An Exploration of the Role of Personality in Parents who Maltreat their Children

By

Hannah Jones

A thesis submitted to the Faculty of Life and Environmental Sciences

of the University of Birmingham

for the degree of

DOCTOR OF FORENSIC PSYCHOLOGY

Centre for Forensic and Criminological Psychology

School of Psychology

University of Birmingham

Birmingham

UK

Abstract

This thesis seeks to explore the role of parental personality in the perpetration of child maltreatment. A systematic review of the literature evaluates whether existing research on personality in parents who maltreat their children reaches consensus and whether it utilises current personality theory and tools of measurement whilst doing so. The findings from the systematic review highlight a particular dearth of recent research on the topic and indicates that there is little consensus on the relationship between personality traits and the perpetration of child maltreatment as a discrete entity, or for specific maltreatment types. As such, the need for further research into the role of personality in child maltreatment is warranted. In order to select a tool to appropriately measure personality within risk-referred parents, a critique of the Millon Clinical Mutiaxial Inventory, Third Edition (MCMI-III) is presented. The reliability and validity of the tool is examined and limitations are discussed. Finally, a study to investigate the role of personality in the perpetration of child maltreatment is reported, utilising a 'risk-referred' sample of parents involved in care proceedings ($n = 90$). A number of significant findings are presented within the study, including the difference between the profile and response styles of male and female perpetrators and the difference between perpetrators of multiple forms of maltreatment and perpetrators of single forms of maltreatment. Female perpetrators tend to show self-defeating characteristics with a higher level of Debasement whereas males tended to present a profile consistent with socially desirable responding. Perpetrators of multiple forms of maltreatment, showed significantly greater levels of pathology. Findings are also made with regard to the impact of childhood adversity upon adult personality and the subsequent link to the perpetration of child maltreatment. The findings are discussed in relation to previous research outcomes and also with regard to implications upon treatment and risk-assessment of perpetrators of child maltreatment.

TABLE OF CONTENTS

APPENDICES

INTRODUCTION

CHAPTER 1

LIST OF TABLES

LIST OF FIGURES

Introduction

There are an increasing number of children in the UK that are subject to child care proceedings with the Local Authority. In the 12 months prior to April 2013, the Children and Family Court Advisory and Support Service (CAFCASS) received 62% more new care applications (10,119) than in the 12 months prior to April 2009 (6,488), a figure that has been growing steadily since this time. Child care proceedings arising from Section 47 (S47) (Children Act, 1989) investigations occur where there has been concern that a child is being maltreated in some way. Alongside Local Authority Children's Services investigations (by Social Workers), it is becoming increasingly common for parents to undertake psychological assessments that evaluate, amongst other things, their background history, cognitive capacity, emotional functioning, mental health difficulties and personality.

Studies that have investigated the content of psychological assessments in childcare proceedings have indicated that personality is the foremost personal characteristic to be tested (Evans, 1980; Lally, 2003; Rantanen, Pulkkinen, & Kinnunen, 2005; Tuchman, 2003; Whisman, 2006). However, despite this, there is a lack of research investigating personality in 'risk-referred' parents (parents deemed to be at increased risk of perpetrating maltreatment) and, as such, little is understood with regards to the role that personality plays in the perpetration of child-maltreatment. The importance of increasing this understanding, and thus improving risk assessment associated with personality in parents who maltreat their children, is therefore paramount (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Perepletchikova, Ansell, & Axelrod, 2012) and as such the aim of this thesis is to examine the personality profile of parents who maltreat their children.

The current chapter will introduce the phenomenon of child maltreatment including its causes, consequences and the role of forensic psychology within childcare proceedings before

going on to introduce the concept of personality, personality assessment and how personality potentially relates to child maltreatment.

Child Maltreatment

Child maltreatment is defined as

'all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment…resulting in action or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power'

(Butchart, Putney, Furniss, & Kahane, 2006, p.9).

Thus, the term 'child maltreatment' encapsulates a number of different forms of maltreatment, including physical abuse, emotional abuse, neglect, and sexual abuse. (A definition of each of these terms can be found in Appendix A.) Additionally, exposure to Intimate Partner Violence (IPV) is increasingly being recognised as a form of child maltreatment (Afifi & MacMillan, 2011, Higgins, 2004). Worldwide, the World Health Organisation (WHO) estimates that each year millions of children around the world are victims and witnesses of physical, sexual and emotional violence (WHO, 2006). Hence, the issue of Child Maltreatment is a worldwide problem, with over three million children in the United States being investigated in 2011 for abuse by child protection services (U.S. Department of Health & Human Services).

Section 31 of the Children Act (1989) sets out the legal basis (known as the threshold criteria) within which the Family Court can make a Care or Supervision order to a Local Authority in respect of a child or children. The child(ren) must be suffering, or likely to suffer, **significant harm**; and the harm or likelihood of harm must be attributable to one of the following: the care given to the child, or likely to be given if the order were not made, not

being what it would be reasonable to expect a parent to give; or the child being beyond parental control. The Local Authority must demonstrate evidence (that is more probable than improbable) that the criteria has been met, following which the Court will then go on to decide whether making a Care or Supervision order would be in the best interests of the child.

The Children Act (1989) defines 'harm' as 'ill-treatment or the impairment of health or development' and this was added to within the Adoption and Children Act (2002) with the definition also including 'impairment suffered by hearing or seeing the ill-treatment of another'. However, the definition does not delineate the difference between 'harm' and 'significant harm'. 'Significant harm' is referred to within the more recent Working Together (2010) guidelines as 'the threshold that justifies compulsory intervention in family life in the best interests of children, and gives Local Authorities a duty to make enquiries to decide whether they should take action to safeguard or promote the welfare of a child who is suffering or likely to suffer significant harm'. The 'best interests' principle remains the overriding consideration for the Family Court and most frequently refers to the juxtaposition between the benefit of the child of having a meaningful relationship with their parents and the need to protect the child from physical or psychological harm from being subjected to, or exposed to, physical abuse, neglect, or family violence.

In terms of the likelihood that the child will suffer significant harm, the phrase 'likely to suffer significant harm' does not refer to a greater than 50 percent likelihood that the child will suffer. Rather 'likely' is used within Section 31 of the Children Act as referring to a real, substantial risk (Children Act, 1989).

In the United Kingdom on 31st March 2012, 42,850 children were the subject of a child protection plan (Department for Education, 2012). Of the 42,850 children, 43% (18,400) were under the category of neglect; 31% (13,240) were under emotional abuse; 10%

(4,310) physical abuse; 5% (2,160) sexual abuse, and finally, 11% (4,680) were under multiple categories of abuse. Of the 42,850 children, 41,890 were aged 15 or under, and 31,070 were aged 9 or under (Department for Education, 2012). Looking at prevalence rates, research conducted by the NSPCC in 2009 concluded that 18.6% of 11 – 17 year olds and 5.9% of children under the age of 11 had experienced severe maltreatment during childhood (Radford et al., 2011). Thus, understanding the potential causes of child maltreatment is vital both in terms of preventative work and in working with potential consequences for victims, their families, and the wider community.

Potential Causes of Child Maltreatment

Child maltreatment is an extremely complex phenomenon and its causes have been investigated with a focus on numerous varying factors, such as socio-demographic environment and own childhood. Additional factors that have somewhat consistently been identified as being correlated with perpetration of child maltreatment include parental low self-esteem, depression, psychopathology, history of childhood abuse, and social isolation (Campbell, Cook, LaFleu, & Keenan, 2010; Hazler & Denham, 2002; Milner & Dopke, 1997; Stith et al., 2009). Thus, multi-cause ecological models of child maltreatment are now favoured, which incorporate multidimensional perspectives emphasising a number of interactive factors (Azar, Povilaitus, Lauretti, & Pouquette, 1998; Belsky, 1993; Cicchetti & Lynch, 1993; Thomas, Leicht, Hughes, Madigan, & Dowell, 2003; Wolfe, 1999).

A meta-analysis by Stith et al. (2009) found large effect sizes between child neglect and perceived child social competence, the parent perceiving the child as a problem, the parent's level of stress, parent's level of anger, and parent's self-esteem. Within the same meta-analysis, large effect sizes for physical child abuse were found with parent anger/hyper-reactivity, high family conflict, and low family cohesion. The difference between the risk

factors for neglect and those for physical abuse is of note, with parental poor self-perception related to neglect and not physical abuse. A further difference between risk factors for physical abuse and those related to neglect was highlighted by Berlin, Appleyard, and Dodge (2011), who found that experiencing physical abuse during childhood directly predicted perpetration of physical abuse, whereas the experience of neglect during childhood did not predict perpetration of neglect.

A further factor which has been evidenced to have a relationship with the perpetration of child maltreatment is that of Intimate Partner Violence (IPV) occurring within the family home. IPV has been described as physical, sexual, or psychological harm caused by a current or former partner (Center for Disease Control, 2009) and witnessing IPV during childhood is increasingly being recognised as a form of child maltreatment (Afifi & MacMillan, 2011, Higgins, 2004), with the Working Together (2010) guidelines recognising impairment suffered through hearing or seeing the ill-treatment of another as a form of harm. Increasingly evidence suggests a significant overlap between IPV and familial child maltreatment (Cox, 2003; Dixon, Browne, & Hamilton-Giachritsis, 2005; Folsom, Christensen, Avery & Moore, 2003; Wekerle, Wall, Leung & Torcme, 2007). Wekerle et al. (2007) found that the presence of IPV was a significant mediator between caregiver vulnerabilities and the perpetration of familial child maltreatment. They suggest that this is due to violent partnerships causing positive parenting strengths to become disrupted, with the abusive partner exercising pervasive control of the family environment. Dixon et al. (2005) evidenced IPV as a mediator between a parent who experienced childhood maltreatment and a parent showing unrealistic perceptions and negative attributions towards their child(ren) in addition to mediating between a history of childhood abuse and poor quality care-giving behaviour, further evidencing the link between the presence of IPV within the family home and perpetration of child maltreatment.

There can be no debate on whether or not IPV in the family home acts as a risk factor for child maltreatment, as simply allowing a child to witness it suggests a failure to protect. Further, the presence of IPV within the family home has been evidenced to increase the risk of the transgenerational cycle of abuse (Dixon & Graham-Kevan, 2011). This has been attributed to the negative impact both the child maltreatment and/or exposure to IPV can have on social, emotional, behavioural, and cognitive development.

Potential Consequences of Child Maltreatment

Indeed, many victims of child maltreatment will suffer both short and long term consequences. It has long been recognised that the short term consequences of physical abuse include aggression, impaired social competence, reduced empathy, poor impulse control, academic and behavioural problems, and internalising problems, such as depression and low self-esteem (Azar, Barnes & Twentyman, 1988; Conaway & Hansen, 1989; Graziano & Mills, 1992; Malinosky-Rummell & Hansen, 1993; Mueller & Silverman, 1989; Toth, Manly & Cicchetti, 1992), as well as physical injury. Long term consequences such as Post Traumatic Stress Disorder, self-harm, and alcohol and drug abuse (Fromm, 2001; Lowenthal, 1999; Wolfe, 1999) are also associated with abuse suffered in childhood (Briere & Elliott, 2003).

Childhood Adversity and Consequences in Adulthood.

Research has long suggested that some of the most substantial contributing factors towards the development of adult personality surround significant childhood experiences (Belsky, Steinberg, & Draper, 1991). This is particularly relevant when an individual has experienced childhood adversity as it has been suggested that this increases the likelihood that the individual will demonstrate psychopathology. Poor academic performance, mental health problems, physical health problems, aggression, violence, and suicidal behaviour have

all been linked to child maltreatment (Gilbert et al., 2009; MacMillan et al., 2001; Scott, Smith, & Ellis, 2010). A review on resilience by Afifi and MacMillan (2011) highlighted that collectively the literature indicates that, although many victims of child maltreatment are resilient to negative outcomes, child maltreatment is linked with impairment across multiple domains of competence, including behavioural and emotional functioning.

Jungmeen and Dante (2010) found that experiencing neglect, physical and/or sexual abuse, particularly when experiencing multiple maltreatment subtypes from an early age is related to emotion dysregulation. Furthermore, adult psychopathology was linked to the experience of childhood maltreatment by Senn and Carey (2010) who suggested that experiencing Childhood Sexual Abuse (CSA) was uniquely associated with adult sexual risk behaviour (a significantly higher percentage of episodes of unprotected sex in the past 3 months and number of lifetime partners was noted, although specific percentages were not reported), with no other forms of childhood maltreatment being linked with such behaviour.

Research has also demonstrated that the experience of early neglect, but not the experience of early physical abuse, has an effect on later child aggression, illustrating the negative effects that early neglect can have (Koch et al., 2008). Such findings present an alternate conclusion than research by Berlin et al. (2011) discussed above, although this may be explained by Berlin et al. (2011) investigating cyclical abuse (perpetrating the same form of abuse that you experienced) rather than looking at the general negative impact the experience of childhood adversity may have. A recent study reported a significant relationship between experiencing childhood adversity and developing a Personality Disorder during adulthood. Findings were particularly robust for physical abuse and neglect with cluster A and cluster B Personality Disorders (Afifi, Mather, Boman, et al., 2011).

As discussed above, IPV occurring within the family home acts as a significant risk factor for child maltreatment. However, even without concurrent active maltreatment, witnessing IPV alone has notable negative consequences for children. As evidenced by Graham-Bermann et al. (2009), 35% of children exposed to IPV went on to have severe adjustment problems or symptoms of clinical depression. Further, as cited in Dixon and Graham-Kevan's (2011) recent review, children who are exposed to both child maltreatment and IPV have been evidenced to experience a greater degree of negative consequences than those exposed to either child maltreatment or IPV (Herrenkohl & Herrenkohl, 2007; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). As previously discussed, psychopathology, including depression, acts as a risk factor for child maltreatment, thus highlighting how IPV can act as a mediator of the intergenerational cycle of maltreatment.

A number of the risk factors discussed here as potential consequences of experiencing childhood maltreatment are also previously discussed as potential risk factors for the perpetration of child maltreatment. It is thus important to further investigate the link between childhood adversity and the development of psychopathology in order to gain greater understanding of how to prevent impairment among those exposed to childhood adversity, and of potential risk factors in those who have been exposed to childhood adversity.

The Role of Forensic Psychology in the Field of Child Maltreatment

As discussed, it is becoming increasingly common for parents involved in care proceedings to undertake psychological assessments in order to explore their psychological functioning and risk factors relating to the perpetration of child maltreatment. In the United States of America, assessments are commonly requested within custody proceedings, whereas in the United Kingdom it is more common that assessments are ordered and conducted in order to assess the psychological risk in adults during child protection proceedings. This is

most frequently with a view to considering whether the parent has any psychological deficits which could have contributed to risky behaviours and that could be addressed by psychotherapeutic input, often following the removal of children from parents' care. Markan and Weinstock (2005) suggested a number of roles the assessments instructed by the Family Court can have: Comprehensive evaluations, when there are complex behavioural or high risk factors such as child abuse; problem-focussed, designed to answer one or two pressing issues; dispute assessments, a quality evaluation emphasising family factors reflective of statutory issues in the case; child development evaluation, child centred evaluation emphasising the relationship between the child's needs and custody / parenting decisions; child forensic interview, usually videotaped and aimed at collecting data for the judge; and emergency case stabilisation, aimed at stabilising potentially dangerous circumstances and making referrals for acute treatment.

As such, Forensic Psychologists (as well as Clinical and Educational Psychologists) have been instructed within the Family Court system to provide psychological opinion within childcare proceedings for many years. The reasons why a court may request or authorise 'risk referred' forensic assessment are, as previously discussed, primarily due to the existence or concern about risks that may threaten the 'best interests' of the child in question. These differ from assessments conducted purely for intervention or support purposes, and from the allegations that can result from divorce litigation, as the risk is generally evidenced in some way and substantial risk is involved. Markan and Weinstock (2005) noted the following issues that can prompt significant concern for the wellbeing of children: 1) imminent risk of harm, 2) threat of physical harm, 3) threat of psychological harm, 4) psychiatric or behavioural health problems, 5) criminal behaviour, 6) poor behavioural history, 7) substance abuse history, 8) parental competency, 9) special needs in children, 10) current aggravating circumstances, 11) developmental, educational, temperamental and behavioural issues in the

child or family. Despite this list relating to the US Family court system, it appears to mirror the reasons for assessment in the UK.

As discussed, studies that have investigated the content of psychological assessments in childcare proceedings have indicated that personality is the foremost personal characteristic to be tested (Evans, 2002; Lally, 2003; Rantanen, Pulkkinen, & Kinnunen 2005; Tuchman, 2003; Whisman, 2006). Personality instruments that are used widely by psychologists are the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kraemmer, 1989), the Million Clinical Multiaxial Inventory (MCMI) (Millon, Millon, Davis & Grossman, 1997) and the NEO – Personality Inventory Revised (NEOPIR) (Costa & McCrae, 1992). However, despite this wide use there is a dearth of research investigating personality in a 'risk referred' parenting population. This is regardless of the significance of, and focus upon, personality within psychological assessment of such population. This would perhaps suggest that clinical practice (the processes and procedures that psychologists undertaking such assessments often currently employ) within such an arena is largely based on outdated or insufficient research and theory, thus highlighting a need for an increase into the quantity and variety of research utilising an 'at risk' parenting population.

Conducting research within this population presents a number of methodological issues. The very nature of this population means that they are potentially less likely to engage with services and therefore potentially less likely to engage in psychological assessments. Further, such parents are normally already engaged in care proceedings which may, in itself, impact upon response styles. This is difficult to combat as, prior to involvement with care proceedings or the Local Authority, research would be reliant on community sampling based on self-selection and self-report of maltreatment, all of which can lead to bias in the data collection. Increasingly, however, collation of data from this population is possible due to a

relatively recent increase in psychological assessments within the population, leading to an increase in individual practitioners or private practices undertaking a greater number of assessments. In turn, this allows for a greater amount of data to be collected and subsequently collated. However, the aforementioned methodological issues remain, in addition to a lack of consistency in approach to assessments and a lack of direct observation outside of assessment.

Personality

Assessment of personality is deemed imperative within psychological risk-assessment of 'at risk' parents during childcare proceedings. It has been evidenced to be the most frequently considered factor within such assessment which suggests that there is a relationship (whether evidenced or presumed) between parental personality and the perpetration of child maltreatment. As such, an understanding of the concept of personality and the development of personality theory is important to consider.

There is no universal definition of personality, which in itself is indicative of the wide variations of interpretations regarding personality theory and personality testing. However it is generally accepted that personality relates to a 'dynamic and organised set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations' (Ryckman, 2005, p.5). In terms of the development of personality it is largely recognised that there are two inter-related factors that contribute to the development of personality: biological factors (people's genetic make-up) and environmental factors (life experiences; Hopwood et al., 2011). The social environment within which an individual exists, combined with significant life events, has been recognised to be an important influence on basic personality traits (Haan et al., 1986; Hogan, 1996)

meaning that personality, although stable, is not fixed (Costa, Herbst, McCrae, & Siegler, 2005; Roberts, Walton, & Viechtbauer, 2006).

Personality Theories

Many differing theories of personality have been suggested, including the early psychoanalytic theories of Freud (1909) and the trait and dimensional theories of Allport (1961) and Cattell (1943). Additionally, theories of abnormal personality have been suggested, including that of Costa and Widiger (1994). Trait theory is frequently used within research and is one of the most prominent approaches to the study of personality. Trait theory has previously been criticised due to the potentially vast number of traits it is possible to identify within an individual. However, within trait theory, personality has frequently been divided into five factors. Personality was referred to in terms of five factors as early as 1932 (McDougall, 1932) and has more recently been termed the 'big five' (Costa & McCrae, 1992). The traits within this approach are as follows;

Table 1. Characteristics of the Five personality factors

Factor	*++ end of range*	*-- end of range*
Extroversion	*Talkative, frank, adventurous, sociable.*	Silent, secretive, cautious, reclusive
Agreeableness	*good-natured/irritable, not jealous/jealous, mild/headstrong, co-operative/negative.*	Irritable, jealous, headstrong, negative.
Conscientiousness	*tidy/careless, responsible/undependable, scrupulous/unscrupulous, persevering/quitting.*	Careless, undependable, unscrupulous, quitting.
Neuroticism	*Nervous, anxious, excitable, hypochondriachal.*	Poised, calm, composed, not hypochondriachal
Openness	*Artistically sensitive, intellectual, refined, imaginative.*	Insensitive, narrow, crude, direct.

Personality Disorder can be understood by considering it in terms of a polaric extreme of 'normal' or adaptive traits. That is, the thoughts and behaviours considered symptomatic of Personality Disorder are present on a continuum, with Personality Disorder considered an extreme expression of 'normal' personality. The exact cause of Personality Disorder remains uncertain; however, as with non-disordered personality, it is clear there are both biological and psychosocial factors that influence the emergence of Personality Disorder (Coccaro & Siever, 2005; Widiger, 2011). Increasingly research and clinical observation add weight to the argument that childhood experiences play a pivotal role in the development of Personality Disorder. Traumatic childhood experiences such as sexual, physical and emotional maltreatment, and neglect, have been identified as risk factors for an increase in the risk that Personality Disorder will develop (although by no means ensure this).

Categorisation of Personality Disorder

Official criteria for the categorisation and diagnosis of Personality Disorder exist in two main forms, those listed within the Diagnostic and Statistical Manual of Mental Disorder (the DSM) (American Psychiatric Association, 2013 [edition 5]) and those listed within the mental and behavioural disorders section of the International Statistical Classification of Diseases and Related Health Problems (ICD), published by the World Health Organisation (2010 [edition 10]).

Originally the World Health Organisation had its own system of mental disorder classification within the International Classification of Diseases (ICD). However, in 1982, following an international conference on mental disorder classification an agreement was made for the ICD to implement diagnostic criteria to define mental disorders that mirrored the 1980 model of the DSM-III (Reiger, 2013). This continued within the DSM-IV and the ICD-10. Such convergence of diagnostic criteria resulted in enhanced clinical practice

communication and ease of research on mental disorders. However, remaining variances in diagnostic criteria did lead to differences in prevalence rates and correlates of mental disorders (Andrews, Slade & Peters, 1999; First & Pincus, 1999).

The Development of the Diagnostic and Statistical Manual (DSM)

Prior to the development of the Diagnostic and Statistical Manual of Mental Disorders (DSM) there were a number of different diagnostic systems. As a result, there was a necessity for a system to minimise confusion and enable consensus among professionals and enhanced communication in the field. The initial DSM (APA, 1952) was published in 1952 and featured 106 disorders referred to as 'reactions'. The second edition fourteen years later (APA, 1968) differed only marginally from the first: the number of disorders was increased to 182 and the term 'reactions' was removed due to its implied causality. In 1980, the DSM-III (APA, 1980) was published and featured a major change, favouring empiricism and increasing to 265 diagnostic categories which were separated by a number of axes. The third edition leaned away from psychodynamic theory and towards biology and genetics playing a role in mental disorders. The DSM-IV (APA, 1994) continued along this path, with empirical research needed before disorders could be included. This edition was revised once (DSM-IV-R) in order to reflect updated research with regards to prevalence and familial patterns, although the number of disorders remained unchanged at 300. The approach to Personality Disorder presented in the DSM-IV and subsequent DSM-IV-R consisted of 3 components: a general definition of mental disorder, specific criteria sets for the most prevalent and severe Personality Disorders, and a 'not otherwise specified' category under which Personality Disorder that does not fall under any other specific category sits (Wakefield, 2013c). Personality Disorder types, and associated 'clusters', as defined by the DSM-IV-R are listed in Tables 2 and 3.

Table 2. DSM-IV-TR Personality Clusters

Cluster	Description
A (Eccentric)	This cluster is characterised by behaviours that may be considered odd and/or eccentric. Individuals with such personality profiles may demonstrate a reluctance to engage meaningfully in long term relationships and may prefer solitude as they consider emotional closeness with others to be unsatisfactory. Individuals within this cluster are often mistrustful of the intentions of others and consequently seek to avoid or resist external influence in their lives and distort events to support their own suspicions.
B (Impulsive)	This cluster is characterised by behaviours that may be erratic and unpredictable. This is due to the need to seek sensation and avoid boredom. Individuals with such personality profiles may demonstrate difficulties placing others needs before their own and have a reduced ability to experience empathy for others in part due to an over inflated sense of self-worth. Due to an increased and unusual need for attention or self-recognition, combined with personal insecurity, they may demonstrate emotional and attachment instability that impacts negatively upon relationships with associates, partners and family members. Impulsive individuals may seek to manipulate others to achieve their own wishes by engaging in behaviours that are generally considered to be socially unacceptable.
C (Fearful)	This cluster is characterised by behaviours that may be fearful and/or anxious in nature. Individuals with such personality profiles may demonstrate a potential to be manipulated by others and a strong desire to appear socially desirable. A fear of abandonment combined with a need for emotional closeness may cause them to be unable to respond appropriately to mistreatment by others. Their fearful personality traits may also demonstrate themselves in a reluctance to engage meaningfully in relationships in order to avoid potentially negative experiences. Feelings of anger are also a feature of this personality style due to conflicting inflexibility and desire to conform.

Table 3. DSM-IV-TR Personality types organised by cluster.

Disorder	*Cluster*	Description
Paranoid	*A (Eccentric)*	Irrationally suspicious and interprets motivations as malevolent
Schizoid	*A (Eccentric)*	Uninterested and detached from social relationships, restricted emotional expressive
Schizotypal	*A (Eccentric)*	Experiences discomfort interacting socially, has distorted cognitions and perceptions
Antisocial	*B (Impulsive)*	Pervasive disregard for and violation of rules and authority and disregard for the rights of others.
Borderline	*B (Impulsive)*	Pervasive instability in relationships, self-image, identity and behaviour, labile and often polaric mood.
Histrionic	*B (Impulsive)*	Pervasive attention-seeking behaviour and excessive displays of emotion
Narcissistic	*B (Impulsive)*	Need for admiration, lack of empathy, pervasive pattern of grandiosity
Avoidant	*C (Fearful)*	Pervasive feelings of social inhibition and inadequacy, extreme sensitivity to negative evaluation
Dependent	*C (Fearful)*	Pervasive psychological need to be cared for by others, reliant /on others for their own psychological well-being.
Compulsive	*C (Fearful)*	Rigid conformity to rules, rigidity of thinking.

It has been suggested that the DSM-IV is more able to convey important clinical details than the Five-Factor model (Rottman, Ahn, Sanislow, & Kim, 2009). However, links have been made between the Five-Factor Model and the DSM-III, DSM-IV, and DSM-IV-R. An analysis of the extensive literature relating to the link between DSM-IV-TR personality traits and the Five-Factor model has been presented through a meta-analysis (Saulsman & Page, 2004), results of which are represented in Table 4 below.

Table 4. DSM-IV-TR Personality traits mapped onto the Five-Factor model

Five Factor Trait	*DSM-IV-TR Personality Type Positive Correlation*	DSM-IV-TR Personality Type Negative Correlation
Extroversion	*Histrionic*	Schizoid, & Avoidant
Agreeableness	/	Paranoid, Antisocial, & Narcissistic
Conscientiousness	*Compulsive*	/
Neuroticism	*Paranoid, Borderline, & Avoidant*	/
Openness	/	/

Saulsman and Page (2004) found that Personality Disorders characterised by emotional distress showed a positive correlation with neuroticism. Additionally, Personality Disorders characterised by gregariousness showed positive correlations with extroversion, whereas Personality Disorders characterised by reclusion showed negative correlations with extroversion. As can be seen, openness did not show any statistically significant relationship with any Personality Disorder which perhaps suggests that openness is more a measure of emotional health than personality per se. These results are supported by a number of further meta-analyses and studies (Aluja, Garcia, Cuevas, & Garcia, 2007; Ostendorf, 2002).

Although the Five-Factor Model is not designed to measure Personality Disorder, unlike the DSM model, there is increasing evidence available to demonstrate that personality structure is essentially alike in clinical and non-clinical samples meaning that Personality Disorder can be understood as an extreme of normal personality (Aluja et al., 2007; O'Connor, 2005; O'Connor, 2002; O'Connor & Dyce, 2001; Strack & Millon, 2007). This approach can also be interpreted as a synchronisation of the dimensional and categorical models of personality classification and allows for an interpretation of the DSV-IV-TR Personality Disorder types as corresponding personality traits. This integration of normal and abnormal personality suggests that constellations of normal personality characteristics can

develop to become abnormal and maladaptive psychopathological personality, giving indications to the origins or Personality Disorder and thus potentially indicative of potential treatment needs (O'Connor, 2005).

Development of the DSM-5

The DSM-5 (APA, 2013) is the first significant revision of the publication since the release of the DSM-IV. Changes were largely influenced by advancements in neuroscience, clinical and public health need, and problems identified with the classification system and criteria utilised in the DSM-IV (APA, 1994). Additionally, its development was also driven by a need for increased convergence with the ICD-11 (Reiger, 2013). More than 400 experts from 13 countries, representing many different professional disciplines were involved in its development.

