Dynamic Risk Assessment, Personality Disorder, and Key Developmental Variables in Sexual Offenders

by

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THESIS ABSTRACT

This thesis examined the relationship between key developmental variables, dynamic risk factors, and personality. First, a detailed review of the literature pertaining to these areas is presented, a narrative review with systematic search strategies was compiled due to the breath of the topic areas. Second, an empirical research project was conducted to investigate the presence of any relationships between key developmental variables, dynamic risk factors on the Stable-2007 (formally Stable-2000 and Sex Offender Needs Assessment Rating) (Hanson & Harris, 2001; Hanson, Harris, Scott, & Helmus, 2007), and personality disorders measured using the Million Multiaxial Clinical Inventory (MCMI-III) (Millon, Millon, Davis, & Grossman, 1997) and the any relationship to treatment attrition. The Challenge project data was utilised for this research which comprised information on 106 sex offenders both child molesters (n=69) and rapists (n=37). The research demonstrated number of relationships between personality disorder, key developmental variables, and the Stable-2007 items. There were very few significant associations between any of the variables and treatment attrition. Third, a case study aimed to demonstrate the practical utility of Stable 2007 discussed in Chapter 1 and researched in Chapter 2 is presented and relevant interventions are discussed. Fourth, a critique of a psychometric measure, the Stable-2007 is provided, which demonstrates continuing advances and validation of dynamic risk assessments. Finally, an overall discussion of each of the chapters is provided.

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INTRODUCTION

The overall aim of this thesis was to investigate the relationships between dynamic risk, factors, personality disorder, and key developmental variables in sexual offenders. This aimed to increase the understanding on these variables and to discuss how they may be measuring the same underlying constructs. It aims to contribute to the overall understanding of sexual offender risk assessment and discuss the need for more holistic risk assessment processes considering a range of background and dynamic variables.

Background

The field of sex offender risk assessment has been a topic of much study and debate in recent decades. This has wide implications on society and victims and as such researchers and clinicians are continually aware of the importance of accurate assessments. The development of risk assessment tools have gone through a number of generations from unstructured clinical judgement through actuarial tool such as the Static-99 (Hanson & Thornton, 2000) and dynamic measures such as the Stable 2007 (Hanson, Harris, Scott, & Helmus, 2007). Actuarial assessments continue to show at least moderate predictive accuracies, AUC ROC >0.7 (Hanson, 2004). However, critics assert that actuarial tools, among other flaws, do not allow for the assessment of offender need and cannot measure change. Dynamic risk assessments have began to overcome this criticism and there is ongoing research into the combination of static, stable dynamic, and acute dynamic risk tools (Hanson, Harris, Scott, & Helmus, 2007). However, further validation of such measures needs to be conducted.

An important component of developing effective sex offender risk assessment tools is well researched risk variables. There are evidently common themes in the risk assessments such as age and previous offending. However, other risk factors remain ambiguous such as that of personality and psychopathy (Hanson, 2000; Hanson & Morton-Bourgon, 2004). Personality disorder, largely antisocial personality disorder and psychopathy have been found to be predictive of sexual offender recidivism and there is a high prevalence of these variables in the sex offender population (Hanson and Bussierre, 2003; Langstrom, Sjostedt, and Grann, 2004; Hanson & Harris, 1998, 2000; Hildebrand, de Ruiter & de Vogel, 2004; Quinsey, Rice, & Harris, 1995; Rice, Harris, & Quinsey, 1990. However, it is evident that ongoing research needs to be conducted in order to clarify the role of personality disorder in sexual offence recidivism. In addition, there is been more recent research into the role of developmental or background variables in sex offender risk and recidivism (e.g., Craissati & Beech, 2006). This has been related to poor childhood attachments (e.g., Ward, Hudson, & Marshall, 1996) and later personality development (Marshall, Hudson, & Hodkinson, 1993). Furthermore, Craissati and Beech (2006) provide some evidence for a model of risk assessment using developmental variables. Finally, these risk related factors have been related to sexual offender treatment attrition (e.g., Craissati, Webb, & Keen, 2005). The research in this area is relatively new and sparse. However, it is a notable topic.

Chapter 1

Chapter one presents a narrative literature review with a systematic search procedure. This aims to present the research on the relationships between dynamic risk factors, personality disorder, and key developmental variables and the links between these factors and treatment adherence in sexual offenders.

Chapter 2

Chapter two presents an empirical research project using data from the Challenge Project (a community assessment and treatment programme for sexual offenders). This aims to build on previous research to determine the links between dynamic risk factors using the Stable-2007, personality disorder using the MCMI-III, and key developmental variables. The research also seeks to investigate the relationship of these variables to treatment attrition.

Chapter 3

Chapter three presents a single case study of a 41-year-old psychopathic rapist being assessed for treatment on the Challenge Project. A full assessment including clinical interview, psychometric assessment, risk assessment, and formulation is presented. Due to the setting a treatment could not be offered by the author. However, recommendations for treatment on the Challenge Project are presented. The case study highlights the importance of individual assessment and formulations within the context of the relevant theory and empirical research. It also demonstrates the importance of considering personality as a risk factors and a factor for treatment considerations.

Chapter 4

Chapter four presents a critique of a psychometric measure relevant to the empirical research, namely the Stable-2000 (Hanson & Harris, 2001). This is a stable dynamic risk assessment. The critique provides a description of the tool and discusses the reliability and validity, as well as the need for further validation for use in forensic settings.

Chapter 5

Chapter five concludes the thesis, discussing the overall main findings. The implications and limitations of the thesis are discussed as well as its applicability to further research and clinical practice.

ETHICAL CONSIDERATIONS

The ethical guidelines outlined by the British Psychological Society were considered and adhered to throughout this thesis. In Chapter 1, the Challenge research project had existing ethical approval. This study was also reviewed at the practices Board of Directors meeting and was approved through the University of Birmingham. In Chapter 3, Nigel provided verbal consent for the information to be used in this manner and for reasons concerning confidentiality, the client in the case study is referred to as Nigel at all times. This is a fictional name, which bears no resemblance to the clientôs true name. Furthermore, any additional names, such as family members, have been changed to protect their identity. All details used within this report are factual and based on the psychological assessment conducted at the establishment the client attended.

CHAPTER 1

The Links Between Dynamic Risk Factors, Personality Disorder, and Key Developmental Variables: A Narrative Review.

ABSTRACT

Sex offender risk assessments have developed considerably in recent years, particularly with the consideration of dynamic risk factors. These risk assessments consider a wide range of variables from static factors to personality and key developmental variables. There is a continuing debate as to the optimum risk assessment methods. Furthermore, these risk assessments provide indications for treatment and research into the links between risk factors and treatment adherence is ongoing. This review aims to discuss the links between dynamic risk factors, personality disorder, and key developmental variables, considering factors related to treatment adherence. Due to the breadth of the topics discussed in this review a narrative review with a systematic search was carried out. The review demonstrates that the research in this area positively demonstrates links between these variables and highlights the relevance to treatment. However, it is evident that further research in this area is pertinent in order to inform future risk prediction and treatment models.

INTRODUCTION

Collins and Fauser (2005) state that systematic reviews are best suitable for focussed topics and that narrative reviews are best suitable for comprehensive topics. The title for the current literature review is too broad to compile a systematic review or a meta-analysis. The review attempts to demonstrate the link between a number of topics which, until recently, have not been investigated as having relationships with one another. As such, the review comprises of a narrative review with a systematic search format.

Risk assessment of sexual offenders is a continuing topic within the empirical literature and is a topic of significant societal concern. Over the past few decades there have been significant advances in the field of sexual offender risk assessment, particularly with the research into dynamic risk factors, that is factors amenable to change over time (Bonta, 1996; Hanson & Harris, 2001). A number of risk assessments have been developed which consider dynamic variables and these have shown moderate predictive accuracy (e.g., Thornton, 2002). However, there is an ongoing need for further research into these variables and risk assessments. One particular issue in the risk assessment literature is that of the effects of personality on risk. Both psychopathy and personality disorders are considered in the empirical literature and included in a number of risk assessment measures (e.g., Hare, 1991; Hanson & Busierre, 1998). Furthermore, there has been interest in the role of key developmental variables and recidivism, particularly with reference to attachment theory (Hudson & Ward, 1997; Marshall, Hudson, & Hodkinson 1993; Marshall, 1993). Craissati (Craissati & Beech, 2001, 2004, 2006; Craissati, McClurg, &

Browne, 2002a, 2002b) has investigated this link and essentially concludes that there is evidence for the role of key developmental variables in the assessment of risk. Craissati and Beech (2006) propose a model to best predict risk by combining two or three key developmental categories (developmental trauma, childhood difficulties, insecure attachment) and static risk prediction. Again, there is a need for further research. However, these studies demonstrate the development of more comprehensive risk assessments. In addition, these risk factors and risk prediction models have been linked to treatment adherence, particularly personality and psychopathy (e.g., Craissati & Beech, 2004). However, empirical literature demonstrates mixed findings.

Aim of the current review

Currently, there are no reviews which attempt to link the relationships between key developmental variables, personality disorder and dynamic risk assessment. Moreover, no reviews investigate the relationship of these factors to the prediction of sexual offender treatment attrition. The areas of interest in the current review remain too broad to compile a Systematic Review or a Meta analysis. However, the author remained conscious of reducing the internal validity of the current review. Therefore, what is presented here is a narrative review using systematic search criteria, in order to investigate any existing relationships between personality disorder, key developmental variables, and dynamic risk assessments. In addition, the review aims to evaluate the use of these four key areas in relation to predicting treatment attrition in sexual offenders.

STRATEGIES EMPLOYED

Search of previous reviews

The Cochrane Library was extensively searched to highlight any previous literature reviews or Meta analyses associated with four key topics: risk assessment of sexual offending; personality disorder as a risk assessment for sexual offending; the role of key developmental variables; and treatment attrition of sexual offenders. In terms of risk assessment and sexual offending, the search revealed five ôClinical trialsõ. However, none of these reviews focused on which risk factors best predict sexual offending. In terms of personality disorder and sexual offending the results returned 31 óclinical trialsõ, none if which were relevant. The role of key developmental variables in sexual offending returned no search results. With relevance to treatment attrition and sexual offenders, one Cochrane review, three óother reviewsõ, and two óclinical trialsõ were revealed. However, only one clinical trial, one Cochrane review, and two other reviews were relevant to the search terms. Furthermore, there was no evidence of existing reviews examining the relationships between any of these areas. In addition, the search revealed no results for key developmental variables associated with sexual offending or personality/personality disorder. A list of the search results can be seen in Appendix 1.

Search Strategies

Initially, a scoping search was conducted in order to identify the relevant searches within the topic areas of interest. Due to the breadth of the current review this search was divided into four main topic areas, 1. Risk assessment measures, 2. Personality Disorder as a risk factor, 3. Key developmental variables, 4. Treatment adherence and

risk assessment (for details of the search terms see Appendix 2). The searches were restricted to English language publications and any comment papers and editorials were removed. The searches were manually scrutinised for any duplicate or untraceable papers. The results were then manually scanned by title and abstract to select articles relevant to the search terms. Reference lists were also manually searched for additional articles and any unpublished work or papers/posters presented at relevant conferences.

Access to publications

Publications were accessed through the University of Birmingham online library using Embase, Psychinfo, and Swetswise, and through direct contact with authors. A record of all search criteria can be found in Appendix 2. Relevant authors in the field were contacted including Dr. Jackie Craissati and Professor Anthony Beech. Both authors were able to make suggestions for further papers, which was useful as no search can be completely accurate and specific as they are limited to the search terms used. The search was also expanded after the date of the search terms based on consultation with my advisor Professor Anthony Beech.

This report will now examine each key area in more detail.

FINDINGS

Risk Assessment Measures

Actuarial risk measures

Risk assessment of sexual offenders has been topic of research within the literature for a number of years and as such there have been considerable developments in this area. Historically, clinical judgement was employed to determine the likelihood of an offender committing a similar offence in the future. However, this method has been criticised as highly unreliable and achieving reliability predictions of little more than chance**.** In response to this a number of authors have developed actuarial risk scales. These scales are based on static, unchangeable, risk factors such as negative family history, previous offending (sexual and violent), and relationship history. Typically, offenders are rated and categorised according to the predetermined risk levels on the associated measure. It is beyond the scope of this review to discuss the various actuarial risk assessments (e.g. Static-99) (Hanson & Thornton, 2000) (Risk Matrix-2000) (Thornton et al, 2003) and their predictive accuracy in detail. However, it can be noted that there is a considerable research base supporting the efficacy of actuarial risk measures (e.g., Allan, Dawson, & Allan, 2006; Kingston et al., 2008; Craig, Beech, & Browne, 2006) and they have been described as the most accurate method of risk prediction in sexual offenders (Beech, Fisher, & Thornton, 2003). Hanson, Broom, and Stephenson (2004) stated, using ROC AUC analysis, the most common actuarial measures all have moderate predictive accuracy for sexual offence recidivism (AUC = >0.7). Hanson and Morton-Bourgon (2004) argue that typically, the predictive accuracies of these measures have fallen within the moderate range

(AUC = > 0.7) and no single measure has shown to be superior across samples. Hanson and Bussière (1998) found that static variables best predicted long term recidivism in a review of 61 studies and comparative studies have consistently supported these assertions (e.g. Barbaree, Seto, Langton, & Peacock, 2001; Nunes, Firestone, Bradford, Greenberg, & Broom, 2002; Harris et al, 2003; Nunes, Firestone, Sjostedt & Langstrom, 2002).

Although actuarial measures have been described as the best tools available to assess the risk of sexual offending, they are not without their criticisms. In their paper Beech, Fisher and Thornton (2003) outline six important criticisms. 1. Actuarial scales do not indicate a certainty of whether an individual will offend. The risk of re-offending is described as a probability. 2. These probabilities of re-offending underestimate actual re-offence rates as the actuarial tools have been designed using official recidivism figures. 3. Actuarial measures do not consider individual differences and if used in isolation atypical variables may not be considered in the assessment of risk. 4. As these measures are developed based on a sample of sexual offenders, risk predictions for individuals presenting with any characteristics not presented within this sample may be inaccurate. 5. They omit acute risk factors, which may inform imminent recidivism risk as they seek to determine long term recidivism. 6. Perhaps most importantly, actuarial risk assessments do not offer anything in terms of which risk factors need to be managed to reduce the risk of recidivism.

Dynamic risk measures

In response to the criticisms of actuarial risk assessment, attention has been turned to dynamic risk factors. These are factors which are amenable to change over time

(Bonta, 1996) and are stable, that is to say they are persistent over months or even years, or acute, that is they last for days or even only minutes (Hanson & Harris, 2001). To date many recidivism studies have been conducted, which identify the variables associated with sexual offence recidivism. Craig, Browne, and Stringer (2003a) identified a total of 24 dynamic variables, 10 stable dynamic (deviant sexual urges, sexual deviance, attitudes tolerant of sexual assault, cognitive distortions, lack of victim empathy, low self esteem, anger, substance abuse impulsivity, and personality disorder) and 14 acute dynamic (frequency of sexual fantasies, delinquent behaviour during treatment, deterioration in dynamic risk during treatment, poor treatment cooperation, deterioration in awareness of high risk situations, short duration of treatment programme, poor cooperation with supervision, isolation, unemployment, deviant social influences, chaotic lifestyle, poor social support, affective disorders, and substance abuse). Within the literature there is now a general consensus that deviant sexual interests and antisocial orientation are strongly related to sexual recidivism (Hanson & Bussière, 1998; Quinsey, Lalumiere, Rice & Harris, 1995; Hanson & Morton-Bourgon, 2005).

