaning Framework (OCMF). The OCMF is comprised of a vulnerability strand and a competency strand that, together, form a structured reasoning process the reader can use to aid in understanding why particular crime scene behaviours predictive of risk of child sexual reoffending. The OCMF is a novel, if somewhat indirect, contribution to the burgeoning literature on offence characteristics. An initial evaluation indicates that the OCMF's strengths outweigh its weaknesses, and is potentially the first theory to incorporate both competency-based and deficit-based models of risk.

We hope that at the very conclusion of this thesis, the reader has been inspired to think more deeply about why particular behaviours are predictive of child sexual recidivism.

We also hope the reader is willing to take the prototype OCMF and test it out, and make alterations if needed. In this way, we can take it upon ourselves to improve the field of offender risk assessment, and contribute to the overall objective of a better understanding of criminal offending.

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