Originally, and until just prior to its publication, the DSM-5 Personality and Personality Disorders Work group (PPDWG) intended to eliminate half of the Personality Disorder diagnoses, including dependent, narcissistic, paranoid, schizoid, and histrionic Personality Disorders. This was in order to reduce diagnostic co-occurrence (Skodol et al., 2011), such as the dependent personality traits present within borderline Personality Disorder that would often meet the criteria for co-morbid dependent Personality Disorder and potentially complicate treatment and assessment needs. The diagnostic system was due to be completely altered, with a focus on a dimensional rather than categorical diagnosis generally and also to address specific problems with personality diagnosis present in the DSM-IV such as excessive comorbidity, high incidence of 'not otherwise specified' diagnoses, and diversity (Wakefield, 2013b). Many of the leading personality researchers in the PPDWG highlighted that the same system of dimensional trait descriptions can be used to describe normal personality as well as Personality Disorders, with the theory that Personality Disorders are

simply polaric versions of personality traits found in everyone. The trait evaluation system that was proposed for the DSM-5 attempted to address pathological features not adequately captured in the 'normal' trait system. This system was originally highlighted as one of the pivotal changes in the DSM-5 and was set to replace the Personality Disorder category and diagnosis system present within the DSM-IV. However, as a result of objections relating to the complex and untested nature of the system, it was postponed, at least until the planned online revision (DSM-5.1). However, the proposed system remains as an 'alternative system' of Personality Disorder diagnosis that can be utilised according to clinician preference. It is predicted that it, or something similar, will replace the Personality Disorder system within future revisions of the DSM (Wakefield, 2013a) and it is being classed as an emerging system. As such, exploration and use of the system is encouraged. Within the current thesis, due to the contrasting Personality Disorder systems presented within the DSM-5, and it's extremely recent release (meaning that even recently published research utilises the DSM-IV system), personality will largely be explained in relation to the DSM-IV-R. Both the trait and associated cluster systems (as noted in Table 3) will be utilised in order to look towards the dimensional system that is proposed for the future.

Assessment and Diagnosis of Personality and Personality Disorder

The recent release of the DSM-5 assessment of personality and Personality Disorder attempts to combine the strengths of several dimensional models, including a personality trait assessment that can also be used to describe major personality characteristics of patients who either do not have a Personality Disorder, or who have a Personality Disorder that does not conform to a prototype (Skodol & Bender, 2009). Additionally, consensus amongst clinicians is that use of multiple methods of diagnosis is preferable to relying on any single instrument or opinion. Common practice is the utilisation of a self-report inventory followed by a semi-structure interview in order to assess the respective diagnostic criteria of any disorders that

were elevated on the self-report inventory or suspected. Where Personality Disorder is suspected the semi-structured interview is often conducted through, or informed by, tools such as the International Personality Disorder Examination (IPDE; Loranger et al., 1994). The IPDE is performed through the use of a semi-structured interview and requires that the behaviour of concern to have been present for at least 5 years and to have occurred prior to the age of 25. Best practice also invokes the use of additional information from external sources (Widiger & Samuel, 2005).

Despite the recent proposed changes in theory many researchers and clinicians continue to favour a categorical system of personality diagnosis, with the DSM-IV and DSM-IV-TR categories familiar to most clinicians, legitimising research and treatment efforts, and facilitating communication between professionals (Ball, Rounsaville, Tennen, & Kranzler, 2001; Millon, 1996). Indeed, psychiatrists in particular have favoured the categorical system and research has highlighted that this system facilitates communication of a large amount of information through the use of a single term (Farmer, 2000). Further, there tends to be little agreement among dimensional theorists concerning the number of traits necessary to represent personality (Strack & Millon, 2007).

Regardless of differences in theoretical position it is commonly recognised that for an individual to be diagnosed with a Personality Disorder they must have a level of disturbance in their everyday functioning beyond what may be considered 'normal'. Individuals with Personality Disorder, regardless of type, demonstrate impairment across everyday functioning with a number of features common to all Personality Disorders. Distorted thinking patterns, problematic emotional responses, over- or under-regulated impulse control, and interpersonal difficulties are all symptomatic of Personality Disorder. An individual must demonstrate significant and enduring difficulties in at least two of these four areas prior to diagnosis (APA, 2013).

Personality is the foremost characteristic measured during psychological risk assessment with at-risk parents (Lally, 2003) and as such it is important to understand the link between personality and child maltreatment in order to be able to conduct an evidence-based assessment utilising an up-to-date and relevant evidence base and consequently adhering to best practice.

Parental Personality and the Perpetration of Child Maltreatment

As will be discussed in depth in the following chapter and explored further in chapter 3, there is little consensus regarding the relationship between parental personality and the perpetration of child maltreatment in any form, with personality traits from each cluster being cited as being linked to the perpetration of each form of child maltreatment. Perhaps the most commonly cited personality trait associated with the perpetration of child maltreatment is Narcissism (Wiehe, 2003). However, increasingly, research is suggesting that there is not one type of personality associated with the perpetration of child maltreatment, but that the higher the level of psychopathology, the greater the risk of child maltreatment (Johnson, Kohl, & Drake, 2012). Due to the extent of coverage on this topic in chapters 1 and 3 this will not be discussed in detail, however, it is worth considering how personality dysfunction may impact upon parenting.

As discussed, there are four core features common to all Personality Disorders (distorted thinking patterns; problematic emotional responses; problematic impulse regulation; and interpersonal difficulties). For an individual to be diagnosed with a Personality Disorder, at least two of these features must be significantly and enduringly present. However, when considering each of these features as a standalone difficulty, it is possible to understand the potential to have a maladaptive personality, and demonstrate significant personality dysfunction, without meeting the criteria for Personality Disorder.

Such personality dysfunction, in turn, is likely to have an adverse impact on parenting. For instance, those parents with distorted thinking patterns may perceive their child's behaviour as a personal attack or alternatively may have unrealistic expectation of their child. Parents with problematic emotional responses may feel the need to self-medicate, exposing their child to dangerous substances, or a chaotic lifestyle, or additionally may impose their inappropriate emotional response upon the child. Further, parents who have difficulties regulating their impulses may be at an increased risk of providing their child with an inconsistent response, or again leading chaotic lifestyle. Additionally, it is likely that each of these features would present the parent with interpersonal difficulties, which is in itself a feature of personality dysfunction. When considering each of these features it is possible to understand how personality dysfunction may lead to parents being at increased risk of placing their own needs before the needs of the child. The parent may deliver inconsistent parenting, the child may learn that it is appropriate to engage in maladaptive behaviours to meet needs and subsequently the child may have difficulty forming appropriate relationships with others.

When considering personality dysfunction in parents it is also possible to understanding how each feature of personality dysfunction makes an individual at increased risk of engaging in a relationship that involves IPV. The link between personality and the involvement in IPV is notable due to the relationship evidenced between IPV and child maltreatment.

Research suggests that affective disorders such as anxiety and depressive disorder positively correlate with IPV (Bourget, Grace, & Whitehurst, 2007; Ehrensaft, Cohen, & Johnson, 2006) acting as both cause and effect of IPV within relationships. Additionally, personality traits such as lack of empathy and accountability, lack of emotional control, rigid and dichotomous thinking, and the devaluation of others have been linked with those who perpetrate IPV (Tau, 2012). Within child care proceedings the risk of potential harm to the

child(ren) is always the primary issue for the court and as such a risk assessment approach will always be appropriate and helpful to the court (Austin & Drozd, 2012). Psychologists acting as expert witnesses must account for all risk factors that may be relevant to their formulation, even if this is not related directly to the parent/child relationship. This is particularly relevant as similar personality traits have been linked to those who perpetrate IPV and those who perpetrate child maltreatment and as such the link between IPV and child maltreatment is a pertinent one to explore.

Thesis Rationale

This thesis contributes to the literature as it aims to provide further functional information for both clinicians involved in assessing and/or treating individuals relevant to this sample of risk-referred parents and researchers investigating the current or similar topics in the future.

Specific thesis aims

- Explore the role of personality in the perpetration of child maltreatment
- Compare subtypes of maltreatment in terms of perpetrator personality and other risk factors.
- Explore the childhood and relationship experiences of a risk-referred parenting sample

Overview

This introductory chapter has outlined the literature in relation to child maltreatment and provided the context of the thesis for the reader. In particularly, the focus was upon the consequences of child maltreatment and the development of personality theory and

assessment. In addition, the role of the Forensic Psychologist, in terms of risk-assessment relating to child maltreatment was considered.

In order to identify personality traits which may be associated with the perpetration of child maltreatment, a systematic review of the previous literature is presented in Chapter 1. This provides a description of the personality traits associated with child maltreatment as identified by previous researchers.

In order to provide the reader with an understanding of methodological issues surrounding personality measurement, Chapter 2 presents a critical evaluation of the MCMI-III, a frequently-used measure for evaluating personality characteristics in those involved in care proceedings.

Chapter 3 consists of a research project examining personality types and associated factors in parents involved in care proceedings due to perpetrating maltreatment or failing to protect from some form of maltreatment. The project utilises the measure evaluated in Chapter 2 and aims to use this measure in combination with information from an assessment conducted within care proceedings to explore the role of personality and other factors relating to child maltreatment. Finally, a discussion of the findings is contextualised with previous literature and future considerations are proposed in Chapter 4.

CHAPTER 1

A Literature Review Following a Systematic Approach:

The Personality of Child Maltreatment Perpetrators

Introduction

As was outlined in the previous chapter, the effects of child maltreatment are far reaching, with the potential to cause deficits during adolescence and adulthood across multiple domains relating to impairments in relationships and impulse control, as well as mental health difficulties and behavioural problems (Briere & Elliott 2003; Fromm, 2001; Wolfe, 1999). One well-researched potential outcome is the perpetration of child maltreatment towards the individual's own offspring, known as the intergenerational cycle of maltreatment. Potential consequences of child maltreatment and risk factors of perpetration of child maltreatment often occur in parallel, such as that of personality difficulties and increased levels of psychopathology (Fontaine & Nolin, 2012; Johnson, Kohl, & Drake, 2012). Such symptomatology is more often than not the focus of risk assessment reports on 'risk-referred' parents by Forensic Psychologists within a child protection arena. As such it is important to understand the link between personality and child maltreatment in order to be able to conduct an evidence-based assessment utilising an up-to-date and relevant evidence base and consequently adhere to best practice.

The current review will focus solely on child maltreatment involving physical abuse, emotional abuse, and neglect, without including sexual abuse. This is primarily due to the differing theoretical positions behind the causes of child sexual abuse and other forms of maltreatment meaning that any results involving sexual abuse may skew the results of the review (Craig, Browne, Beech, & Stringer, 2006; Gudjonsson & Sigurdsson, 2000). In order to appropriately review studies related to personality styles of parents who maltreat their children a brief review of personality theory is warranted.

In light of the changes to personality assessment procedure that were proposed during the development of the DSM-5 the current review will analyse and categorise findings using

26

both trait and cluster personality terms according to one of the three personality clusters of the DSM-IV-TR (as noted in the general introduction). This approach will attempt to strike an appropriate balance between ever-evolving personality theory and the model that clinicians and researchers would have employed at the time that data within the current review was collected and analysed. Additionally, whilst there have been no significant changes made to the Personality Disorder diagnosis system in the DSM-5, a hybrid dimensional-categorical model was included in order to promote increased research utilising such methods.

Personality of parents who maltreat their children

Personality traits of parents who maltreat their children are important factors to consider in understanding, risk assessing and potentially preventing, child abuse (Egeland, Erickson, Butcher & Ben-Porath, 1991). The types of psychological descriptors that have been applied to abusive parents are far ranging, and research into overall personality (rather than Personality Disorder specifically) within this population is scarce. Within historical research, findings have lacked consistency with personality traits from all clusters having been evidenced to be prominent amongst parents who maltreat (Egeland, Erickson, Butcher & Ben-Porath, 1991; Francis, Hughes & Hitz, 1992; Spinetta (1978); Paulson, Afifi, Thomason & Chaleff, 1974; Kokkevi & Aganthonos, 1987).

Research suggests that Personality Disorders, rather than maladaptive personality traits, occur in only a minority of maltreating parents, but the cases where these diagnoses exist tend to be those where most harm is done (Adshead, 2003; Foreman, 1998). Historical research (Falkov, 1996) found that 20% of parents who killed their children and were previously known to psychiatric services had been diagnosed with Personality Disorder, and suggested that this was likely to be an underestimate due to co-morbidity of Personality

Disorders with other mental health difficulties. Congruently, the majority of research regarding mental disorder and its effect on parenting has been in relation to mental illnesses rather than the effect which Personality Disorder has on parenting (Adshead, 2003). Despite the lack of confirmed prevalence studies, evidence exists that Personality Disorder (particularly Antisocial or Borderline) is a common diagnosis in abusive parents, often in combination with substance misuse (Davison, 2002; Dinwiddie & Bucholz, 1993). Concurrently, in a sample of abusive mothers, Bools, Neale and Meadow (1994) found that 66% met the criteria for Borderline Personality Disorder. Further, Stanley and Penhale (1999) found that of a sample of mothers involved in childcare proceedings, 70% had a diagnosis of Personality Disorder.

The management of risk in Personality Disorder is highly complex. If an individual with Personality Disorder has been violent within the context of a parental relationship, it must be assumed that all and any future children the individual has a similar relationship with would be at some degree of risk from that person (Adshead, 2003). Particular Personality Disorders are associated with an increased risk of violence to others, specifically Cluster B Personality Disorders (i.e. Antisocial Personality Disorder, Borderline Personality Disorder, and Narcissistic Personality Disorder) (American Psychiatric Association 1994; Widiger & Trull, 1994). Similarly, certain Personality Disorders are associated with increased risk of violence to significant partners (Hart, Dutton, & Newlove, 1993) which is known to be a further risk factor for child maltreatment (McCloskey, 2001). Additionally, diagnosis of a Personality Disorder (regardless of which Personality Disorder) is associated with a preoccupation with the self and a significant failure of interpersonal functioning, poor affect and arousal regulation, particularly in relation to anger, sadness, and distress. Consequently, parents with Personality Disorders may place their children at risk, either indirectly,

neglecting their children because of their focus on their own emotional difficulties, or directly because they may be violent or emotionally abusive towards the child.

Methodological Issues

It is widely acknowledged within the literature that methodological problems in investigating personality of maltreating parents persist. Paz, Jones and Byrne (2005) suggest that this may, in part, be related to an over-emphasis on the type of maltreatment, to the detriment of consideration of degree and extent of maltreatment. Further, much of the research into personality in maltreating parents does not include specifications of personality characteristics based upon actual personality test data, and instead is based upon clinical observations rather than quantifiable data (Kent, Weisberg, Lamar & Marx, 1983; Wright, 1970) which is not reliable between clinicians. Additionally, the literature often does not separate characteristics of physical abuse from those of neglect, and this makes it difficult to determine whether personality traits are attributable to physically abusing parents, or neglectful parents, or whether in fact there is no distinction between personality traits of the two.

It is apparent that taken as a whole, the existing body of research provides a list of psychological descriptors that is lengthy and, at times, inconsistent or even contradictory. An important caveat, as noted by Spinetta (1978) is that causes of child abuse are multiple and interactive, and that there is no single type of child abuser or single causative factor to provide sufficient explanation of abuse and that emphasis on parents personality is in no way meant to detract from other factors.

Existing Reviews

An initial search of the Cochrane databases (completed 15th October, 2012) was conducted to determine the existence of any Systematic Literature Reviews regarding

personality in parents who maltreat their children. A range of terms (e.g. 'Child Abuse', 'Parent Child Abuse', 'Personality Child Abuse', 'Child Maltreatment' and others) identified over 100 articles but none were on personality and child maltreatment in the way outlined for this review. PsycINFO was also searched, refining results to include only literature reviews and systematic literature reviews. , The search term 'child abuse' (auto explode) returned 787 results, none were a systematic literature review regarding personality and child abuse, however, one was deemed appropriate for review (Spinetta & Riegler, 1972).

Further, it is worth highlighting the seminal work of Kempe, Silverman, Steele, Droegemueller and Silver (1962). Whilst the article is historic, and largely related to medical phenomena associated with physical child abuse, it is the first review of note to review previous findings associated with psychological characteristics in parents who abuse their children. The authors used the term 'battered-child syndrome' which they described as "a clinical condition in young children who have received serious physical abuse, generally from a parent or foster parent". The article was pivotal as it assisted professionals in recognising this as a commonly occurring 'syndrome' and allowed the use of common terminology in describing it. In relation to the psychological characteristics associated with the perpetrators of physical child maltreatment Kempe et al. (1962) do not cite any specific research conducted in the area. However, the authors do refer to 'studies' or 'reports' having found that parents who perpetrate this maltreatment being "of low intelligence, with psychopathic or sociopathic characters". The authors suggest that instability within relationships and general functioning has been commonly reported and that perpetrators are "immature, impulsive, self-centred, hypersensitive, and quick to react with poorly controlled aggression". Further, Kempe et al. (1962) describe a "defect in character structure which allows aggressive impulses to be expressed too freely".

Whilst the review by Kempe et al. (1962) is flawed in that it does not refer to specific studies, conduct any form of quality assessment, or report personality according to any of the major diagnostic systems, it is worth noting due to its' seminal nature. In contrast, as previously noted, PsycINFO returned one review of potential interest, albeit of a narrative nature. Spinetta and Riegler (1972) reviewed the literature related to psychological aspects of parents who maltreat their children. As with the review by Kempe et al. (1962), the review focuses exclusively on parents who physically injure their children and omits studies of parents who neglect their children, emotionally, socially, or psychologically, or those who have perpetrated sexual abuse. The review highlighted a shift in findings regarding the presence of 'severe Personality Disorders' amongst perpetrators, highlighting that during the 1950s and early 1960s consensus seemed to by that there was a high incidence of 'neurotic or psychotic behaviour' but that towards the end of the 1960s only the minority of abusive parents showed 'severe psychotic tendencies'.

Within the review, five studies are referred to as considering 'psychological factors' to be of prime importance in the aetiology of child abuse. As such, the review concludes that findings suggest that there is a 'defect in character structure' that, during times of additional stress, causes the parent to experience 'uncontrolled physical expression'. Spinetta and Riegler (1972) highlighted that relatively little attention has been devoted to research into child maltreatment by psychologists although reference the first major attempt at a psychological profile of those who physically abuse their children (Merrill, 1962).

Merrill (1962) identified three clusters of personality characteristics for perpetrators of both genders, and a further fourth potential cluster for abusive fathers alone. The first cluster was characterised by continual and pervasive hostility and aggressiveness, sometimes focused, sometimes directed at the world in general. The second cluster was characterised by rigidity, compulsiveness, lack of warmth, lack of reasonableness and lack of pliability in

thinking and belief. The third cluster was characterised by passivity and dependence and competing with their own children for the love and attention of their spouses. The final cluster was solely applied to male abusers who had become unable to support their families because of a recent physical disability. This cluster was characterised by frustration leading to swift and severe punishment, and to angry rigid discipline. Spinetta and Riegler (1972) highlight that these clusters were supported by later research (Delsordo, 1963; Zalba, 1967) albeit with slight modifications. Whilst Spinetta and Riegler (1972) provided a comprehensive review of the literature at that time, it was of a narrative nature and is now very dated. No information was provided regarding search strategies and studies were not quality assessed.

Shortly following the time that the current review was completed a highly relevant review was released, systematically reviewing the literature on the link between Personality Disorder and parenting behaviours from an attachment theory perspective (Laulik, Chou, Browne & Allam, 2013). Laulik et al. (2013) found that 81% (9/11) of the studies included in the review found a positive association between Personality Disorder and impaired parenting practices and/or incidents of child maltreatment. Cluster B disorders were found to exert a negative effect on parenting in eight of the studies and Cluster A and C were featured in three of the studies.

Particularly evident in the Laulik et al. Study was the evidence supporting maladaptive parenting practices, such as disrupted communication and less engaged quality of interactions with the infant(s), in women with Borderline Personality Disorder. However, sampling bias within the reviewed studies must be taken in to account when interpreting this finding due to the proportion of studies that focused exclusively on Borderline Personality Disorder (36%; 4/11), although the findings were supported by one reviewed study that included all personality symptomatology (Johnson et al., 2008). Johnson et al. (2008)

specifically found that Antisocial, Borderline, Dependent, Paranoid, and Passive-Aggressive Personality Disorder symptoms were predictive of 3 or more problematic child-rearing behaviours. The authors of the review (Laulik et al., 2013) highlight that a number of features of the studies included in the review may impact on their overall quality and reliability. Such features included variable measures and diagnoses of personality (and Personality Disorder) and of parenting behaviours, which included observational methods. Further, the review highlighted the lack of research utilising a paternal sample, with only 27% (3/11) of studies reviewed including fathers, meaning that findings are not necessarily generalisable to all parents who display impaired parenting behaviours.

The review specified a clear objective as well as inclusion criteria, types of studies and sources of literature (PsychINFO; Medline; Embase; and Web of Science). Search terms were not provided although the search strategy is explained. The review included a quality assessment, following which eight studies were excluded due to having a quality score of under 70%. However no information is given on the excluded studies, nor are the quality criteria given. Laulik et al. (2013) do provide a critique of included studies in the findings section and caution against a number of limitations within the reviewed studies (as discussed above).

Current Review

The current review was justified as no literature review of a systematic nature exploring the link between parental personality and child maltreatment has, to the author's knowledge, been published. Whilst a recent systematic review (Laulik et al., 2013) explored a related area, this was related to parenting behaviours in general (rather than parents who have categorically maltreated their children) and to Personality Disorder, rather than personality as

a whole (incorporating Personality Disorder). Furthermore, historical reviews have tended to focus on one area of maltreatment (physical child abuse).

Aims and Objectives

As outlined above, the current review will attempt to review findings according to one of the three personality clusters of the DSM-IV-TR. As such, historical findings will also be discussed in these terms in order to make comparison of recent and historical research more accessible.

Therefore, the aim of the current systematic review was to identify and analyse studies that explore personality traits in parents who maltreat their children. Specifically, the main objectives of the review were:

1) To identify whether specific personality types occur within parents who maltreat their children**.**

2) To investigate whether specific personality clusters, as cited by the DSM-IV, are associated with specific type of abuse – e.g. physical abuse; failure to protect.

Caveats

Within the literature on parents who maltreat their children, empathy, or a lack of it, is frequently mentioned. However, within the current study, research focussing on empathic ability and its association with child abuse was not included as although the DSM-IV manual identifies a deficiency of empathy as one of the essential features of Narcissistic Personality Disorder (APA, 1994), empathy itself is not a personality trait.

In a similar manner, the current review will only be covering research investigating explicit child abuse, neglect or maltreatment. Issues such as attachment, which have been

linked to both personality and child abuse, within the existing literature, will not be discussed as this would require inferences to be made between the three. This is in order to maintain focus upon parental personality and its empirically evidenced association with child maltreatment.

Finally, as previously discussed, the current review does not include perpetrators of sexual abuse.

Method

Database Search

A search of the following electronic bibliographic databases was subsequently conducted in order to identify literature for the current systematic review:

- PsycINFO (including Journals@Ovid Full Text) *(to 2012, December, Week 3)*

- Web of Science *(to 2012 December, Week 3)*

- EMBASE *(to 2012 December, Week 3)*

- MEDLINE *(to 2012 December, Week 3)*

- ASSIA *(to 2012 December, Week 3)*

Initially, the PsyINFO database was searched with a no date constraint. However, following the return of a large number of very historical and inappropriate results a time constraint was placed at December 1992, Week 3. This is due to the change in theory and measurement of personality prior to this time, with measures that have since been discredited or use outdated theory. In addition, changes in theory mean that results from older studies are potentially incomparable to more recent studies. Additionally, the understanding and

conception of child maltreatment changed dramatically during the 20th century, again leading to vast differences in study methodology prior to this cut-off.

Search Strategy

A scoping search was initially conducted to gain an understanding of studies relevant to the search area. The databases were accessed electronically, allowing limits to be placed on the searches. Searches were limited to literature written in English, primarily due to the time and financial restraints upon the current paper. Editorials, opinion papers and literature reviews were also omitted, the latter as it would not provide empirical evidence and the former two to reduce bias associated with unsupported, individual opinion. Although (as shown below) the same search terms were initially used in each database, they were subsequently altered to allow for the use of appropriate search tools relevant to the individual database. Initially, search results were filtered using the title and abstracts of the studies, eliminating irrelevant studies. Relevant journals were also searched by hand, although did not provide any results which had not been provided electronically. Duplicate studies and studies considered irrelevant were eliminated and all remaining studies were saved. Three authors were contacted for papers not otherwise accessible. Of these, only one did not reply; the author of an unpublished dissertation paper. The remaining authors replied and provided the requested papers.

Search Terms

A number of search strategies were trialled in order to assess whether mapping to subject headings and which keywords were most appropriate. Through the use of a combination of both keywords and mapping, the most effective strategy was chosen. This was approved by an expert from the University of Birmingham Library Service. The following strategy was employed:

exp "parent*" (auto explode function included adoptive parents, fathers, foster parents, homosexual parents, mothers, single parents, stepparents, surrogate parents) OR "guardian*"

AND

exp "child abuse" (auto explode function included child maltreatment, battered child syndrome, child abuse reporting, child neglect, child welfare, domestic violence, emotional abuse, failure to thrive, Munchausen syndrome by proxy, patient abuse, physical abuse, verbal abuse, violent crime)

AND

("child welfare" OR "child neglect" OR "emotional abuse" OR "physical abuse" OR "verbal abuse")

AND

("child*" OR "infant*" OR "teen*" OR "adolescen*" OR "son*" OR "daughter*")

AND

exp "personality" (auto explode function included adaptability, antisocial personality disorder, avoidant personality disorder, borderline personality disorder, dependency, dependent personality disorder, histrionic personality disorder, MMPI, NEO, obsessive compulsive personality disorder, passive aggressive personality disorder, personality disorders, personality change, personality processes, personality theory, personality traits, psychoanalytic personality factors, rigidity, schizoid personality disorder, schizotypal personality disorder, masochistic personality)

Inclusion Criteria

The following inclusion and exclusion criteria (Table 5) were used to determine study eligibility for the current review. Information was taken from the title and abstract of each study. If these did not provide sufficient information the entire study was accessed and assessed.

Table 5. Inclusion and exclusion criteria

	Inclusion	**Exclusion**
Population	Parents or carers who have abused, neglected or maltreated their children. Including biological parents, stepparents, adoptive parents and legal guardians.	Parents or carers who have, or have been alleged to have sexually abused their children.
Exposure	Use of structured assessment of personality.	N/A
Comparator	Parents or carers with no history of maltreating their children.	N/A
Outcomes	Classification or description of personality.	N/A
Study Design	Cohort, case control, cross sectional, experimental studies.	Reviews, opinion papers, commentaries, editorials, non-English papers, case series.
Papers remaining (pre quality assessment) = 9		

Quality Assessment

Following the elimination of any study which did not meet the inclusion criteria, each study was assessed on quality, regarding methodology and results. A quality assessment form (see Appendix B) was devised. The rationale for the included quality assessment items was as follows:

- *Participants (representativeness of the sample):* Participants were considered to be more representative of the wider population of maltreating parents when they included male and female participants, were drawn from a cross cultural sample, had an appropriate mean age, and were not obviously self-selecting.

- *Measure of Personality:* The classification of personality was rated highly if a valid, standardised measure of personality was utilised in combination with clinician interview. This is deemed 'best practice' in personality classification by the American Psychiatric Association (APA, 2013).

- *Categorisation of child maltreatment:* Evidence from professionals and parents in conjunction was rated highly, followed by evidence from professionals alone. Self-report by parents alone was rated as low as this leaves the results open to the greatest degree of bias.

- *Study design;*

  o *Sample size/power* – This was rated highest if sufficient level of power was reported. Alternatively if no power calculation was reported but the sample size was large this was rated as moderate.

  o *Personality focus* – Studies that gave consideration to all major DSM and/or ICD personality types were rated more highly.

  o *Maltreatment focus* – Studies that considered all maltreatment types (excluding sexual abuse) were rated more highly (as opposed to those which focused on a single form of maltreatment) in order to prevent data bias associated with focusing on one maltreatment type (e.g. the exclusion of any comorbid maltreatment).

  o *Control group* – studies were rated highly if a control group was used.

o *Analysis* – Multivariate analysis was rated more highly than bivariate analysis.

o *Confounding variables* – Studies that considered and accounted for potentially confounding variables were rated more highly.

The first three items (Sample, Measure of personality, and Categorisation of child maltreatment) were rated on a scale of 0 to 3, three items (Sample size/Power, Personality focus, and Maltreatment focus) were rated between 0 and 2, and the remaining items (Control group, Analysis, and Confounding variables) were rated dichotomously (0 or 1). As such the total score was between 0 and 19.

A subsection of the articles (n = 3) were also assessed by a second, independent reviewer to ensure quality scores were reliable. An inter-rater reliability analysis using the Kappa statistic was performed to determine consistency among raters which determined substantial agreement (Kappa = 0.81, p < .001). Any differences were discussed and an agreement reached. Studies that met the pre-defined inclusion and exclusion criteria but were assessed to have below 60% quality were excluded from the review (n = 2). This cut off was determined based upon other systematic literature reviews such as Verhagen et al. (1998). Characteristics of included studies are shown in Table 6, along with the quality assessment score out of 19.