Bonta (1996) asserts that a risk-need approach is favourable, whereby risk is measured by static variables and need by dynamic variables. This argument was based on research into criminogenic needs (Andrews & Bonta, 1994; Andrews, Bonta, & Hoge, 1990) and the view that the likelihood of re-offending is reduced when these needs are altered (Bonta, 1996). Thus, asserting that criminogenic needs are essentially dynamic risk factors. Similarly, Beech, Fisher, and Thornton (2003) argue that an assessment of offender risk should contain information which can contribute to risk management rather than rely solely on simple documentation of risk. In

accordance with this, Beech, Friendship, Erikson, and Hanson (2002) examined the relationship between static and dynamic variables in a sample of child abusers and found the use of dynamic variables significantly increased the predictive accuracy of the Static-99. Reviewing the literature, Hanson, Broom, and Stephenson (2004) asserts that although there are currently no well-established dynamic risk prediction variables, they are clearly too influential to be ignored.

From such research findings there are three notable risk assessments which consider dynamic variables, the Initial Deviance Assessment (IDA) (Thornton, 2000, 2002), The STEP test battery (Beech, Fisher, & Beckett, 1999), and the Stable-2007 (formally Stable-2000 and Sex Offender Needs Assessment Rating) (Hanson & Harris, 2001; Hanson, Harris, Scott, & Helmus, 2007).

Initial Deviance Assessment (IDA) (Thornton, 2000, 2002)

Thornton (2002) supports the idea of a Structured Risk Assessment (SRA). Such an assessment seeks to integrate static risk assessment (Static-99), stable dynamic risk assessment (using the IDA), progress evaluation based on response to treatment, and management of risk based on acute dynamic factors and offence specification. The IDA incorporates four domains of dynamic risk predictors: Sexual Interests, Distorted Attitudes, Socio-effective Functioning, and Self Management. The IDA is empirically informed as the four domains are well established within the empirical literature spanning three different research designs; longitudinal (e.g., Bakker, Hudson, Wales, & Riley, 1998; Hanson & Bussière , 1998), group comparisons (e.g., Barbaree & Marshall, 1989; Beech, Fisher, & Beckett, 1999), and offence precursor studies (e.g., Hanson & Harris, 2001; Pithers, Kashima, Cumming, & Beal, 1988; Proulx, Perrault,

& Ouimet, 1999; Ward, Louden, Hudson, & Marshall, 1995). Thornton (2002) posits that this research base provides enough evidence for the justification of these risk factors. Moreover, Thornton (2002) reports that the predictive accuracy of the IDA is comparable to Static assessments with ROC coefficients in the 0.7 range. However, the Sexual Interests domain was not included in these studies, which leaves it un-validated for use in the IDA. Further, the IDA has received criticism for not considering response to supervision as a dynamic risk factor (Lindsay, Elliot, & Astell, 2004).

The STEP test battery (Beech, Fisher, Becket, 1999)

The STEP test battery is used nationwide by the Prison and Probation Services in the U.K., following its successful implementation as an evaluative tool in the Prison Sex Offender Treatment Programme Project. This assessment is a psychometric test battery designed to estimate dynamic risk factors (pro-offending attitudes, socio-affective problems, and deviant sexual interest) in adult male child abusers. Beech, et al. (1999) advocate that the presence and intensity of these dynamic risk factors can be used to categorised offenders into high and low deviancy. Beech, Friendship, Erikson, and Hanson (2002) found that establishing the deviancy level of offenders pre-treatment allows the predictive accuracy of the Static-99 to improve by between 25% and 86%. However, the STEP-test battery has its limitations in that it does not currently have the capacity to generalise to other populations as it has only been validated for use on adult male child abusers. As such, Craissati and Beech (2003) highlight the requirement for ongoing research into the applicability of the STEP test battery to other client groups.

Stable-2007 (Hanson & Harris, 2001, Hanson, Harris, Scott, & Helmus, 2007)

The Stable-2007 is a 13 item (Significant Social Influences, Capacity for Relationship Stability, Emotional Identification with Children, Hostility toward women, General Social Rejection, Lack of concern for others, Impulsive, Poor Problem Solving Skills, Negative Emotionality, Sex Drive/Sex Preoccupation, Sex as Coping, Deviant Sexual Preference, Co-operation with Supervision) stable dynamic risk assessment. The Stable-2007 can be used with both adult rapists and child sexual abusers. However, the item Emotional Identification with Children is only rated in child sexual abusers. Each of the items in this assessment are rated 0, 1, or 2 for not present, maybe present, and definitely present respectively. These are then tallied to reach a total Stable-2007 score where 0-3 is low risk, 4-11 moderate risk, and 12+ high risk. Hanson, Harris, Scott, & Helmus, (2007) report that the results of their study investigating the predictive accuracy of the Stable-2007 are consistent with previous studies demonstrating that stable dynamic characteristics significantly contributed to the prediction of recidivism above that given by established static measures. Furthermore, Hanson, et al. (2007) argue that in order to produce a holistic risk assessment the Static-99 and Stable-2007 should be combined with their acute dynamic risk assessment the Acute-2007, which produces an overall risk score whilst informing on which variables should be targeted during treatment. However, further work needs to be conducted into the predictive accuracy of this assessment as it remains in the investigative stages at present and no concrete conclusions have been drawn.

Summary

It can be seen that the process of risk assessment has evolved to a position whereby the predictive accuracy of static variables associated with recidivism are well established and continuing research is addressing the development of the dynamic variables. Indeed, common themes and generally accepted stable dynamic risk predictors can be distinguished in the literature. Nonetheless, there is a ubiquitous need for the development of comprehensive risk assessment tools, which comprise well-validated static, stable dynamic, and acute dynamic factors which can be achieved via further research into sexual recidivism. Indeed, Bonta (1996) states that advances in the assessment of offenders are continuing at an exponential rate and no doubt there will be a fourth generation in risk assessment in the near future.

Personality Disorder has been identified as a likely risk factor for both sexual and violent offending. This will be discussed in more detail in the next section.

Personality Disorder and Its Relationship to Risk

The most widely used definition of personality disorder (PD) is from the American Psychiatric Association (APA), Diagnostic and Statistically Manual of Mental Disorders-Fourth Edition-Text Revision (DSM-IV-TR, APA, 2000). This states that personality disorder is óan enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the culture of the individual who exhibits itô. DSM-IV-TR stipulates that in order to receive a formal diagnosis of personality disorder the pattern must be manifested at least two of the following areas: cognition, affect, interpersonal functioning, and impulse control. The enduring pattern needs to be inflexible, pervasive across a range of personal and social situations, lead to

clinically significant distress, be stable over time, and not related to the effects of a substance use or other medical condition. The onset of personality disorder is usually marked in adolescence or early adulthood.

The most popular assessment of personality disorder other than DSM-IV is the Millon Clinical Multiaxial Inventory (MCMI-III). The MCMI-II uses items reflective of the diagnostic criteria of the DSM to diagnoses personality disorders and Axis 1 disorders; moreover, it is the most comparable to the DSM-IV personality disorder constructs. However, it does not assess other mental health problems. Within the MCMI-III there are 175 items relating to 24 clinical scales and three modifier scales (Disclosure, Desirability, and Debasement). The 24 clinical scales are comprised of 11 Clinical Personality Patterns (Schizoid, Avoidant, Depressive, Dependant, Histrionic, Narcissistic, Antisocial, Sadistic, Compulsive, Negativistic, and Masochistic), three Severe Personality Pathologies (Schizotypal, Borderline, and Paranoid), and ten Axis 1 and other clinical syndromes (Anxiety, Somatoform, Bipolar, Dysthymic disorder, Alcohol dependence, Drug dependence, Posttraumatic Stress, Thought Disorder, Major Depression, and Delusional Disorder). Scores above 75 on any scale of the MCMI-III indicate the probable presence of a disorder and scores over 85 signify definite presence of pathology. The MCMI-III is relatively easy to administer and to score. However, it is only validated on clinical populations and is susceptible to bias during interpretation.

Other personality assessments include the Minnesota Multiphasic Personality Inventory-Second Edition (MMPI-II) (Butcher & Megargee, 1989, 2001) and the

Personality Assessment Inventory (PAI) (Morey, 1991). In comparison to the MCMI-III, the MMPI-2, at 567 items is a far longer and timely assessment. However, it is a widely researched, which also has credible measures of validity. The PAI is also lengthier than the MCMI-III although approximately 40% shorter than the MMPI-2. An advantage of the PAI is that it has three normative samples (community, psychiatric, and college), allowing for a broad source of comparison.

DSM-IV records ten personality disorders which can be presented in three clusters: Cluster A (odd or eccentric disorders) includes: Paranoid, characterised by irrational distrust and suspiciousness of others believing that others motives are malicious; Schizoid, characterised by a limited range of emotional expression and a lack of interest in social relationships; Schizotypal, characterised by eccentric behaviour and a reduced capacity for and severe discomfort with close personal relationships. Cluster B includes: Antisocial, characterised by manipulative behaviours, difficulty controlling impulses with a disregard for others rights, and a lack of empathy; Borderline, characterised by an inability to regulate emotion resulting in dramatic and abrupt shifts in mood, impulsivity, poor self-image and tumultuous interpersonal relationships; Histrionic, characterised by melodramatic behaviour, attention seeking, and an excessive level of emotionality; Narcissistic, characterised by grandiosity, need for admiration, and lack of empathy. Narcissistic individuals tend to be self-absorbed, intolerant of othersô perspectives, insensitive to othersô needs and indifferent to the effect of their own egocentric behaviour. Cluster C includes: Obsessive-Compulsive, characterised by a preoccupation with perfectionism and orderliness. There is a lack of flexibility, which interferes with the ability to complete tasks effectively and damages personal relationships; Avoidant, characterised by an

intense level of social anxiety, feelings of inadequacy, extreme self-consciousness, hypersensitivity to rejection, and a subsequent avoidance of social situations; characterised by neediness of others, submissive behaviours, over sensitivity to criticism, and extreme fear of separation; and Dependent, characterised by a severe psychological dependence on other people, feelings of helplessness and submissiveness, and a need for constant reassurance.

In addition, there are a number of personality disorders which have been removed from the DSM-IV such as passive-aggressive, depressive, or sadistic. However, these can still be conceptualised under the term personality disorder not otherwise specified, which can be diagnosed under the criterion that the individual displays symptoms of two or more personality disorders and this impairs their social and interpersonal functioning. Furthermore, Psychopathy is considered to be a serious personality disorder. Although not a personality disorder diagnosed within DSM-IV, it is often associated with antisocial personality disorder (Hart, Forth, & Hare, 1991). However, this association has caused confusion among the diagnoses (Hare, 1998) and in fact, most adults diagnosed with antisocial personality disorder do not fulfil the criteria for psychopathy as they lack the callous and emotionless features (Hart & Hare, 1997).

Cleckley (1982) was one of the first researchers to define psychopathy, stating that psychopathic individuals exhibit chronic maladjustment, superficial personal relationships, are highly manipulative, and have an extreme lack of empathy. In terms of criminal behaviour, Cleckley (1941) postulated that this is a result of impulsivity combined with the inability to form affective bonds with others. Drawing on Cleckleyôs (1941) earlier work, Hare (1991) developed the most widely known model

of psychopathy, whereby psychopathy is characterised by a combination of affective, interpersonal, and behavioural characteristics, which have serious and devastating social consequences (Hare, 1993, 1996). These features are evident from adolescence or early adulthood, are relatively stable over time, and appear to be hereditary (Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007; Viding, Frick, & Plomin, 2007). Moreover, Viding, Blair, Moffitt, and Plomin (2005) have evidenced that callous-unemotional traits observed in seven year olds have a strong genetic influence. Other researchers have reported environmental influences, such as abuse in childhood (Weilder & Widom, 1996) and poor family functioning (Farrington, 2006).

To measure psychopathy, Hare (1991) developed the Psychopathy Checklist-Revised (PCL-R) (1991), which is now the most widely used assessment tool for this personality construct. The PCL-R consists of 20 items each scored on a three point scale by a qualified assessor via file information and semi-structured clinical interview. The total score is out of 40 and typically scores of 25 or above for U.K. samples and 30 or above for U.S. samples are considered to be psychopathic. The PCL-R was developed in such a way that an individualôs score (ranging from 0-40) provides an estimation of the degree to which the given individual matches the prototypical psychopath. Initially, the PCL-R listed two factors, Factor 1 assessing the interpersonal and affective characteristics of psychopathy and Factor 2 assessing the chronic antisocial behaviour. This model is well published (e.g. Hare, 1996a, 1996b) and has been cross-validated over a number of diverse samples (Cooke, 1995). However, it did not fare well across African American and Caucasian populations (Kosson, Smith, & Newman, 1990) or substance abusing populations (McDermott et al., 2000). More recently, a four factor model has been proposed (Newman, Kossan,

Hare, & Forth, 2006) and has received some empirical support (e.g. Hill, Newman, & Rogers, 2004). There is still continuing debate in the literature whether a one, four, or even three factor model is superior and clearly more research needs to be completed in this area. However, it is beyond the scope of this review to discuss these issues further.

Prevalence in sex offenders

The prevalence of both personality disorder and psychopathy in sexual offenders has been documented within the extant literature. In terms of personality disorders, there is no direct association between personality disorder and sexual offending (Craissati, Webb, & Keen, 2005). However, studies have reported a high prevalence of personality disorder in sex offenders. For example, Borchard, Gnoth, and Schulz (2003) reported at least 72% of their sample met the criteria for at least one personality disorder, with the highest prevalence being in Cluster B disorders and mainly antisocial personality disorder. Berger, Berner, Bolterauer, Gutierrez, and Berger (1999) found that 89% of the sample exhibited at least one personality disorder. Further, Chantry and Craig (1994) found that, using the Millon Clinical Multi-axial Inventory-III (MCMI-III) (Millon, Millon, Davis, & Grossman, 1997) adult rapists demonstrated either an emotionally detached personality with dependent personality features, or an independent personality style characterised by narcissism and antisocial features, whilst child sex offenders demonstrated a primarily detached personality style, with dependent personality traits, with or without passive-aggressive features. In terms of psychopathy, Borchard, Gnoth, and Schulz (2003), using a cut-off of 25 on the PCL-R found that 21% of their sample were considered psychopathic.

Similarly, Forth and Kroner (1995) found that 26% of rapists, 18% of rapist/child abusers, and 5% of incest offenders reached the cut-off for psychopathy.

Personality Disorder, Psychopathy, and recidivism

The research in relation to personality variables and recidivism has focused on a criminal personality involving antisocial personality disorder and/or psychopathy as a risk factor for further offending. The evidence to suggest that a range of personality disorders/variables are at play in increasing risk is relatively sparse. Harris, Rice, and Cormier (2002) have reported a history of personality disorder to be related to recidivism. Craissati, Webb, and Keen (2005), in an attempt to devise an enhanced model of risk prediction, demonstrated that a screening tool which included, recidivism risk (measured by static or dynamic risk measures), the presence of childhood trauma, and mental health difficulties or personality disorder was the strongest recidivism prediction model. However, these findings do not define between diagnosis of mental illness and different types of personality disorder.