Initial searches of the electronic databases using the specified search terms yielded a total of 748 studies. An additional four studies were identified through reviewing reference lists of identified studies. Upon contacting authors to request access to their studies, an additional one study was identified. Following brief perusal 91 duplicate studies were removed. Based upon title and abstract review, 649 of studies were excluded according to the inclusion/exclusion criteria. The remaining 9 studies were then assessed using the pre-defined

quality assessment form, excluding two at this point due to them falling below the quality cut off score (60%). This selection process yielded 7 studies which met the inclusion criteria and the quality cut off point. This process is represented (in Figure 1) below. Rejected studies are presented in Appendix C.
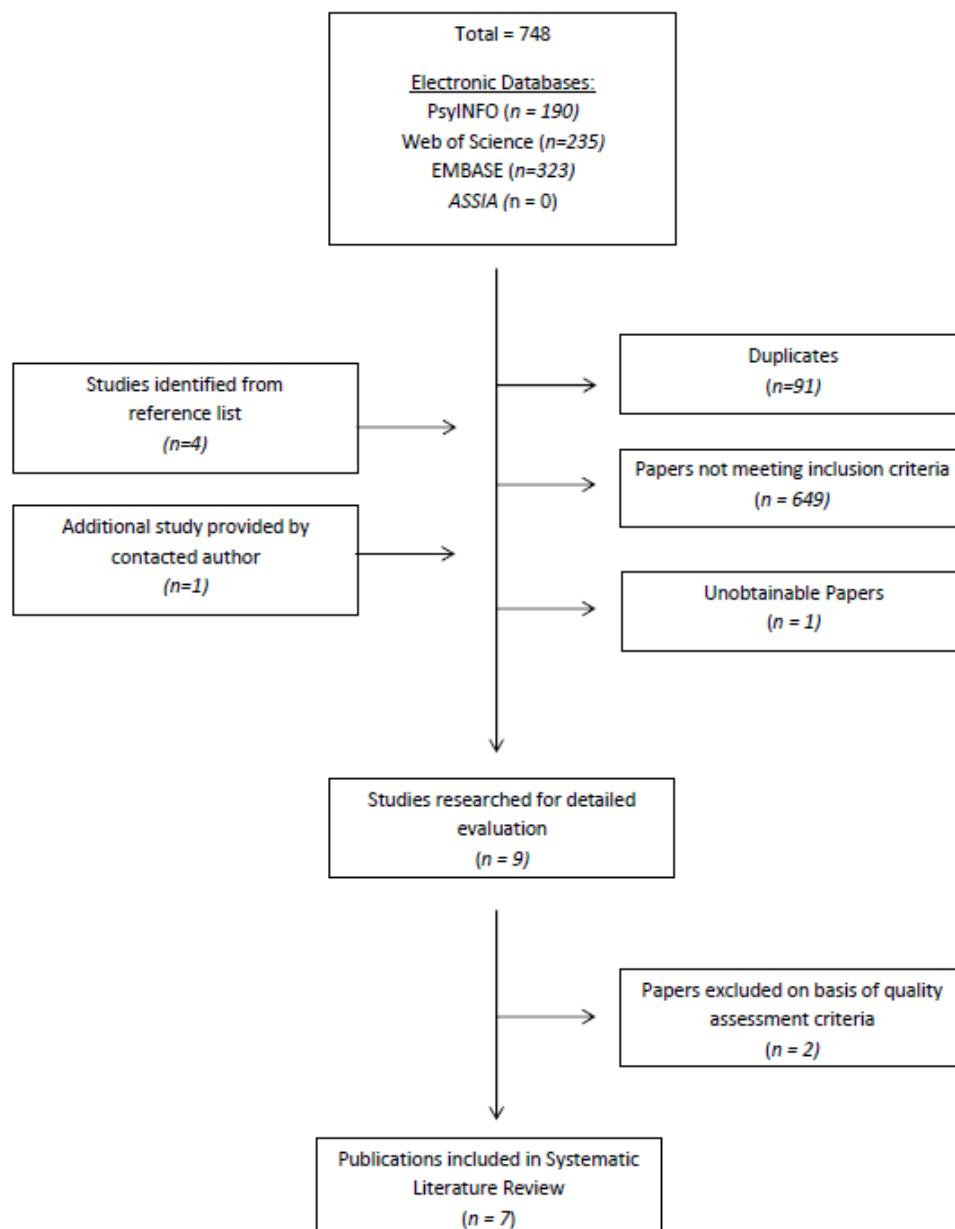
Figure 1. Article selection process

All of the included studies were considered for a quality perspective, using descriptive

data synthesis, as recommended by Woodward and Webb (2001). It has been argued that meta-analysis can only be used when the study designs and outcome definitions among studies are sufficiently homogenous to be combined into one pooled estimate (Blettner, Sauerbrei, Schlehofer, Scheuchenpflug, & Friedenreich, 1999; Evans, 2002). In the event of heterogeneity of the factors being investigated, there is the potential for confounding variables; hence, meta-analysis could produce misleading statistics (Egger, Schneider, & Smith, 1998). Evans (2002) highlights that the combination of narrative and tabulation involved in descriptive data synthesis provides the most comprehensive summary of qualitative research as the limitations of one method are complimented by the benefits of the other. Additionally, the combination of narrative review and tabulation permits a large number of studies to be incorporated into a review, and can be used to summarise a range of different types of research. Thus, this was the procedure employed within the current study, allowing for investigation of the diversity both between studies and within the individual studies. A quality score was achieved through considering individual aspects of each study, as shown in Appendix B.

Data Extraction

As discussed above a quality assessment was completed on each selected study. During this process, relevant information was extracted and recorded using a pre-defined data extraction form (Appendix C). The form, in keeping with the quality assessment form allowed the author to maintain focus and consistency whilst keeping a clear record of relevant information. If information was not clear within any study the author was contacted to request further information. In two cases this provided information needed. In the remaining case (Bogacki & Weiss, 2007) areas that remained unclear were scored as such. Extracted data is shown in Table 7.

Results

Table 6 presents a synthesis of methodological considerations of the studies included in the review, a brief summary of results and an associated quality assessment score. Within Table 7 the results of the data extraction, including further information regarding the methods utilised within the studies and limitations of the study, are presented.

Table 6: Characteristics of included studies (N = 7)

Authors/ Year	Hypotheses/ Aims	Sample Size and Gender	Control Group	Abuse Type	Results	Quality Assessment Score
Bogacki & Weiss (2007). United States of America	An exploration of the diagnoses of parents involved in investigations of child abuse and neglect allegations.	300 defendants prosecuted by the New Jersey Division of Youth and Family Services F = 234 (78%), M = 66 (22%)	n/a	Neglect and physical abuse	Two thirds of parents showed evidence of Personality Disorder. MCMI-III sub-clinical elevations: 22% > BR64 Narcissistic; 18% > BR64 Dependent; 7% > BR64 Borderline; 4% > BR64 Antisocial; Other > BR 64 49% (Authors were contacted for more information but reported that no further information was available).	14/19 (74%)
Ezzo, Pinsoneault, & Evans (2007). United States of America	Comparison of MMPI-2 profiles of termination of parental rights cases Comparing care proceedings sample (maltreatment) vs child custody sample (no	Maltreatment perpetrators: n = 76, valid = 70 Mean age 34.3 F = 55 (72%), M = 21 (28%)	Unmarried custodial sample n = 102 (56F, 46M), valid = 100. Mean age 37.1 Married custodial sample n = 105 (56F, 49M), valid	'Documented maltreatment' – unclear as to type of maltreatment.	56.5% of the child maltreatment group = 1 or >1+ clinical elevation 28.5% of the non-maltreatment group = 1 or >1+ clinical elevation. MMPI-2 profiles for the child maltreatment group	17/19 (90%)

| | | | = 105. Mean age 38.5 | | showed elevations five or more points higher on scales F, Pd, Pa, Sc, Ma, & Si, and five points lower of scale K, than the combined non-maltreatment group (see Appendix D for explanation). | |
| Fontaine & Nolin (2012).

Canada | Objective of the study was to provide a psychological profile of parents formally accused of child maltreatment.

Hypotheses:
- maltreating parents would have significantly higher scores on Personality Disorder and clinical | 16 parents accused of physical abuse

F = 10 (62.5%), M= 6 (37.5%)

24 parents accused of neglect. F = 18 (75%), M = 6 (25%) | *n* = 42, F = 27 (64.3%) M = 15(35.7%), aged 21 - 56. | Physical and neglect | Physical maltreatment subclinical peaks = paranoid, narcissistic, & antisocial

Neglect subclinical peaks = schizoid, paranoid, narcissistic & compulsive

Control group subclinical peaks = narcissistic, histrionic, and compulsive scales.

Abusive parents significantly higher on paranoid, schizotypal, | 17/19 (90%) |

	syndrome scales; - the physical abuse group would have significantly higher scores than the neglectful group for the antisocial and borderline scales				antisocial, borderline, and avoidant scales. Each significant at $p < .05$	
Fukushima, Iwasaki, Aoki, & Kikuchi (2006). Japan	Hypothesised that parents who are more narcissistic would commit a greater number of aggressive acts towards their children in cases where their self-esteem feels threatened.	Parents with children < 12 (*n* = 626). F = 306 (48.9%); M = 320 (51.1%)	No control group as such – parents were compared to each other on a number of scales so acted as controls.	'Aggressive' behaviours. Seems to include physical abuse and neglect (as measured by the CCAP, 2000)	More narcissistic parents reported more aggressive acts towards their children. This was significantly mediated by 'blame' placed on children. Narcissistic parents seem to be highly aggressive towards their child only when they intensely attribute their misfortune to the child.	12/19 (63%)

| Perepletchikova, Ansell & Axelrod (2012).

United States of America | Examination of the history of childhood maltreatment and BPD symptoms in mothers whose children were removed from the home by the CPS.

Hypothesised that:

- CPS involved mothers would have greater BPD features as compared to community control mothers
- BPD features would significantly predict CPS involvement even after controlling for history of maltreatment, alcohol and drug use, and | Mothers of removed children ($n = 41$).

88.6% perpetrated at least one form of maltreatment

54.3% had emotionally abused

84.3% had neglected

40% had physically abused

(not mutually exclusive) | 58 community mothers with no history of involvement with CPS. | Physical, neglect, and emotional. | Mothers involved with the CPS were more likely to have clinically elevated BPD features

BPD features predicted group status above any other factor | 17/19 (90%) |

	demographic variables.					
Pinsoneault, & Ezzo (2012). United States of America	Compared characteristics of MMPI-2-RF scales of maltreating custodial sample and non-maltreating custodial sample Hypothesised that the maltreating sample would show higher elevations on the MMPI-2-RF clinical scales	Unmarried custodial sample or parents who have maltreated, $n = 67$. F = 48 (71.6%); M = 19 (28.4%)	Unmarried, non-maltreating sample, n = 91 Married, non-maltreating sample, n = 80	Incidents of maltreatment with a severe enough level of physical abuse and/or neglect to that the LA sought permanent custody removal.	Child maltreatment group showed high scores on scales RC3, RC4, JCP, FML, RC6, THD, RC8, PSYC (see Appendix D for explanation).	15/19 (79%)
Wiehe (2003). United States of America	Comparison of personality variables of empathy and narcissism in a sample of child abuse perpetrators and a sample of foster parents, conceptualised as non-abusive	52 physically and emotionally abusive parents being investigated for child abuse by CPS. F = 41 (78.8%); M = 11 (21.2%)	101 non abusing foster parents.	Physical and emotional abuse.	Statistically significant differences were found for the two groups on three of the six subscales of the NPI: authority, exhibitionism, and superiority. Abusive parents demonstrated less self-confidence, greater lack of impulse control and were	13/19 (68%)

	parents. Attempt to gain further understanding of maltreating perpetrators and to provide clues for intervention.				more narcissistic than their foster parent counterparts. The data would suggest that physically and emotionally abusive parents reflect some of the characteristics of Narcissistic PD as defined by the DSM-IV manual.	

Key: BPD = Borderline Personality Disorder; **BR =** Base Rate; **CPS** = Child Protection Services; **F** = Female; **LA** = Local Authority; **M** = Male; **MCMI-III =** Millon Clinical Multiaxial Inventory, Third Edition; **MMPI-2** = Minnesota Multiphasic Personality Inventory, Second Edition; **NPI** = Narcissistic Personality Inventory; **PD** = Personality Disorder

Table 7: Data extraction results

Authors/Year	Sample Methods	Assessments Used	Assessment Conditions	Negatives	Statistical Analysis
Bogacki, D. & Weiss, K. (2007).	The sample randomly selected reports of psychological evaluations of 300 defendants prosecuted by the New Jersey DYFS between 2000 and 2006. All participants had been assessed by the lead author. 'Chart-review' methodology was utilised.	- Luria-Nebraska Neuropsychological Battery-Screening Test; - Bender Visual-Motor Gestalt test; - WAIS-III - Wide Range Achievement Test-Reading Subtest -MCMI-III.	Historical file review. At time of assessment parents were being reviewed due to the possibility of the State terminating parental rights as a result of child abuse and/or neglect. Assessments took place at a medical school in New Jersey, USA.	Nearly 60% of the sample for diagnosed with some form of learning difficulty or disability (mean IQ = 76) – may have compromised personality test results. Only descriptive statistics are analysed.	Descriptive statistics only. Authors contacted for further data analysis but they stated that 'there is no other available data other than what is presented in the article'.
Ezzo, F. R., Pinsoneault, T. B., & Evans, T. M. (2007).	MMPI-2 Profiles were obtained from three separate groups. 76 profiles from parents litigating permanent custody cases involving documented incidents of child maltreatment were obtained from cases seen at a county juvenile court clinic in a large city in Ohio. This was named the 'Child Maltreatment' sample. 102 profiles from unmarried parents involved in custody dispute cases were obtained from the same	- MMPI-2	Historical file review of parents involved in the permanent removal of their children due to maltreatment; unmarried parents involved in custody disputes; and marries parents involved in custody disputes.	Uses MMPI-2 results alone – no clinical judgement involved.	-Wilk's Lamda and associated post hoc ANOVAs to determine which MMPI-2 scales might account for observed differences in the overall profiles. -Cohen's *d* used to determine effect size. -Discriminant analysis was conducted to

	source. This was named the 'Unmarried Custodial' sample. 105 profiles from married parents were obtained from private custody evaluations conducted in Ohio. This was named the 'Married Custody' sample. No information on recruitment given potentially due to being a historical file review.				determine how effective MMPI-2 scores might be in predicting child maltreatment type.
Fontaine, D., & Nolin, P. (2012).	Participant for maltreatment samples were recruited through the Youth Centres of La Mauricie. Participants were approached for the study at the time that accusations of abuse or neglect were evidenced. Participants for the control sample were approached through various parent organisations or the Centre de la Petite Enfance de la Mauricie by means of a poster on a bulletin board.	Participants completed a shortened version of the WAIS-III as well as the CAPI and MCMI-III.	Interviews were conducted at a University or at the participant's home. Compensation of $30 CDN was given at the end of testing.	Small sample size is a limitation. Additionally, the overlap between neglectful and abusive parents.	The results were based on a MANCOVA, where IQ and income were regarded as covariates when comparing groups. A logarithmic transformation of data was carried out to standardize the dependent variables.
Fukushima, O., Iwasaki, K., Aoki, S., & Kikuchi, J. (2006).	Parents were drawn from 38 sampling areas within Iwate Prefecture by a two-stage stratified random sampling method. Each person was then	- NPI-40 - Self-report measure that assesses a parent's abusive behaviour towards the	Questionnaires were sent to participants with a cover letter and a return stamped envelope.	The NPI was translated into Japanese (although the authors state that the alpha coefficient remains at .82).	Correlation among variables was determined. Hierarchical regression analysis

	sent a survey form.	child (previously used in research by CCAP, 2000) - Social Desirability Scale (SDS) - Single item questionnaire		Participants were not assessed by a clinician – questionnaires were completed by participants and sent back. Full details of the self-report measured regarding parental aggression were not provided. Parents were not selected on the basis of any form of maltreatment.	of aggression towards the child was completed.
Perepletchikova, F., Ansell.,& Axelrod, S. (2012).	The sample included the first three cohorts of Child Protection Services (CPS) involved and control mothers that participated in a previous study. Participants included 41 mothers of children who had been removed from the home by CPS due to reports of abuse and/or neglect, and 58 community-control women with no history of CPS involvement. Families recruited for the CPS group	CTQ PAI-BOR MAST DAST	Participants underwent interviews at their current place of residence in two interview sessions. The first session began with discussion of informed consent. Parents received $25 as compensation after the end of the first interview and a further $15 for their participation after the	By only using the Borderline Features Scale of the PAI potentially important personality results may have been missed. Only females were included. Significant difference between CPS involved mothers and control mothers with regards to	Group differences on history of childhood maltreatment and BPD features were examined using Chi Square and analysis of covariance. Hierarchical logistic regression analysis was performed to test the prediction of CPS-involved

	met the following criteria: 1) a child was removed from parental care due to a substantiated report of abuse or neglect within 6 months of the study onset; and 2) Department of Children and Families was awarded 96-hour temporary custody of the children by the courts. Eligible families were informed about the study by their caseworker, and interest parents signed a form consenting for research staff to contact them about the study. Control parents were recruited through targeted mailings and newspaper advertisements, and prospective subjects were screened for study inclusion by telephone.		end of the second interview.	education level and annual income (although this was statistically controlled for).	versus community-control group status from BPD features, controlling for the history of maltreatment, alcohol and drug use, and certain demographic variables. Holm-Bonferroni corrections were utilised to adjust the x level downward to prevent chance capitalisation in multiple comparisons.
Pinsoneault, T. B., & Ezzo, F. R. (2012).	MMPI-2-RF profiles from unmarried parents litigating permanent custody cases involving documented incidents of child maltreatment obtained from cases seen at a County Juvenile Court Diagnostic Clinic in Ohio. Profiles from	- MMPI-2-RF	Historical file review.	File review of psychometric results and abuse type only – no clinical judgement given.	2 x 2 ANOVA was conducted to examine both group type and gender. Wilk's Lamda and associated post hoc ANOVAs to determine which

	married and unmarried parents without documented incidents of maltreatment involved in custody disputes at the same agency were also obtained. No information on recruitment given potentially due to being a historical file review.				MMPI-2 scales might account for observed differences in the overall profiles. Cohen's *d* used to determine effect size.
Wiehe, V. R. (2003).	Receptionists in the county social services offices were asked to distribute the research instruments to parents being investigated for child abuse and to foster parents as they came to the office.	IRI NPI HSNS	A cover letter attached to the instruments explained that the participants were being asked to respond to a series of questions that asked for their thoughts and feelings about various subjects that may or may not describe them as a person. They were told their participation was voluntary and that they were to respond to the instruments anonymously. Upon completing the instruments, participants sealed the instruments in an envelope addressed to	1) Doesn't explain why using twice as many control participants. 2) The use of foster parents – why not use non-abusive biological parents? Foster parents receive extra training and guidance, as well as financial incentive. Limits the generalisability to parents in general. 3) Low rate of return	Chi-square analysis and t-tests. Scores on each of the instruments and their subscales were correlated.

			the researcher that was mailed by the receptionist. It was not possible under this method of data collection for the researcher to determine the number of individuals who refused to complete the instruments.		

Key: BOR = Borderline Features Scale; **BPD** = Borderline Personality Disorder; **CAPI** = Child Abuse Potential Inventory; **CDN** = Canadian Dollars; **CPS** = Child Protection Services; **CTQ** = Childhood Trauma Questionnaire; **DAST** = Drug Abuse Screening Test; **DYFS** = Department for Youth and Family Services; **HSNS** = Hypersensitivity Narcissism Scale; **IQ** = Intelligence Quotient; **IRI** = Interpersonal Reactivity Index; **MAST** = Michigan Alcohol Screening Test; **MMPI-2** = Minnesota Multiphasic Personality Inventory, Second Edition, Restructured Format; **NPI** – Narcissistic Personality Inventory; **PAI** = Personality Assessment Inventory; **WAIS-III** = Wechsler Adult Intelligence Scale, Third Edition;

Study Populations

The total number of participants in each studied varied, ranging between 626 (Fukushima, Iwasaki, Aoki, & Kikuchi, 2006) and 40 (Fontaine & Nolin, 2012). Across the entire review, accounting for those who did not complete the studies, a total of 1202 parents were assessed (excluding control groups), with an average of 171 participants per study. However, this average is somewhat skewed by the largest sample (626) and without this the average amount of participants per study was 96.

Three of the seven included studies were historical file reviews, utilising data from past participants of child protection proceedings (Bogacki & Weiss, 2007; Ezzo, Pinsoneault, & Evans, 2007; Pinsoneault & Ezzo, 2012). The remaining studies utilised various testing conditions, including interview (Fontaine & Nolin, 2012; Perepletchikova, Ansell, & Axelrod, 2012), questionnaires (Fukushima et al., 2006; Wiehe, 2003), within participants homes (Fontaine & Nolin, 2012; Fukushima et al., 2006; Perepletchikova et al., 2012; Wiehe, 2003) and on university premises (Fontaine & Nolin, 2012). Participants participated on a voluntary basis within all studies and received monetary compensation in two (Fontaine & Nolin, 2012; Pereplitchikova, Ansell, & Axelrod, 2012). Participants tended to be recruited from child protection agencies with the only exception of this being Fukushima et al. (2006) who used a random sampling method.

One of the seven studies (Bogacki & Weiss, 2007) did not use a control comparison group. Of those who did, the control group samples were recruited from a variety of settings, including child custody proceedings due to parents' separation (Ezzo, Pinsoneault, & Evans, 2007; Pinsoneault & Ezzo, 2012), community parents with no history of involvement with child protection services (Fontaine & Nolin, 2012; Fukushima, Iwasaki, Aoki, & Kikuchi,

2006; Perepletchikova, Ansell, & Axelrod, 2012), and non-abusing foster parents (Wiehe, 2003).

Gender

One of the seven studies (Perepletchikova, Ansell, & Axelrod, 2012) used a female only population. Overall, the clinical samples within the review included 753 females and 449 males. Gender figures for control groups were often unavailable.

Assessments employed

A variety of assessments were used in the reviews studies. However, only those assessing personality are discussed as other measures are not relevant to the aims and objectives of the current review.

The measures used most often were the Millon Clinical Multiaxial Inventory, Third Edition (MCMI-III) which was used in two of the seven reviewed studies (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012) and the Narcissistic Personality Inventory (NPI-40) (Fukushima, Iwasaki, Aoki, & Kikucki, 2006; Wiehe, 2003). Other assessments used were the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (Ezzo, Pinsoneault, & Evans, 2007), the Personality Assessment Inventory (Borderline Features Scale) (PAI-BOR) (Perepletchikova, Ansell, & Axelrod, 2012), the Minnesota Multiphasic Personality Inventory-2-Restructured Format (MMPI-2-RF) (Pinsoneault & Ezzo, 2012), and the Hypersensitivity Narcissism Scale (HSNS) (Wiehe, 2003).

A variety of personality traits were reported within the reviewed studies. Due to the varying personality terms used within the studies the results will be reported as classified by the studies' author(s) prior to being further discussed in the context of personality as defined by the DSM-IV.

- Narcissistic personality traits/disorder in parents who maltreat were reported in the majority of the studies (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Fukushima, Iwasaki, Aoki, & Kikuchi, 2006; Wiehe, 2003).

- Antisocial personality traits/disorder were reported in three of the studies (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Pinsoneault & Ezzo, 2012)

- Paranoid personality traits/disorder were reported in two of the studies (Ezzo, Pinsoneault, & Evans, 2007; Fontaine & Nolin, 2012), and both these studies were of the highest quality (>89%).

- Borderline personality traits/disorder were reported in two of the studies (Bogacki & Weiss, 2007; Perepletchikova, Ansell, & Axelrod, 2012).

- Other identified personality traits or disorders included:

   o Dependent (Bogacki & Weiss, 2007)

   o Psychopathic Deviate; Schizophrenia; Hypomania; Social Introversion (Ezzo, Pinsoneault, & Evans, 2007)

   o Schizoid; Avoidant; Compulsive; Mania (Fonatine & Nolin, 2012)

   o Cynicism, Ideas of Persecution, Thought Dysfunction, Aberrant Experiences, Psychoticism (Pinsoneault & Ezzo, 2012).

Personality styles found to be reported in two or more studies within the review, along with the associated studies, are presented below in Table 8. Studies that achieved a quality score of 90% or over are highlighted in bold.

Table 8. Personality style reported in more than one study as present in maltreating parents.

Personality trait or disorder	Reported	Not reported
Narcissistic	Bogacki & Weiss, 2007 **Fontaine & Nolin, 2012** Fukushima et al., 2006 Wiehe, 2003	**Ezzo et al., 2007** **(Perepletchikova et al., 2012)** Pinsoneault & Ezzo, 2012
Antisocial	Bogacki & Weiss, 2007 **Fontaine & Nolin, 2012** Pinsoneault & Ezzo, 2012	**Ezzo et al., 2007** (Fukushima et al., 2006) **(Perepletchikova et al., 2012)** (Wiehe, 2003)
Paranoid	**Ezzo et al., 2007** **Fontaine & Nolin, 2012**	Bogacki & Weiss, 2007 (Fukushima et al., 2006) **(Perepletchikova et al., 2012)** Pinsoneault & Ezzo, 2012 (Wiehe, 2003)
Borderline	Bogacki & Weiss, 2007 **Perepletchikova et al., 2012**	**Ezzo et al., 2007** **Fontaine & Nolin, 2012** Fukushima et al., 2006 Pinsoneault & Ezzo, 2012 (Wiehe, 2003)

Studies in bold achieved a quality assessment of equal to, or over, 90%
(Studies in brackets) focused exclusively on an alternate personality type.

<center>**Discussion**</center>

Main Findings

As previously discussed, personality will be reported in the format of the DSM-IV-TR, by cluster.

Cluster A (Eccentric)

As discussed above, the eccentric cluster (Cluster A) consists of Paranoid, Schizoid and Schizotypal personalities. Within the reviewed studies, evidence was presented to suggest that Cluster A showed association with abusive parents with this being the only individual personality type to have two high quality studies demonstrating evidence towards the association (Ezzo, Pinsoneault & Evans, 2007; Fontaine & Nolin, 2012).

Ezzo, Pinsoneault and Evans (2007) found evidence of paranoid personality in maltreating parents, with mean T-scores on the Paranoid scale of the MMPI-2 reaching a moderate degree of elevation (56.30) suggesting individuals who are sensitive and are easily hurt emotionally. Such individuals also have a tendency to misinterpret actions and statements of others and consequently could interpret inoffensive statements as judgmental or critical, often resulting in mistrust and guardedness within interpersonal relationships. In the same study results also suggested that maltreating parents were also more likely to have personality traits reflective of social introversion and schizophrenia (at levels which the MMPI-2 suggests would reflect a schizoid lifestyle and eccentric thinking, rather than a diagnosis of schizophrenia, Si = 48.91; SC = 54.25) which also places maltreating parents within the eccentric personality cluster. Fontaine and Nolin (2012) found results to support this, with both physically abusive and neglectful parents obtaining significantly higher scores for the schizotypal and paranoid scales (of the MCMI-III) than the control group of parents (average physical abuse schizotypal score 57.12; average neglect schizotypal score 56.64;

average control schizotypal score 40.94; average physical abuse paranoid score 62.88; average neglect paranoid score 62.27; average control paranoid score 40.56). Within the same study a 'subclinical peak' was also found on the schizoid scale of neglectful parents. Fontaine and Nolin highlight that 38% of the physically abusive parents in their study, and 32% of neglectful parents, reported that they were socially isolated, compared to no parents in the non-maltreating control group, showing further indication of eccentric personality traits in maltreating parents due to social isolation being symptomatic of each of the Cluster A personality styles. Additional supporting evidence of this is provided by Pinsoneault and Ezzo (2012) who found that amongst the most commonly elevated scales for the maltreatment participants were ideas of persecutions (RC6 = 57.66), thought dysfunction (THD = 53.80), psychoticism (PSYC = 50.52), and cynicism (RC3 = 51.70). Each of these factors is symptomatic of an eccentric personality style.

Cluster B (Impulsive)

As previously defined, the impulsive cluster (Cluster B) consists of Antisocial, Narcissistic, Borderline and Histrionic personalities. The majority of the reviewed studies reported impulsive traits in abusive parents although only two of these were assessed as being of high quality (Fontaine & Nolin, 2012; Perepletchikova, Ansell, & Axelrod, 2012) and no individual Cluster B trait demonstrated evidence of the highest quality in more than one included study.

Wiehe (2003) presented results that showed that abusive parents, compared to the control sample, were not able to take perspective of another or see things from a different viewpoint, they showed less warmth, compassion and concern for others, and experienced difficulty in tense interpersonal situations. Further, the abusive parents experience the child's misbehaviour as an affront to their authority, exposing the narcissistic component.

Statistically significant differences were found for the two groups on three of the six subscales of the NPI (Narcissistic Personality Inventory): authority, exhibitionism, and superiority. On the HSNS (Hypersensivity Narcissism Scale), abusive parents demonstrated less self-confidence, greater lack of impulse control and were more narcissistic than their foster parent counterparts. The data would suggest that physically and emotionally abusive parents reflect some of the characteristics of Narcissistic Personality Disorder as defined by the DSM-IV manual, although Wiehe (2003) asserts that this is not meant to imply that these individuals should be labelled with this diagnosis.