There is a considerable amount of research demonstrating correlations between APD, psychopathy, and recidivism. Hanson (2000) demonstrated that antisocial personality in a group of sexual offenders achieved correlation co-efficients of r=.16 for general recidivism and r=.14 for sexual recidivism. Similarly, Hanson and Bussierre (1998) in their meta-analytic review reported correlation co-efficients of r=.14 for antisocial personality and sexual recidivism (correlation co-efficients are a measure of the proportion of variance shared by two variables. This ranges from 0 to 1, where 1 is a perfect positive linear relationship). Langstrom, Sjostedt, and Grann (2004) reported antisocial personality as a risk factor for recidivism. In terms of psychopathy, a

number of studies have found psychopathy and sexual recidivism to have a significant relationship (e.g., Hanson & Harris, 1998, 2000; Hildebrand, de Ruiter & de Vogel, 2004; Quinsey, Rice, & Harris, 1995; Rice, Harris, & Quinsey, 1990). Moreover, in their meta-analysis Hanson and Morton-Bourgon (2004) found significant overall Effect Sizes for psychopathy in predicting sex offender recidivism (sexual recidivism r =.15). However, other studies have not replicated these findings (Barbaree, Seto, Langton, & Peacock, 2001; Langstrom & Grann, 2000; Sjostedt & Langstrom, 2002).

Clearly more research needs to be conducted in this area. However, there has been investigation into sexual deviance as a mediator for psychopathy and sexual recidivism. Rice and Harris (1997) and Harris et al. (2003) found that sex offenders scoring over 25 on the PCL-R and were assessed as having a deviant sexual preference, had higher and faster rates of both sexual and violent recidivism. In addition, some discrepancy in these research findings may be as a result of the differences in the way researchers operationalise recidivism (Wormith, Oliver, Stevenson, & Girard, 2007). Wormith et al. (2007) suggest that there may be differences in the way researchers define recidivism, such as arrest, re-conviction, re-sentence as well as on dimensions such as the type of offending behaviour classed as recidivism. Moreover, the length of follow up of recidivism studies significantly impacts on the recidivism rates, particularly with sexual recidivism where the base rate of offending is typically very low.

The next section aims to review what is known about the role of developmental variables and their relationship to sexual offending and risk assessment.

Developmental Variables

There has been interest in attachment theory and its role in sexual offending (Hudson & Ward, 1997; Marshall, Hudson, & Hodkinson 1993; Marshall, 1993). Attachment theory posits that based on early childhood experiences, individuals form working models of themselves, others, and the world. It suggests that these experiences are primarily determined by significant others, which then determine how attachments are formed with others in later life (Bowlby, 1977; 1979). Moreover, abnormal adult emotional bonds are seen as a result of distortions in early attachments. Marshall, et al. (1993) suggested that individuals who experience poor attachments in childhood develop low self esteem, which results in difficulties in forming emotional intimacy. As such, these individuals may be more likely to seek this intimacy through sexual experiences, which may not be consensual. Further, both sexual offending and poor attachments have been linked to the tendency to sexually objectify others and to experience a lack of empathy (Marshall, et al., 1993).

The empirical evidence demonstrating the relationship between sexual offending and early attachment experiences is relatively sparse despite a wealth of theoretical, clinical, and anecdotal support (Craissati, McClurg, & Browne, 2002). However, Hanson and Bussière (1998) reported that negative relationship with mother was the single developmental history variable predictive of sexual offence recidivism. It is important to highlight the relevance of this finding whilst considering that a small sample size and only three studies evidenced this. Further, insecure attachments styles have been observed in sexual offenders. Smallbone and Dadds (1998) found that in comparison to property offenders, sexual offenders were less secure. Ward, Hudson, and Marshall (1996) found that child molesters exhibited a fearful/preoccupied

attachment style, whereas rapists demonstrated a dismissive style. In addition, more specific key developmental variables associated with attachments in childhood have been studied, although this link is yet to be clearly established (Craissati & Beech, 2006). There are consistent findings within the evidence base that sex offendersô backgrounds are marked by neglect, violence and disruption (Bard et al., 1987; Craissati & McClurg, 1996). Studies have primarily demonstrated that maltreatment in childhood and in particular sexual victimisation are related to later sexual offending. Craissati, Falla, McClurg, and Beech (1998) found that risk was associated with a history of childhood victimisation and some prospective studies have illustrated that sexual or violent offences are committed by one in six maltreated children (Watkins & Bentovim, 1992; Widom; 1989).

In a series of papers Craissati (Craissati & Beech, 2001, 2004, 2006, Craissati, McClurg, & Browne, 2002a, 2002b) has aimed to cement the research on the relationship between key developmental variables and sexual offending. This has been achieved largely through the research on the Challenge Project, a community assessment and treatment programme for sexual offenders. Craissati and Beech (2001) focussed on attrition of sexual offenders. They found that the following variables: ótwo or more childhood difficultiesô and óchildhood sexual victimisationô were significantly associated with both non-compliance and attrition in treatment. However, they noted that it was difficult to obtain the background variables of the participants and strict criteria for treatment attendance were employed, i.e. failure to attend the complete programme for any reason was deemed as attrition. Therefore, the remaining sample size was reduced. Craissati, McClurg, and Browne (2002a) investigated the effects of sexual victimisation in childhood. In this study almost half

of the sexual offenders had been sexually victimised in childhood, most often by an acquaintance or stranger. Only 18% of the sample reported no physical, sexual, or emotional abuse, lending weight to the link between key developmental variables and sexual offending. Furthermore, those who were sexually victimised as children reported higher levels of childhood difficulties such as being bullied and having difficulties in friendships, resulting in adult characteristics such as self harm, hostility, lack of empathy, sexual pre-occupation, and contact with mental health services. However, this study relied heavily on the self report of the offenders and only included child sexual offenders, therefore, no conclusions can be drawn for rapists.

Craissati, McClurg, and Browne (2002b) studied both child sexual offenders and rapists, primarily investigating the parental bonding experiences of these individuals. Using the parental bonding instrument (PBI) they found that child sexual offenders and rapists did not differ on the four categories (affectionless control, affectionate constraint, weak bonding, and optimum bonding). However, in terms of maternal and paternal care the child sexual offenders scored significantly higher than the general population, whereas rapists did not. In addition, they reported that both groups reported high levels of affectionless control which is categorised by inconsistent parenting and related to insecure attachments. Moreover, poor parental bonding was linked to adverse childhood experiences, which was particularly evident for child sexual offenders. However, it is notable that the sample size of rapists was particularly small (19 rapists compared to 57 child sexual abusers). Craissati and Beech (2004) acknowledge that the research on adult rapists is relatively sparse and the empirical evidence demonstrates mixed findings. They compared child sexual offenders and rapists on a range of background and offence related variables and

found little variation between the groups. Rapists were, however, less likely to have been sexually victimised in childhood and demonstrated more difficulties with intimacy. Although, rapists who had been sexual victimised showed greater levels of psychosexual disturbance than those who were not.

Craissati and Beech (2006) attempted to produce a model which would integrate the key findings of the previous research on the Challenge Project. They suggest that the evidence is there to support the notion that key developmental variables are related to both risk assessments and treatment compliance/attrition. They suggest a model that includes a combination of two or three key developmental categories (developmental trauma, childhood difficulties, insecure attachment) and static risk prediction as the optimum method of determining risk of community failure. Although, there is clearly a need for further research on key developmental variables and later sexual offending there is clearly a link between these factors. Furthermore, the existing research gives valid suggestions for treatment implications following this model, which will be discussed further.

In the next section, treatment adherence and its relationship to risk assessment will be examined in more detail.

Treatment adherence and Risk Assessment

Existing treatments

In England, Canada, the U.S., and New Zealand; cognitive behavioural interventions are largely utilised for sex offender treatment in both the Prison Service and community settings (Craig, & Beech, 2009). Psychodynamic approaches are the basis

for intervention with this population in the UK NHS. Cognitive behavioural interventions include a range of treatments stemming from social learning theory and essentially strive to modify the individuals cognitive and emotional functioning and their behaviour. This involves linking thoughts, feelings, and behaviours with respect to a presenting difficulty (e.g., sexual offending, sexual fantasy, etc.) and a provision of alternative strategies to cope with the presenting difficulty. In addition, in sex offender treatment, cognitive behavioural therapy will usually include a relapse prevention module. Psychodynamic interventions can have many definitions, which are largely inefficient (Kenworthy, Adams, Brooks-Gordon, & Fenton, 2004). A well defined psychodynamic approach can be described as providing individual sessions, which are regular, are at least 30 minutes in duration, and continue for at least one year. These sessions would be provided by a trained psychoanalyst and they need to be working where they target sexual relations at the infantile level. Further, Kenworthy et al., (2004) stated that sessions rely on a variety of strategies, including explorative insight-orientated, supportive or directive activity, applied flexibly. Other less common but still readily reported therapies include drug treatment such as Medroxyprogesterone, which increases the level of female hormones in the body to reduce the sex drive of the male sexual offender and behavioural interventions which may include; electrical aversion, relaxation treatment, self regulation, imaginal desensitisation, and covert sensitisation.

Methodological Difficulties

In general, the effectiveness of treatment with sexual offenders has been difficult to quantify, particularly in criminal justice settings. This is largely due to the difficulty with producing randomised control trials (RCTôS) within this field. In particular, if an

intervention were to be theoretically sound, the use of an RCT brings controversy in terms of ethics, human rights, and the possible repercussions of potential victims given that a beneficial treatment would essentially be withheld (Hood, 2002). Furthermore, historically, positive treatments effects in quasi-experimental treatment programmes have been sparse (Quinsey, 1998). ôFailure to complete treatmentô was found to be a moderate predictor of sexual recidivism in one meta-analysis. However, this may have been more likely a result of risk monitoring than the outcome of the treatment programme (Hanson, 2002). One of the most pertinent issues in evaluating sex offender treatment programmes is how the treatment is measured. Using sex offendersô self-report or the reports of others including professionals can often be unreliable. The use of recidivism rates can be used to assess treatment success. However, with the known difficulties of underreporting and under-recording of offences coupled with the fact that even of those offenders arrested few are convicted this measurement method also presents as problematic (Grossman, Martis, & Fichtner, 1999). In addition, the base rates for recidivism of sexual offenders are typically low, approximately 15% after five years and 20% after ten years (Hanson & Bussière , 1998; Hanson & Thornton, 2000). As such, the study design may become corrupted over time when such long follow up periods are required.

Further, many of the sex offender treatment programmes were designed with the child sex offender in mind and as such rapists are under-represented in many of the evaluation studies (Ward, et al. 1997). This may be attributed to a number of factors such as higher denial rates of offending behaviour (Kennedy & Grubin, 1992) or rapists being more likely to drop out of treatment, more likely to recidivate, and be more antiauthoritarian (Craissati & Beech, 2004). Therefore, questions arise as to the

utility of these programmes with rapists. Treatment efficacy studies produce varying results when considering rapists. Marques, Day, Nelson, and West (1994) documented significant differences between treated and untreated rapists (9.1% and 27.8% respectively). However, this study only included 26 rapists of which 11 dropped-out before the treatment end date. Conversely, Alexander (1999) reported non-significant treatment differences, where 20.1% of the treatment group and 23.7% of the non-treatment group sexually re-offended.

Despite the above, a number of authors have managed to compile meta-analyses of sexual offender treatment efficacy. For example, Hall (1995) reported a small treatment effect when considering studies which compared a treatment group to a comparison group. This analysis also demonstrated cognitive behavioural therapy to be the most effective. However, as the comparisons made in the included studies were largely between individuals who completed treatment and those who did not, this may reflect a difference in recidivism rates due to individual differences rather than treatment effects (Hanson, Broom, & Stephenson, 2004). Hanson et al. (2002) report that studies comparing treatment completers to drop-outs evidence higher recidivism rates in drop-outs regardless of treatment type. They concluded that these results reflected a methodological flaw rather than a real treatment effect. Hanson et al. (2002) also made comparisons using studies based on matching/incidental principles and a number of RCTôs. They reported that cognitive behavioural treatments produced significant reductions in sexual offence recidivism. However, behavioural approaches and psychotherapy yielded no treatment effects. Schmucker and Losel (2008) compiled a meta-analysis, using 69 studies with a total of 9,512 treated sexual offenders and 12,669 untreated offenders. A positive treatment effect was

demonstrated with cognitive behavioural treatments being reported to be superior to other approaches.

More recently, Hanson, Bourgon, Helmus, and Hodgson (2009) completed a meta-analysis of 22 studies to investigate the effectiveness of sexual offender treatment (3,121 treated offenders, 3,625 comparison group offenders). In particular they examined whether the risk-need-responsivity principles (Andrews, Bonta, & Hoge, 1990; Bonta & Andrews, 2007) were applicable to the treatment of sexual offenders. Further, they considered whether the meta-analysis results would be confounded by study design, selective publication of positive results, age of sample, and treatment setting. They demonstrated a positive treatment effect, with the rate of sexual recidivism being lower for treated offenders. Hanson et al. (2009) also reported smaller, albeit non-significant, treatment effects in studies they considered to be of good quality than weak studies. Age of the offenders was not a mediating factor of treatment adherence, nor was treatment setting, that is community versus institutional treatment. Moreover, they report that those studies which represented programmes adhering to the risk-need-responsivity principle returned stronger treatment effects. These treatment effects were increased dependant on the number of principles adhered to. The risk-need-responsivity principle refers to three principles which if adhered to are generally accepted to increase intervention success. The risk principle stipulates that those offenders falling in the higher risk categories should be receiving the most intense treatment programmes and low risk offenders should receive much lower intensity or no treatment. The need principle states that criminogenic needs i.e. factors which are related to recidivism should be the primary treatment targets. The responsivity principle refers to adapting treatment programmes to the individual on

factors such as motivation, readiness to change, personality style etc (e.g., Andrews & Bonta, 2003; Andrews, Bonta, & Wormith, 2006; Andrews & Dowden, 2006; Andrews et al., 1990; Gendreau & Andrews, 1990). However, it is important to note it is not without its criticisms. Primarily in that it can be argued that is alone does not provide enough therapeutic tools to work with offenders fully (Ward & Gannon, 2006). Although this model has a strong empirical base and a clear direction for treatment, it fails to consider the over all welfare of the individual. Furthermore, as Mann, et al. (2004) indicate, goals which focus on reducing offending are more motivating for the individual than approach related goals i.e. those goal which focus on pursing a better life. Moreover, the evidence base relies heavily on meta-analytic studies which in themselves can be flawed due to which studies are included and which perhaps unpublished studies may be excluded i.e. the file draw phenomenon (it is much harder to get studies published that support the null hypothesis than those which report positive findings).

Hanson et al (2009) discuss that although positive treatment effects were reported, the confidence in these findings are reduced due to weak study designs, which further highlights the need for more rigorous research in this area. However, it is also suggested that more recent studies produced stronger treatment effects, which may be reflective of better treatment programmes and or better research designs.