In a moderately high quality study (14/19; 74%) Bogacki and Weiss (2007) also found evidence of Narcissistic personality in maltreating parents, with 22% of their entire sample (of 300 parents) showing subclinical (suggesting the presence of narcissistic traits) or clinical (suggesting the presence of narcissistic Personality Disorder) elevations on the Narcissistic scale of the MCMI-III. Fukushima, Iwasaki, Aoki, and Kikuchi (2006) also reported results supporting the presence of Narcissistic traits within maltreating parents and suggested that higher levels of narcissism in parents (as measured by the NPI) were related to a greater number of 'aggressive' acts towards their children. Wiehe (2003) hypothesised that the presence of narcissistic traits is due to the abusive parent looking to the child for satisfaction or their own emotional needs. The child is expected to be the source of comfort and care and be responsible for much of the happiness of parents. If children subsequently fail to live up to their pseudo adult roles, the risk of abuse could potentially increase. Should the child misbehave, narcissistic abusive parents appear to view the behaviour as a personal insult, a wounding of themselves, and a reflection of their loss of control and authority. In order to restore a sense of equilibrium, the parents may use force in the form of physical or emotional abuse to induce compliance. Fukushima et al. (2006) supported this with results that suggested that narcissistic personality and its link with aggression is significantly

mediated by the 'blame' placed on the child(ren) by the parent and that narcissistic parents seem to be more aggressive towards their child(ren) when they intensely attribute their own misfortune to the child.

Fontaine and Nolin (2012) also found results suggestive of impulsive personality within maltreating parents. Within this study (assessed as of high quality) physically abusive and neglectful parents obtained significantly higher scores than participants in a control group on the antisocial and borderline scales of the MCMI-III (average physical abuse borderline score 52.88; average neglect borderline score 50.82; average control borderline score 31.61; average physical abuse antisocial score 61.25; average neglect antisocial score 56.73; average control antisocial score 46.39). The authors discuss that both borderline and antisocial Personality Disorders have been linked with violence, although suggest that violence symptomatic of Borderline Personality Disorder is more related to 'emotive interpersonal valence', unlike the lack of remorse displayed in violence symptomatic of Antisocial Personality Disorder. Fontaine and Nolin expressed surprise at the lack of difference between physically abusive and neglectful parents with regards to impulsive personality traits. They had hypothesised that neglectful parents would be more likely to have Borderline personality traits (or disorder) and that physically abusive parents would be more likely to have Antisocial personality traits (or disorder). They suggest that this lack of difference may be due to the small sample size in each group, or additionally that the overlap of maltreatment type (some physically abusive parents also had secondary charges of neglect, and vice versa) may have affected this result. It is likely that such confounding variables are likely to have affected the results of this study, and go some way to undermining their findings and conclusions.

Additional Cluster B personality traits were also found in maltreating parents within the two studies assessed as being of moderately high quality (Pinsoneault & Ezzo,2012;

Bogacki & Weiss, 2007) with findings indicating the presence of Antisocial personality traits. Bogacki and Weiss found Narcissistic personality traits in 22% of their sample. Further evidence of impulsive personality in maltreating parents was found in a high quality study by Perepletchikova, Ansell, & Axelrod (2012) who found that mothers involved with child protection services (due to child removal as a consequence of physical abuse or neglect) were more likely to have clinically elevated borderline features as compared with community control mothers, even when history of maltreatment and alcohol and drug use were statistically controlled for. Within their sample, 50% of the mothers involved with child protection services reported clinically significant Borderline features with approximately 20% of the sample meeting the criteria for Borderline Personality Disorder. This is in comparison with the community mother sample of which 3.6% reported symptoms consistent with a Borderline Personality Diagnosis, which is within the expected range of the general population. To a lesser degree, Bogacki and Weiss (2007) also found evidence of Borderline personality within maltreating parents (7% of their sample showed subclinical or clinical elevations on the Borderline scale of the MCMI-III) although again were unable to provide further information regarding this so conclusions regarding this data are limited.

Cluster C (Fearful)

As discussed above, the fearful cluster (cluster C) consists of Avoidant, Dependent, and Compulsive personality styles. Few of the reviewed studies identified prevalent fearful personality traits in maltreating parents. Fontaine and Nolin (2012) reported a subclinical peak on the Compulsive scale of the MCMI-III for the neglectful parents (60.95), but not in the physically abusive parents (51.69). This is somewhat supported by evidence that suggests that maltreating parents tend to show higher scores on self-presentation manipulation scales, often wishing to present in a socially desirable manner (Ezzo, Pinsoneault, & Evans, 2007; Pinsoneault & Evans, 2012) which is typical of a

compulsive personality (though it should also be noted that there is evidence that an elevated score on the Compulsive scale can, conversely be an artefact of a high score on the Desirability scale). Additional evidence for fearful personality traits within maltreating parents was reported by Bogacki and Weiss (2007) who found 18% of maltreating parents in their sample had at least a subclinical elevation on the Dependent scale of the MCMI-III. Finally, Fontaine and Nolin (2012) also found significantly higher elevations on the Avoidant scale of the MCMI-III within maltreating parents (physical 59.94; neglect 56.41) compared to non-maltreating parents (38.17). Due to the overlap between the Avoidant personality and Eccentric (Cluster A) personality (both share characteristics of seeking to be alone and mistrusting the motivations of others) it may in fact be that the MCMI-III was detecting symptoms of an eccentric personality.

'Normal' Personality

Rates of 'normal' personality – personality that showed no pathological levels – varied widely within the included studies. Unfortunately, a number of the studies did not report the number or percentage of participants who showed no pathology within their personality structure (Fontaine & Nolin, 2012; Fukushima, Iwasaki, Aoki, & Kikuchi, 2006; Wiehe, 2003). Bogacki and Weiss (2007) and Pinsoneault and Ezzo (2012), both studies assessed as being of moderately high quality, reported similar levels of psychopathology, with 36% and 33% of the maltreatment groups respectively showing no clinical or subclinical elevations. The two studies assessed as being of high quality who did report on the amount of participants displaying a lack of pathology (Perepletchikova, Ansell, & Axelrod, 2012; Ezzo, Pinsoneault, & Evans, 2007) showed greater levels of 'normal' personality, with Ezzo et al. (2007) reporting that 43.5% of the group showed no clinical elevations and Perepletchikova et al. (2012) reporting that 50% of the sample did not show features of Borderline Personality Disorder (although they did not measure other personality traits). Studies have estimated that

in the general population of the UK Personality Disorder affects between 4 and 11% of people (Coid, Yang, Tyrer, Roberts, & Ullrich, 2006; Craissati et al., 2011). This would therefore suggest a higher level of prevalence in those who maltreat their children.

Interpretation of Findings

The aim of this review was to identify and analyse studies which survey personality in parents who maltreat their children. Two main objectives were identified:

1. To identify whether specific personality types occur within parents who maltreat their children.

The included studies help to elucidate a variety of personality traits which have been identified as being associated with parents who maltreat their children. A number of personality characteristics were identified, many of which corresponded with previous findings.

As discussed above, it was possible to analyse and categorise the findings of the current review into one of the three clusters defined in the current DSM-IV-TR (APA, 2000). This was deemed appropriate and of clinical utility in light of the dimensional-categorical model presented in the DSM-5 and proposed for future assessment of personality, with an increasing shift towards a dimensional model rather than the categorical one (Skodol & Bender, 2009).

The majority of the reviewed studies, including two assessed as high quality and two assessed as moderately high quality, reported an association between impulsive (Cluster-B) personality and parents who maltreat their children. Narcissistic personality was evidenced to be significantly associated with child maltreatment. This is explained in a number of ways. The first of these is due to a need for power and control relating to poor self-esteem or

negative self-appraisal. This subsequently leads to the perpetrators experiencing aversive behaviour of the child(ren) as a personal attack, provoking them to physically or emotionally abuse the child(ren). Additionally the association between narcissistic personality and child abuse has been explained through the parent becoming pre-occupied with their own needs, limiting their ability to identify with the child. Further, the abusive parent views the child as a source of emotional comfort and care, and when the child fails to meet this pseudo-adult role, abuse may occur. Of additional interest is that this phenomenon is similar to data presented on spouse abuse perpetrators. Spousal abusers exert a strong need for power and control which may relate to their poor self-esteem or negative feelings and evaluations of themselves (Wolfe, 1999). Data suggests that this is why, should the perpetrators experience aversive behaviour in their children, they may be provoked to physically and emotionally abuse their children. Similarly, a relationship was found between Borderline personality traits and child abuse, also perhaps relating to the polaric emotions associated with Borderline personality exposing children to substance abuse, suicide attempts and conflict, and also the subsequent rapid oscillation between intrusive and rejecting contact with significant others, including children (Newman & Stevenson, 2005).

Cluster A personality types were also evidenced to be present in maltreating parents, a result which is somewhat rarely reported in previous literature on neglectful or physically violent parents. This is an interesting finding as the 'Paranoid' personality type was the only individual personality type to receive supporting evidence by two of the studies deemed as being of the highest quality. Further, the remaining one high quality study which did not report an association between child maltreatment and a Paranoid personality exclusively investigated the Borderline personality type and, as such, it is possible that this sample would have also included individuals with Paranoid personality, particularly as 50% of the sample in this study showed no Borderline personality traits.

Eccentric personality types are characterised by a reduced ability or inclination to engage in close interpersonal relationships, cognitive distortions and a distrust in others. Although historically literature on personality in maltreating parents has rarely referenced paranoid, schizotypal, or schizoid personality types per se, in fact, eccentric traits (such as social isolation and cognitive distortions) have been reported. Additionally, there is a large overlap between the eccentric personality types indeed reflected by the proposed combination of the three into one 'schizotypal disorder' during the development of the DSM-5 characterised by social deficits with a reduced capacity for interpersonal relationships and cognitive and perceptive distortions including mistrust in motivations of others (Esbec & Echeburua, 2011). It is clear when considering such a personality type that this could have detrimental effects on parenting which is potentially further confounded by being under surveillance by child protective services leading to further mistrust (Fontaine & Nolin, 2012).

Evidence of an association between Cluster-C (Fearful) personality types and child maltreatment was less extensive. However, compulsive traits were demonstrated within a number of studies and Bogacki and Weiss (2007) did find a large proportion of maltreating parents showed dependent personality traits, and it may therefore be that in other studies reviewed such traits were picked up by the 'Borderline' personality scales. This again would be consistent with the initially proposed structure for the DSM-5 which did not include 'Dependent' as a Personality Disorder but rather incorporated it within the Borderline syndrome. Alternatively, the lack of consistency in these findings could relate to the populations sampled – those who have actively physically abused or neglected their children, rather than those who have failed to protect their children. Previous historical research, as discussed, has sampled parents associated with 'passive abuse' – those who did not directly abuse a child but were aware of the risk of potential abuse and made no intervention. Such parents have previously been associated with compulsive and dependent personality types

due to the vulnerability to manipulation and dependence on a (potentially abusive) significant other symptomatic of such personality types.

2. To investigate whether specific personality clusters, as cited by the DSM-IV, are associated with specific types of abuse – e.g. physical abuse; failure to protect.

As reported, the current review has evidenced an association between personality clusters and child maltreatment. Conversely, a link between specific personality types and specific forms of maltreatment unfortunately remains uncertain. It is, however, worth highlighting the results of a study included in the review that was assessed as being of high quality. Fontaine and Nolin (2012) evidenced different sub-clinically elevated profiles for parents who perpetrated neglect and parents who perpetrated physical abuse. Whilst both profiles showed elevations on the Paranoid and Narcissistic scales, those who perpetrated physical abuse showed an additional elevation on the Antisocial scale, and those who perpetrated neglect showed additional elevations on the Schizoid and Compulsive scales. This difference in profile makes theoretical sense as Antisocial personality is linked to violence (in that the perpetration of violence is one of the diagnostic criteria) whereas those with a Schizoid personality are more likely to lack interest in those around them and display emotional coldness (APA, 2013). Furthermore, the underlying personality structure of Paranoid and Narcissistic personality for both types of abuse also makes theoretical sense in that such individuals would be likely to place their own needs before the needs of others (Narcissistic) and misinterpret others' motivations leading to resistance to external authority or input (Paranoid).

Methodological Considerations

The current review. The current study employed a comprehensive search strategy in conjunction with an efficient quality assessment tool. Additionally, the quality assessment

tool was used by a second reviewer on a subsection of the reviewed studies in order to ensure reliability.

One limitation of the current review is the small amount of studies reviewed within it. However, there is an apparent lack of recent research in the area and therefore all relevant studies were sourced, including one study (Fukushima, Iwasaki, Aoki, & Kikucki, 2006) which was conducted in Japan. Had there been a wealth of recent research, this study may have otherwise been excluded, due to cultural differences, but as it was published in English and used a well-recognised tool (the NPI) it was included. One study (Pinsoneault & Ezzo, 2012) was not sourced using the search strategy, but when the lead author was contacted with regards to an earlier study (Ezzo, Pinsoneault, & Evans, 2007) he provided this study. In an attempt to identify any further studies not provided by the search strategy all reference lists of relevant papers were examined for any further relevant studies. Four potential studies were identified, however, following review, these were again eliminated due to being unsuitable. An additional limitation is that it was not possible to undertake any quantitative analysis due to the varying forms of personality measurement used within the reviewed studies. Quantitative data synthesis would have allowed for a composite description of the data to be generated from multiple populations, settings and circumstances (Evans, 2002).

The reviewed studies. A general criticism applicable to the majority of the reviewed studies was that there was a lack of comparison between abuse types (physical/neglect/failure to protect). This could lead to somewhat confounding results, or at the very least prevent a full understanding of how personality links to child maltreatment. A further consideration is that assessment conditions differ between the studies and varying measures of personality (and their subsequent varying theoretical stances) were used within the studies, meaning that a true comparison between the studies is not possible. Additionally, studies tend to rely on *either* a personality inventory *or* a clinical interview meaning that data has not been

triangulated. It could be hypothesised that this would lead to greater inconsistency of results particularly in terms of overlapping personality characteristics (e.g. dependent traits mapping on to the borderline disorder).

Specific study limitations. As previously discussed, one study (Fukushima, Iwasaki, Aoki, & Kikucki, 2006) that was included was conducted in a non-Western country, meaning that cultural differences may have acted in a confounding manner. Additionally, this study relied on self-report of 'aggressive acts' rather than involvement with child protection services or police reports.

A number of studies (Fukushima, Iwasaki, Aoki, & Kikucki, 2006; Perepletchikova, Ansell, & Axelrod, 2012; Wiehe, 2003) solely investigated one type of personality (Narcissism, Borderline, and Narcissism respectively) meaning that these studies missed a valuable opportunity to explore and gain further understanding of personality as a whole in this under-researched population. Finally, Bogacki and Weiss (2007) only provide very limited details of the personality results of their sample and despite being contacted in order to gain a further understanding of their results they declined to provide any additional information.

Conclusion

Conclusions, Recommendations and Implications for Clinical Practice

Findings from the current review suggest that recent research applying up-to-date personality theory is somewhat lacking.

The current review identified a relationship between personality structure and child maltreatment extending the existing evidence relating to personality assessment in the context

of risk assessment in child-care proceedings. Further, the findings suggest that personality cluster, as defined by the DSM-IV, related to certain types of maltreatment.

This review provides evidence that there is no single personality profile to fit abusive parents, which should be taken into consideration when designing and conducting parenting programmes with the intent to lower an individual's risk to children. Indeed, this also has implications for the focus of psychological treatment. The current evidence suggests that treatment should be tailored to the individual's needs and personality characteristics, rather than relying on a 'best-fit' approach.

More research, utilising current psychological theory and up-to-date validated and normed psychometric measures is needed to investigate the association between personality and child maltreatment, particularly aiming to identify the association between personality and specific forms of maltreatment. Additionally, the link between the personality of spousal abusers and child abusers should be investigated further to allow greater insight into the similarities between the two, particularly in terms of personality and antecedents to violent behaviour. Finally, future research should endeavour to utilise as much amount of varied information as possible, preferably using both clinical interview, historical information, and psychometric measures, as is suggested for best practice when diagnosing or assessing personality as a clinician.

CHAPTER 2

Assessment and Critique of a Psychometric Measure:

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

& Grossman, 1997)

The aim of this chapter was to critically evaluate the Millon Clinical Multiaxial Inventory, Third Edition (MCMI-III, Millon, Millon, Davis & Grossman, 1997). The MCMI-III is frequently used by professionals and was designed to assess the interaction of personality and mental health difficulties based on the DSM-IV classification system and Millon's theory of personality. The MCMI-III is a self-report measure which consists of 29 scales assessed across three domains: Personality Disorder Scales (divided into 'Moderate Personality Disorder Scales' and 'Severe Personality Pathology Scales'), Clinical Syndrome Scales (separated into 'Moderate Syndrome Scales' and 'Severe Syndrome Scales') and Correction Scales (divided into 'Modifying Indices' and 'Random Response Indicators'). The MCMI-III has been described as *'an ambitious attempt to evaluate both Axis I clinical syndrome and Axis II Personality Disorders'* (Rogers, 2003).

Overview of the MCMI-III

The Millon Clinical Multiaxial Inventory, Third Edition (MCMI-III) is based on Millon's personality theory and corresponds closely with criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association [APA], 1994). It is a self-report inventory that consists of 175 true/false items and provides information on personality functioning, Personality Disorders, and a range of indicators of mental health difficulties. Importantly, the MCMI-III contains a number of intrinsic safeguards designed to detect unreliable response patterns such as minimisation or exaggeration of psychological difficulties.

The MCMI is an evolving assessment tool, and is currently in its third edition, reflecting developments in theory, research data, and professional nosology. For example, the MCMI-III has employed several innovative ideas in personality assessment including that it is normed on a 'clinical' population. This is in contrast to other major tests of

psychopathology, where participants are compared to 'normal' individuals. The recent literature suggests that the MCMI-III continues to be popular amongst clinicians due to its relative concision and ease of administration, combined with its breadth and parallel with formal diagnostic systems (Blais et al., 2003; Cuevas, Garcia, Aluja, & Garcia, 2008; Grove & Vrieze, 2009; Saulsman, 2011; Strack & Millon, 2007).

Development of the Tool

During the past two decades there have been substantial changes made to the tool. The second edition was introduced in 1987 to concur more readily with the DSM-IIIR (American Psychiatric Association, 1987) and the current edition, the MCMI-III, was introduced in 1994 in order to match changes in the diagnostic guidelines of the DSM-IV (APA) (Saulsman, 2011). Ninety-five of the original 175 items were either rewritten or replaced and two new scales – Depressive Personality and Post Traumatic Stress – were added.

The Current Review

This review will examine the MCMI-III in terms of its development and construct, its potential for use in the forensic arena and its scientific properties. The theory behind the MCMI-III will be discussed followed by an exploration of its construct prior to an in-depth discussion of its reliability and validity with reference to relevant literature. It should be noted that an exploration of the construct, reliability, and validity of each individual scale is beyond the scope of the current review, however most scales are discussed.

Millon's Theory of Personality

In order to be able to critique the MCMI-III it is important to have a brief understanding of Millon's theory of personality. Millon proposed that Personality Disorders

are derived from three polarity dimensions (self-other, pleasure-pain and active-passive). These polarities were initially proposed by Freud, but later employed by Millon in constructing a series of eight based personality patterns (Millon, 1981). The eight patterns that Millon proposed were a mixture of these three polarities. Four personality patterns were constructed from the nature and source of reinforcements (detached, dependent, independent, and ambivalent), and these were combined with two variations of instrumental behaviour (active, passive) to create eight personality patterns (Widiger, 1999). Although it is possible to comprehend the derivation of the active-passive polarity, it is less evident as to the origin of the detached, dependent, independent, and ambivalent patterns. Widiger (1999) suggested that the positive versus negative nature of these reinforcement styles appears to be the pleasure-pain polarity, but highlighted that only the 'detached' pattern is explicitly associated with the nature of the reinforcement but that even this cannot be classed as purely pleasure or pain oriented. Widiger explains that the detached pattern is the presence of either the pain polarity or the absence of an interest in either pleasure or pain. The dependent and independent patterns appear to be representations of the self-other polarity, and the final pattern, ambivalent, represents individuals who can neither be classified as self or other orientated. Essentially, Millon proposed links between Personality Disorder and the polarity patterns (Table 9).

Table 9. The original eight basic personality patterns with respect to the three polarities

Personality Disorder	Polarity Pattern
Avoidant	Active-Detached
Histrionic	Active-Dependent
Antisocial	Active-Independent
Schizoid	Passive-Detached
Dependent	Passive-Dependent
Compulsive	Passive-Ambivalent
Narcissistic	Passive-Independent
Negativistic	Active-Ambivalent

After a number of revisions and additions relating to the progression of the Diagnostic and Statistical Manual (American Psychiatric Association, 1994) and the development of Millon's theory (Millon & Davis, 1996), the relationship between the polarity dimensions and the classification of Personality Disorders was clarified. Millon and Davis (1996) classified each of the 14 Personality Disorders as features on the MCMI-III personality scales according to how they would correlate with respect to each dimensional pole. This is summarised below in Table 10.

Table 10. Millon and Davis' (1996) Description of each Personality Disorder with respect to polarity dimensions.

Personality scale	Polarity dimension					
	Pleasure	*Pain*	*Active*	*Passive*	*Self*	*Other*
Schizoid	Low	Low	Low	High	Average	Low
Avoidant	Low	High	High	Low	Average	Average
Depressive	Low	High	Average	High	Average	Average
Dependent	Average	Average	Low	High	Low	High
Histrionic	Average	Average	High	Low	Low	High
Narcissistic	Average	Average	Low	High	High	Low
Antisocial	Average	Low	High	Low	High	Low
Sadistic	Average	High	High	Low	Average	Low
Compulsive	Low	Average	Low	High	Low	High
Negativistic	Low	Average	High	Low	Average	Low
Masochistic	Low	High	Average	High	Low	Average
Schizotypal	Low	Low	Low	Low	Low	Low
Borderline	Average	Average	Average	Average	Average	Average
Paranoid	Low	Low	Low	Low	Low	Low

As can be seen in Table 10, Millon and Davis' (1996) classification of how each Personality Disorder relates to the polarity dimensions included a number of somewhat illogical relationships. A clear example of this is the classification of the *Borderline* personality style as 'average' across all scales, despite it being notoriously behaviourally

polaric. As such, one may logically assume that the Borderline personality style would show 'High's and 'Low's across the polarity dimensions.

Base Rates and Norms

As mentioned, the MCMI-III employs the use of base rate scores (BR score; range, 0-115; median = 60), created through a transformation of raw scores, in order to assess the probability that a person presents with the presence of a trait (BR scores 75 – 84) or prominence (BR ≥ 85) of a syndrome or disorder. These are raw scores which are transformed to account for base rates of clinical diagnoses and Personality Disorders. For example, by being aware of patients in the normative sample with a diagnosis of Schizoid Personality Disorder and their corresponding raw scores on the schizoid personality scale, it would be possible to establish a base rate cut-off score that would inform the clinician that the individual taking the test would be likely to meet the DSM-IV criteria for Schizoid Personality Disorder (Strack & Millon, 2007). However, this process has been called into question on numerous occasions due to the vague nature that is described within the manual (Millon, Millon, Davis, & Grossman, 1997). A number of criticisms have been made, firstly that the basic raw score frequency distributions are at no point provided, nor are the clinician observed prevalences. This leaves the user unable to understand the transformation process, and consequently unable to critique it. Additionally, the base rates were at no time investigated in a peer-reviewed epidemiological study and were merely *estimated*, described in the manual as 'clinically judged prevalence base rates'. Grove and Vrieze (2009) go as far as to suggest that due to these deficits, the MCMI-III manual does not meet standards for psychological testing as set out by the American Psychological Association. They suggest that instead a Bayes score transformation should be employed, combined with an appropriate base rate for the setting that the individual is in, obtained though clinics, hospitals and other settings.

Further criticisms of the transformation from raw to BR scores relate to the somewhat vague description of the normative sample that the MCMI-III employs. The MCMI-III normative sample consisted of individuals who received mental health services (79%), correctional inmates (8%), and 'other' (including child custody participants and 'high conflict couples'). The manual does not provide the mean and standard deviation from the normative sample, nor is this freely available from the measure's publisher. Millon, Millon, Davis and Grossman (1997) indicate that the MCMI-III was designed for use with individuals evidencing problematic emotional and interpersonal symptoms *or* those undergoing psychodiagnostic evaluation *or* those undergoing professional psychotherapy. Clearly, compared to the normative sample, this leaves a great deal of decision making about the measure's suitability down to the clinician due to the wide-ranging description of the individuals with whom use of the measure would be suitable. Based on the normative sample the MCMI-III should be used with in-patients and out-patients because the data was mainly based on these norms. Indeed this is stressed by Millon et al. (1997), who stated that the MCMI-III is not to be used with normal populations or for purposes other than diagnostic screening or clinical assessment, as normative data and transformation scores for the MCMI-III are based entirely on clinical samples. This is a particularly important consideration when using the MCMI-III due to the use of base rates. Consequently, the meaning of a score at the 100th percentile differs from population to population which again highlights the importance of using the MCMI-III with appropriate populations.

However, the MCMI-III has been utilised within research using non-clinical populations and results from such research have supported Millon and Davis' (1996) view that personality in non-clinical populations is merely the basic personality prototype but in mild form – trait prevalence rather than disorder prevalence (Choca, 2004; Retzlaff & Gibertini, 1987; Strack, 1991, 2005). In support of this, both clinical and non-clinical

populations have essentially the same factor structure on the Personality Disorder scales of the MCMI-III and both groups obtained similar personality structures on the MCMI-III and other measures designed by Millon to assess normal traits (Craig & Olson, 2001; Dyce, O'Connor, Parkins, & Janzen, 1997; Strack, 2005). Essentially, this suggests that the MCMI-III is appropriate for use with various populations, providing the original normative group is considered during selection (Wise, Streiner, & Walfish, 2010).

The Use of the MCMI-III within Forensic Populations

The MCMI-III is commonly used in forensic populations (Archer, Buffington-Vollom, Stredny, & Handel, 2006; Bow, Flens, & Gould, 2010; Bow, Flens, Gould,& Greenhut, 2005; Craig, 2006) with research suggesting that it is the second most widely used personality assessment instrument in both civil and criminal evaluations (Bow, Flens & Gould, 2010; Quinnell & Bow, 2001). Despite the introduction of the Daubert[1] standard (Daubert v. Merrell Dow Pharmaceuticals, Inc., 1993) and the corresponding stringent admissibility of evidence, research suggests that MCMI-III results have been ruled as admissible in Court proceedings for a variety of clinical and forensic issues (Craig, 1999) including cases relating to Intimate Partner Violence, classification of sex offenders, assessment of malingering and deception, evaluation of criminal defendants, determination of disability, personality injury, and child protection hearings (Bow, Flens, & Gould, 2010). Additionally, Retzlaff, Stoner and Kleinsasser (2002) found that the MCMI-III is utilised within custodial settings, often in addition to traditional assessment upon intake as it correlates well with expert judgment in such settings. Accordingly, custodial settings across the state of Colorado use the MCMI-III as a mental-health screen, and any individual scoring

---

[1] Admissibility of evidence within Court proceedings was ruled upon in 1993 when the Daubert standard was introduced (Daubert v Merrell Dow Pharmaceuticals, Inc., 1993). Daubert identified acceptable scientific knowledge as being grounded in methods and procedures of science and consequently the underlying theory must have been tested; subjected to peer review; have a potential error rate; and have a generally accepted underlying theory.

above BR75 on any one of seven scales (schizotypal, borderline, somatoform, post-traumatic stress, thought disorder, major depression, and disclosure) is immediately referred for further mental health evaluation, further demonstrating the wide ranging potential uses for the MCMI-III, including in forensic populations.

However, for any test to be utilised in forensic or clinical settings it is important that it meets the necessary reliability and validity standards.

Reliability

The Standards for Educational and Psychological Testing (American Educational Research Association, 1999) suggest that practitioners should be familiar with reliability, and indeed any evaluation of a scale should consider both its reliability and validity (Wise, Streiner, & Walfish, 2010). Reliability sets an upper limit on the possible criterion-related aspect of validity (Streiner & Norman, 2008). If a scale has poor reliability it is unable to have acceptable levels of criterion-related validities. However, reliability is intrinsically linked to the normed sample, rather than the test itself meaning that clinicians should expect varying reliability coefficients if the tool is used with populations that differ from the normative sample. This should be kept in mind at all times when considering the reliability of the MCMI-III.

a) Internal consistency. The level of internal consistency is a factor of reliability to consider when evaluating a tool. The internal consistency of test scales refers to how well the items in a scale measure an identified construct (Nunnally, 1978; Streiner, 2003). Internal consistency is reported through the use of Cronbach's coefficient alpha (a) (Cronbach, 1951). Henson (2001) reported that a high degree of internal consistency is a particularly desirable characteristic. Providing that the name of the scale reflects the domain that it measures, it allows the clinician to easily interpret the scale score (Wise, Streiner, & Walfish, 2010).