Further, the Correctional Service of Canada reported on their programme (Community Sex Offender Program, CSOP) that offenders released after the program and those released before demonstrated few differences in recidivism rates (CS/RESORS). The approach with the most promising results was cognitive

behavioural therapy, which mainly focussed on offence specific variables (Stephenson, 1991). Hanson, Broom, and Stephenson (2004) extended the follow up of this study to 12 years and report that no significant treatment effects were observed. However, more recently, Olver, Wong, and Nicholaichuk (2009) demonstrated that, using a treatment programme adhering to the ôWhat Worksô principles. What Works is a set of principles outlined by National Offender Management System (NOMS) which outline what works i.e. effective treatment and management of offenders and what does not work in reducing recidivism. The What Works literature produces guidelines, based on best practice for working with offenders and from this a number of standarised treatment programmes have been developed such as Enhanced Thinking Skills, Reasoning and Rehabilitation, and the Sex Offender Treatment Programme (Harper & Chitty, 2005). Over a twenty year follow up treated offenders recidivated significantly less than the non-treated comparison group. They argue that studies published in recent years are methodically sounder than those included in earlier reviews. In addition, they posit that the positive treatment effects observed in the evaluation of their programme (Clearwater Program, a high-intensity inpatient sex offender treatment program) were largely due to the cognitive behavioural nature of the programme, that they adhere to the principles of risk, need and responsivity, and that there were high enough base rates to detect these treatment effects (Barbaree, 1997). In addition, Crassati and Beech (2001) report on the Challenge Project that when controlling for risk level, significant differences in exhibiting ósexually risky behaviorsô were found between treated and untreated high risk offenders, 14% and 19% respectively. We can conclude that historically, the results of treatment for sex offenders have been poor. However, with more rigid cognitive-behavioural based programmes in place and improve methodology of these

studies we should expect better results in the future. Furthermore, given the importance of sex offender treatment even small treatment effects warrant a continuation of a programme due to the impact on society and the victims.

In addition, it has been suggested that there may be variation in terms of the types of offenders studied in regards to treatment effectiveness. Seto and Barbaree (1999) in their study reported no differences between types of sexual offenders (rapists, incest offenders, and extra familial child abusers) on their scores on treatment behaviour. Craissati and Beech (2004) reported that child molesters performed better than rapists in terms of treatment attendance and overall compliance. However, this study only included a small number of rapists, which may affect the findings. In terms of recidivism, rapists were more likely to commit any new offence than child abusers but no differences were found between the groups when considering new serious offences (a new violent or sexual offence).

Psychopathy, Personality, and Treatment

Seto and Barbaree (1999) in their study reported no differences between types of sexual offenders (rapists, incest offenders, and extra familial child abusers) on their scores on treatment behaviour. In terms of recidivism, rapists were more likely to commit any new offence than child abusers but no differences were found between the groups when considering new serious offences (a new violent or sexual offence). Furthermore, Both the PCL-R and treatment behaviour have been shown to be significantly associated with serious recidivism. Those who scored highly on the PCL-R combined with demonstrating good treatment behaviour were more likely to commit any new offence and five times more likely to commit a new serious offence.

In addition, Keihl, Hare, McDonald, and Brink (1999) found high factor 1 scores on the PCL-R to be predictive of recidivism following a sex offender treatment programme. Neumann, Kossan, Forth, and Hare (2006) postulates that individuals with high Factor 1 scores may in fact learn further manipulative skills during treatment which leads them to be at greater risk of serious re-offending in the future, which must be taken as a serious consideration when assessing psychopathic sexual offenders for relevant treatment programmes. Conversely, DôSilva, Duggan, and McCarthy (2004) and Barbaree, Langton, and Peacock (2006) both found that rates of sexual recidivism in psychopaths does not increase after treatment. Doren and Yates (2008) in their review of the empirical literature concluded that no firm conclusions of the amount of benefit psychopathôs gain from treatment can be drawn from the current literature. They assert that some psychopaths did not demonstrate the same recidivism rates as non psychopaths, whereas other did. Furthermore, there were no clear differentiating characteristics between those psychopaths who benefited from treatment and those who did not. As such, this is a clear topic for further research. In the mean time unfortunately we must employ the current literature as best we can and use clinical judgement to determine the likelihood of a psychopathic sex offenderôs risk increasing or decreasing through treatment.

In terms of developmental variables, Craissati, McClurg, and Browne (2002a) report that, due to the difficulties sexual offenders experience in terms of parental bonding, offenders may benefit from increased victim empathy work. They suggest that this could be achieved by increasing the offendersô awareness of the style of their attachments and parental relationships as well as their own victim experiences. This would assist in facilitating changing dysfunctional ways that they relate to others.

Craissati, McClurg and Browne (2002b) suggest that an offender who has been sexually victimised themselves in childhood may struggle to form appropriate victim empathy and as such they are at risk of offending. They suggest that hearing the offender as a victim during treatment may lead to improved treatment results. Personality disorder and its relationship to risk of recidivism and treatment non-compliance have been discussed in the previous sections of this review. Although it has been consistently demonstrated that personality disorder is a risk factor for further offending, there is little evidence on what works for personality disordered sex offenders. Craissati, Webb, and Keen (2005) have reported on their programme for personality disordered offenders and have suggested that specialist interventions such as the Challenge Project are the best way to manage this high risk group. They demonstrated higher levels of mental health difficulties, more childhood victimisation and more negative developmental variables. These individuals were also more likely to fail the community treatment programme. As such, they suggest there is a need for a specialist programme designed specifically to engage offenders who are at risk of failure, which is certainly an area for future research. Moreover, given the mixed findings in terms of treatment success depending on type of offender, personality disorder, and development variables, further research into the development of more specialist programmes is warranted in the future.

Summary and Conclusions

The area of risk assessment has grown considerably in recent years, particularly in relation to which factors best predict recidivism (Hanson & Morton-Bourgon, 2004). Actuarial risk assessments, based on static factors, have been developed and have been found to have relatively high predictive accuracy (e.g. Hanson, 2004, AUC >.7).

However, they fail to consider risk management issues and as such dynamic variables have been identified (e.g. Beech, Fisher & Beckett, 1999; Hanson & Harris, 2001). In addition, personality disorder has been identified as a likely risk factor for recidivism and is considered to be so in a number of risk assessment tools (e.g. Hare, 1991; Webster, Eaves, Douglas, Winthrup, 1995). However, the research in this area needs to be extended.

More recently key developmental variables have been associated with sex offender recidivism risk (e.g. Craissati, McClurg, & Browne, 2002b). Craissati (Craissati & Beech, 2001, 2004, 2006, Craissati, McClurg, & Browne, 2002a, 2002b) also highlighted a possible link between personality disorder and these key developmental variables and as such questions whether these are in fact measuring the same or a similar construct. This research has demonstrated that this is a valid hypothesis, however, it remains clear that further research needs to be conducted to explore this as there is currently limited supportive evidence in sexual offenders. However, there is a plethora of research in the general personality disorder research demonstrating the link to negative childhood experiences. For example, Fonagy (2000) suggests that Borderline Personality Disorder characteristics may be grounded in developmental pathology. Weaver and Clum (1993) reported that individuals with a diagnosis of Borderline Personality Disorder reported significantly more history of sexual abuse, physical abuse, and witnessing violence than those who did not have this diagnosis. Laporte and Guttman (1996) indicate that women with Borderline Personality Disorder reported more separation, abuse, and loss than individuals with other personality disorder diagnoses. Further, the development of both psychopathy and Anti-social Personality Disorder has been related to a history of attachment problems.

Indeed, psychopathic traits can be demonstrated form the age of eight and as such it has been perceived as a developmental disorder (Blair, 2005; Blair et al., 2006). Battle et al., (2004) assessed history of abuse and negative childhood experiences in 600 individuals with a diagnosis of either Borderline, Schizotypal, Avoidant, or Obsessive-compulsive personality disorder and found that 73% self reported abuse and 82% self report neglect. Furthermore, there may well be many pathways to the same personality disorder i.e. different risk factors or traumas may result in the same diagnosis in adulthood. Moreover, there will be many risks associated with a disorder in an individual as findings rarely demonstrate a single variable to be associated with a disorder (Rutter, 1987; 1989).

However, it is important to note that these associations between trauma and personality disorder are subject to problems in base rate due to many studies using clinical samples, and not reflecting the fact that there is also a high frequency of trauma in the general population (i.e. there are many individuals who mature into well-functioning adults, Paris, 1998). Therefore, this suggests that there is likely to be some protective factors serving these individuals. Resiliency is a key factor in protecting from the development of personality disorder. Werner and Smith (1992), for example, suggest that resiliency is related to adaptive personality traits in the individual. These traits enable them to form secure bonds. Factors associated with resiliency may include intellectual ability, œeasyô temperament (i.e. low anxious individuals), autonomy, and communication skills (e.g., Baldwin et al., 1993; Brooks, 1994; Werner, 1982). The social background, which includes the family of the individual (e.g., Brooks, 1994; Cowen & Work, 1988) and the environment such as positive school experiences and peer relationships (e.g., Rutter, 1987; Wright &

Masten, 1997) may also increase resiliency Similarly, Rutter and Rutter (1993) propose that individuals who do not develop personality disorders are more likely to have had positive life events, which serve to safeguard against the trauma.

Finally, as dynamic risk factors consider risk management the issue of treatment adherence and its link to risk factors needs to be considered. As such there is a question whether risk assessments have secondary function in predicting treatment adherence. There is an ongoing need for further research into dynamic risk factors including personality disorder and key developmental variables and their relationship to treatment adherence.

CHAPTER 2

Investigating The Relationship Between Key Developmental Variables, Personality Disorder, and Dynamic Risk assessment in Sexual Offenders.

ABSTRACT

The area of risk assessment has grown considerably, particularly in relation to which factors best predict recidivism (Hanson & Morton-Bourgon, 2004), where dynamic factors have now been highlighted. Similarly, personality disorder has been identified as a risk factor for recidivism. More recently, key developmental variables have been associated with sex offender recidivism risk (e.g., Craissati, 2002). Craissati questions whether key developmental variables, personality disorder, and dynamic risk factors are, in fact, measuring a similar construct. In addition, there is a question whether dynamic risk assessments have secondary function in predicting treatment adherence. The aim of the current research is to extend Craissatiôs work by identifying whether there is a relationship between personality disorder, as measured by the Millon Multiaxial Clinical Inventory (MCMI-III) (Millon, Millon, Davis, & Grossman, 1997), key, developmental variables, and dynamic risk domains, as measured by the Stable-2007 (formally Stable-2000 and Sex Offender Needs Assessment Rating) (Hanson & Harris, 2001; Hanson, Harris, Scott, & Helmus, 2007). Secondly, it aims to establish if these variables can be used as reliable markers of treatment attrition. 106 sex offenders were assessed, 69 child abusers and 37 rapists. Those participants who were assessed for treatment but who did not enter into the programme for any reason (i.e. those assessed only) were excluded from the treatment attrition statistical analyses. Chi-squared analyses were conducted to investigate relationships between the assessment modes and Area Under the Curve analysis was conducted to assess the predictive qualities of the variables on treatment attrition. In addition, due to the low sample size Power Analysis has been reported. Results indicated that there were a number of relationships between personality disorder, key developmental variables,

and items on the Stable-2007. However, very little was significant at predicting treatment attrition. The research had a number of methodological limitations largely due to the data collection methods and the limited sample size. The research concludes that this study demonstrates associations between key developmental variables, personality disorder and dynamic risk and that developmental variables should be considered in offender assessment and treatment. Further investigation in this area is warranted employing more rigorous research designs.

INTRODUCTION

The literature associated with the topics investigated in this empirical research have been reviewed in detail in Chapter 1 of this thesis. Therefore, in order to prevent repetitiveness but to provide a contextual background to the research what will be presented here is a brief introduction to the research or summary of the literature presented in Chapter 1.

Risk assessment of sexual offenders has been a pertinent topic for research and clinical developments for a number of decades. The serious societal impact and the impact on the victims has been a drive for much of the research into accurate risk assessment tools. Actuarial risk assessment tools (e.g. Static-99) (Hanson & Thornton, 2000), (Risk Matrix-2000) (Thornton et al., 2003) have been seen as the best available measures, receiving predictive accuracies in the moderate to good ranges (Hanson, 2004). However, actuarial risk assessments are not without their criticisms. One important critique of actuarial risk assessments is that they do not consider variables amenable to change and therefore cannot make suggestions for the treatment and management of sexual offenders. In response to this, a number of authors have investigated dynamic risk factors, that is, those amenable to change. Hanson and Harris (2001) further divided these into stable dynamic risk variables, which are persistent over months or years and acute dynamic risk variables, which can change in a matter of hours or even minutes. Furthermore, a number of dynamic risk assessment tools have been developed, which are demonstrating moderate predictive accuracy (e.g., Hanson, et al., 2007). Hanson et al. (2007) advocate for a comprehensive risk assessment tool, which comprises static, stable dynamic, and acute dynamic risk

variables. However, more research into the variables included in such a risk assessment and the predictive accuracies of this tool is required.

Sexual offender personality and psychopathy have both been considered as risk variables in sexual offenders (e.g. Borchard, Gnoth, & Schlz, 2003; Chantry & Craig, 1994; Forth & Kroner, 1995). However, what has not been clear is whether a range of personality variables are associated with sexual offending as much of the literature has focussed on antisocial personality disorder (e.g. Hanson, 2000) and psychopathy (e.g., Hanson and Morton-Bourgon, 2004). There is a need for further research into a range of personality disorders and psychopathic variables in relation to sexual offence recidivism. In addition, there has been research into the role of key developmental variables and early attachment related to personality development and risk of sexual offending. Insecure attachments have been demonstrated to be evident in sexual offenders (Smallbone & Dadds, 1998; Ward, Hudson, & Marshall, 1996). Such attachments in childhood are associated with later personality development, such as the development of low self-esteem and difficulties forming intimacy (Marshall, Hudson, & Hodkinson, 1993), known risk factors of recidivism. Craissati and Beech (2006), using data from the Challenge Project, have proposed a model for assessing sex offending risk incorporating key developmental variables and static risk prediction. This research highlights the possibility that key developmental variables, personality, and dynamic risk variables may be related by a similar underlying construct. In addition, variables associated with risk of sexual offence recidivism, such as personality and psychopathy, have been associated with treatment failure (Craissati, Webb, & Keen, 2005). However, the empirical research linking risk

variables to treatment adherence variables remains sparse. This highlights a serious gap in the research and future research in this area is warranted.

The current research aims to identify the relationships, if any, personality disorder, as measured by the MCMI-III, key developmental variables, and dynamic risk domains, as measured by the Stable-2007. The research also aims to demonstrate whether these variables are related to treatment attrition in a group of community based sexual offenders (the Challenge Project).

Descriptions of key developmental variables can be found in Appendix 3 and details of the measures used in the current research can be found in Appendix 4.

Hypotheses

1. ŏThere will be significant associations between items on the Stable-2007, key developmental variables, and personality disorder on the MCMI-IIIŏ, as discussed in Chapter 1.

2. ŏThe Stable-2007, key developmental variables, and personality disorder will be significantly associated with failure of the Challenge Programmeŏ.

3. ŏThe Stable-2007, key developmental variables, and personality disorder together will be predictive of failure of the Challenge Programmeŏ.

METHOD

Sample

106 sex offenders both child molesters (n=69) and rapists (n=37) were referred for the Challenge project, a community based sex offender treatment programme. Participants were referred to the challenge project either at the time of sentencing or prior to release from custody for psychological reports. These offenders represent a specialist sample in that the offenders referred to the Challenge project are those offenders who present as challenging to manage in some way, whether this is by having a diagnosed mental illness, personality disorder, or previous non-compliance with supervision.

Procedure

An existing database was utilised which contained information on all participants gathered from probation files and entered onto a research schedule. Additionally, information was gathered through a semi-structured interview, covering areas of personal and social details, a full history of offending behaviour, and monitoring attitudes towards the offence. All background and offending variables were clearly defined in this process, but were also checked by the previous researchers, particularly if there were any doubts about the rating. Definitions of key developmental variables can be found in Appendix 3.