High internal consistency is reflected by a coefficient $a > .80$ and is expected for measures of stable personality characteristics in order to reflect the cohesiveness of the underlying traits (Strack & Millon, 2007). However, Streiner and Norman (2008) cite several authors who suggest that an acceptable internal consistency reliability coefficient for a psychometric instrument ranges between .70 and .90. Strack and Millon (2007) suggest a similar notion, stating that $a > .70$ is acceptable for research instruments and measures of less stable traits in abnormal populations. If Cronbach's (1951) coefficient alpha for internal consistency reliability was lower than .70, this may indicate that more than one psychological construct is actually being measured and that therefore the name of the scale may not accurately reflect the true dimensions of the scale (Wise et al., 2010). It should be noted that acceptable alpha coefficients do not guarantee that the scale items are internally consistent as the alpha level is related to the number of items in a scale (Cortina, 1993; Streiner, 2003). Consequently, if a scale contains 14 or more items it could have a high alpha coefficient whether it is truly internally consistent or not (Streiner, 2003).

The MCMI-III Personality Disorder scales have exhibited good levels of internal consistency, with alpha levels above .80 for the majority of its scales. This is in comparison to other prominent instruments such as the MMPI-II (Butcher, Dahlstrom, Graham, Tellegen, & Kreammer, 1989), which have a number of scales with reliability of below .50 (Dyer & McCann, 2000). However, two of the MCMI-III Personality Disorder scales – Compulsive and Narcissistic – exhibited less than desirable values ($a = .66$ and .67 respectively). It has been hypothesised (Strack & Millon, 2007) that as these scales assess a number of normal healthy attributes infrequently found in samples of psychiatric patients (Choca, 2004), this lower alpha level is due to patients within the normative sample infrequently endorsing such items. This is supported by research utilising the MCMI-III in non-clinical populations, as previously discussed. However, the alpha levels for the Compulsive and Narcissistic scales

should be kept in mind when interpreting results of the MCMI-III due to the level of reliability being unacceptable according to Strack and Millon's own guidelines (2007). As such, results relating to these scales need to be treated with caution.

Discrepancy can also be seen when considering the scale score distributions of the Personality Disorder scales of the MCMI-III. All scales have been shown to have a continuous underlying distribution (Choca, 2004), but score distributions are not normal. Scales typically show a significant positive skew (Strack & Millon, 2007) due to most respondents having low rates of item endorsement and progressively fewer people showing high endorsement rates. The least skewed scale is Narcissistic and the most skewed is Schizotypal (Strack & Millon, 2007). However, this is not necessarily a problematic issue as it can be interpreted in terms of how these constructs relate to mental health, in that in certain circumstances Narcissistic traits can be viewed as adaptive whereas Schizotypal traits can be related to mental health difficulties such as Schizophrenia (Millon, Millon, Davis, & Grossman, 1997).

b) Test – Re-test. A further factor to consider when assessing a tool's reliability is the test-re-test reliability. Test-retest reliabilities can be somewhat difficult to interpret (Wise, Streiner, & Walfish, 2010) as the duration between test administrations introduces a confounding variable. Typically, the more time between test and re-test, the lower the coefficient or stability, and the less time, the higher the stability. MCMI-III test-retest durations are somewhat ambiguous, with Strack & Millon (2007) citing retest intervals between five days and four months within the MCMI-III manual. Nonetheless the median value across Personality Disorder scales is reported as ($r =$) .78, with a range of .58 (Depressive) to .93 (Depressive, Antisocial, Borderline; Craig, 1999).

There are a number of reasons for low coefficients for test-retest reliability across the MCMI-III personality scales that can be postulated. The first of these is that of Axis I comorbidity. Symptoms of Axis I disorders are often, by their very nature, unstable and polaric which can be further affected by medication adherence. As such, if an individual was experiencing different symptomatology across the test-retest period this could skew their interpretation of the MCMI-III items, and of their own thoughts, behaviour, and feelings. Additionally, individuals who experience a significant life event between the initial test period and the subsequent re-test period may interpret the items differently or consider their behaviour to have changed significantly and answer accordingly. Moreover, such an event would also be likely to compound any Axis I difficulties further. A further consideration when interpreting test-retest coefficients is that of awareness of the original test results. An individual may consider the outcome of the original administration of the MCMI-III unsatisfactory or incorrect and as such they may attempt to alter their profile when undertaking the 'retest' administration.

Validity

The initial validation study (Millon, 1994) used 'several hundred clinicians who regularly used the MCMI-II for evaluating and treating adult clients'. Data were collected from 1079 subjects across the United States of America and Canada. From this sample 81 participants were excluded. Of these, 8 were excluded due to incomplete forms and 73 subjects were excluded due to one or more of the invalidity conditions being met. The remaining 998 were divided into two groups. The first group consisted of 600 participants and were used to define the MCMI-III scales and develop base rate scores, and the other 398 were used for cross-validation. Clinician judgements were made without any formal diagnostic interview and were also made at the time of intake, without any further insight from therapeutic sessions. Understandably, this validity study was quickly criticised due to

the limited contact with patients and a lack of structured assessment of Axis I disorders (Retzlaff, 2000), ultimately leading to suggestions that the MCMI-III did not satisfy minimal requirements for validity. However, it was determined that it was, in fact, the validity study rather than the measure itself which was so seriously flawed (Millon, Millon, Davis, & Grossman, 1997; Retzlaff, 2000).

A second validity study was designed (Millon et al., 1997) in order to overcome some of the major limitations of the previous study. In particular, clinicians involved in the 1997 study were required to have extended contact with the participants they rated with at least three therapeutic sessions with each client. The number of hours of contact ranged from three to over 60. Clinicians were explicitly required to only rate subjects they knew well. From the 1994 study to the 1997 study, the average positive predictive power almost tripled in size, the average sensitivity more than doubled in size with Cohen's effect size improving from 'medium' to 'very large'(Saulsman, 2011). As a consequence of this later validity study Millon et al. (1997) suggested that the MCMI-III had a greater positive predictive power and greater level of sensitivity than its predecessor, the MCMI-II. Eleven of the 14 Personality Disorder scales of the MCMI-III are reported to have positive predictive power of above .50 and each of the scales to have negative predictive power of greater than or equal to .94. However, flaws with the second validation study have also been noted (Hesse et al., 2012; Hsu, 2002; Saulsman, 2011).

Hsu (2002) suggested that the 1997 study was flawed in a number of respects, potentially the most serious of which being criterion contamination. Clinicians were instructed not to include patients for whom they had a recollection of MCMI-III scores following the initial 1994 validation study. However, the clinician may have still recalled the scales on which the participant had clinically relevant elevations. Additionally, clinicians were required to complete a form that had participants' MCMI-III scores on as well as the

clinical rating. Although clinicians were instructed not to review BR scores prior to making their own judgements there is no guarantee whether this was adhered to (Saulsman, 2011). Clearly diagnoses should have been made without knowledge of the MCMI-III results in order to achieve accurate validity statistics, a factor considered essential by the American Psychiatric Association (APA, 1994).

Concurrent and convergent validity. In terms of validity the Personality Disorder scales of the MCMI-III have fared well in terms of concurrent (the degree to which the measure correlates with other measures of the same construct that are measured at the same time), convergent (the degree to which the measure is correlated with other measures that it is theoretically predicted to correlate with), and discriminant validity (whether scales that are theoretically supposed to be unrelated are, in fact, unrelated) when compared to other self-report measures of Personality Disorders (Choca, 2004; Craig, 1999; Retzlaff & Dunn, 2003; Rossi, Van den Brande, Sloore, & Hauben, 2003, Strack & Millon, 2007). With each new version of the MCMI tool consistent improvements in validity have been noted, with the best concurrent validity found between the MCMI-III Personality Disorder scales and the MMPI-2 Personality Disorder scales (Somwaru & Ben-Porath, 1995) with the highest correlations found between corresponding Personality Disorder scales (Rossi et al., 2003).

Since the release of the MCMI-III a number of comparisons with other measures that theoretically measure similar constructs have been drawn, allowing further assessment of the convergent validity of the MCMI-III. Rossi, Van den Brande, Sloore and Hauben (2003) suggested that, in general, mean scores on the MMPI-2 Personality Disorder scales tend to be higher than the mean scores on the MCMI-III Personality Disorder scales, suggesting that the MMPI-2 may lead more readily to scale elevations and subsequent prevalence rates. Additionally they found that correlations between corresponding scales (scales theoretically supposed to measure the same construct) on the MCMI-III and MMPI-2 were all higher than

.70, with the exception of the Narcissistic and Compulsive scales. The latter of these in fact correlated in a negative manner (-.30). This finding supported previous research by Craig (1999) who suggested that the MCMI-III Compulsive personality scale shows poor convergent validity with other measures of compulsivity, with patients with a diagnosis of Obsessive Compulsive Personality Disorder not showing significant elevations on this scale. Upon examination of the items relating to this scale it is easy to understand this finding, with it being likely that this scale in fact measures a compulsive style, rather than obsessive compulsive Personality Disorder. Blais et al. (2003) supported this level of convergent validity for the majority of the personality scales with the finding that the MCMI-III Avoidant scale was strongly related to the Personality Diagnostic Questionnaire-Revised (PDQ-R: Hyler & Rieder, 1987) Avoidant scale (r = .78), again suggesting that these scales measure similar underlying constructs.

When considering other individual scales, the anxiety scale (A) is perhaps the most frequently investigated. Blais et al. (2003) found that scale A was mostly strongly associated (*r* = .56) with the Beck Depression Inventory (BDI: Beck & Steer, 1987) rather than the Beck Anxiety Inventory (BAI: Beck & Steer, 1990) (*r* = .49) or the Hamilton Anxiety Rating Scale (HAM-A: Hamilton, 1959) (*r* = .42) with only the BDI acting as an independent predictor of MCMI-III Anxiety scale score ($F(1, 39) = 18.1$, p < .01). Despite this giving some cause for concern, it is perhaps not unexpected, given the link between anxiety and depression (discussed further below). Nonetheless it should still give cause for concern that the scale was not correlated to a greater degree with Anxiety Inventories. However, a more recent study (Hesse, Guldager, & Linneberg, 2012) suggested that scale A had an 'impressive' correlation with the Beck Anxiety Inventory, with over 50% shared variance. This same study found fault with the SS Scale (thought disorder) suggesting that this scale is a measure of general psychopathology, rather than a specific measure of symptoms associated with disordered

thinking. This finding was based on results which suggested that the SS scale had an

unacceptably high proportion of comparison violations (the proportion of cases in which

discriminant validity correlations exceed convergent validity coefficients) when compared to

the psychotic disorder scale on the Mini-International Neuropsychiatric Interview (MINI;

Lecrubier et al., 1997), instead sharing a high degree of its variance with the BAI and the

Montgomery-Asberg Depression Rating Scale (MADRS: Montgomery & Asberg, 1979).

Conversely, Hesse et al. (2012) praised the level of convergent validity between the

delusional disorder (PP) and the psychotic disorder scale on the MINI (0.51). Findings also

suggested that the Major Depression scale (CC) had a correlation of .84 with the MADRS

despite methodological differences (unlike the MCMI, the MADRS is interviewer

rated),which the authors described as 'impressive'.

Discriminant validity. The discriminant validity of the MCMI-III Personality

Disorder scales has produced mixed opinions. Saulsman (2011) suggests that the lack of

over-pathologisation represented by a general lack of elevation on most MCMI-III scales is

supportive of the measure's discriminant validity. However, Rossi, Van den Brande, Sloore

and Hauben (2003) suggest that in fact the discriminant validity of the MCMI-III poses an

issue, due to each of the personality scales (with the exception of the compulsive scale)

having between one and seven positive correlations with other personality scales. However,

Millon, Millon, Davis and Grossman (1997) explain this through a general maladjustment

factor, and it is also likely that it reflects the overlapping nature of the DSM-IV Personality

Disorders. Indeed, changes proposed during the development of the DSM-5 suggest that a

significant flaw with the DSM-IV and the DSM-IV-R was the significant overlap of

symptoms of Personality Disorders, making reliability between clinicians' diagnoses

unsatisfactory. It is, therefore, potentially unfeasible to expect a measure of Personality

Disorder that largely conforms to the DSM-IV not to have significant correlations between

personality scales. This is a view supported by Widiger and Samuel (2005) who discuss that the substantial overlap between scales is consistent with theoretical expectation. They cite Borderline Personality Disorder as an example of this, raising that a valid assessment of Borderline Personality Disorder should not result in the absence of overlap with Dependent, Histrionic, and Narcissistic Personality Disorders.

In terms of the discriminant validity of the MCMI-III clinical syndrome scales, the MCMI-III contains a total of 10 clinical syndrome scales. However, a number of these scales seem to measure overlapping constructs. Despite there being a 'major depression' scale (CC) there is also a dysthymia scale (D). Additional overlap is likely to be found between the anxiety scale (A) and the post-traumatic stress scale (R). A recent study by Hesse, Guldager and Linneberg (2012) found that the greatest support exists for the discriminant validity of the alcohol dependence, drug dependence, major depression and delusion scales. The alcohol and drug dependence scales were not strongly correlated with indicators of general psychopathology, or with other MCMI-III scales. Additionally they suggest that despite significant correlation between the depression and anxiety scales, this is not unwarranted, due to other scales measuring similar constructs also being similarly correlated. This would be consistent with the theoretical model of anxiety and depression (Watson, 2000) and would also support the previously discussed relationship between scale A and the Beck Depression Inventory (BDI). Further, in revisions to the scoring system since the release of the measure the item weighting system has been altered and the number of individual items on each scale was reduced in order to address statistical problems associated with excessive item overlap between scales (Cuevas et al., 2008).

When considering the sensitivity statistics from the 1997 validity study (Millon, Millon, Davis, & Grossman, 1997, p.98), a number of issues have been raised, suggesting that the sensitivity statistics may not truly reflect cohesion between test and clinician.

Sensitivity measures of the MCMI-III were found by Millon to be more than adequate (between 44% and 92% ; Millon et al., 1997, p.98). However, percentages were based on primary or secondary diagnosis without consideration of the clinical relevance. For example, if a clinician deemed a patient to have a primary diagnosis of Narcissistic Personality Disorder and the highest personality scale on the MCMI-III for that patient was Narcissistic, this was deemed accurate *regardless* of the BR score. This means that the BR score could have been 65 and still been deemed accurate if it was the highest scoring personality scale, despite Millon's clinical anchor points being at 75 (trait prevalence) and 85 (disorder prevalence). Further, even if the clinician observed three relevant Personality Disorders only two were taken into account. Rossi, Van den Brande, Sloore and Hauben (2003) highlight that this method of calculating prevalence rates and consequent sensitivity statistics is not ideal due to this distortion in the end statistic produced. Additionally, compared to clinicians, the MCMI-III showed a tendency to under-report Personality Disorder prevalence (i.e. scores of 85 or over) in Antisocial, Histrionic, Narcissistic, Borderline, Negativistic and Compulsive personality types. Conversely, it showed a tendency to over-report trait strengths (scores between 75 and 84) with the exception of Histrionic, Narcissistic, and Compulsive personalities. Similar prevalence rate estimations were found on Avoidant, Schizoid, Paranoid and Schizotypal personality styles.

In evaluating the validity of the MCMI-III it is important to consider the validity conditions that the tool itself employs. The MCMI-III manual (Millon, Davis, & Millon, 1997) gives the following conditions that can invalidate an examinee's test score: Gender is not indicated; the age of the examinee is under 18; the examinee failed to complete 12 or more items; the examinee marked two or more of the validity scale items true; scale X (Disclosure) has a raw score of less than 34 or more than 178; all personality scale BR scores are under 60. The MCMI-III has its own individual validity scales – Disclosure (X),

Desirability (Y), Debasement (Z) and Invalidity (V) (the former three scales are known as 'modifying indices' with the latter scale being the only 'true' validity scale). Additionally, in 2010, a further validity scale was added, the Inconsistency Scale (W) which detects differences in responses to pairs of items. The manual suggests that clinical interpretations can be made from these scales alone. As discussed above if an examinee scores below 34 or above 178 on Scale X then the profile would not be valid. This is because a score below 34 would suggest defensive underreporting, and a score above 178 would suggest an extreme exaggeration of symptoms. Scale Y is a measure of defensive responding, that is the higher the score, the more the person is concealing. BR scores above 75 on this scale suggest that the individual is attempting to present themselves in an overly positive, emotionally stable, manner, otherwise known as 'faking good'. Scale Z is, in essence, opposite to scale Y in that an individual scoring highly on this would have an inclination to deprecate themselves by presenting as having extreme emotional difficulties. This scale has become most closely associated with 'faking bad'.

Particular populations and personality types have been shown to correlate with the validity scales, with it being observed that elevated Narcissistic, Compulsive, and Histrionic personality characteristics are positively correlated with the Desirability scale (Blood, 2008; McCann et al., 2001; Stredny, Archer, & Mason, 2006). In fact, this correlation between these four MCMI-III scales (desirability, narcissistic, compulsive, and histrionic) has so frequently been observed that it has been named 'the normal quartet'. The normal quartet has been observed as occurring in populations that are deemed to be potentially more emotionally healthy than the majority of the normative population. Empirical evidence (Craig, 1997; Craig & Weinberg, 1993) suggests that these personality scales correlate in a positive direction with measures of emotional health and in a negative direction with measures of psychological disturbance. This interpretation would suggest that, despite reaching clinical

scoring thresholds of 75 and 85, individuals with this profile may not, in fact, have a Personality Disorder, and any prevalent traits may be adaptive rather than maladaptive.

However, it should also be noted that this 'normal quartet' has most frequently been found amongst individuals undertaking an assessment that they are *required* to undertake, such as psychological assessment as part of child protection proceedings, or child custody proceedings. It may therefore be wiser to interpret this profile as an individual trying to present themselves in a socially desirable manner (Blood, 2008). Indeed research suggests that despite these scales being designed to measure both personality features and Personality Disorders, when utilising the MCMI-III with individuals that are likely to wish to present themselves in a positive light, due caution should be paid if this 'normal quartet' profile presents itself (Bagby & Marshall, 2004; Halon, 2000; Lenny & Dear, 2009).

Correspondingly Thomas-Peter, Jones, Campbell and Oliver (2002) highlighted that a significant proportion of high Debasement scorers had been found amongst forensic populations and those who desired to be assessed (such as those wishing to seek help whilst serving a custodial sentence) in comparison to those who received a 'required assessment' (such as in child protection cases) who were more likely to remain within the 'normal' debasement range. They suggest that rather than this being a true characterological issue, it is one of impression management. A profile with a very high score on the debasement scale combined with very low scores on the histrionic, narcissistic and compulsive scales is likely to reflect an individual attempting to 'fake bad'. Conversely, those who have high scores on the debasement scale, but also moderate to high scores on the histrionic, narcissistic and compulsive scales are likely to be those individuals who are attempting to manage their impression positively due to their required outcome of the assessment (e.g., those involved in child custody assessments; Thomas-Peter et al., 2000). It is important that clinicians using the MCMI-III are aware of issues such as these, often raised in research conducted after the

publication of the manual, in order to interpret an individual's profile in the most useful, and accurate manner.

When considering the use of the MCMI-III with risk-referred parents specifically, results from an unpublished Masters dissertation by the author (Jones, 2012, unpublished) suggest that of the potentially appropriate Millon personality inventories - the MCMI-III and the Millon Index of Personality Styles (MIPS; Millon, 1994) – the MCMI-III is the more suitable measure for use within parenting capacity proceedings. Findings from the study supported previous research (Blood, 2008) to suggest that the MCMI-III does not over-pathologise individuals being assessed within such a context. Further, with the relatively recent introduction of the non-gendered BR transformations, gender bias, particularly extreme elevations on the 'normal quartet' (discussed above) for females seems to have abated. The results from the sample used in the study suggest that a parenting capacity sample is more similar to a 'clinical' population, than a 'non-clinical' population on the MCMI-III, which was also supported by profiles on the MIPS. Despite the mean profile of the sample within the Jones (2012) study showing no clinical elevations (MCMI-III BR elevations above 85), 91.1% of the individual MCMI-III profiles showed elevations above 75, suggesting that the majority of parenting capacity litigants reach a degree of psychopathology making them suitable candidates for assessment through the MCMI-III.

Scale V (Validity) consists of three items – 65 ('I flew over the Atlantic 30 times last year'), 110 ('I was on the front cover of several magazines last year'), and 157 ('I have not seen a car in the last ten years'). These items were deemed 'improbable' by Millon (1994) and consequently two or more 'true' responses to these items will mean that the results are invalid, and one true response will give the results 'questionable validity'. These items further highlight that clinicians must be aware of nuances present within the MCMI-III as, for example, long term prisoners may not have seen a car in the past ten years, and business

people may indeed have flown over the Atlantic 30 times. Indeed, despite claims by Millon, Millon, Davis, and Grossman (1997) that the validity scale is highly sensitive to random or confused responding, probability theory suggests that approximately 12% of randomly responding examinees would give zero true responses, indicating a falsely valid result, and 38% of random responders will have one true response, indicating a profile with questionable validity (Charter, 2000). Based on this, it is possible that 50% of randomly responding examinees profiles could be interpretable based on the validity scale. Charter and Lopez (2002) examined this further to ascertain the likelihood that randomly generated profiles would be valid for interpretation. A computer program generated 5000 tests for each combination of gender, inpatient/ outpatient, and duration possibilities with a total of 40,000 tests. Of these 12% had zero true responses and 38% had one true response. There were no profiles with an invalid score on Scale X and all profiles had at least one personality scale scoring 60 or above. This meant that approximately 50% of randomly generated profiles were valid for interpretation (Charter & Lopez, 2002). As such, clinicians must remain vigilant for the possibility of random responding by individuals and ensure not to rely on the probability of the profile being invalid (whether due to the thresholds being met on the validity scales or the personality scales all being under 60).

Finally, a further consideration when assessing the validity of the scale is whether it can be considered a true measure of DSM-IV (APA, 1994) disorders and syndromes. Whether or not the MCMI-III is a valid measure of DSM-IV (APA, 1994) Personality Disorders is a matter of dispute. As previously discussed, the MCMI-III was developed in accordance with Millon's theory of Personality Disorders (Millon & Davis, 1996) and this does not exactly correspond to the DSM-IV diagnostic criteria nor is it operationalized by the Research Diagnostic Criteria (Spitzer, Endicott, & Robins, 1978). However, despite this, Rossi, Van den Brande, Sloore and Hauben (2003) highlight that the similarity between DSM

and the MCMI was strengthened in the latest version (MCMI-III) as Millon had a role in formulating the DSM-IV (APA, 1994) and the MCMI-III combined items reflecting Millon's theory with items that correspond to DSM-IV criteria. Further, Strack and Millon (2007) contend that normative data were obtained from patients with known DSM-IV diagnoses, which supports the use of the MCMI-III as a tool for identifying DSM-IV Personality Disorders. Additionally, Dyer and McCann (2000) assert, in a review responding to criticism of the initial 1994 validation study, that following the second validation study (1997) the MCMI-III has content validity against the DSM-IV that is superior to any other major personality instrument (citing a number of instruments such as the MMPI, MMPI-2, SCID, PDQ-R, and PDE). This is supported by recent findings from Hesse, Guldager and Linneberg (2012) who suggest that the MCMI-III clinical syndrome scales have good convergent validity with DSM-IV Axis I disorders. Additionally, Widiger (1999) proposes that in fact the MCMI-III is more a measure of DSM-IV criteria for Personality Disorder than it is a measure of Millon's Personality Disorder classification. This is supported by findings by Piersma, Ohnishi, Lee, and Metcalfe who also suggest that the MCMI-III item construction and selection procedures are explicitly designed to be consistent with DSM-IV criteria, despite the MCMI-III manual presuming Millonian theory as its base.

Conclusion

Despite some criticism relating mainly to methods of development, the MCMI-III does seem to show good levels of validity, and adequate levels of reliability. The overriding message gained from a review of the literature surrounding the MCMI-III is that the tool should be used according to general 'best practice'. This means that it is used in triangulation with information gained during clinical interview and information gathered from external sources and that it is not used with populations deemed unsuitable. Providing these guidelines are followed, the MCMI-III appears to be a useful and wide ranging tool for clinicians

wishing to assess personality difficulties and clinical syndromes. Clearly there are some deficits with the tool, such as the ability of random responders to go undetected and the vulnerability of the tool to manipulation. However, providing clinicians use the MCMI-III data as appropriate, in triangulation with other data sources and following clinical interview with the individual, these deficits should not prove confounding to the degree that they would utterly devalue the tool. As such, clinicians should remain particularly vigilant when certain profiles are revealed, particularly that of elevated scores on the desirability, compulsive, narcissistic, and histrionic scales.

With regard to the personality scales, the tool appears to show the highest validity for the 'eccentric' type personality structure (including the avoidant scale) and this is perhaps due to the nature of the self-report instrument. Eccentric personality characteristics feature a high degree of rigidity and a lack of a need to present oneself in a desirable manner. This may therefore make individuals with such a personality structure less likely to wish to manipulate their profiles, and also make their mood less labile than those with impulsive or dependent personality characteristics. It appears that the MCMI-III is more a measure of DSM-IV disorders and syndromes than it is a measure of Millon's personality classification, save for Millon's theory that 'normal' (non-clinical) personality is merely a 'mild' form of clinical-level personality. However, this does not seem to affect the validity or reliability of the tool and, if anything, appears to make it available for wider use and greater validity. However, this does not come without criticism, due to wide reaching critique of the current DSM-IV (and DSM-IV-R) system. Essentially, the MCMI-III is a measure of a flawed construct, and many of the criticisms and findings regarding its shortcomings in fact relate to the construct which it measures. Until a major revision to the current diagnostic system is released, and revisions are made accordingly to other tools, the MCMI-III remains at the forefront of its field, popular amongst clinicians with few viable alternatives.

CHAPTER 3

A Research Project Examining the Role of Personality in Parents Who Maltreat Their

Children

Child maltreatment is associated with developmental deficits in childhood, adolescence, and throughout an individual's lifespan and is related to impairment in a number of domains, including social, physical, behavioural, and emotional functioning (Afifi & MacMillan, 2011). Clearly, this impairment also has an impact on societal costs with the World Health Organisation (2006) estimating that societal costs associated with child maltreatment are substantial. Child maltreatment has been shown to contribute to morbidity and mortality and is linked not only to mental health problems but also to physical health problems and decreased quality of life (Afifi & MacMillan, 2011).

Behaviours linked with child maltreatment that are thought to decrease an individual's quality of life include maladaptive behaviour such as aggression and violence, high-risk sexual behavioural, mental health problems, substance abuse, and adult relationship problems including Intimate Partner Violence (IPV) (Lansford et al., 2007; Widom, Czaja, & Dutton, 2008; Widom, DuMont, & Czaja, 2007). Adults with a history of maltreatment during childhood frequently display difficulties in relationships with peers and partners, a limited capacity to empathise with others, and inadequate parenting skills. Consequently the cycle of maltreatment risk is often perpetuated by those who were maltreated (De la Vega et al., 2011). Similarly, the cycle of violence hypothesis is often accepted by professionals, with the suggestion that victimised children will be at increased risk of perpetrating violent behaviour later in life, therefore again perpetuating the cycle with their own children and consequently future generations (Forsman & Langstrom, 2012). This cycle has been suggested even in children that were neglected or sexually abused, with these children, in combination with those that were physically abused, more likely to be convicted of a violent offence in adulthood (Forsman & Langstom, 2012). Further, the recurrence of maltreatment has been linked to both violent and sexually based offending during adolescence (Hamilton, Falshaw, & Browne, 2002).

The cycle of maltreatment is thought to possess a number of mediators, including that of mental health problems. Child maltreatment is linked to mental health problems, and suicidal behaviour. In turn, experiencing Mental Health difficulties during adulthood is a known risk factor for intergenerational child maltreatment (Dixon, Browne, & Hamilton-Giachritsis, 2005; Sroufe, 2005). Both historical and more recent research has noted a link between childhood maltreatment and subsequent negative outcomes during childhood and adulthood including Mental Health difficulties of both an Axis-I and Axis-II domain. Johnson, Cohen, Brown, Smailes and Bernstein (1999) found documented cases of childhood neglect to be linked with increased symptoms of antisocial, avoidant, borderline, dependent, narcissistic, paranoid, and schizotypal Personality Disorder in early adulthood. The same study found childhood sexual abuse to be linked with a higher prevalence of borderline, histrionic, and depression Personality Disorder symptoms. Alink, Cicchetti, Kim and Rogosh (2009) highlighted that maltreated children show dysregulated emotional patterns, particularly in response to inter-adult anger, compared to non-maltreated children.

Personality Linked to Child Maltreatment

Children of parents with mental health and personality difficulties are at increased risk of multiple negative outcomes, including child maltreatment and removal from the parents' care (Huntsman, 2008; Royal College of Psychiatrists, 2011). As discussed in Chapter 1 a wide variety of personality characteristics have been found to be linked to child maltreatment but there was no conclusive link found between specific personality types and specific forms of maltreatment. Indeed, significant deficits in safety and stability were found between children of mothers with and without mental illnesses and Personality Disorders, as well as variability across diagnoses (Kohl, Jonson-Reid, & Drake, 2009).