In addition, a number of standardised tests were administered. The Risk Matrix-2000 (Thornton et al., 2003), Static-99 (Hanson & Thornton, 2000), the Psychopathy Checklist-Revised (PCL-R) (Hare, 1991), and the Million Multiaxial Clinical

Inventory-Third Edition (MCMI-III) (Millon, Millon, Davis, & Grossman, 1997) were administered by previous authors and information pertaining to this was added to the database. The Stable-2007 was administered by the current primary author. This information was collected retrospectively through file information. Any information missing or unconfirmed in the files was obtained through asking key professionals who have knowledge of the client. Information on the Stable-2007 was conducted blind to ensure the author did not have information relating to success or failure of the treatment programme. Descriptions of each of the measures can be found in Appendix 4. Participants who were deemed suitable for treatment were either placed into group or individual (cognitive behavioural or supportive psychotherapy) community based treatment with appropriately qualified professionals (see Craissati & Beech, 2001 for details of the treatment programme). In order to analyse failure of the programme, participants who did not go on to receive treatment were disregarded from the sample at this point. This data was already available from previous authors and included formal failure only. Formal failure included; sexual, violent, or general re-convictions, and breach or recall. The data was then coded and appropriately analysed using the Statistical Package for the Social Sciences-Version 15 (SPSS-15). In order to test hypothesis one, Chi-squared analyses were employed. To test hypothesis two, Chi-squared analysis was employed and a regression analysis was planned but was unsuccessful in execution due to the limited associations found in hypothesis one. To test hypothesis three, Area Under the Curve (ROC) analyses were used and due to small sample sizes Power Analysis was employed.

Ethical permission for the research was obtained by the London Probation Area by the Challenge Programme.

RESULTS

The sample comprised 106 sexual offenders, of which 69 (65.1%) were child sex offenders and 37 (34.9%) were adult sex offenders (rapists). Background and offending characteristics of the whole sample are outlined in Table 1. It can be seen from Table 1 that background variables demonstrate that the adult offenders were significantly younger than the child offenders. Both the child and adult offenders have experienced relatively high levels of childhood disturbances. However, the sample demonstrates child sex offenders experienced significantly more sexual abuse in childhood and more child sex offenders attended special schooling. No significant differences were observed in adulthood or offence related variables.

Table 1: Background and offence-related variables for the sample

Variable	***All (%)***	***CM (%)***	***Rapists (%)***
Background variables	*N=106*	*N=69 (65.1)*	*N=37 (34.9)*
Age	41 sd 14	44 sd 13	35 sd 11**
Referral agent:			
▪ Solicitor	4 (3.8)	4 (5.8)	0
▪ Court	1 (0.9)	1 (1.4)	0
▪ Adult psychiatric service	5 (4.7)	3 (4.3)	2 (5.4)
▪ Probation	87 (82.1)	53 (76.9)	34 (91.9)
▪ Social services	2 (1.9)	2 (2.9)	0
▪ Mapps	2 (1.9)	2 (2.9)	0
▪ Other	4 (3.8)	3 (4.3)	1 (2.7)
Childhood			
Emotional/physical neglect in childhood	60 (56.6)	41 (59.4)	19 (51.4)
Physical abuse in childhood	40 (37.7)	29 (42)	11 (29.7)
Sexual abuse in childhood	36 (34)	29 (42)	7 (18.9)**
2+ childhood disturbances	54 (50.9)	37 (53.6)	17 (45.9)
Taken into local authority care	31 (29.2)	18 (26.1)	13 (35.1)
Special schooling	12 (11.3)	11 (15.9)	1 (2.7)*
1 or more trauma	48 (73.6)	53 (76.8)	25 (67.6)
2 or more trauma	60 (56.6)	43 (62.3)	17 (45.9)
Adulthood			
Contact with mental health services	12 (11.3)	10 (14.5)	2 (5.4)
History of self harm	9 (8.5)	6 (8.7)	3 (8.1)
No co-habiting relationships	60 (56.6)	42 (60.9)	18 (48.6)
Never married	51 (48.1)	31 (44.9)	21 (56.8)
Employment problems	74 (69.8)	46 (66.7)	28 (75.7)
Offence-related variables	***All (%)***	***CM (%)***	***Rapists (%)***
Legal status:			
▪ Sentenced	8 (7.5)	4 (5.8)	4 (10.8)
▪ Remanded	14 (13.2)	11 (15.9)	3 (8.1)
▪ Informal	9 (8.5)	7 (10.1)	2 (5.4)
▪ Parole	64 (60.4)	38 (55.1)	26 (70.3)
▪ Probation	7 (6.6)	6 (8.7)	1 (2.7)
Previous sexual convictions	41 (38.7)	26 (37.7)	15 (40.5)
Unconvicted allegations (sexual)	27 (25.5)	19 (27.5)	8 (21.6)
Victim gender (any sexual conviction):			
▪ Male	21 (19.8)	19 (27.5)	2 (5.4)
▪ Female	70 (66)	37 (53.6)	33 (89.2)
▪ Both	10 (9.4)	10 (14.5)	0
Substance abuse at time of offence:	49 (46.2)	26 (37.7)	23 (62.6)

* p<.05, ** p<.01

Risk

The results of the psychometric measures for risk are detailed in Table 2. It can be seen from Table 2 that no significant differences were observed between child sex offenders and adult offenders on the Risk Matrix-2000 or the Static-99. There were very few child sex offenders or adult offenders who were defined as psychopaths on the PCL-R (score of above 25). Scores for the risk domains on the Stable-2007 were rated as present if a score of definitely present or possibly present was given. There was a prevalence of the sample scoring as present in the significant social influences, relationship instability, poor problem solving skills, and deviant sexual preferences risk domains. However, even when a more rigorous cut off was used (0, 1 = not present; 2 = present), there was still a high prevalence of difficulties observed within these variables. On the Stable-2007 variables significant differences were observed within significant social influences and deviant sexual preferences, with child molesters being more likely to be scored as present on these factors. There were no significant differences between child and adult sexual offenders on the risk categories of the Stable-2007. There were also no significant differences on the total score of the Stable-2007.

Table 2: Results of the psychometric measures for risk

Psychometric measures (risk)	*All (%) N=106*	*CM (%) N=69*	*Rapists (%) N=37*
Risk Matrix 2000:			
▪ Low	18 (17)	12 (17.4)	6 (16.2)
▪ Medium	35 (33)	25 (36.2)	10 (27)
▪ High	27 (25.5)	14 (20.3)	13 (35.1)
▪ Very high	18 (17)	11 (15.9)	7 (18.9)
Static 99:			
▪ Low	16 (15.1)	14 (20.3)	2 (5.4)
▪ Medium low	28 (26.4)	17 (24.6)	11 (29.7)
▪ Medium high	30 (28.3)	16 (23.2)	14 (37.8)
▪ High	25 (23.6)	16 (23.2)	9 (24.3)
PCL-R :			
▪ Present	3 (2.8)	39 (56.5)	20 (54.1)
▪ Not present	59 (55.7)	2 (2.9)	1 (2.7)
Stable-2007[1] (n=78):			
▪ Significant influences definite	18 (17)	14 (20.3)	4 (10.8)
▪ Significant influences some	54 (50.9)	40 (58)	14 (27)*
▪ Relationship instability definite	42 (39.6)	31 (44.9)	11 (29.7)
▪ Relationship instability some	64 (60.4)	44 (63.8)	20 (54.1)
▪ Emotional ID definite	15 (14.1)	14 (20.3)	N/A
▪ Emotional ID some	32 (30.2)	31 (44.9)	N/A
▪ Hostility to women definite	9 (8.5)	5 (7.2)	4 (10.8)
▪ Hostility to women some	25 (23.6)	14 (20.3)	11 (29.7)
▪ General social rejection definite	24 (22.6)	19 (27.5)	5 (13.5)
▪ General social rejection some	51 (48.1)	37 (53.6)	14 (37.8)
▪ Lack of concern for others definite	17 (16)	13 (18.8)	4 (10.8)
▪ Lack of concern for others some	35 (33)	24 (34.8)	11 (29.7)
▪ Impulsivity definite	16 (15.1)	13 (18.8)	3 (8.1)
▪ Impulsivity some	39 (36.8)	29 (42)	10 (27)
▪ Poor problem solving definite	21 (19.8)	15 (21.7)	6 (16.2)
▪ Poor problem solving definite	57 (53.8)	39 (56.5)	18 (48.6)
▪ Negative emotionality some	18 (17)	13 (18.8)	5 (13.5)
▪ Negative emotionality some	38 (35.8)	27 (39.1)	11 (29.7)
▪ Sexual preoccupations definite	13 (12.3)	8 (11.6)	5 (13.5)
▪ Sexual preoccupations some	29 (27.4)	21 (30.4)	8 (21.6)
▪ Sex as coping definite	16 (15.1)	10 (14.5)	6 (16.2)
▪ Sex as coping some	34 (32.1)	20 (29)	14 (37.8)
▪ Deviant sexual preferences definite	26 (24.5)	19 (27.5)	7 (18.9)
▪ Deviant sexual preferences some	55 (51.9)	43 (62.3)	12 (32.4)**
▪ Co-operation with supervision definite	6 (5.7)	4 (5.8)	2 (5.4)
▪ Co-operation with supervision some	31 (29.2)	20 (29)	11 (29.7)
▪ Low	8 (7.5)	5 (7.2)	3 (8.1)
▪ Moderate	36 (34)	22 (31.9)	14 (37.8)
▪ High	30 (28.3)	23 (33.3)	7 (18.9)
▪ Total Score	11 sd 5	11 sd 5	9 sd 6

*p<.05, ** p<.01, [1] Definite/some

Personality

The results of the MCMI-III are laid out in Table 3 (personality traits).

When viewing the frequencies and percentages of the presence of personality disorder in child abusers and rapists a few differences can be observed. However, statistical analysis revealed no significant differences between the two groups. A moderate level of personality difficulties were reported overall with 37% of the sample reporting dysfunction and 21% reporting dysfunction to a level considered to be diagnosable personality disorder.

Table 3: Results of the MCMI-III

Variable	*All N=66 (%)*	*CM N=49 (%)*	*Rapists N=17 (%)*
Schizoid PD	9 (8.5)	7 (10.1)	2 (5.4)
Definite/probable[1]	26 (24.5)	21 (30.4)	5 (13.5)
Paranoid PD *Definite*	3 (2.8)	3 (4.3)	0
Paranoid PD *probable*	9 (8.5)	9 (13)	0
Schizotypal PD *Definite*	3 (2.8)	3 (4.3)	0
Schizotypal PD *probable*	9 (8.5)	8 (11.6)	1 (2.7)
Antisocial PD *Definite*	3 (2.8)	2 (2.9)	1 (2.7)
Antisocial PD *probable*	12 (11.3)	8 (11.6)	4 (10.8)
Borderline PD *Definite*	3 (2.8)	2 (2.9)	1 (2.7)
Borderline PD *probable*	11 (10.4)	7 (10.1)	4 (10.8)
Histrionic PD *Definite*	5 (4.7)	4 (5.8)	1 (2.7)
Histrionic PD *probable*	6 (5.7)	5 (7.2)	1 (2.7)
Narcissistic PD *Definite*	2 (1.9)	2 (2.9)	0
Narcissistic PD */probable*	4 (3.8)	3 (4.3)	1 (2.7)
Avoidant PD *Definite* Avoidant	5 (4.7)	5 (7.2)	0
PD *probable*	29 (27.4)	24 (34.8)	5 (13.5)
Dependent PD *Definite*	9 (8.5)	7 (10.1)	2 (5.4)
Dependent PD/*probable*	29 (27.4)	23 (33.3)	6 (16.2)
Obsessive-compulsive *Definite*	3 (2.8)	1 (1.4)	2 (5.4)
Obsessive-compulsive *probable*	5 (4.7)	2 (2.9)	3 (8.1)
Sadistic *Definite*	8 (7.5)	8 (11.6)	0 (0)
Sadistic *probable*	8 (7.5)	8 (11.6)	0 (0)
Negativistic *Definite*	14 (13.2)	12 (17.4)	2 (5.4)
Negativistic *probable*	25 (23.6)	18 (26.1)	7 (18.9)
Self-Defeating *Definite*	12 (11.3)	11 (15.9)	1 (2.7)
Self-Defeating *probable*	26 (24.5)	20 (29)	6 (16.2)
Depressive *Definite*	6 (5.7)	6 (8.7)	0
Depressive *probable*	9 (8.5)	9 (13)	0
Cluster A *Definite*	11 (10.4)	9 (13)	1 (2.7)
Cluster A *probable*	35 (33)	24 (34.8)	6 (16.2)
Cluster B *Definite*	12 (11.3)	10 (14.5)	2 (5.4)
Cluster B *probable*	27 (25.5)	23 (33.3)	4 (10.8)
Cluster C *Definite*	8 (7.5)	7 (10.1)	1 (2.7)
Cluster C *probable*	25 (23.6)	19 (27.5)	6 (16.2)

* $p<.05$, ** $p<.01$

[1.] Definite=score of 85+, Probable=score of 75+

Developmental Variables, Personality Disorder and Risk

Chi-squared tests were performed to test whether there were significant associations between developmental variables, personality disorder, and risk. However, a numbers of the cells had an expected cell count of less than five and as such Fishers Exact tests have been reported in these cases.

Significant associations between PD and Stable-2007

(The personality disorder clusters can be found in Appendix 6)

- General Social Rejection was associated with definite presence of Cluster B personality disorder (Fishers Exact $p<.05$), probable presence of Cluster C personality disorder (X^2 4.4, df 1, $p<.05$), and probable presence of Paranoid Personality disorder (Fishers Exact $p<.05$).

- Sex as Coping was significantly associated with Histronic Personality Disorder (Fishers Exact $p<.05$), definite presence of Cluster B Personality Disorder (Fishers Exact $p<.01$), definite presence of Avoidant Personality Disorder (Fisher Exact $p<.05$), probable presence of Antisocial Personality Disorder (Fishers Exact $p<.05$), definite presence of Cluster B (Fisher Exact $p<.05$), and probable presence of Cluster C (Fisher Exact = $p<.01$).

- Relationship Instability was significantly associated with definite presence of Compulsive Personality Disorder (Fishers Exact $p<.05$) and definite presence of Masochistic Personality Disorder (Fisher Exact $p<.05$).

- Lack of Concern for Others was significantly associated with probable presence of Dependent Personality Disorder (X^2 4.8, df 1, $p<.05$).

- Impulsivity was significantly associated with probable presence of Cluster C Personality Disorder (Fisher Exact $p<.05$).

- Deviant Sexual Preferences was significantly associated with definite presence of Schizoid Personality Disorder (Fishers Exact $p<.05$) and definite presence of Personality Disorder (Fishers Exact $p<.01$).

- Emotional Identification with Children was significantly associated with definite presence of Schizoid Personality Disorder (Fishers Exact = $p<.05$).

Significant associations between key developmental variables and Stable-2007

Due to the number of associations between these variables, the definite presence of items on the Stable-2007 has been reported.

- Significant Social Influences was significantly associated with emotionally/physically neglected (X^2 4.0, df 1, $p<.05$), sexual abuse (X^2 4.6, df 1, $p<.05$), and the presence of two or more childhood traumas (X^2 4.0, df 1, $p<.05$).

- Relationship Instability was significantly associated with emotionally/physically neglected (X^2 7.1, df 1, $p<.01$).

- Emotional Identification with Children was significantly associated with sexual abuse (X^2 5.3, df 1, p<.05).

- General Social Rejection was significantly associated with emotionally/physically neglected (X^2 4.2, df 1, p<.05).

- Lack of Concern for Others was significantly associated with physical abuse (X^2 9.7, df 1, p<.05), two or more abuses (X^2 6.3, df 1, p<.05), and two or more childhood traumas (X^2 6.7, df 1, p<.01).