The majority of the studies reviewed in Chapter 1 reported an association between Impulsive Sensation Seeking personality traits and parents who maltreat their children in one way or more. Of such traits, Narcissistic personality was most often associated with children maltreatment (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Fukushima, Iawasaki, Aoki, & Kikuchi, 2006; Wiehe, 2003). A number of explanations for this have been suggested, each surrounding the inflated but fragile ego of those with narcissistic personality. Such explanations have included the theory that perpetrators of child maltreatment with narcissistic personality interpret aversive behaviour of the child as an attack aimed towards them, provoking them to react to the child in a hostile manner – either through withdrawing care and affection, or through perpetrating physical abuse (Fontaine & Nolin, 2012; Fukushima et al., 2006). Another contemporaneous theory is that those with narcissistic personality traits expect the child to fill a pseudo-adult role and, when the child fails to provide the parent with what they believe to be an appropriate level of emotional comfort, attention, and care, they react in a manner which leads to child maltreatment (Wiehe, 2003). Similarly, a number of studies also showed Antisocial personality traits in those who perpetrate maltreatment (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Pinsoneault & Ezzo, 2012). Both those with antisocial personality traits and those with narcissistic personality traits often fail to identify appropriately with the needs of others, leading them to become pre-occupied with their own needs, again leading to child maltreatment (Bogacki & Weiss; Fontaine & Nolin, 2012; Pinsoneault & Ezzo, 2012). Another Impulsive Sensation Seeking personality trait which has been linked to child maltreatment within the literature is that of Borderline Personality. It was suggested (Newman & Stevenson, 2005) that this was not only due to the polaric nature of mood and emotion associated with borderline personality but also the increased risk of exposure to substance abuse, suicide attempts, and relationship conflict.

A number of personality traits of an 'eccentric' manner were also noted to be linked with child maltreatment, with Paranoid Personality specifically being highlighted in two of the highest quality studies reviewed in Chapter 1 (Ezzo, Pinsoneault, & Evans, 2007; Fontaine & Nolin, 2012). Although Eccentric personality types were not frequently reported in the historical literature, more recent evidence has reported traits such as mistrust in motivations of others and reduced capacity for social interaction in those who maltreat their children (Esbec & Echeburua, 2011; Fontaine & Nolin, 2012). Such traits are also likely to be exacerbated by intervention from appropriate authorities if child maltreatment is suspected.

In addition to literature findings as discussed in Chapter 1, findings have also suggested that risk factors linked to perpetrators of neglect (but not to perpetrators of physical abuse) were related to self-concept, including concept of personal adequacy, competency and resilience (Stith, et al., 2009). This, therefore, perhaps suggests that those who neglect their children are more likely to be reliant on others (including their children and partner) for their level of self-worth, rather than reliant upon themselves, characteristics that are typical of a dependent personality. It is also worth noting that evidence of an association between compulsive personality traits and child maltreatment has been found (Blood, 2008; Fontaine & Nolin, 2012). However, the context of the research within which such results were found should be considered, due to the majority being conducted with those parents involved in care-proceedings, as is the case with the current research. Thus, when interpreting these results, one should remain mindful of the biases this may cause within these research participants. Individuals involved in care proceedings may be liable to attempt to present themselves in a socially desirable manner (Blood, 2008), which may confound the results of any personality inventory. Indeed, as discussed in Chapter 2 (critique of the MCMI-III) both child custody and parenting capacity litigants often demonstrate a particular pattern of elevations on the Histrionic, Narcissistic, and Compulsive personality scales of the MCMI-III

(Blood, 2008; Halon, 2001; Lampel, 1999; Lenny & Dear, 2009; McCann et al., 2001; Stredny, Archer, & Mason, 2006), often referred to as the 'normal trio' (or 'normal quartet' when also including a raised Desirability scale score).

Lampel (1999) suggested that this 'normal trio' elevation may be due to parents attempting to present themselves in a positive light, an assertion supported by Halon (2000) who suggested that this pattern of elevations could reflect a normal level of defensiveness, given the situation. However, it must also be considered that this pattern of elevations does actually represent personality traits and pathology in child custody and parenting capacity litigants. It has also been raised that these particular scales (Histrionic, Narcissistic and Compulsive) also correlate in a positive direction with measures of emotional health and in a negative direction with measures of psychological disturbance (Craig, 1997; Craig & Weinberg, 1993; McCann et al., 2001), suggesting perhaps that the elevation is a reflection of the use of this clinical personality measure in only a pseudo-clinical context.

Other Factors Linked to Child Maltreatment

It is important to consider a number of factors that have also been linked to Child Maltreatment alongside personality as these can often act as mediators or moderators alongside atypical personality characteristics. For example, there is an increasing amount of research being conducted on the link between child maltreatment and IPV. It seems logical that a relationship would exist between the two; however the extent of this link has been much debated.

Early research by Straus (1990) suggested that, in a sample of married parents, fathers who were frequently physically abusive towards their wives had higher rates of physically abusing their children, whereas mothers who were physically abused were more than twice as likely to maltreat their children than those mothers not assaulted by their husbands. Research

on Police responses to child abuse and IPV (Browne & Hamilton, 1999) found that in 46.3% of Child Protection Unit (CPU) referrals spousal abuse was known to be occurring in the family. Further, 89% of the siblings of the children referred to the CPU had a history of maltreatment, compared to a rate of 47% in families with no spouse abuse ($p < .001$).

These findings were supported by more recent research (Taylor, et al., 2009), which suggested that mothers who experienced abuse from their partner were more likely to use psychological and physical aggression against their children and were also more likely to 'spank' their children. Additionally such mothers were twice as likely to report at least one instance of neglect towards their children. Further, they reported higher levels of parenting stress and had higher odds of experiencing symptoms of clinical depression. It is of note that this research was based on mothers' self-report, which increases the likelihood of multiple forms of measurement bias such as attempting to present in a socially desirable manner, or recall bias. However, the self-report measure they employed had been validated and recommended as a measure of child maltreatment risk (World Health Organization, 2006). Furthermore, the relationship between IPV and child maltreatment remained significant (Taylor et al.) even after depressive symptoms and parenting stress were statistically controlled for. Correspondingly a recent review (Dixon & Graham-Kevan, 2011) cited an estimated overlap rate of non-fatal maltreatment of 30-60% in samples of children and/or female victims of IPV. Additionally, IPV has been evidenced to mediate the intergenerational cycle of child maltreatment (Dixon & Graham-Kevan, 2011; Dixon, Browne, & Hamilton-Giachritsis, 2005) further highlighting the pertinence of understanding the link between IPV and Child Maltreatment.

However, this is not to suggest that all parents who engage in, or are victims of, IPV go on to maltreat their children. One factor which may mediate this pathway is the severity of the IPV experienced. Hartley (2004) suggested that significantly more families who engaged

in 'severe' IPV had a confirmed allegation of lack of supervision than those who experienced 'less severe' IPV. However, interestingly, a converse result was found regarding parents who had physically abused their children, with almost twice as many parents in the 'less severe' IPV group having a confirmed allegation of physical abuse compared to those in the 'severe' IPV group. This perhaps suggests that those parents who engage in 'severe' IPV fail to supervise their children appropriately due to the focus being placed upon the adult relationship and therefore absorbing the parents' attention, whereas those who engage in 'less severe' IPV do so as a symptom of a generally maladaptive home milieu, that includes abuse of some form towards all members of the family. Indeed it is accepted that chronic maltreatment predicts more negative outcomes than isolated maltreatment (Johnson, Kohl & Drake, 2012) and it may be that 'less severe' IPV occurs on a more regular basis than 'severe' IPV but there is no empirical data to evidence this.

Maltreatment chronicity is in fact an important factor to consider in that the number of maltreatment reports (rather than the severity) is a significant predictor of negative outcomes in both childhood and later life (Johnson, Kohl, & Drake, 2012). Correspondingly, results of a considerable amount of research suggest that the number of maltreatment occurrences is a significant and reliable predictor of a range of negative outcomes, including behavioural and emotional disturbance and hospitalisation (Anda et al., 2006; Cohen, Perel, DeBellis, Friedman, & Putnam, 2002). Such results consistently explain more variance than simply considering reported maltreatment versus non reported maltreatment. This finding is also supported with evidence from Cohen, Foster et al., (2013) who report that greater levels of childhood maltreatment are linked with greater levels of adult personality pathology.

Another factor which has been linked to child maltreatment is that of gender. This has been much debated due to the potential sampling biases that are often inherent within research samples, in that mothers feature much more widely, due to them often being the

main care giver. Conversely, fathers are often presumed to be the main perpetrator of physical abuse (Hartley, 2004). In a review of fatal child maltreatment that took place in the UK between 2005 and 2009, 27 of 48 (56%) cases within which a child had died due to severe physical assault the father or father figure was found to be the lone perpetrator, compared to 2 of 48 cases (4%) in which the mother was found to be the lone perpetrator (Sidebotham, Bailey, Belderson & Brandon, 2011). Similar results were presented within a review of child maltreatment fatalities in children under the age of 5 from the USA. This review utilised a wide ranging sample of 1374 child deaths reported to the National Violence Death Reported System in the USA. Results highlighted a large gender discrepancy in that fathers (or father substitutes) were found to have perpetrated 52.8% of the Abusive Head Trauma injuries (198/375) that resulted in death compared to 11.2% that was perpetrated by mothers (or mother substitutes); other perpetrators accounted for the remaining 36% of Abusive Head Traumas. The gender discrepancy for other physical abuse that resulted in death was less clear cut with 38.2% perpetrated by fathers (63/165) and 27.9% perpetrated by mothers (46/165). Conversely, the gender discrepancy for child deaths caused by neglect broadens, with 58.3% of deaths (35/60) perpetrated by mothers and 11.7% (7/60) perpetrated by fathers (Klevens & Leeb, 2010). Whilst this discrepancy may reflect the difference in primary care-giver, there was no data given to suggest that mothers were the sole carers in the majority of the cases of neglect.

Cyclical Maltreatment

It is widely believed by professionals that a parent with a history of maltreatment in their own childhood has an elevated risk of their own child being maltreated, whether by themselves, or another caregiver. Several studies demonstrate this elevated risk (Dixon, Browne, & Hamilton-Giachritsis, 2005; Egeland et al., 2002; Pears & Capaldi, 2001; Sidebotham et al., 2001), although they also acknowledge that the majority do not follow this

pattern, and simultaneously documented rates of cyclical maltreatment vary widely. One seminal prospective study (Dixon et al., 2005) estimated that the proportion of parents with a history of maltreatment whose children were subsequently referred to the authorities due to maltreatment was 6.7% by the age of 13 months (the cut off age), compared to 0.4% of parents without a history of maltreatment. This is much lower than the historical but often quoted 33.3% (Kaufman & Zigler, 1989) found within high risk groups, such as young single mothers.

Regarding cyclical physical abuse, Berlin, Appleyard and Dodge (2011) found that mothers' experiences of childhood physical abuse, but not neglect, directly predicted offspring victimisation. Over twice as many mothers with a history of childhood physical abuse had offspring who became victims of maltreatment by the age of 26 months compared to mothers who had not experienced childhood physical abuse. Such results are easily comparable to the theory of the 'cycle of violence' as previously discussed. When considering such results it is also important to consider findings that rates of cyclical maltreatment increase with the length of longitudinal follow up (Egeland et al., 2002) and there is therefore the potential that rates of cyclical maltreatment would have increased if the participants in the study were surveyed after a greater period of time. Conversely, mothers' childhood neglect did not significantly predict their child's victimisation. However, as discussed, figures of cyclical maltreatment may have increased after the 26 month cut off. Additionally, a further potentially confounding variable in this study is that fathers were not included in the study meaning that the results are not generalisable to the general 'maltreated' population.

When considering the evidence for the phenomena of cyclical maltreatment it is also important to consider that the vast majority of those adults who were maltreated as children do not go on to abuse their own offspring (Dixon, Browne, & Hamilton-Giachritsis, 2005).

106

Berlin, Appleyard and Dodge (2011) found that 17% of mothers in their study experienced physical abuse and went on to maltreat their own child by the age of 26 months. This therefore means that 83% of mothers who experienced physical abuse did not have offspring who became victims of maltreatment. Thus, although parental history of experiencing maltreatment as a child may increase the risk of subsequent maltreatment, it by no means ensures it.

Childhood Adversity Outcomes

When considering the outcomes of childhood maltreatment it is important to consider the differing types of maltreatment (i.e., physical abuse; neglect; sexual abuse) as their own individual entities. This is particularly in order not to eliminate some potentially fundamental evidence which may not otherwise be highlighted due to statistical methods as outcomes have been evidenced to differ according to type and severity of abuse, as discussed below.

In a recent study by Cohen et al., (2013) all types of maltreatment significantly correlated with adult personality pathology. Historically, despite neglect being the most common form of child maltreatment, relatively little has been known about the long term consequences it may have on a child (Bradshaw, Donohue, Cross, Urgelles, & Allen, 2011). However, there is evidence to suggest that neglect may have the most significant effect on adult functioning. Following statistical control for education, neglect and emotional abuse were the only significant predictors of adult personality pathology (Cohen et al., 2013). This supports more historical evidence (Grilo & Masheb, 2002) who found that, in a sample consisting of psychiatric outpatients, emotional abuse was the only category of child maltreatment that was significantly associated with personality pathology in adulthood. Similarly, Berenbaum et al. (2008) found that childhood neglect and emotional abuse were particularly strong predictors of psychopathology in adulthood. Conversely, de la Vega, de la

Osa, Ezpeleta, Granero, & Domenech (2011) suggested that the experience of physical abuse during childhood was not significantly linked to adult psychopathology and maladaptive behaviour. They suggested that this is potentially because the fear of being physically hurt has fewer psychological consequences than other forms of maltreatment during which an individual's self-concept is threatened. This hypothesis was also supported by Cohen et al. (2013) who suggested that physical neglect is a particularly damaging form of neglect as it causes a greater threat to an individual's psychological integrity.

Childhood sexual abuse has been evidenced to have a longitudinal association with Personality Disorder in adulthood, with those who experience sexual abuse during childhood being at increased risk of experiencing a Personality Disorder in later life. Moran et al. (2011) found that repeated childhood sexual abuse was associated with a dramatic increase in the likelihood of an individual experiencing a Personality Disorder in adulthood (32% of individuals who experienced more than one episode of childhood sexual abuse under the age of 16 met the criteria for a Personality Disorder at the age of 24 compared to 18% of those who experienced no childhood sexual abuse), and this association remained consistent across all Personality Disorders (Cluster A: 21 % compared to 7%; Cluster B: 16% compared to 7%;Cluster C: 18% compared to 9%). It is important to note, however, that such an association was only found within those individuals who had experienced multiple episodes of abuse, with a much less consistent relationship evidenced between individuals who had experienced a single episode of childhood sexual abuse and Personality Disorder in adulthood (23% of those who experienced a single episode under the age of 16 met criteria for a Personality Disorder by the age of 24). Such findings correspond with previously discussed evidence that the greater the occurrences of maltreatment, the more likely that the individual will develop psychopathology in adulthood (Johnson, Kohl, & Drake, 2012).

Similar evidence has been found by Higgins (2004) who suggested that not only is the link between childhood maltreatment and adult psychopathology related to the number of occurrences of maltreatment, but also the variety of maltreatment. Those individuals who experienced 'multitype maltreatment' (individuals who have been exposed to more than one category of maltreatment; Higgins & McCabe, 2000) were more likely to experience a greater degree of impairment in adult life. Higgins (2004) highlights that a significant proportion of maltreated individuals do not just experience repeated episodes of one type of maltreatment, but are prone to experiencing multiple types of maltreatment. Finkelhor, Ormrod and Turner (2007) presented similar findings and suggested that recent experiences of multiple types of maltreatment acted as an important predictor of trauma symptoms, substantially eclipsing the influence of individual experiences. Additionally, Finkelhor et al. (2007) discussed that negative outcomes of multiple types of maltreatment included becoming more vulnerable to being further maltreated.

Such findings are important to consider in the context of research as it may therefore be imperative to question whether the apparently discrete categories of maltreatment are truly distinct, or whether it may in fact be of greater utility to consider them as aspects of a single construct. Analogous findings were presented by Rogosch and Cicchetti (2004) who suggested that children frequently experience both physical abuse and neglect and that those who do are particularly vulnerable to developing maladaptive personality. Further, the very nature of physical abuse and neglect suggests that emotional abuse is likely to occur simultaneously. Whilst this means emotional abuse is rarely categorised as the main reason for referral, it is of note due to the adverse consequences previously discussed (Grilo & Masheb, 2002). Indeed, more recent findings (Scott, Varghese, & McGrath, 2010) suggest that maladaptive family functioning should be addressed holistically, rather than targeting individual forms of maltreatment. Such suggestions were based on findings that the

association between childhood adversity and mental illness increased with each addition of a maltreatment type.

Although a number of negative outcomes of experiencing maltreatment during childhood have been discussed, it is also important to note that the majority of individuals who experience such adversity do not develop mental health problems or behavioural difficulties (Afifi et al., 2011). There is a breadth of literature on this resilience exhibited by the vast majority of childhood maltreatment survivors which is outside the remit of this research but regardless it is important to consider that there are a number of 'protective' factors for these resilient children, including a stable family environment, and supportive relationships outside of the family home. Additionally, there is some evidence that particular personality traits aid resilience (Afifi & MacMillan, 2011).

As demonstrated within this chapter and Chapter 1 there is a relative lack of recent research relating to the personality of parents who maltreat their children (excluding sexual abuse). This is particularly notable when comparing the quantity of research, and therefore amount of empirical evidence, in this field to research regarding the potential personality outcomes related to experiencing child maltreatment, and research regarding personality profiles of a wide range of offenders, including sexual offenders and violent offenders. This may potentially be due to difficulties in accessing the population in that child maltreatment is often dealt with within the family courts, meaning that perpetrators are less accessible. This is particularly the case when the perpetrated maltreatment is of a neglectful nature rather than a physical nature, due to the standard of evidence the Crown Prosecution Service requires in order to prosecute.

However, as demonstrated within Chapter 1, in the past 5 years there has been a relative resurgence of personality research relating to parents who perpetrate maltreatment.

This is potentially due to heightened media awareness of the topic, particularly since new legislation in the United Kingdom (UK) meaning that UK family courts can be potentially made open to the media. Yet this still leaves a comparative dearth of research regarding a topic which is used in assessments that contribute towards the assessment of risk that an individual poses towards their child. Clearly, relevant, appropriate, and accurate research is needed to inform the assessments of clinicians. An increase in empirically gathered data on personality in parents who perpetrate maltreatment could aid development of risk assessment tools related to the topic and also improve the reliability of current risk assessment. Further, it would improve the ability of clinicians working within the field to base and support their clinical opinion with empirical evidence which is not only ethically important but crucial if working within a legal framework (e.g., justifying opinion in a Court arena).

Aims and Objectives of the Current Study

The objective of the current study is to explore the personality styles of parents who maltreat their children. This will be achieved through addressing a number of questions;

1) Are particular personality traits present in parents who maltreat their children?

2) Do the personality traits of parents who maltreat their children differ according to the type of maltreatment perpetrated?

3) What is the impact of negative experiences during childhood and within relationships on personality traits in parents who maltreat their children?

Method

Participants

The participants in this study were 90 individuals completing parenting capacity assessments conducted by Forensic Psychologists at a private company specialising in providing legal reports for the Family Courts. All participants were assessed between February 2010 and May 2011 and their reports completed, with cases finalised and closed. Participants were a subsection of all individuals assessed during this time period, randomly selected according to inclusion/exclusion criteria. All underwent personality testing through the administration of the MCMI-III and MIPS. All participants also completed an IQ measure, either the WASI (Wechsler, 1999), WAIS-III (Wechsler, 1997) or WAIS-IV (Wechsler, 2008) instrument. Any participant who scored below 70 (therefore being in the 'extremely low', or 'learning disabled' category of intelligence) was excluded, due to the possibility that they would not have fully comprehended the personality assessment. No formalised reading test was routinely conducted. However, the clinician was present during test administration and was available to answer questions.

The sample consisted of 53 females (59%) and 37 (41%) males from a wide geographical area (i.e. counties spanning England and Wales). The mean age for the entire sample was 30 years (SD = 8.05; range 18–60), with females having a mean age of 28.47 (SD = 7.89; range 18-48) and males having a mean age 32.16 (SD = 7.87; range 19-60).

Participants had between zero (e.g., when all children have been removed from the family home) and six children living in the family home with them (M = .80; 17.8% had one or more children remaining in the family home) and between zero (e.g., when no children have been removed from the family home) and five children living away from the family home (M = 1.5). Of the male participants, 30% (n = 11) were not in a relationship at the time

of their assessment, 54% (n = 20) were in a relationship with the parent of their child(ren), and 16% (n = 6)were in a new relationship. Of the females 41% (n = 22) were not in a relationship, 38% (n= 20) were in a relationship with the parent of their child(ren) and 21% (n = 11) were in a new relationship. Regarding perpetrated maltreatment, 63.3% (n = 57) participants perpetrated neglect, 13.3% (n = 12) participants perpetrated physical abuse, 8.9% (n = 8) participants failed to protect their child(ren) from maltreatment perpetrated by another, 8.9% (n = 8) participants perpetrated neglect and physical abuse and 5.6% (n = 5) participants perpetrated neglect or physical abuse combined with a failure to protect. Of those participants who failed to protect, 75% (n = 6) were victims of Intimate Partner Violence (IPV). Of those who perpetrated neglect or physical maltreatment in combination with failure to protect, 100% (n = 5) were victims of IPV. As previously discussed, any individual who had perpetrated sexual abuse was excluded from the sample, regardless of whether they also perpetrated an additional form of maltreatment.

Procedure

Data were collected from information obtained during assessments of 'risk referred' parents involved in child care proceedings. The MCMI-III was administered to all subjects as part of a battery of tests completed during a psychological risk assessment of 'risk referred' parents involved in childcare proceedings by Forensic Psychologists. All participants took the English version of the MCMI-III. Standard administration procedures were adhered to, and were conducted by, or under the supervision of, a Consultant Psychologist. The MCMI-III was computer scored using the Q-Local software produced by Pearson Assessments using the 'profile' reports (which include scores only, and no interpretation). The Author was provided with an anonymised version of the final Court report, an anonymised summary of the case papers and an anonymised version of the MCMI-III scores. Basic demographic data were collected along with relevant information from each individual's history; both from self-

report (within the anonymised Court report) and historical file information (taken from an anonymised summary of the case papers). Personality data was taken from base rate (BR) scores and validity scale data was also taken. Data from other scales was not taken. All files were anonymised prior to the Author collecting the data from them, following which the Author constructed a database with the information collected.

Maltreatment data was categorised according to the causes for referral and as such was not subjective in terms of the Author's interpretation. Childhood adversity was categorised from a combination of data provided prior to the assessment (e.g., if the individual had been in the care of the Local Authority and the reasons for this, or if the individual had been subject to the Child Protection Plan) and also self-report data. Whilst self-report data does increase the risk of bias, it is also an essential source of data due to the importance of an individual's own interpretation of their childhood. Similarly, involvement in IPV (whether as victim or perpetrator) was taken from a combination of information received prior to the assessments (including, but not limited to, hospital visits and police calls) and self-report. Where based on self-report alone, the involvement was categorised as 'alleged' rather than 'confirmed'. Descriptive statistics (e.g., age, number of children in the home) were again taken from a combination of information received prior to the assessment and self-report, depending on category of data (i.e., age was taken from date of birth provided prior to the assessment but relationship status was taken from self-report in most cases).

Measures

As outlined in Chapter 2, **The Millon Clinical Multiaxial Inventory, Third Edition (MCMI-III)** is based on Millon's personality theory and corresponds closely with criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV;

American Psychiatric Association [APA], 1994). It is a self-report inventory that consists of 175 true/false items and provides information on personality functioning, Personality Disorders, and a range of indicators of mental health difficulties and has been described as *'an ambitious attempt to evaluate both Axis I clinical syndrome and Axis II Personality Disorders'* (Rogers, 2003). The MCMI is an evolving assessment tool, and is currently in its third edition, reflecting developments in theory, research data, and professional nosology. The MCMI-III has employed several innovative ideas in personality assessment in that it is normed on a 'clinical' population. This is in contrast to other major tests of psychopathology, within which participants are compared to 'normal' individuals. However, as will be discussed below, this normative sample has caused controversy due to the use of the MCMI-III in varying populations, such as those taking part in parenting capacity evaluations (Rogers, Salekin, & Sewell, 1999). The MCMI-III uses base rate (BR)scores (range, 0-115; median = 60), created through a transformation of raw scores, in order to assess the probability that a person presents with a clinical elevation - the presence of a trait (BR scores 75 – 84) or a prominence (BR ≥ 85) of a syndrome or disorder.

Ethics

The research was granted ethical approval by the Science, Technology, Engineering and Mathematics Ethical Review Committee at the University of Birmingham on the 25th April 2012 (application no. ERN_12-0372). The methodology was also reviewed by the Jurisdictional and Operational Support Manager in the Family Operations Team, HM Courts & Tribunals Service (HMCTS), who confirmed with the secretariat to the Data Access Panel that neither HMCTS nor the President's approval was required for this research. Individuals being assessed completed a consent form at the time of their assessment relating both to their participation in the assessment and their consent to use of their anonymised data for research

purposes. Individuals were aware that consenting to their data being stored anonymously was voluntary and would not affect the outcome of their assessment.

Treatment of Data

The present study used a known-group, archival, non-experimental design. This form of design allowed for the comparison of historical data of a particular group, in this case 'risk referred' parents who were assessed within childcare proceedings. A power analysis was conducted, using G*Power (Buchner, Erdfelder, & Faul, 1997) which indicated that a minimum sample size of 90 was required at $p < .05$.

Several statistical analyses were employed within the current study. Initially, descriptive statistics were used in order to describe the demographic information of the sample. Percentage distributions were used as well as frequencies when applicable. A number of T-tests, Multivariate Analysis of Variance (MANOVA) and Multivariate Analysis of Covariance (MANCOVA) and associated post-hoc testing were also employed alongside Chi-Square analysis, utilising BR scores from the MCMI-III and/or demographic data. MANCOVAs were run where necessary in order to control for covariates. Where appropriate, bonferroni corrections were applied in order to reduce the chance of Type 1 errors.

<center>**Results**</center>

Descriptive Data

Data relating to gender and age and relationship status can be found within the description of participants in the 'method' section. Means and corresponding standard deviations regarding MCMI-III personality scale BR scores can be found in Table 14. Correlations between modifying indices and personality scales can be found in Table 11.

Data relating to the prevalence of perpetrated maltreatment types, participants'
experiences of childhood adversity and varying involvement in IPV can be found in tables
16, 28, and 31 respectively.

Response Style

Correlations between modifying indices and personality scales can be found in Table
11.

Table 11: Correlation between modifying indices and personality scales.

Modifying Index	*Disclosure*	*Desirability*	*Debasement*
Personality Scale			
Schizoid	.381	-.563	.436
Avoidant	.613	-.681	.616
Depressive	.787	-.582	.745
Dependent	.709	-.502	.578
Histrionic	-.398	.817	-.490
Narcissistic	.317	.615	-.470
Antisocial	.547	-.235	.375
Compulsive	-.493	.713	-.597
Negativistic	.738	-.391	.630
Masochistic	.722	-.536	.689
Schizotypal	.606	-.525	.623
Borderline	.739	-.528	.648
Paranoid	.638	-.427	.536

In terms of gender differences in response style, an ANOVA yielded a significant
overall effect of gender on validity indices scale scores (Wilk's Lamda = .903 (*3, 86*), p =
.031). Univariate testing showed that the significant effect applied to the Desirability and
Debasement scales only, with post hoc (Bonferroni) analysis showing that males had

significantly higher Desirability scale scores than females (p = .022), and that females had significantly higher Debasement scale scores than males (p = .008).

Further examination of the Desirability and Debasement scales yielded a number of significant results. A MANOVA comparing high (>74) and 'normal' (<75) scorers on the Desirability ('Y') scale showed a significant overall effect (Wilk's Lamda = .392 *(16, 73)*, p < .001) on personality scale scores. Results of post hoc (Bonferroni) testing are presented in Table 12 below.

Table 12: A comparison of personality scale scores for high and normal Y scale scorers and associated F scores.

	High Y (>74) (n = 28)		'Normal' Y (<75) (n = 62)			*p* level
	Mean	SD	Mean	SD	*F*	(*df* = 1, 88)
Schizoid	36.11	25.62	**59.95**	17.08	27.17	.000
Avoidant	33.43	24.37	**65.53**	23.25	25.69	.000
Depressive	34.54	24.77	**64.31**	24.51	28.27	.000
Dependent	44.96	19.67	**65.55**	21.64	18.44	.000
Histrionic	**66.89**	11.79	44.29	16.60	41.92	.000
Narcissistic	**61.04**	11.03	47.52	15.15	17.94	.000
Antisocial	53.18	21.08	**65.48**	15.33	9.76	.002
Compulsive	**72.79**	12.64	49.92	13.86	55.33	.000
Negativistic	41.68	21.94	**58.68**	24.01	10.18	.002
Masochistic	32.04	28.17	**55.32**	27.55	13.60	.000
Schizotypal	32.04	27.30	**55.23**	20.86	19.56	.000
Borderline	33.21	22.72	**56.92**	24.45	18.93	.000
Paranoid	44.00	26.21	**59.11**	20.68	8.69	.004

Bold figures are higher; all calculations adjusted for multiple comparisons (Bonferroni).