- Impulsivity was significantly associated with one or more childhood traumas (Fishers Exact p<.05), and two or more childhood traumas (X^2 5.9, df 1, p<.05).

- Poor Problem Solving was significantly associated with emotionally/physically neglected (X^2 4.7, df 1, p<.05), physical abused (X^2 6.9, df 1, p= p<.01), one or more childhood traumas (Fishers Exact p<.05), and two or more childhood traumas (X^2 4.7, df 1, p<.05).

- Negative Emotionality was significantly associated with physical abuse (X^2 6.3, df 1, p<.05), sexual abuse (X^2 4.1, df 1, p<.05), and two or more childhood traumas (X^2 4.1, df 1, p<.05).

- Sex as Coping was significantly associated with one or more childhood traumas (Fishers Exact p<.05).

- Deviant Sexual Preferences was significantly associated with sexual abuse (X^2 4.4, df 1, $p<.05$).

Significant associations between PD and key developmental variables

- Schizoid Personality Disorder was significantly associated with sexual abuse (Fishers Exact $p<.05$).

- Possible presence of Depressive Personality Disorder was significantly associated with physical abuse (Fishers Exact $p<.01$), two or more abuses (Fisher Exact $p<.01$) and definite presence of Depressive Personality Disorder was significantly associated with two or more abuses (Fishers Exact $p<.05$).

- Possible presence of Antisocial Personality Disorder was significantly associated with two or more abuses (Fishers Exact $p<.05$).

- Possible presence of Masochistic Personality Disorder was significantly associated with sexually abuse (X^2 4.6, df 1, $p<.05$), at least one trauma (X^2 5.0, df 1, $p<.05$).

- Cluster B personality disorders was significantly associated with sexually abuse (X^2 7.1, df 1, $p<.01$) and physically abused (X^2 6.4, df 1, $p<.05$).

- Cluster C personality disorders was significantly associated with two or more abuses (X^2 4.4, df 1, $p<.05$),

Treatment Attrition

Of the total sample, 31 failed to complete the programme, 21 child sex offenders failed and 10 rapists. There were no significant differences between the child sex offenders and the rapists on failure/survival. Chi squared analyses were performed to explore any associations between key developmental variables, personality disorder, and/or items on the Stable-2007 and failure of the Challenge Programme. A regression analysis was then planned to build a model predictive of treatment failure. However, this could not be achieved due to the limited associations between the variables.

AUC Analysis

AUC analysis was performed to test for any significant predictive value of personality disorder, developmental variables, and Stable-2007 scores to failure of the Challenge programme. Only one significant predictive value was observed on the probable presence of Cluster A personality disorder (AUC = 0.84, CI = .69 - .99, p>0.05) and two moderate predictive values were observed on the Avoidant personality disorder (AUC = 0.75, CI = .44 - .89, non-significant) and Schizotypal personality disorder variable (AUC = 0.75, CL = .40 ï 1.0, non-significant). Although it can be seen that this was non-significant (p>0.05), when the 95% confidence intervals are viewed the results indicate that they would be more promising if there was a larger sample. In addition, based on Craissati, Webb, and Keen (2005) findings, when new variables are computed to attempt to increase the predictive value of the Stable-2007, personality disorder, and key developmental variables, no significant predictive values are observed.

Table 4 ROC results:

Test Result Variable(s)	Area	Std. Error[a]	Asymptotic Sig.[b]	Asymptotic 95% Confidence Interval	
				Lower Bound	Upper Bound
Millon schizoid	.67	.12	.22	.44	.89
Millon avoidant	.75	.10	.07	.54	.95
Millon depressive	.53	.14	.86	.25	.80
Millon dependent	.68	.14	.18	.41	.96
Millon histrionic	.60	.12	.48	.37	.82
Millon narcissistic	.61	.12	.41	.37	.86
Millon antisocial	.56	.16	.67	.25	.86
Millon schizotypal	.75	.13	.06	.49	1.0
Millon aggressive	.60	.15	.48	.31	.88
Millon borderline	.66	.14	.25	.39	.93
Millon paranoid	.66	.13	.25	.41	.90
Millon compulsive	.64	.14	.30	.36	.92
Millon passive aggressive	.59	.14	.52	.31	.86
Millon self defeating	.55	.13	.74	.29	.81
Cluster A probable	.84	.08	.02	.69	.99
Cluster A definite	.61	.13	.48	.35	.86
Cluster B probable	.59	.15	.55	.31	.87
Cluster B definite	.48	.15	.89	.19	.77
Cluster C probable	.33	.14	.26	.05	.61
Cluster C definite	.50	.15	1.0	.21	.79
Probable PD	.46	.15	.80	.18	.75
Definite PD	.66	.12	.29	.42	.89
Emotionally/physically neglected	.51	.11	.65	.31	.80
Physically abused	.49	.11	.89	.27	.70
Sexually abused	.54	.10	.68	.34	.74
Two or more abuses	.52	.11	.87	.30	.74
At least 1 trauma	.47	.10	.75	.27	.67
At least 2 trauma	.56	.11	.57	.35	.77
Total score on Stable-2007	.57	.13	.65	.31	.80
Stable 2007+PD	.40	.16	.57	.09	.72
Stable 2007+Dev. vars.	.55	.13	.72	.28	.81
PD+Dev. Vars.	.51	.15	.92	.23	.81

Power Analysis

In light of the fact that there were limited predictive values of the Stable-2007, personality disorder, and key developmental variables (which is contrary to previous findings) and that the current sample size was relatively small, power analysis was performed in order to determine whether predictive values could be increased given a larger sample size. This was completed using the G Power statistical package. Power analysis was performed on those variables which achieved an AUC of more than 0.5. Results indicated that many of the variables would need a sample size of over 1000 to achieve a significant effect. Other variables appeared more promising, requiring sample size of around one or two hundred, for example the definite presence of personality disorder required a sample size of 79, paranoid personality disorder 101, definite presence of Cluster A personality disorder 131, and sadistic and probable presence of Cluster B personality disorder requiring a sample size of 178.

DISCUSSION

This empirical research aimed to investigate the relationships between dynamic risk variables, personality disorder, and key developmental variables. In addition, it aimed to demonstrate whether any of these variables were related to treatment attrition in a sample of community based sex offenders. The sample included 106 sexual offenders (69 child sex offenders and 37 rapists). There were relatively few differences in background and offence related variables within the sample. There were also relatively few differences on psychometric measures for risk with no significant differences of child sexual offenders and rapists being observed on risk level of the measures. The sample revealed moderate levels of personality difficulties. However, no significant differences were observed between the groups. In the study there was a potential for Type 1 errors, i.e. a null hypothesis being incorrectly rejected. This could be reduced by increasing from a 0.05 to 0.01 significance level.

It was hypothesised that 1. õThere will be significant associations between items on the Stable-2007, key developmental variables, and personality disorder on the MCMI-III, 2. õThe Stable-2007, key developmental variables, and personality disorder will be significantly associated with failure of the Challenge Programmeô and 3. õThe Stable-2007, key developmental variables, and personality disorder will be predictive of failure of the Challenge Programmeô.

Key findings

The current research findings provided a number of results supportive of Hypothesis One. Although total score on the Stable-2007 was not associated with any of the personality disorder variables, Chi-squared and Fishers Exact tests did demonstrate that many of the items on the Stable-2007 were associated with some of the personality disorders and the personality disorder clusters. In addition, the Stable-2007 items and personality disorder variables were significantly associated with key developmental variables. In terms of Hypothesis Two, this was not supported by the research findings as Chi-squared analyses revealed that there were no associations between Stable-2007, key developmental variables, and personality disorder and failure of the Challenge Programme. However, this may have been affected but the low sample size of offenders who failed to complete the programme. Hypothesis Three was partially supported by the research findings. AUC analysis demonstrated was one significant predictive value was observed on the probable presence of Cluster A personality disorder. However, more promising results were expected for a number for the variables (definite presence of PD, paranoid PD, definite presence of Cluster A PD, sadistic PD, and probable presence of Cluster B PD) if a larger sample size were to be used, as demonstrated by G Power, power analysis.

These findings would have been expected and are in line with previous research. Sexual offenders have been consistently found to experience trauma and neglect in childhood (Bard et al., 1987; Craissati & McClurg, 1996), which is evident in the current findings. Furthermore, sexual abuse has been previously found to be associated with later sexual offending (Craissati, et al., 1998). Other developmental variables previous associated with sexual offending physical, sexual, or emotional

abuse, higher levels of childhood difficulties such as being bullied and having difficulties in friendships, resulting in adult characteristics such as self harm, hostility, lack of empathy, sexual pre-occupation, and contact with mental health services (Craissati, McClurg, & Browne, 2002a). In terms of treatment compliance, the notion that the current findings may be significant if there was an increased sample size is supported by previous findings. For example, Craissati and Beech (2001) indicate that treatment attrition is associated with childhood difficulties and childhood victimisation. In terms of the predictive value of the variables this has also been supported by previous research. While, Harris, Rice, and Cormier (2002) indicated that personality disorder was related to sexual offence recidivism. Moreover, a risk prediction model, which includes static or dynamic risk, the presence of childhood trauma, and mental health difficulties or personality disorder, has been found to be predictive of sexual offence recidivism (Craissati, Webb, & Keen, 2005).

Limitations and suggestions for future research

The current research is not without its limitations. Firstly, as reported in the results the limited sample size affected the number of analyses that could be performed as well as the quality of these analyses. Future research using a larger sample size would certainly be useful and would be feasible given that the data continues to be collected at the Challenge Project. Furthermore, research into Personality disorder and key developmental variables potentially measuring the same construct would be useful. This could be achieved by partially replicating the current research, whilst developing it to alleviate the methodological limitations. The research design included a number of methodological limitations and these may be alleviated by considering the following: The data collection was affected by some missing information on the

research schedules. This was partially alleviated by contacting report authors. However, this would have obvious limitations with historical collection of data as the report authors would often be recalling from memory rather than documented information. This may be alleviated in future by using a longitudinal design rather than retrospective for this data collection. The data collection and reports were completed by different professionals, which has problems associated with inter-rater reliability. In particular, it was obvious that some professionals provided clearer information on dynamic variables within the psychological reports than others did. This was an interesting observation as it seemed that the more recent psychological reports included more detailed and structured information on dynamic risk variables. It may be that this is a reflection of the current research and clinical climate, where dynamic variables are becoming viewed as more pertinent in the overall risk assessment of sexual offenders. This may be overcome by ensuring all report authors have the same training level and are up to date with current research. Further, background information of the offenders on the research schedules was collected via self-report. The MCMI-III is also a self-report measure for personality functioning. Similarly, the Stable-2007 was collect by file information, which at the point this information was initially obtained would have been largely self-report. It may be that the offenders self-report includes a minimisation or exaggeration of the difficulties experienced. This may be at least partially alleviated in future research if a DSM-IV diagnosis was also used to determine personality disorder. However, much research and clinical information is gathered in this way so there is limited evidence to suggest that the current research is anymore flawed in this sense than is standard.

The study would also have benefited from using a control group, for example from the local area probation service. However, the data for a control group was not available for the current research. Further, non-contact offenders were excluded from the current research, although they are accepted for treatment on the Challenge Programme. This was due to the low number of non-contact offenders to comprise heterogeneous group and the researchers did not want to categorise them as rapist or child sexual offenders. As the data collection on the Challenge Project has continued it would be useful to consider this group of offenders in future research projects. Finally, due to the nature of the research sample, i.e. those sexual offenders who have been referred to a specialist treatment programme, the applicability of the research findings to other settings will inevitably be somewhat limited. Future research might consider a non-specialist treatment group for further comparisons. This may include, as suggested previously, local probation samples. It may also be valuable to consider inpatient and prison samples for comparison. Furthermore, it may be of interest to include in a future research design general and violent offenders. The Stable-2007 would not be useful in this as it is a dynamic risk assessment for sexual offenders only. However, other dynamic risk assessment could be used and evaluation of whether the associations between risk level personality disorder and key developmental variables is specific to sexual offenders or the current cohort could occur.

Conclusions

The research presented is preliminary piece of work and clearly more work needs to be completed in this area, following above recommendations. The research does demonstrate that further investigation is warranted and it gives weight to theory that

key developmental variables, personality disorder, and dynamic risk assessments may be measuring similar underlying constructs. In addition, it highlights the importance for professionals to consider assessment and treatment of sexual offenders from a developmental perspective. More rigorous research designs with larger samples sizes and comparison groups would improve upon the current research.

Chapter 3:

Case Study of a 41 Year Old High Risk Sexual Offender

CHAPTER 4

Critique of a Psychometric Measure: Stable-2000 (Hanson & Harris, 2000)

INTRODUCTION

Over the past decade, research pertaining to the area of sex offender risk assessment and recidivism has evolved considerably. Most notably, the literature has expanded in relation to which variables are the best predictors of future risk and offending behaviour (Hanson & Morton-Bourgon, 2004). This research base has identified that key predictors of sexual offence recidivism are static, unchangeable variables such as; age, sexual offence history, length of intimate relationships or cohabitation, stranger victims, and victim gender. Correspondingly, this has lead to the development of a number of actuarial risk assessment tools, designed to predict sexual offence recidivism, based upon static variables (Craig, Browne, Stringer & Beech, 2005). The most widely used of which are the Risk Matrix-2000 (Thornton et al, 2003) and the Static-99 (Hanson & Thornton, 2000).

Actuarial risk assessments are now well established in both clinical and research settings. Furthermore, to date, they have consistently demonstrated their efficacy in risk prediction, in particular by repeatedly providing at least moderate predictive power for sexual offence recidivism (AUC > .7) (Hanson, 2004). However, although these assessments are now well rooted within the empirical literature (e.g. Harris, Rice, & Cormier, 2002; Hood, Shute, Feilzer, & Wilcox, 2002) they fail to consider the role of risk management (Prins, 2005; Beech, Fisher, & Thornton, 2003). Furthermore, they do not guide clinicians on the psychological factors associated with risk and provide no indications of how risk can be reduced (Beech & Ward, 2003).

In order to alleviate some of the problems associated with static risk assessments, a number of researchers have focussed their attentions on dynamic risk factors, i.e. those factors which are amenable to change (Hanson & Harris, 2001). Theoretical and practical attempts have been made to introduce these dynamic variables and develop standardised assessment procedures. Such dynamic approaches maintain the importance of offence-related factors, whilst accounting for a broad range of psychological difficulties (Craissati, Webb, & Keen, 2005). The initial empirical base pertaining to dynamic factors suggests that there are four significant dynamic domains predictive of sexual offence recidivism; pro-offending attitudes, intimacy deficits, sexual self-regulation (including deviant sexual interests) and general self-regulation (e.g. Barbaree & Marshall, 1989; Hanson & Bussière , 1998; Beech, Fisher, & Beckett, 1999; Proulx, Perrault, & Ouimet, 1999.

Two notable dynamic risk assessment tools have currently been validated for use with sexual offenders, the Sex Offender Treatment Evaluation Project (STEP) test battery (Beech, Fisher, & Beckett, 1999) and the Initial Deviance Assessment (IDA) (Thornton, 2002). The STEP test battery, implemented within the U.K. probation service, determines pro-offending attitudes, socio-affective problems, and deviant sexual interest, through a number of psychometric measures and the IDA, used in U.K. Prison Service, focuses on: deviant sexual interest, distorted attitudes, socio-affective functioning, and problems with self-management. In both assessment measures the dynamic domains have been shown to be predictive of sexual offence recidivism, independently of static variables (Beech, Fisher & Thornton, 2003). Furthermore, preliminary research suggests that dynamic variables can enhance the accuracy of actuarial risk assessments (Hanson & Harris, 2001; Beech, Friendship,

Erikson & Hanson 2002; Thornton, 2002). Nonetheless, there is an ubiquitous need for continuing research into sexual recidivism and the development of comprehensive risk assessment tools, which comprise well-validated static and dynamic variables.

In accordance with this developing literature base, Hanson and Harris (2000) have developed the Stable-2000. This review will examine the Stable-2000, in terms of its scientific properties and its applicability to sexual offender risk assessment.

Overview of the stable 2000

The Stable-2000 is a 16 item measure of stable dynamic risk factors designed for use with adult sexual offenders. These factors are organised into 6 subsections (see Stableï 2000 Tally Sheet, appendix 5). 1. Significant Social Influences, which refers to individuals in the offenders life who are not paid to be there. 2. Intimacy Deficits, which is divided into five items, a) stability of the offenderôs current intimate relationship; b) emotional identification with children; c) hostility toward women; d) general social rejection/loneliness; and e) lack of concern for others. 3. Sexual Self-Regulation, comprising three items; a) high sex drive/sexual pre-occupations; b) use of sex as a coping strategy; and c) deviant sexual interests. 4. Attitudes Supportive of Sexual Assault, which assesses three items a) sexual entitlement; b) attitudes tolerant of rape; and c) attitudes tolerant of adult-child sex. 5. Co-operation with Supervision, which identifies the degree to which the offender is co-operating with their supervision. 6. General Self-Regulation, comprising three items a) impulsive acts; b) poor cognitive problem-solving skills; and c) negative emotionality/hostility.

Each item is assessed following a structured scoring guide using three-point rating scales, 0 (no problem), 1 (some concern/slight problem) and 2 (present/definite concern). When all the items have been scored, the highest score in each subsection is calculated as the section score. The subsection scores are then tallied to arrive at an overall Stable-2000 score ranging from 0 to 12. In terms of risk categories total scores of 0-4 are considered to be low, scores of 5-8, moderate, and scores of 9-12, high. These score ranges are not validated and were derived from the clinical judgement of Hanson and Harris (2000), the toolôs authors. The Stable-2000 can be administered at any time during the offendersô supervision period. Therefore, it allows assessment of changes in risk/need to be made as the offender progresses through treatment or if significant, potentially risk altering, events occur.

The Stable-2000 does not have a professional manual. However, a comprehensive administration and scoring guide is available by emailing the authors. When initially developed the Stable-2000 was empirically informed but not validated. Since this date, attempts have been made to validate the measure (e.g. Hanson, Harris, Scott, & Helmus, 2007). However; a formal manual is still unavailable. As such, normative data is not comprehensively presented and information pertaining to factor structure and test construction is absent. Furthermore, as a result, although used in forensic practical settings, the literature pertaining to the measure is somewhat sparse. The Stable 2000 has since been developed into the Stable 2007. The differences between the measures lie in their validation, as the Stable-2007 has been further validated and that the items which were not predictive of sexual offence recidivism in the Stable 2000 have been removed from the Stable 2007. Furthermore, the Stable 2007 does not divide the individual items into subsections, rather it has one overall score obtained by

tallying all the items. The Stable 2000 was used as a critique in this measure due to the Stable 2007 being unpublished at the time of writing. In addition, it was felt useful to highlight these differences and the tools development.

RELIABILITY

Internal Consistency

A test is considered reliable if it is self-consistent (internal consistency). This is important as internal consistency relates to the degree to which the items are correlated to the criterion and how well each item relates to each other independently (Janda, 1994), usually measured by Cronbachôs alpha co-efficient. The internal consistency alpha for the Stable-2000 equalled .83. Field (2000) suggests that alphas over 0.60 reflect a measure that it internally consistent. Nunnally (1978) takes a more conservative view of alphas over 0.70 being an acceptable level. Which ever level is considered, the alpha provided demonstrates that the Stable-2000 has very good internal consistency. However, Hanson, Harris, Scott, & Helmus (2007) is the only paper which has reported on the internal consistency of the measure. It would enhance the reliability if additional studies were to report on the internal consistency. Moreover, the inter-item correlations are not reported on and as Cattell and Kline (1977) point out this could be anti-theoretical. In the absence of inter-item correlations it remains unknown whether each item on the Stable-2000 are operating in the same way to the criterion. In other words, if the inter-item correlations are too great then each item would not be providing any new information. Therefore, the measure would only pertain to a limited theoretical criterion with little variance.

Test-retest reliability

A test is also deemed reliable if it achieves adequate test re-test reliability. Test-retest reliability refers to correlating the scores from set of subjects tested on two separate occasions (Kline, 1986), where no intervention has been provided. Using correlational

analysis a minimum level of 0.7 should be reported. A correlation of less than this is deemed unsatisfactory as the standard error would become too large resulting in uncertain interpretations (Guilford, 1956). Unfortunately, no information pertaining to test-re-test reliability is available on the Stable-2000.

Inter-rater reliability

More recently, Hanson, Harris, Scott and Helmus (2007) have reported on the inter-rater reliability of the Stable-2000. The authors tested for inter-rater reliability in two ways. Firstly, they compared the responses 258 trained officers to their own responses. The authorsô responses were taken to be the correct answers. They demonstrated that for the Stable-2000 total scores, between 47% and 67% were within one point of the correct answer and between 74% and 99% were within three points of the correct answer. On initial examination, these ópercent correctô scores appear to demonstrate a high degree of inter-rater reliability. However, on closer examination and when considered with the scoring guide a difference of two or three points on the total Stable score can affect an offenders risk category relatively easily. Therefore, it may be asserted that only the percent scores within one point of the correct answer can be used as a valid measure of inter-rater reliability. In doing this, it is evident that the inter rater reliability is reduced considerably, at times to less than 50% accurate.

Secondly, the authors file reviewed 92, randomly selected cases which had existing Stable-2000 scores. They identified the best scoring possible based upon the file information. The inter-rater reliability achieved here was high, the intra-class correlation was .89 (k = 87). However, the reliability may have been artificially affected as the second raters (the authors) were not blind to the original ratings and

they also took the opportunity to question the first raters about any missing or ambiguous information.

VALIDITY

Face Validity

Face validity refers to the extent to which a measure appears to be measuring what it claims to. Employing theoretical knowledge of the area, the Stable-2000 demonstrates good face validity as all the items appear to be relevant to sex offender risk of recidivism.

Predictive Validity

As with the reliability, predictive validity information is not available within the initial guide of the Stable-2000. However, the subsequent study (Hanson, Harris, Scott and Helmus, 2007) does provide some predictive validity information, using the criterion recidivism. They utilised Stable-2000 assessments of 805 adult male sex offenders and followed them up to a survival end date which was set one month after the last assessment information was received. They then recorded the predictive validity of five types of recidivism; ósexual crime recidivismô (AUC = .64), óany sexual recidivismô (AUC = .66), óviolent recidivismô (AUC = .65), óany criminal recidivismô (AUC = .64), and óany recidivismô (AUC = .67). These results demonstrate that the Stable-2000 total scores provide good predictive validity on all five types of recidivism.

However, upon further analysis Hanson, Harris, Scott and Helmus (2007) indicated that only seven of the 16 items showed significant linear relationships to all recidivism categories (Negative Social Influences, AUC = .59; Hostility Toward Women., AUC = .58; Rejection/Loneliness, AUC = .60; Lack of Concern for Others,

AUC = .58; Lack of Cooperation with Supervision, AUC = .58; Impulsive Acts, AUC = .64; and Poor Cognitive Problem-Solving, AUC = .60). Three, of the items showed a significant linear relationship with the category of recidivism they were designed to predict: Sexual Pre-Occupations and Sex as Coping were significantly related to sexual recidivism, (AUCôs of .58 and .62 respectively) and Negative Emotion/Hostility was related to violent (AUC = .57) and general recidivism (AUC = .57). The óLovers/Intimate Partnersô item produced a significant but non-linear relationship to relevant outcomes (AUC = .59). None of the attitude items were significant to sexual offence recidivism, (sexual entitlement, AUC = .54; attitudes tolerant of rape, AUC = .54; attitudes tolerant of adult-child sex, AUC = 4.7), which is contrary to the theory and demonstrates the necessity for measures to be formally validated rather than simply empirically informed.

In addition, a 0.05 level of rejection was employed in Hanson, Harris, Scott and Helmusô, (2007) evaluation, which is acceptable. However, to further control the probability of a Type 1 error occurring it would be interesting to demonstrate the performance of the Stable-2000 at the more conservative level of rejection (0.01), particularly as the AUCôs at the 0.05 level are only moderate. Further, the predictive validity of the Stable-2000 remains somewhat premature and confirmatory analyses are required. However, the predictive validity presented may be affected because as with all supervisions the higher the risk of the offender then the closer the monitoring therefore providing opportunity less to offend and any offences committed more likely to be recorded.

Concurrent Validity

With no professional manual and no studies to date having provided correlation information on the Stable-200 and associated measures, its concurrent validity has not been firmly established. Future validations of the Stable-2000 should consider correlating the measure with dynamic risk assessments such as the Initial Deviance Assessment (IDA) (Thornton, 2002) and the Sex Offender Treatment Evaluation Project (STEP) Test Battery (Beech, Fisher, & Beckett, 1999). Nonetheless, preliminary item comparisons can be made with other dynamic assessments, which indicate that the Stable-2000 provides meaningful contributions to the risk assessment of sexual offenders. Furthermore, Kline (1986) states that for a measure to practically useful it needs to offer something that existing measures lack. In terms of risk assessment as a whole, the Stable-2000 offers a dynamic aspect, which static measures ignore. In comparison with existing dynamic measures, the Stable-2000 considers response to supervision, which has been consistently demonstrated as an important dynamic risk factor (e.g. Hanson & Harris, 2000; Quinsey, Rice, Harris, & Cormier, 1998; Zamble & Quinsey, 1997), whereas the IDA does not. In addition, it considers all sexual offenders whereas the STEP test battery was designed for use with adult male child abusers, and has not been validated for use with other populations.

Content Validity

The Stable-2000 has not been validated using an official measure of content validity, such as Lawshe (1975), who proposed that each item should be rated on its necessity to the performance of the construct by a panel of raters. Lawshe (1975) asserts that if more than half the raters agree on an itemsô necessity the measure can claim at least some content validity. However, the Stable-2000 can boast content validity in that it has evolved out of the extensive research area and theoretical background of sex offender risk assessment. It appears to consider all aspects of dynamic risk assessment. In addition, the authors are currently in the process of combining this into an integrated assessment considering areas of static, stable dynamic and acute dynamic risk.

Construct Validity

Due to the Stable-2000 being a relatively new assessment and the limited information pertaining to this it is difficult to assess the construct validity of the measure. High scores have been related to recidivism in Hanson, Harris, Scott and Helmusô (2007) study, which has been demonstrated via predictive validity analyses. To date, it seems that the Stable-2000 scores have not been related to any other relevant constructs or research areas. As the measure matures, it is hoped that the research and evidence based pertaining to this will increase.

NORMATIVE DATA

The importance of a professional manual is reiterated here for two reasons. Firstly, the Stable-2000 has been officially employed in many regions of Canada and in some establishments in the U.K. without established norms being published. Secondly, although a representative sample has been used in the subsequent validation study, clearly presented normative data is not available. The sample consisted of 805 adult sexual offenders over 16 different jurisdictions in Canada. The study does detail recidivism rates of these offenders. It also appropriately considers sex offenders not to be a homogenous group and thus identifies recidivism rates of rapists and child abusers separately. It is evident that clearly defined normative data is necessary. In addition, it would be useful to report normative data for U.K. samples.

CONCLUSIONS

The most salient criticism of the Stable-2000 is the lack of a professional manual and that is has been fully implemented in some jurisdictions in Canada and informally implemented in a number of settings in the U.K. without formal validation. In addition, the subsequent validity study has evidenced that some of the items in the Stable-2000 are in fact not predictive of future recidivism and many other areas of validity are neglected. Therefore, further highlighting the pervasive need for validation of this measure. However, the authors are currently in the process of revising the measure on the basis of the validation study which will result in the production of the Stable-2007. Furthermore, they are investigating the validity of a combined assessment incorporating the Static-99, Stable-2007, and acute-2007. Overall, the measure appears to be promising and there is clearly a requirement for such a measure within both the clinical and research fields. With further validation, a practical, reliable, and valid risk assessment measure is expected to emerge.

CHAPTER 5

Thesis Discussion

DISCUSSION

Risk assessment of sexual offenders is an important topic for researchers and clinicians working with sexual offenders, predominantly because sexual offending has significant impacts on the victims and wider society. As such, accurate risk assessments are essential, particularly has they have considerable impacts on the management of offenders. The primary of aim of this thesis was to examine developments in sexual offender risk assessment, with a focus on the possible relationships between key developmental variables, dynamic risk variables, and personality disorders. The thesis had a secondary aim to examine whether any of the risk related variables (key developmental variables, personality disorder, and dynamic factors) were related to treatment attrition.

A narrative review was presented in Chapter 1, which aimed to discuss and draw together four broad topic areas; dynamic risk factors, personality disorder, key developmental variables, and treatment adherence. A narrative review was presented here as the topic areas were too broad to compile a single systematic review. However, systematic search strategies were used in order to increase the validity of the review. The review demonstrates the significant advances in sex offender risk assessment in recent decades and describes advances in actuarial and dynamic risk assessment, with a discussion of risk variables. Detailed within the review are personality disorder and psychopathy, with particular reference to their relevance to sexual offending and risk. Key developmental or background variables are considered as risk factors and recent research querying their relationship to personality disorder and dynamic risk factors is presented. The review also considers treatment adherence

and how the risk variables are related to and possibly increase or predict risk. The review concludes that the evidence is there to suggest that further research in these areas is certainly warranted but at this time no firm conclusions can be drawn.

Chapter 2 presented an empirical study, seeking to go some way to alleviating the gap in the literature identified in the narrative review. Data was gathered from the Challenge Project, a community sex offender treatment programme, and information on 106 sexual offenders was available. The primary aims of the research were to investigate associations between items on the Stable-2007, key developmental variables, and personality disorder on the MCMI-III and to investigate the predictive value of these variables to failure on the treatment programme. A number of statistical analyses were performed. Chi-squared and Fishers Exact analyses revealed some significant associates between the variables. Low sample sizes were suggested to affect the results pertaining to failure on the programme as no significant associations were observed. Power analysis was conducted which suggested that increased sample sizes would make the results more promising for a number of variables; definite presence of PD, paranoid PD, definite presence of Cluster A PD, sadistic PD, and probable presence of Cluster B PD.

Unsurprisingly, from the results in Chapter two a relationship was found between social rejection and Cluster B personality disorder, Cluster C and Paranoid personality disorder. Individuals diagnosed with a personality disorder of any type would reasonably be expected to have some deficits in social interactions and combined with the stigma of such a label deems this an unsurprising result. Social rejection was also associated with emotionally/physically neglected. It may be that the skills required to

interact in social settings are suppressed under these childhood circumstances. Sex as coping was associated with a number of personality disorders including Histrionic and with one or more childhood traumas. Lack of concern for others was associated with dependant personality disorder and physical abuse and childhood traumas. This lack of concern may be developed from a negative view of others formed in childhood. The relationship to dependant personality disorder is seemingly less clear. However, it could perhaps be understood as although a negative view of others is developed so is a negative view of self and this confusion leads to a dependant style. Lack of significant social influences and relationship instability was again unsurprisingly associated with emotional and physical neglect, likely demonstrating a difficulty forming meaningful adult relationships due to the rejection experienced in childhood. Emotional identification with children was associated with sexual abuse, highlighting that abuse in childhood can lead to viewing children as emotionally safer alliances. Deviant sexual preferences were also associated with sexual abuse demonstrating the cognitive distortions formed during development.