A MANOVA comparing high (>74) and 'normal' (<75) scorers on the Debasement ('Z') scale showed a significant overall effect (Wilk's Lamda ($16, 73$) = .431, p < .001) on personality scale scores. Post hoc (Bonferroni) testing is presented in table 13 below.

Table 13: A comparison of personality scale scores for high and normal Z scale scorers and associated F scores.

	High Z (>74) (n = 10)		'Normal' Z (<75) (n = 80)			*p* level
	Mean	SD	Mean	SD	*F*	(*df* = 1, 88)
Schizoid	**63.20**	24.50	51.20	22.45	2.491	.118
Avoidant	**75.00**	11.50	53.11	28.34	5.797	.018
Depressive	**84.60**	10.51	51.35	27.44	14.30	.000
Dependent	**81.80**	10.16	56.31	22.63	12.27	.001
Histrionic	33.10	18.44	**53.60**	17.34	12.26	.001
Narcissistic	34.70	17.99	**54.85**	13.62	16.38	.000
Antisocial	**72.70**	14.92	60.28	18.10	4.33	.040
Compulsive	34.80	13.50	**59.81**	15.48	23.80	.000
Negativistic	**78.10**	11.08	50.30	24.07	12.90	.001
Masochistic	**79.30**	7.59	44.18	29.06	14.36	.000
Schizotypal	**71.70**	11.99	45.05	25.02	10.95	.001
Borderline	**81.70**	8.14	45.52	24.91	20.64	.000
Paranoid	**69.80**	4.54	52.49	24.18	5.06	.027

Bold figures are higher; all calculations adjusted for multiple comparisons (Bonferroni).

Gender

A comparison of scale means between male and female participants was made using an MANOVA (Table 14). The MANOVA yielded a significant overall effect of gender on personality scores (Wilk's Lamda ($14, 75$) = 0.739, p = .041). Post hoc (Bonferroni) analysis showed that males had higher mean scores than females on the Narcissistic, Histrionic and Compulsive scales. However, only the Histrionic scale was significantly higher (F(1, 88) =

6.509, p = .012). In contrast, females scored significantly higher than males on Avoidant (F(1, 88) = 7.728, p =.007), Schizoid (F(1, 88) = 6.331, p = .014), Depressive (F(1, 88) = 4.914, p =.029), and Masochistic (F(1, 88) = 16.290, p <.001) scales.

Table 14: A comparison of female and male mean MCMI-III BR Scores and associated F scores

	Females (*n* = 53)		Males (*n* = 37)		Total Sample (*n* = 90)		*F*
Scales	Mean	*SD*	Average	*SD*	Average	*SD*	
Validity Indices							
Disclosure	58.49	*19.64*	52.11	*17.92*	55.87	*19.11*	2.470
Desirability	**59.21**	***17.53***	**67.89**	***17.20***	**62.78**	***17.82***	**5.430**
Debasement	**51.87**	***20.39***	**40.35**	***18.94***	**47.13**	***20.50***	**7.367**
Cluster A							
Schizoid	**57.45**	***20.13***	**45.49**	***24.89***	**52.53**	***22.86***	**6.331**
Schizotypal	51.83	*24.95*	42.54	*25.16*	48.01	*25.32*	2.999
Paranoid	57.79	*21.41*	49.57	*25.67*	54.41	*23.47*	2.727
Cluster B							
Narcissistic	49.92	*16.30*	54.30	*13.53*	51.72	*15.29*	1.797
Histrionic	**47.28**	***18.07***	**57.11**	***17.84***	**51.32**	***18.52***	**6.509**
Borderline	52.81	*26.48*	44.86	*25.49*	49.54	*26.23*	2.023
Antisocial	60.42	*16.10*	63.43	*20.80*	61.66	*18.13*	0.601
Cluster C							
Avoidant	**62.11**	***25.536***	**46.14**	***28.59***	**55.54**	***27.82***	**7.728**
Dependent	61.89	*23.750*	55.22	*21.65*	59.14	*23.02*	1.847
Compulsive	55.68	*16.707*	59.11	*17.75*	57.03	*17.13*	0.921
Other							
Depressive	**60.42**	***26.73***	**47.35**	***28.60***	**55.04**	***28.11***	**4.914**
Negativistic	56.53	*22.31*	48.89	*27.17*	53.39	*24.57*	2.131
Masochistic	**57.81**	***26.42***	**34.14**	***28.72***	**48.08**	***29.64***	**16.290**

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

Due to the significant differences found between genders on the desirability (t(88) = 2.330, p = .022) and debasement (t(88) = -2.714, p = .008) scales, and also the significant

difference found in mean age between genders (t(88) = 2.186, p = .031), a MANCOVA was run with age, desirability and debasement factored in as covariates. Age was found to have no significant interaction with personality scale scores (F (1, 88) = 0.708, p > .05), however both desirability and debasement had a significant interaction with personality scale scores (Desirability F (1, 88) = 21.230, p < .001; Debasement F (1, 88) = 10.038, p <. 001). Following this revised MANCOVA, the multivariate outcome was much weaker (F (1, 88) = .1.109, p > .05). In terms of the univariate outcome, post hoc tests (Bonferroni corrected) showed that significant differences in personality scale scores between genders remained only on the Antisocial (F (1, 85) = 4.317, p = .041) and Masochistic scales (F (1, 85) = 6.137, p = .015) with females having significantly higher scores on the Masochistic scale and males having significantly higher scores on the Antisocial scale. Revised F scores are presented in Table 15 below.

Table 15: A comparison of female and male mean MCMI-III BR Scores and associated F scores following inclusion of covariates.

	Females (n = 53)		Males (n = 37)		F
Scales	Mean	*SD*	Mean	*SD*	
Cluster A					
Schizoid	57.45	*20.13*	45.49	*24.89*	2.362
Schizotypal	51.83	*24.95*	42.54	*25.16*	0.006
Paranoid	57.79	*21.41*	49.57	*25.67*	0.017
Cluster B					
Narcissistic	49.92	*16.30*	54.30	*13.53*	0.030
Histrionic	47.28	*18.07*	57.11	*17.84*	1.251
Borderline	52.81	*26.48*	44.86	*25.49*	0.773
Antisocial	**60.42**	***16.10***	**63.43**	***20.80***	**4.317**
Cluster C					
Avoidant	62.11	***25.536***	46.14	*28.59*	1.250
Dependent	61.89	*23.750*	55.22	*21.65*	0.196
Compulsive	55.68	*16.707*	59.11	*17.75*	3.060
Other					
Depressive	60.42	*26.73*	47.35	*28.60*	0.016
Negativistic	56.53	*22.31*	48.89	*27.17*	0.033
Masochistic	**57.81**	***26.42***	**34.14**	***28.72***	**6.137**

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

Perpetrated Maltreatment

As can be seen in Table 16 the most frequently perpetrated maltreatment type within the current sample is neglect, with over 75% of both the male and female samples perpetrating neglect. A higher percentage of the male sample perpetrated physical maltreatment, whereas the perpetration of failure to protect was exclusively female. The percentage of those participants who perpetrated cyclical maltreatment was similar in both males and females.

Table 16. Prevalence of perpetrated maltreatment types within the current sample.

Maltreatment perpetrated	Males (*n*, %) (*n* = 37)	Females (*n*, %) (*n* = 53)
Perpetrated neglect current	*28* (75.5)	*41* (77.4)
Perpetrated neglect past	*5* (13.5)	*14* (26.4)
Perpetrated physical current	*12* (32.4)	*9* (17)
Perpetrated physical past	*0* (0)	*3* (5.7)
Failed to protect current	*0* (0)	*13* (24.5)
Failed to protect past	*0* (0)	*6* (11.3)
Cyclical Maltreatment	*5* (13.5)	*8*(15.1)

The percentages of participants (whole group) who reached clinical significance (BR ≥ 75) on personality scales where the mean scale score was 60 or above are presented in Table 17. Participants who perpetrated both neglect and physical maltreatment had the highest percentage of clinically significant scores on associated raised scales. Where noted 'current' refers to the form of maltreatment that the current proceedings were relating to and 'past' refers to maltreatment that was perpetrated and addressed in previous proceedings. Cyclical maltreatment refers to a parent perpetrating the same form of maltreatment that they themselves experienced as a child.

Table 17. Perpetrated maltreatment elevated personality scale percentages

Current Maltreatment Perpetrated *(n)*	*Personality Scale Elevated (mean scale score)*	**Percentage of Participants who scored >75** **% (n)**
Neglect *(57)*	*Avoidant (60.60)*	43.9 *(25)*
	Dependent (61.89)	35.1 *(20)*
	Antisocial (61.86)	19.3 *(11)*
Physical *(12)*	*Histrionic (60.83)*	25 *(3)*
Failure to Protect *(8)*	*Histrionic (61.50)*	12.5 *(1)*
	Narcissistic (62.75)	25 *(2)*
	Compulsive (60.38)	25 *(2)*
Neglect & Physical *(8)*	*Depressive (64.88)*	75 *(6)*
	Dependent (68.88)	50 *(4)*
	Antisocial (72.13)	25 *(2)* (62.5% scored >70 but <75)
	Negativistic (67.88)	37.5 *(3)* (75% scored >70 but <75)
	Borderline (68.13)	62.5 *(5)* (62.5% scored >70 but <75)
Neglect & FTP *(4)*	*Schizoid (64.75)*	0 (75% scored >60 but <75)
	Avoidant (69.75)	25 *(1)* (75% scored >60 but <75)
	Depressive (61.75)	50 *(2)*
	Antisocial (69.00)	25 *(1)* (100% scored > 60)
	Masochistic (73.00)	50 *(2)*
	Paranoid (60.50)	0 (75% scored between 64 & 69)

Validity indices means split by perpetrated maltreatment are presented in table 18.
When split by perpetrated maltreatment a MANCOVA showed no significant main effect of
maltreatment type on validity indices scores ($p > .05$).

Table 18: Mean validity indices scores (BR) for whole sample separated by maltreatment perpetrated (N=90).

Scales	Total Mean (SD) (*n* = 90)	Neglect Mean (SD) (*n* = 57)	Physical Mean (SD) (*n* = 12)	FTP Mean (SD) (*n* = 8)	Neglect & Physical Mean (SD) (*n* = 8)	[Neglect or Physical] & FTP Mean (SD) (*n* = 5)
Disclosure	55.87 (19.11)	57.91 (17.91)	40.75 (17.09)	55.37 (23.71)	63.13 (21.27)	58.00 (14.12)
Desirability	62.78 (17.82)	61.82 (19.55)	67.75 (13.89)	71.00 (12.02)	55.25 (17.93)	60.60 (5.37)
Debasement	47.13 (20.50)	47.51 (19.60)	35.83 (19.37)	42.87 (25.09)	60.50 (21.49)	55.40 (13.01)

Table 19: Mean MCMI-III personality scale scores (BR) for whole sample separated by maltreatment perpetrated (N=90).

Scales	Total Mean (SD) (*n* = 90)	Neglect Mean (SD) (*n* = 57)	Physical Mean (SD) (*n* = 12)	FTP Mean (SD) (*n* = 8)	Neglect & Physical Mean (SD) (*n* = 8)	[Neglect or Physical] & FTP Mean (SD) (*n* = 5)
Cluster A						
Schizoid	57.45 (20.13)	56.19 (20.80)	43.92 (21.76)	29.00 (25.92)	58.87 (25.66)	59.00 (16.76)
Schizotypal	51.83 (24.95)	48.95 (26.22)	32.17 (28.09)	52.25 (16.39)	56.38 (21.27)	52.80 (22.82)
Paranoid	57.79 (21.41)	58.79 (20.91)	36.33 (28.83)	52.50 (19.86)	54.13 (28.19)	51.40 (22.32)
Cluster B						
Narcissistic	49.92 (16.30)	49.21 (15.05)	58.08 (10.35)	62.75 (18.07)	51.13 (18.70)	48.40 (9.40)
Histrionic	47.28 (18.07)	47.77 (19.31)	60.83 (14.21)	61.50 (9.89)	**53.75 (21.93)**	48.80 (13.03)
Borderline	52.81 (26.48)	49.58 (26.90)	35.75 (28.06)	49.38 (19.44)	68.13 (17.852)	52.80 (22.82)
Antisocial	60.42 (16.10)	61.86 (18.23)	55.83 (21.38)	56.50 (15.57)	72.13 (13.05)	64.80 (17.24)
Cluster C						
Avoidant	62.11 (25.54)	60.60 (28.18)	36.17 (23.21)	45.63 (22.98)	55.38 (29.34)	60.60 (21.76)
Dependent	61.89 (23.75)	61.89 (21.94)	42.00 (25.56)	59.38 (13.84)	68.88 (25.67)	53.00 (23.36)
Compulsive	55.68 (16.71)	58.40 (17.50)	58.67 (17.41)	60.38 (16.43)	41.00 (12.83)	57.80 (9.65)
Other						
Depressive	60.42 (26.73)	55.79 (25.83)	43.92 (31.51)	50.00 (27.22)	64.88 (39.64)	65.60 (26.44)

Negativistic	56.53 (22.31)	55.56 (22.00)	37.67 (27.62)	49.63 (23.29)	67.88 (29.643)	49.20 (28.16)
Masochistic	57.81 (26.42)	**52.09 (27.73)**	21.25 (27.31)	43.50 (26.26)	50.00 (35.93)	71.00 (13.06)

Bold = significantly higher than at least one other maltreatment type; All calculations adjusted for multiple comparisons (Bonferroni).

Personality means separated by maltreatment perpetrated are presented in Table 19. The personality scales of the groups of perpetrators were compared using a MANCOVA controlling for age, desirability and debasement scores. Maltreatment type yielded a significant main effect (Wilk's Lambda = 0.289, F (70, 327.327.83) = 1.393, p = .030) on personality scale scores. Significant results of the univariate analysis are presented in Table 20, which shows a significant effect of maltreatment type on the Avoidant, Histrionic, Masochistic, and Paranoid scale scores ($p < .05$).

Table 20: Significant results of univariate analysis

Significant Personality Scale	*Df*	*F*	*Sig*
Avoidant	5, 81	3.003	.015
Histrionic	5, 81	3.420	.007
Masochistic	5, 81	3.314	.009
Paranoid	5, 81	2.922	.018

Post hoc (Bonferroni) analyses of the univariate outcomes (adjusted for age, desirability and debasement scores) showed that perpetrators of neglect had significantly higher scores on the Masochistic scale than perpetrators of physical maltreatment (p = .048) and that perpetrators of neglect and physical maltreatment had significantly higher scores on the Histrionic scale than perpetrators of neglect alone (p = .046).

Mean MCMI-III BR scores for females and males, split by the perpetrated abuse type, are found in Table 21 and 22 respectively. For females, the mean BR score of 75.80 on the

Borderline scale for those who perpetrated neglect and physical maltreatment reached clinical significance (BR ≥ 75). For females, a further clinically significant BR score was found on the Dependent scale (BR=81.60), again for females who perpetrated both neglect and physical abuse. This finding was somewhat mirrored in the male population in that the only two mean MCMI-III scores that approached clinical significance were found within those that perpetrated both neglect and physical abuse, reaching an average of 71.33 on the Histrionic scale, and 70.33 on the Antisocial scale. However, these scores did not reach statistical significance ($p > .05$).

For females, a large number of subclinical elevations (BR ≥ 60 but <75) were noted across all maltreatment types and personality scales. This was less the case in the male population, with the only subclinical elevations appearing on the Cluster B scales, most notably on the Antisocial scale on which all categories of perpetrated abuse reached a mean BR score of above 60.

Table 21: Mean MCMI-III personality scale scores (BR) for females separated by maltreatment perpetrated (N=53).

Scales	Total Mean (SD)	Neglect Mean (SD)	Physical Mean (SD)	FTP Mean (SD)	Neglect & Physical Mean (SD)	[Neglect or Physical] & FTP Mean (SD)
Cluster A						
Schizoid	57.45 (20.13)	**63.22 (13.23)**	47.00 (12.12)	29.00 (25.92)	**70.80 (13.83)**	59.00 (16.76)
Schizotypal	51.83 (24.95)	51.75 (27.59)	21.33 (32.72)	52.25 (16.39)	66.60 (2.70)	52.80 (22.82)
Paranoid	57.79 (21.41)	61.41 (20.89)	26.67 (23.63)	52.50 (19.86)	68.20 (6.06)	51.40 (22.32)
Cluster B						
Narcissistic	49.92 (16.30)	46.94 (14.98)	61.00 (14.93)	62.75 (18.07)	43.40 (19.86)	48.40 (9.40)
Histrionic	47.28 (18.07)	42.22 (17.96)	67.67 (10.79)	61.50 (9.89)	43.20 (20.07)	48.80 (13.03)
Borderline	52.81 (26.48)	53.47 (27.98)	16.67 (16.86)	49.38(19.44)	75.80 (7.56)	52.80 (22.82)
Antisocial	60.42 (16.10)	60.34 (15.29)	43.00 (19.98)	56.50 (15.57)	73.20 (12.38)	64.80 (17.24)
Cluster C						
Avoidant	62.11 (25.54)	67.63 (25.66)	30.67 (14.22)	45.63 (22.98)	73.60 (13.37)	60.60 (21.76)
Dependent	61.89 (23.75)	64.00 (22.48)	28.00 (40.95)	59.38 (13.84)	81.60 (14.22)	53.00 (23.36)
Compulsive	55.68 (16.71)	55.16 (17.52)	71.67 (8.51)	60.38 (16.43)	38.80 (6.98)	57.80 (9.65)
Other						
Depressive	60.42 (26.73)	61.44 (23.97)	25.33 (36.36)	50.00 (27.22)	86.40 (12.30)	65.60 (26.44)
Negativistic	56.53 (22.31)	57.41 (20.59)	36.33 (6.35)	49.63 (23.29)	81.40 (13.22)	49.20 (28.16)
Masochistic	57.81 (26.42)	59.72 (25.68)	25.00 (35.79)	43.50 (26.26)	75.00 (10.63)	71.00 (13.06)

Bold text = significantly higher than at least one other maltreatment type

Table 22: Mean MCMI-III personality scale scores (BR) for males separated by maltreatment perpetrated (N=37).

Scales	Total Average (SD)	Neglect Average (SD)	Physical Average (SD)	Neglect & Physical Average (SD)
Cluster A				
Schizoid	45.49 (24.884)	47.20 (25.171)	42.89 (24.685)	39.00 (31.23)
Schizotypal	42.54 (25.162)	45.36 (24.44)	35.78 (27.55)	39.33 (29.54)
Paranoid	49.57 (25.67)	55.44 (20.88)	39.56 (30.93)	30.67 (37.22)
Cluster B				
Narcissistic	54.30 (13.53)	52.12 (14.93)	57.11 (9.35)	64.00 (6.08)
Histrionic	57.11 (17.84)	54.88 (18.96)	58.56 (15.00)	71.33 (11.68)
Borderline	44.86 (25.49)	44.60 (25.12)	42.11 (28.79)	55.33 (24.66)
Antisocial	63.43 (20.80)	63.80 (21.59)	60.11 (21.13)	70.33 (16.80)
Cluster C				
Avoidant	46.14 (28.59)	51.60 (29.20)	38.00 (25.99)	25.00 (21.00)
Dependent	55.22 (21.65)	59.20 (21.37)	46.67 (19.51)	47.67 (28.68)
Compulsive	59.11 (17.75)	**53.20 (23.91)**	38.11 (32.22)	45.33 (28.81)
Other				
Depressive	47.35 (28.60)	48.56 (26.79)	50.11 (29.36)	29.00 (45.92)
Negativistic	48.89 (27.17)	53.20 (23.91)	38.11 (32.22)	45.33 (38.81)
Masochistic	34.14 (28.72)	42.32 (27.68)	20.00 (26.43)	8.88 (11.15)

Bold text = significantly higher than at least one other maltreatment type

When split by gender, a MANCOVA (controlling for age, desirability and debasement scores) showed no significant main effect of maltreatment type on personality scale scores for either gender (p >.05).

Whilst the MANCOVA showed no significant main effect, results of the univariate analyses are worth consideration due to their potential clinical significance. Significant results of the univariate analyses are presented in Tables 23 and 24, which shows a significant

effect of maltreatment type on the Histrionic, Compulsive, and Masochistic scale scores (p <

.05) for males and on the Schizoid scale score for females (p <.05).

Table 23: Significant results of univariate analysis for males

Significant Personality Scale	Df	F	Sig
Histrionic	2, 31	3.660	.037
Compulsive	2, 31	4.798	.015
Masochistic	2, 31	4.472	.020

Table 24: Significant results of univariate analysis for females

Significant Personality Scale	Df	F	Sig
Schizoid	4, 45	5.018	.002

Post hoc (Bonferroni) analyses of the univariate outcomes (adjusted for age,

desirability and debasement scores) showed that male perpetrators of neglect had

significantly higher scores on the Compulsive scale than male perpetrators of neglect and

physical maltreatment (p = .028) and that female perpetrators of neglect, and of neglect and

physical maltreatment had significantly higher scores on the Schizoid scale than females who

failed to protect (p = .001; p = .024 respectively).

Perpetration of Polyabuse

A comparison of personality scale means between perpetrators of polyabuse and

perpetrators for single abuse was made. Personality scale score means split by polyabuse or

single abuse perpetrated are presented in Table 25.

Table 25: A comparison of MCMI-III BR Scores and associated t scores between those who perpetrated polyabuse and those who perpetrated no polyabuse.

	Polyabuse Perpetrated (*n* = 13)		No Polyabuse Perpetrated (*n* = 77)		F
Scales	Mean	*SD*	Mean	*SD*	
Cluster A					
Schizoid	58.92	*21.86*	51.45	*22.98*	1.190
Schizotypal	55.92	*18.17*	46.68	*26.19*	1.492
Paranoid	53.08	*25.13*	54.64	*23.35*	0.049
Cluster B					
Narcissistic	50.08	*15.34*	52.00	*15.37*	0.174
Histrionic	51.85	*18.15*	51.23	*18.64*	0.012
Borderline	62.23	*20.49*	47.40	*26.60*	3.661
Antisocial	69.31	*14.57*	60.36	*18.43*	2.760
Cluster C					
Avoidant	57.38	*25.83*	55.23	*28.30*	0.066
Dependent	62.77	*25.11*	58.53	*22.77*	0.374
Compulsive	**47.46**	***14.12***	**58.65**	***17.16***	**4.953**
Other					
Depressive	65.15	*33.91*	53.34	*26.89*	1.987
Negativistic	60.69	*29.44*	52.16	*23.66*	1.348
Masochistic	58.08	*30.38*	46.39	*29.38*	1.744

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

A MANOVA showed no significant overall effect of group status (polyabuse or single abuse perpetrator) on personality scale scores (Wilk's Lambda (*14, 75*) = 0.830, p =.375). However, univariate testing yielded a significant effect of group status on the Compulsive scale (p = .029). Post hoc testing (Bonferroni) showed that Polyabusers had significantly lower scores than single abuse perpetrators on the Compulsive scale.

Mean personality scale scores split by gender and perpetration of poly or single abuse are presented in Tables 26 and 27. When split by gender a MANCOVA (controlling for Age, Desirability and Debasement scores) yielded no significant overall effect (Male Wilk's

Lamda (*14, 19*) = 0.529, p = .345; Female Wilk's Lamda (*14, 35*) = 0.835, p = .920).

However, univariate testing showed a significant effect of group status (poly or single abuse

perpetrator) on the Histrionic, Compulsive and Masochistic scales for male perpetrators ($p <$

.05). Post hoc (Bonferroni) analyses of the univariate outcomes showed that males who

perpetrated polyabuse had significantly higher scores on the Histrionic scale (p=.045) and

significantly lower scores on the Compulsive (p = .021) and Masochistic (p = .047) scales

than those who perpetrated single abuse. No significant effects were found following

univariate analysis for the female sample.

Table 26: A comparison of MCMI-III BR Scores and associated t scores between females who perpetrated polyabuse and females who perpetrated no polyabuse (N = 53).

	Polyabuse Perpetrated (*n* = 10)		No Polyabuse Perpetrated (*n* = 43)		F
Scales	Mean	*SD*	Mean	*SD*	
Cluster A					
Schizoid	64.90	*15.77*	55.72	*20.79*	0.160
Schizotypal	60.90	*11.28*	49.72	*26.82*	0.020
Paranoid	59.80	*17.78*	57.33	*22.33*	0.244
Cluster B					
Narcissistic	45.90	*14.88*	50.86	*16.63*	0.410
Histrionic	46.00	*16.22*	47.58	*18.64*	1.892
Borderline	64.30	*20.09*	50.14	*27.26*	1.064
Antisocial	69.00	*14.83*	58.42	*15.89*	1.665
Cluster C					
Avoidant	67.10	*18.35*	60.95	*26.98*	0.282
Dependent	67.30	*23.65*	60.63	*23.87*	0.164
Compulsive	48.30	*12.78*	57.28	*17.18*	0.131
Other					
Depressive	76.00	*22.32*	56.79	*26.58*	0.527
Negativistic	65.30	*26.80*	54.49	*20.97*	0.124
Masochistic	73.00	*11.42*	54.28	*27.72*	0.845

All calculations adjusted for multiple comparisons (Bonferroni).

Table 27: A comparison of MCMI-III BR Scores and associated t scores between males who perpetrated polyabuse and males who perpetrated no polyabuse (N = 37).

	Polyabuse Perpetrated (*n* = 3)		No Polyabuse Perpetrated (*n* = 34)		F
Scales	Mean	*SD*	Mean	*SD*	
Cluster A					
Schizoid	39.00	*31.26*	46.06	*24.74*	0.080
Schizotypal	39.33	*29.54*	42.82	*25.24*	0.099
Paranoid	30.67	*37.23*	51.24	*24.49*	2.875
Cluster B					
Narcissistic	64.00	*6.08*	53.44	*13.72*	1.609
Histrionic	**71.33**	***11.68***	**55.85**	***17.86***	**4.361**
Borderline	55.33	*24.65*	43.94	*25.71*	1.649
Antisocial	70.33	*16.80*	62.82	*21.22*	0.467
Cluster C					
Avoidant	25.00	*21.00*	48.00	*28.65*	2.683
Dependent	47.67	*28.68*	55.88	*21.35*	0.238
Compulsive	**44.67**	***21.13***	**60.38**	***17.21***	**5.860**
Other					
Depressive	29.00	*45.92*	48.97	*27.04*	2.737
Negativistic	45.33	*38.81*	49.21	*26.70*	0.021
Masochistic	8.33	*11.150*	36.41	*28.75*	4.264

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

Childhood Adversity

With regards to experiences of childhood adversity within the current sample, percentages of all adversities experienced by females were higher than the national average, as represented in Table 28. This higher rate was particularly notable in a number of areas, namely childhood experiences of witnessing IPV, time spent in care, experience of neglect, and experience of sexual abuse. The male sample was closer to the national average for experiences of childhood adversity although remained higher than the national average on

most domains. The most notable difference between the current sample and the UK national average for both males and females was the percentage of participants who had spent time in local authority care. Conversely, the percentage of males in the current sample who experienced multiple childhood adversity was lower than the national average.

Table 28. Experiences of childhood adversity in the current sample

Childhood adversity	Males *n* (%)	Females *n* (%)	UK national average %*
Childhood IPV witness	*7* (18.9)	*17*(32.1)	15%
Spent time in care	*9* (24.3)	*20* (37.7)	0.67
Neglect experienced	*6* (16.2)	*10* (18.9)	9
Physical abuse experienced	*4* (10.8)	*8* (15.10)	11
Sexual abuse experienced	*5* (13.5)	*10* (18.9)	4.8
Multiple childhood adversity	*4* (10.8)	*11* (20.8)	15%

*figures according to the NSPCC in 2013, children aged 0 – 18.

There were no significant differences between personality scale scores of different types of abuse experienced in childhood, even when split by gender (p > .05). Further, a MANOVA showed no significant overall effect of experiencing polyabuse during childhood on personality scale scores (p > .05). However, univariate testing yielded a significant effect of the experience of polyabuse during childhood on the Avoidant, Depressive, Masochistic, and Borderline scale scores (p < .05) as demonstrated in Table 29.

Table 29. Significant results of univariate analysis comparing personality scales of those who did and did not experience polyabuse during childhood.

Significant Personality Scale	Df	F	Sig
Avoidant	1, 88	5.181	.025
Depressive	1, 88	6.080	.016
Masochistic	1, 88	4.665	.033
Borderline	1, 88	4.895	.030

Post hoc (Bonferroni) analyses of the univariate outcomes showed that those who had experienced polyabuse during childhood had significantly higher scores on the Avoidant ($p = .025$), Depressive ($p = .016$), Masochistic ($p = .033$), and Borderline ($p = .030$) scales than those who did not experience polyabuse during childhood (all Bonferroni corrected for multiple comparisons, $p < .05$). Notably, in addition, the majority of the means in the polyabuse experienced group reached subclinical significance ($BR \geq 60$) whereas only one (Antisocial) reached this in the no polyabuse experienced group.

No adjustment for covariates was utilised within the analysis relating to experiencing polyabuse during childhood as pre-analysis testing showed no significant difference in age or validity indices between groups ($p > .05$).

Table 30: A comparison of MCMI-III BR Scores and associated F scores between participants who experienced polyabuse during childhood and participants who did not experience polyabuse during childhood (N = 90).