In general, the results perhaps indicate a somewhat linear relationship from disruptions and abuse in childhood resulting in a skills deficit, to the development of personality disorder, leading and corresponding to difficulties within adult life. Therefore, this supports the notion that developmental variables, personality disorder and the Stable-2007 measure some underlying construct or developmental patterns.

A number of limitations with the empirical research were outlined, of which the sample size was key. Other methodological flaws were discussed focussing on data collection issues such as; missing information, relying on memory of other

professionals, and conducting the Stable-2007 assessments from file information. It was concluded that the research demonstrates that this is a valid research topic. It provided weight to an emerging theory that there are associations between what we are measuring when we assess dynamic risk factors, key developmental variables, and personality disorder. However, it was apparent that more research in this is area is needed.

A single case study of Nigel, an adult rapist, was presented in Chapter 3, which provided a practical example of how risk issues can affect the management of sexual offenders. The case study was limited as the author was not able to complete the intervention and no post intervention measures were available at the time of writing. However, a detailed psychological assessment, risk assessment, formulation, and intervention plan (the Challenge Programme) was presented. The assessment revealed that Nigel was high risk on static measures and moderate risk on dynamic measures. He was also deemed to have high psychopathic tendencies. Nigel, therefore, provided a good example of a high risk sexual offender who is challenging in some way (psychopathy) and was relevant for this thesis. Two formulation hypotheses were presented in order to inform treatment plans. It was suggested that he may either have a dominant deviant sexual preference or a dominant antisocial and psychopathic personality. It was suggested that the Challenge Programme was the best option for Nigel in terms of community based treatments, although it was inconclusive of how he would fare in this given the lack of previous interventions. The biggest obstacle to treatment was deemed to be associated with psychopathy. This case study demonstrates the importance of individual assessments of sexual offenders whilst allowing for static and categorised risk assessments. It also demonstrates the need for

responsivity issues, i.e. responding to individual clients needs, to be considered when a treatment programme is offered.

Chapter 1 of this thesis provided some evidence for the ubiquitous need for accurate, valid, and reliable risk assessments. However, Chapter 4 aimed to present a specific example of this relevant to the continuing development of dynamic risk assessments for sexual offenders. Specifically, Chapter 4 presented a critique of the Stable-2000 (Hanson & Harris, 2000) a dynamic risk assessment for child molesters and rapists. Within this Chapter, an overview of the measure was presented followed by a discussion of its psychometric properties; including various reliability and validity. In terms of reliability, the measure had good internal consistency. However, there was no information on test-retest reliability and the inter-rater reliability was questionable. In terms of validity, face validity, and content validity were deemed to be good, concurrent validity looked positive, and there was at least moderate predictive validity. However, there was no information on construct validity. The main criticism of the measure was that it was under-researched and there was a lack of a professional manual. The Stable-2000 has been updated and currently the Stable-2007 is available, which was used in the empirical research of this thesis. As such, it is hoped that future research can concentrate on validating the Stable-2007.

Conclusions

The field of sexual offender risk assessment and its advances in terms dynamic risk predictors, personality, and key developmental variables were examined in this thesis. The thesis has clearly demonstrated that over recent decades, sexual offender risk assessment has made many advances. Indeed, it provides some confirmation to

Bontaôs (1996) comment that there will be a forth generation risk assessment in the future. It is clear that dynamic risk assessments and the idea of combining static, stable dynamic, and acute dynamic assessments for a comprehensive assessment goes some way to support this. In addition, Craissatiôs work and the review and research presented in this thesis have demonstrated that the development of risk assessments considering background variables is an important development. The thesis has primarily demonstrated that the empirical research presented is preliminary and further research in this area needs to be conducted with more rigorous methodological considerations. However, the thesis gives good weight to hypotheses that key developmental variables, personality disorder, and dynamic risk factors are associated, perhaps by measuring some similar underlying constructs. The issue of treatment compliance was also examined throughout the thesis. Unfortunately, the empirical paper could draw no firm conclusions and further research is suggested with a larger sample size. However, the review and the case study identified that responsivity issues in treatment are important to minimise non-compliance. The future in terms of sexual offender risk assessment is a broad and ever developing one. It seems of importance to be considering holistic and comprehensive risk assessments taking care not to ignore background and individual factors.

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APPENDICIES

APPENDIX 1 - LIST OF COCHRANE REFERENCES

R=Relevant, NR=Not Relevant

Clinical Trials (n=38):
(R=1, NR=37)

Annunziato, R.A., Timko, C.A., Crerand, C.E., Didie, E.R., Bellace, D.L., Phelan, S., Kerzhnerman, I., and Lowe, M.R. (2009). A randomized trial examining differential meal replacement adherence in a weight loss maintenance program after one-year follow-up. Eating behaviours, 2009, 10, 176-83. (NR)

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Cochrane Reviews (n=1):
(R=1, NR=0)

Kenworthy, Tracy., Adams, C. E., Bilby, C., Brooks-Gordon, B., and Fenton, M. (2008). Psychological interventions for those who have sexually offended or are at risk of offending. Cochrane Database of Systematic Reviews: Reviews, 4, John Wiley & Sons, Ltd Chichester, UK. (R)

Other Reviews (n=3):
(R=2, NR=1)

Bilby, C., Ferriter, M., Jones, H., Huband, N., and Smailagic, N. (2008). Psychological interventions for those who have sexually offended or are at risk of offending. Cochrane Database of Systematic Reviews: Protocols 2008 Issue 4 John Wiley & Sons, Ltd Chichester, UK. (R)

Bilby, C., Brooks-Gordon, B., and Wells, H. (2006). A systematic review of psychological interventions for sexual offenders - II: quasi-experimental and qualitative data. Journal of Forensic Psychiatry and Psychology, 17, 467-484. (R)

Walker, D. F., McGovern, S. K., Poey, E. L., and Otis, K. E. (2004). Treatment effectiveness for male adolescent sexual offenders: a meta-analysis and review. Journal of Child Sexual Abuse, 13, 281-293. (NR)

Total = R=5, NR=37

APPENDIX 2 – SEARCH STRATEGIES

Database	Search Strategy (limit to full text and English language)
Cochrane	1. drop* out* in Title, Abstract or Keywords and sex* offend* in Title, Abstract or Keywords in all products 2. treat* adhere* and sex* offend* in all products 3. attrition in Title, Abstract or Keywords and sex* offend* in Title, Abstract or Keywords in all products 4. personality* in Title, Abstract or Keywords and treat* adhere* in Title, Abstract or Keywords in all products 5. personality in Title, Abstract or Keywords and sex* offend* in Title, Abstract or Keywords in all products 6. risk* assess* in Title, Abstract or Keywords and sex* offend* in Title, Abstract or Keywords in all products 7. key dev* variable* and sex offend* (0 results). 8. key dev* variable* and personality* (0 results.
Embase (1980-2008)	1. Treatment Outcome/ or Patient Compliance/ or drop$ out$.mp. or Personality Disorder/ 2. limit 1 to (full text and english language) 3. Criminal Behavior/ or Offender/ or Sexual Crime/ or Child Sexual Abuse/ or sex$ offend$.mp. or Rape/ or Recidivism/ 4. limit 3 to (full text and english language) 5. 2 and 4 6. treat$ adhere$.mp. 7. limit 6 to (full text and english language) 8. 4 and 7 9. attrition.mp. 10. limit 9 to (full text and english language) 11. 4 and 10 12. personality$.mp. or PERSONALITY DISORDER/ or PERSONALITY/ 13. limit 12 to (full text and english language) 14. 7 and 13 4 and 13 15. Risk Assessment/ or risk* assess*.mp. 16. limit 16 to (full text and english language) 17. Criminal Behavior/ or Sexual Crime/ or Child Sexual Abuse/ or sex$ offend$.mp. or Rape/ or 18. 18. Recidivism/ 19. limit 18 to (full text and english language) 20. 4 and 17

	21. dev$ variable$.mp. 22. limit 21 to (full text and english language) 23. 4 and 22 24. 13 and 22 25. personality disorder$.mp. or exp Personality Disorders/ 26. limit 25 to (full text and english language) 27. risk factor$.mp. or exp Risk Factors/ 28. limit 27 to (full text and english language) 29. 26 and 28 30. 4 and 29 Searches returned 12 journals relevant by title
PsychINFO (1967 ï 2008)	1-30. Search terms from Embase search history were re-executed using OVID. Searches returned 25 relevant journals by title
Swetswise (year: all, showing: all subscriptions, language: English categories: all)	1. Treatment outcome and offend

APPENDIX 3 - KEY DEVELOPMENTAL VARIABLES

Sexual victimisation in childhood

Sexual victimization was defined as sexual contact with another person that was either unwanted or perpetrated by an adult at least five years older than the subject. Consenting sexual contact with peers was coded separately.

Physical victimisation in childhood

Ratings of physical abuse in childhood were defined as physical contact, perpetrated by an adult on a number of occasions, which was unprovoked, or excessive in relation to any misdemeanor committed by the subject.

Emotional abuse/physical neglect in childhood

Ratings of emotional or physical neglect in childhood were defined as persistent and marked failures on behalf of the caring adult(s) to provide adequate and consistent care.

Childhood 'disturbance'

A number of variables were considered, which are associated with emotional or conduct disorder in childhood. These included ratings (before the age of 16) for persistent truanting or school refusal, significant episodes of being bullied or bullying others, suspension from school for aggression, stealing, running away from home, deliberate self harm, experiencing prolonged difficulties with peer friendships and marked feelings of misery. Subjects were defined as having experienced childhood disturbance/difficulties if they reported two or more of the above.

Trauma

One or more or two or more traumaôs are defined as having one or more or two or more of the variableôs óphysical abuse, sexual abuse, emotional/physical neglect in childhoodô.

APPENDIX 4- MEASURES

MCMI-III (The Millon Clinical Multiaxial Inventory, Third Edition) (Millon, 1994)

The MCMI-III is a 175 item test, which is designed for use with adults aged 18 years and older. The MCMI-III supports psychologists and other qualified mental health professionals in clinical, counselling, medical, forensic and other settings in which individuals are being assessed for emotional, behavioural, or interpersonal difficulties. This instrument can be used to:

- Assess the interaction of Axis I and Axis II disorders based on the *DSM-IV* classification system
- Identify the deeper and pervasive personality characteristics underlying a patient's overt symptoms
- Gain an integrated understanding of the relationship between personality characteristics and clinical syndromes to facilitate treatment decisions.

The test incorporates 14 Personality Disorder Scales (11 Moderate Personality Disorder Scales and 3 Severe personality Pathology Scales), 10 Clinical Syndrome Scales (7 Moderate Syndrome Scales and 3 Severe Syndrome Scales), 4 Corrections Scales (3 Modifying Indices and 1 Validity Index).

Stable-2007 (Hanson & Harris, 2000)

The Stable-2007 is a sex offender risk assessment tool designed to measure stable dynamic risk domains to supplement static risk assessment measures. The instrument includes 13 relatively stable factors, significant social influences, relationship instability, emotional identification with children (child abusers only), hostility to women, general social rejection, lack of concern for others, impulsivity, poor problem solving skills, negative emotionality, sexual preoccupations, sex as coping, deviant sexual preferences, co-operation with supervision. The items are rated as 0 (absent), 1 (maybe present) and 2 (present). All items are then calculated to arrive at an overall Stable-2007 score. The Stable-2007 has achieved AUC of .77 (Hanson, Harris, Scott, and Helmus, 2007). The tool has been designed for use with the Static-99 and the

Acute-2007 to provide a comprehensive risk assessment. However, it can be used alone for clinical and research purposes.

Risk Matrix 2000 (Thornton et al, 2003)

The Risk Matrix 2000 (RM2000) is an evidence-based actuarial sexual violence risk assessment tool, for men over 18 with at least one conviction for a sexual offence. The tool can be used to predict the likelihood of reconviction for a sexual or violent offence in the long term (up to 15 years). It involves a two stage process, whereby in stage one three static items are scored and a risk category is determined and in stage two there are four aggravating factors, if two aggravating factors are present the risk is raised one category and if all four are present the risk is raised two categories. This tool is widely used in the Prison, Probation, and Police services in England and Wales. It has achieved AUC ranging from low 0.7ôs to low 08ôs (Thornton et al, 2003).

Static-99 (Hanson & Thornton, 2000)

The Static-99 is a brief actuarial risk assessment designed to estimate the probability of sexual and violent recidivism in adult males convicted of at least one sexual offence. The tool contains ten items associated with four broad categories: Sexual Deviance, Range of Potential Victims, Persistence, and Anti-sociality. The Static-99 is widely used in the United States and Canada and has achieved AUC of 0.71.

Psychopathy Checklist Revised (PCL-R) (Hare, 1991)

The PCL-R is a rating scale designed to measure traits of psychopathy in forensic populations. The measure contains 20 items each reflecting a different characteristic of psychopathy, which are rated on a three-point scale, from ôthe item does not applyô through to ôthe item definitely appliesô. A score between 0 and 0 is calculated with a cut off of 25 (U.K. samples) or 30 (U.S. samples) indicating a diagnosis of psychopathy. The measure can also be rating according to two factors, Factor one, which reflects the affective and interpersonal features, and Factor two, which reflects the social deviance features. It is designed to be completed on an interview basis combined with file information. The PCL-R has good internal consistency, inter-rate and test re-test reliabilities ranging from .85 to .95.

APPENDIX 5 - STABLE-2007 RATING SHEET

Subject Name: _____

Place of Scoring: _____

Date of Scoring:_____ Name of Assessor: _____

Scoring Item	Notes	Section Total
Significant Social Influences		
Capacity for Relationship Stability		
Emotional ID with Children	**(Only score this item for child molesters)**	
Hostility toward women		
General Social Rejection		
Lack of concern for others		
Impulsive		
Poor Problem Solving Skills		
Negative Emotionality		
Sex Drive Sex Preoccupation		
Sex as Coping		
Deviant Sexual Preference		
<u>Deviant Sexual Interests in Possible Remission</u> An offender who has scored a "2" based upon historical facts can have their Deviant Sexual Interest score reduced by one point if the following is present: The offender is involved in an age appropriate, consensual, satisfying sexual relationship of at least one year's duration while "at risk" in the community with the absence of behavioural indicators of Deviant Sexual Interest for 2 years. If the presence of this relationship has been confirmed by a credible, independent, collateral contact and the above condition applies you may enter and count a "negative 1" in this score box – reducing the offender's overall score by "1"		
Co-operation with		

Supervision		
Sum for Final Total (Out of 24 for those without a child victim, see Tab 8, page 36 for definition of a ñchildò)		_____ **26**

Interpretive Ranges: 0 – 3 = Low, 4 – 11 = Moderate, 12+ = High

APPENDIX 6 – PERSONALITY DISRODER CLUSTERS

Cluster A
Described as the Odd or Eccentric disorders, consists of Paranoid, Schizoid, and Schizotypal personality disorders.

Cluster B
Consists of Antisocial, Borderline, Histrionic, and Narcissistic personality disorders.

Cluster C
Consists of Obsessive-compulsive, Avoidant, and Dependant personality disorders.