	Polyabuse Experienced (*n* = 15)		No Polyabuse Experienced (*n* = 75)		F
Scales	Mean	*SD*	Mean	*SD*	
Cluster A					
Schizoid	60.93	*15.63*	50.85	*23.767*	2.472
Schizotypal	49.13	*27.70*	47.79	*25.01*	0.035
Paranoid	62.60	*20.02*	52.77	*23.89*	2.221
Cluster B					
Narcissistic	47.87	*15.48*	52.59	*15.24*	1.146
Histrionic	46.53	*15.93*	52.28	*18.95*	1.206
Borderline	**62.93**	***22.78***	**46.87**	***26.19***	**4.895**
Antisocial	67.73	*13.82*	60.44	*18.72*	2.046
Cluster C					
Avoidant	**70.13**	***16.72***	**52.63**	***28.75***	**5.181**
Dependent	64.80	*25.96*	58.01	*22.41*	1.087
Compulsive	56.07	*20.75*	57.23	*16.38*	0.057
Other					
Depressive	**70.93**	***20.268***	**51.87**	***28.48***	**6.080**
Negativistic	57.87	*20.75*	52.49	*25.30*	0.595
Masochistic	**62.87**	***26.00***	**45.12**	***29.59***	**4.665**

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

An additional finding relating to childhood adversity was that of a significant relationship between having spent time in care as a child and the perpetration of neglect. A chi-square test was performed and a significant relationship was found between spending a period of time in care as a child and perpetration of neglect, X^2 (1, N = 90) = 6.46, *p* = .011. Additionally, a chi-square test was performed and a significant relationship was found spending a period of time in care as a child and perpetration of IPV, X^2 (2, N = 90) = 6.98, *p*

= .031. However, 33.3% of cells have an expected count of less than 5 and therefore the results of this latter test cannot be relied upon.

Intimate Partner Violence (IPV) Involvement

As can be seen in Table 31 the percentage of male participants who perpetrated IPV was notably higher than the percentage of females who perpetrated IPV. Contrastingly, the percentage of females who were victims of IPV was higher than the percentage of males who were victims of IPV.

Table 31. Prevalence of IPV involvement in the current sample

IPV involvement	Males n (%)	Females n (%)
IPV Perpetrator	*25* (67.6)	*6* (11.3)
IPV Victim	*10* (27)	*40* (75.4)
Cyclical IPV	*7* (18.9)	*16* (30.2)

The personality scales were compared according to IPV involvement using a MANOVA. IPV involvement yielded a significant main effect (Wilk's Lambda = 0.468, $F_{(42, 217.318)} = 1.507$, $p < .05$) on personality scale scores. Significant results of the univariate analysis are presented in Table 32, which shows a significant effect of IPV involvement on the Depressive, Narcissistic, Masochistic and Borderline scale scores ($p < .05$).

Mean MCMI-III Personality Scale scores of all participants, split by type/level of involvement with Intimate Partner Violence (IPV), are shown in Table 33.

Table 32: Significant results of univariate analysis of the effect of IPV involvement on personality scale scores

Significant Personality Scale	Df	F	Sig
Depressive	3,86	5.262	.002
Narcissistic	3,86	3.872	.012
Masochistic	3,86	5.555	.002
Borderline	3,86	2.740	.048

Post hoc (Bonferroni) analyses of the univariate outcomes showed that victims of IPV had significant higher scores on the Depressive scale (p = .001), Masochistic scale (p = .019) and Borderline scale (p = .037) and lower scores on the Narcissistic scale (p = .010) than individuals with no IPV involvement. Additionally, victims of IPV had significantly higher scores on the Masochistic scale (p = .003) than IPV perpetrators.

Table 33: A comparison of MCMI-III BR Scores and associated F scores between participants with varying levels of involvement in IPV (N = 90)

Scales	No Involvement (*n* = 24)	IPV Perpetrator (*n* = 17)	IPV Victim (*n* = 35)	IPV Perpetrator & Victim (*n* = 14)	F
Cluster A					
Schizoid	53.46	41.76	58.14	50.00	2.107
Schizotypal	44.33	44.71	53.43	44.79	0.872
Paranoid	53.92	43.41	58.77	57.71	1.789
Cluster B					
Narcissistic	**58.71**	**54.82**	**46.11**	**50.00**	**3.872**
Histrionic	52.33	61.06	46.37	50.14	2.571
Borderline	**38.83**	**46.47**	**57.83**	**50.93**	**2.740**
Antisocial	54.29	67.53	63.29	63.07	2.114
Cluster C					
Avoidant	50.79	44.06	64.20	56.00	2.443
Dependent	49.71	59.82	64.71	60.57	2.128
Compulsive	62.33	54.18	53.69	59.79	1.515
Other					
Depressive	**41.17**	**51.65**	**67.94**	**50.71**	**5.262**
Negativistic	50.67	43.24	57.54	60.00	1.783
Masochistic	**38.75**	**31.79**	**60.91**	**52.00**	**5.555**

Bold = p<.05; All calculations adjusted for multiple comparisons (Bonferroni).

An additional finding relating to IPV is that of the relationship between IPV and child maltreatment. A chi-square test was performed and a significant relationship was found between perpetrating IPV and perpetrating physical abuse, X^2 (df = 2, N = 90) = 6.24, *p* = .044. However, 33.3% of cells have an expected count of less than 5 and therefore these results cannot be relied upon. In order to address this, the analysis was re-run, merging

participants with allegations of perpetration of IPV and proven IPV. In this case a significant relationship between the perpetration of IPV and the perpetration of physical abuse was maintained, X^2 (df = 1, N = 90) = 3.90, p = .048. Additionally, a chi-square test was performed and a significant relationship was found being a victim of Intimate Partner Violence and perpetrating failure to protect, X^2 (df = 2, N = 90) = 10.29, p = .006.

Cyclical Abuse

The interaction between perpetrated abuse and experienced abuse can be found in Figure 2. Of those participants who experienced neglect as a child, 100% (n = 9) went on to neglect their own offspring. However, none of those who experienced neglect as a child went on to physically abuse their children, or fail to protect them. Of those who experienced physical abuse during their own childhood, 62.5% (n = 5) went on to neglect their own offspring, and 37.5% (n = 3) went on to physically abuse their own offspring, and 25% (n = 2) went on to fail to protect their own offspring. Of those who experienced sexual abuse as a child 80% (n = 12) went on to neglect their own offspring, 27% (n = 4) went on to physically abuse their own offspring, and 13.3% (n = 2) went on to fail to protect their offspring. Of those participants who witnessed IPV as a child, 73% (n = 8) went on to neglect their offspring, 28% (n = 3) went on to physically abuse their offspring. Additionally, of those who witnessed IPV as a child 55% (n = 6) went on to become a victim of IPV, and 27% (n = 3) went on to become a perpetrator of IPV.
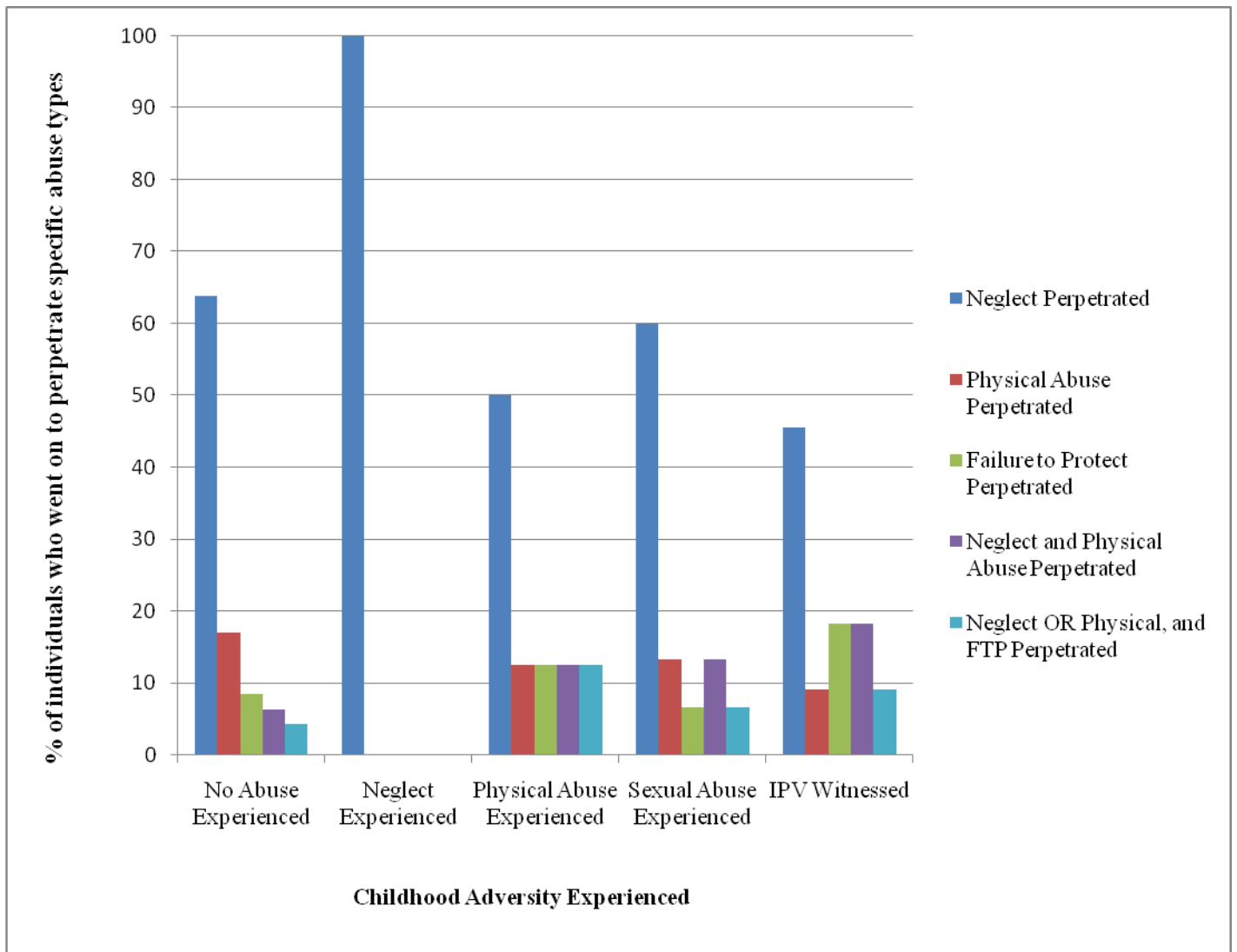
Figure 2: Interaction between Childhood adversity experienced and maltreatment perpetrated.

Ideally the current chapter would have utilised predictive statistics in order to be able to make inferences on how strongly specific personality types predict maltreatment. However, due to the sample size this was not possible due to the need for a minimum of 10 participants per predictor variable (Hosmer, Lemeshow, & Sturdivant, 2013). The sample size was particularly confounded by the need to separate outcomes by gender, due to theoretical differences that were supported by the findings, and also by the sample bias towards perpetration of neglect over other forms of maltreatment. However, it is possible to observe the correlations that exist between specific maltreatment categories and personality

types. For female perpetrators of neglect a number of moderate correlations exist (Schizoid: .634; Histrionic: -.495; Avoidant: .471; Narcissistic: -.408; Paranoid: .379) whereas for male perpetrators of neglect only weak correlations exist (the highest is Masochistic: .283).

Discussion

Response Style

In terms of the results of the correlation between the validity indices and the personality scales, each are theoretically consistent. Multiple studies have found a positive correlation between scores on the Desirability scale and scores on the Histrionic, Narcissistic, and Compulsive scales (together termed the 'Normal Quartet' or, without the Desirability scale, termed the 'Normal Trio') (Blood, 2008; McCann et al., 2001; Stredny, Archer, & Mason, 2006). Further, individuals who were categorised as scoring high on the Desirability scale (>74) had significantly higher scores on the Histrionic, Narcissistic and Compulsive scales than all other participants, and significantly lower scores on all other scales. Such presentation is open to a number of interpretations. As discussed in Chapter 2, these personality scales have been evidenced to be associated with measures of emotional health and as such would suggest that these participants have a lower level of psychological disturbance. However, this pattern of elevated scales has also frequently been found amongst individuals undertaking assessments that they are required to undertake and can also be interpreted as an individual trying to present themselves in a socially desirable manner.

Conversely, those who had high scores on the Debasement scale (>74) had significantly lower scores on the histrionic, narcissistic and compulsive scales than all other participants, and significantly higher scores on all other personality scales except for the Schizoid scale which showed no significant result. Again research suggests that, whilst this could be interpreted as a true characterological issue, it is in fact likely to suggest a profile of an

individual who is attempting to manage their impression in an attempt to 'fake bad' (Thomas-Peter et al., 2002).

Gender Differences

It is possible to see within the results sections that female participants had higher means than male participants on all Cluster A scales, and two out of the three Cluster C scales (Avoidant and Dependent). Conversely, males had higher scale means on all Cluster B personality scales except for the Borderline scale, and a higher scale mean on the Compulsive scale. This suggests that, overall, the female perpetrator profile seems to be displaying greater levels of psychopathology, with males scoring higher on the 'normal trio' (Narcissistic, Histrionic, and Compulsive scales). This is an interesting finding as this disparity is not reflective of a 'normal' population, although some difference between genders can be accounted for as being typical. In a study assessing the prevalence of Personality Disorder in the UK, Coid, Yang, Tyrer, Roberts and Ullrick (2006) found that Cluster B personality disorders were over twice as common in males than females, a difference not found for the other Clusters.

When interpreting the differences in findings between genders it is important to consider the findings relating to response style in that females have significantly higher Debasement scale scores than males and males have significantly higher Desirability scale scores than females. As discussed, these scales had a significant effect on personality scale scores. Following these scales being accounted for significant differences remained only on the Masochistic scale (with females being significantly higher than males) and the Antisocial scale (with males being significantly higher than females). That the significant finding remained on the Masochistic scale is interesting as theoretically one may assume that this would be the most affected by controlling for Debasement.

This difference between the response styles of males and females is an interesting finding. Theoretically one would assume that both males and females would have similar motivations for undertaking the assessment, that of either maintaining care of one's child, or having one's child returned to one's care. As such, it could be hypothesised that individuals would be most likely to attempt to 'fake good', often represented by the pattern of raised scores demonstrated by the male profile (raised Desirability, Histrionic, Narcissistic and Compulsive scales). Such presentation within care proceedings has been noted by a number of studies, as discussed (Blood, 2008; Halon, 2001; Lampel, 1999; Lenny & Dear, 2009; McCann et al., 2001; Stredny, Archer, & Mason, 2006). There are a number of explanations for this ranging from a true representation of this population's personality (Craig, 1997; Craig & Weinberg, 1993) to a defensive attempt to present oneself in a socially desirable manner (Blood, 2008; Lenny & Dear, 2009; McCann et al., 2001). However, as discussed, these scales were not significantly different from female scale scores when accounting for the Desirability scale. This further emphasises the need to consider scores on the Desirability scale when interpreting these scales. The Antisocial scale was the only scale that remained significantly higher for males than for the female sample. Antisocial personality is characteristically not socially desirable although interestingly does share some characteristics with Narcissistic and Histrionic scales.

The female profile, in essence, demonstrates opposite characteristics and, potentially therefore, a different motivation. The female profile is characterised by self-defeating characteristics. This is again open to a number of interpretations regarding whether this is also an attempt to manipulate the assessment, or whether it is a true reflection of the female sample's personality. If interpreted as a manipulation, it may be that females within the current sample were 'faking bad'. This contradicts previous findings and could suggest perhaps that females in the current sample were attempting to gain extra assistance through

being identified as having a certain degree of psychopathology. Additionally it may be an attempt to show that the individual understands that their previous behaviour has been inappropriate and they are now chastising themselves as a result. Such a presentation may also be as a result of being in care proceedings for lengthy periods of time. The very nature of care proceedings means that the parent's ability to care appropriately for their child is called in to question, often in a detailed manner, placing the parent under a great deal of scrutiny. As such, it would be understandable that an individual may begin to display somewhat self-defeating characteristics. Additionally it must also be considered that such presentation is a true reflection of the female sample's personality, particularly as the significant finding relating to the Masochistic scale remains significant even after controlling for the Debasement scale scores. This would be consistent with previous research that suggests that the perpetration of neglect is largely related to poor self-image and self-construct (Stith et al., 2009). Each of the scales on which females score significantly higher than males is related in some way to having poor self-image and being self-defeating. This will be discussed further below in terms of perpetration of child maltreatment.

Perpetrated Maltreatment

The most frequently perpetrated type of maltreatment in this sample is that of Neglect. This is a notable finding because this doesn't necessarily reflect the UK National Average of maltreatment experienced (as presented in the results section), with a larger percentage of children experiencing physical maltreatment than neglect. This is possibly a contextual issue relating to confidence in the removal of children from parents' care. It is possible that care proceedings relating to neglect are more ambiguous and therefore authorities require greater expert opinion around the question of what an appropriate level of contact between parent and child would be. This is in contrast to when physical maltreatment has occurred, following

which the local authority may feel a greater degree of confidence in removing a child, or allowing supervised contact only.

A higher percentage of males than females perpetrated physical maltreatment in this study which is aligned with common consensus (Klevens & Leeb, 2010; Sidebotham, Bailey, Belderson & Brandon, 2011). Conversely, Failure to Protect was exclusive to the female population. As discussed, Failure to Protect largely relates to failing to protect the child(ren) from physical or sexual harm. As such, it may be that in this sample this population is exclusively female due to the population that concurrently perpetrate physical and sexual maltreatment also having a gender imbalance, with males perpetrating these abuse types more frequently than females, or at least being prosecuted or being the subject of fact finding hearings more often than females. Additionally it may be due to Local Authority biases not considering this within the male population. This gender imbalance may also be due to the differing personality profiles of male and female perpetrators which will be discussed further below.

In participants reaching clinical significance (BR $\geq$ 75) on scales with a raised mean ($\geq$ 60), the largest percentage was found in the sample of perpetrators of both neglect and physical maltreatment. This suggests that this sample of participants displayed the greatest level of psychopathology when compared to perpetrators of other single or combinations of maltreatment types. This is an interesting finding because personality profiles of perpetrators of neglect and perpetrators of physical maltreatment are fairly polaric with regards to the personality scale means, whereas those who perpetrated both neglect and physical abuse show consistently high means across the majority of personality scales, with sub-clinically significant raised means on the Depressive, Dependent, Antisocial, Negativistic, and Borderline scales.

The type of maltreatment perpetrated was found to have a significant overall effect on personality scale scores, even after controlling for age, Desirability, and Debasement score. When breaking this down to individual personality scales, significant findings remained on the Avoidant, Histrionic, Masochistic, and Paranoid scales. Findings on these scales are discussed below in terms of the effect of specific types of maltreatment perpetrated.

Neglect. When considering the complete current sample, perpetrators of neglect had raised means on the Avoidant, Dependent, and Antisocial scales. However, after controlling for age, Debasement and Desirability scores, significant findings remained solely on the Masochistic scale, with perpetrators of neglect having significantly higher scale scores than perpetrators of physical abuse. When separated by gender, male perpetrators of neglect showed significantly higher Compulsive scale scores than male perpetrators of neglect and physical abuse. It may be that this finding reflects a socially desirable presentation; however, the Desirability scale scores were controlled for during analysis. An additional interpretation would be that the Compulsive scale may be acting as a measure of emotional health (as suggested by McCann et al., 2001) and, as such, the findings merely suggest that males who perpetrate Neglect have a lower level of psychopathology than males who perpetrate neglect and physical maltreatment, which would seem logical.

Female perpetrators of neglect had significantly higher Schizoid scale scores than females who failed to protect.   The combination of raised scale scores and the statistically significant finding relating to the Schizoid scale support previous research which suggests that perpetrators of neglect often have risk factors surrounding poor self-concept (Stith et al., 2009) and is also consistent with recent research suggesting that traits such as mistrust in motivations of others and a reduced capacity for social interaction are prevalent within perpetrators of maltreatment (Esbec & Echeburua, 2011; Fontaine & Nolin, 2012).

Physical maltreatment. The personality profiles of perpetrators of physical maltreatment generally showed elevations across Clusters B and C. Female perpetrators of physical maltreatment showed subclinical elevations on the Narcissistic, Histrionic, and Compulsive scales, a pattern somewhat reflective of the overall male sample. Male perpetrators of physical maltreatment showed subclinical elevations on the Antisocial scale alone. These findings are open to a number of interpretations. Perhaps the most realistic in relation to the female profile is that females who perpetrate physical abuse responded to the MCMI-III in a defensive manner due to the context of the assessment, an interpretation advocated by Halon (2000) and Blood (2008). This may be due to female perpetrators of physical maltreatment considering that due to the nature of the maltreatment they perpetrated, the consequences will be of a more severe nature than if they had perpetrated neglect, and therefore feel more of a need to attempt to present themselves in a socially desirable manner. As previously discussed, the presence of such a pattern is likely to indicate that the individual has attempted to 'fake good' and, as such, this perhaps suggests that clinicians should remain particularly wary of 'faking good' in females who perpetrate physical maltreatment. Further, clinicians may have to consider alternative methods of personality assessment as it may be that such presentation would mask any underlying psychopathology.

Another interpretation of the findings is that female perpetrators of physical maltreatment have a greater level of emotional health than female perpetrators of other types of maltreatment, an interpretation suggested by Craig (1997). However, due to the type of maltreatment that these individuals have perpetrated this would seem unlikely. With regards to the male profile, for those that perpetrate physical maltreatment, an elevation on the Antisocial personality scale seems logical as this suggests a lack of empathy and a disregard for authority. Whilst, as previously discussed, a sub-clinically raised mean does not suggest

the presence of Personality Disorder, it does suggest that the individual possesses at least some of the traits associated with the Personality type.

Neglect and physical maltreatment. Perpetrators of neglect and physical maltreatment showed the highest level of elevated personality scale scores. Elevated scales within the female sample are those that have been evidenced to be indicative of the greatest level of psychopathology. This profile is particularly notable in that it features raised means across all personality domains, suggesting a consistent level of psychopathology, rather than characteristics of one personality trait alone. Additionally, the only scales not to be raised are those within the 'normal trio' (Histrionic, Narcissistic, and Compulsive) again suggesting that female perpetrators of the combination of neglect and physical maltreatment have a raised level of overall psychopathology. Contrastingly, males who perpetrated neglect and physical maltreatment have elevated scale means on the Desirability, Histrionic, Narcissistic, and Antisocial scales. These are each scales which suggest a need for attention and inability to place the needs of others before your own. This is in direct contrast to the traits of the elevated female scales and suggests that males perhaps need to reach a lower threshold of psychopathology than females before perpetrating polyabuse. However, it should be noted that the male sample for this category of maltreatment is very small ($n = 3$) and therefore, although differences between genders remain of interest, caution should be taken when considering these results. Findings may change should the sample size be bigger.

Regarding the overall sample, perpetrators of neglect and physical maltreatment showed significantly higher Histrionic scale scores than perpetrators of neglect. However, when split by gender female perpetrators of neglect and physical maltreatment obtained significantly higher Schizoid scale scores than females who failed to protect. This is an interesting finding as Schizoid traits and Histrionic traits are polaric (Schizoid personality is characterised by a lack of interest in social relationships whereas Histrionic personality is

characterised by an extreme need for attention from others). The key to interpreting this finding is likely to lie behind the form of maltreatment that the effect related to. Significant findings were related to different forms of maltreatment.

Failure to protect. Individuals who failed to protect are exclusively female in the current sample. The personality profile for these individuals shows elevations exclusively on the 'normal trio' which potentially suggests a lower level of psychopathology than other perpetrators. However, this pattern of elevations could also be interpreted as characteristic of individuals with a need for attention. The pattern of elevation could also of course merely reflect the individual's attempt to present in a socially desirable manner due to the context of their assessment, as suggested by Halon (2000). This latter explanation is supported by consideration of the mean Desirability scale score for those who failed to protect (71) and the lack of significant differences following consideration of the Desirability scale outside of those discussed above.

Polyabuse. Individuals who perpetrated Polyabuse (more than one type of maltreatment) had a significantly lower mean on the Compulsive scale than those who perpetrated a single type of maltreatment. As previously discussed this may be indicative of a raised level of psychopathology, as suggested by McCann et al. (2001). Further support for this theory is that single abuse perpetrators did not score significantly higher on the Narcissistic or Histrionic scales which suggests that the finding relating to the Compulsive scale was not related to a socially desirable presentation. Perpetrators of polyabuse also had a significantly raised mean on the Antisocial scale, suggesting a disregard for rules and authority as well as a lack of empathy for others.

When split by gender, significant differences remain in the male sample. The personality profile for males who perpetrated polyabuse showed a significantly higher mean

on the Histrionic scale than males who perpetrated other maltreatment, and significantly lower means on the Compulsive and Masochistic scale, although it should be noted that this was a very small sample ($n = 3$) and for males this consists of the same sample as the neglect and physical maltreatment category due to the lack of failure to protect within males.

These differences are indicative of the male polyabuse profile having characteristics of egocentrism and attention seeking and manipulative behaviours which is consistent with previous research on the link between such traits and child maltreatment (Bogacki & Weiss, 2007; Fontaine & Nolin, 2012; Fukushima, Iawasaki, Aoki, & Kikuchi, 2006; Wiehe, 2003). This is different from the female profile as a general level of psychopathology is not suggested for males who perpetrate polyabuse, with the only subclinical mean scale elevations within the Cluster B personality traits, rather than across domains as in the female profile.

This division between the personality profiles of male and female perpetrators of child maltreatment suggests that personality associated with child maltreatment relates to two entirely different constructs. This highlights that it is therefore potentially inappropriate to consider risk factors equal across genders. It appears that female perpetrators are, in general, self-defeating with a higher overall degree of psychopathology whereas male perpetrators are self-enhancing and have a lack of empathy for others. This suggests that males and females are likely to have different motivations for perpetrating maltreatment, even if the eventual act is a similar one. This does not necessarily mean that males and females will have different catalysts, but just different thought patterns. For example, an individual with Narcissistic personality traits may interpret a child's questioning as an attack on their authority and an insult to their superiority, whereas an individual with Borderline personality traits may interpret this same questioning as indicative that the child no longer loves them, or that the child is trying to trick them.

Additionally, the differing response styles of males and females must be considered. However, the results described control for this and as such it may be that such response styles are actually characteristic of the differing personalities between gender (e.g., high Debasement scores would be typical of an individual with a Masochistic profile). The potential that, within the current sample, the male profile is one that reflects at attempt to 'fake good' has been discussed above. However, statistically, the higher scale scores on the Desirability scale have been controlled for and, as such, the significant differences on the Histrionic scale may be truly characteristic of males who perpetrate polyabuse. Additionally, it should also be highlighted that the male sample of polyabusers was small and represents only 8% of the overall male sample and therefore findings, although significant, cannot be relied upon.

Childhood Adversity

Observationally a vast difference between the current sample and the UK national average in terms of time spent in care is shown. This is also supported by a statistically significant relationship being found between the perpetration of neglect and having spent time in local authority care as a child. A suggestion of a causal link goes outside the remit of this research however a number of factors related this significant relationship must be considered. It is likely that spending time in local authority care as a child would have been due to experiencing an inadequate standard of parenting. This may therefore mean that these individuals were at no time exposed to appropriate parenting and therefore, despite potentially being aware of the need for such, did not learn how to deliver such parenting. Additionally, it may also be the case that individuals who were in the care of the Local Authority would have been subject to increased monitoring. Therefore, when they subsequently became pregnant, any concerns regarding their parenting would have been

highlighted at a much earlier opportunity than those not already involved with the Local Authority.

Other hypotheses for the relationship between perpetrating neglect and having spent time in local authority care as a child surround disruption of attachment during childhood and the subsequent development of a maladaptive attachment style. Research suggests this has a number of detrimental consequences on parenting. Future research regarding the relationship between spending time in care and perpetrating child maltreatment could explore the effect that length of time spent in care has on the relationship and also the context of care (i.e. foster placement versus children's home etc.) as well as the reasons for entering local authority care. The discussed hypotheses should also be considered in the context of the other findings in relation to participants' experiences of childhood adversity. For example, the large percentage of participants who experienced neglect in their childhood compared to the UK national average is notable, and would be consistent with the hypothesis that a lack of an experience of adequate parenting may lead to a lack of understanding of the need for appropriate parenting and therefore an increased likelihood of the perpetration of maltreatment. This is also supported by the observational finding that of those participants who experienced neglect as a child, 100% went on to neglect their own offspring. Again this is likely to have been mediated by a disruption in attachment (Hildyard & Wolfe, 2002; Shipman, Edwards, Brown, Swisher, & Jennings, 2005), as well as other factors such as sociodemographic background, resilience and protective factors and the source of the current sample.It is important to consider that this research should in no way be used to infer that individuals who experience neglect or other childhood adversity *will* go on to perpetrate the same or similar maltreatment, or even that they are likely to do so. This is especially significant given the dramatic difference between the percentage of the current sample that spent time in care and the percentage of the general population that spends time in care.

However, the current research perhaps suggests that the experience of childhood adversity could be considered as a risk for the perpetration of maltreatment in the context of this population and in combination with other risk factors. Such results support findings by Dixon, Browne and Hamilton-Giachritsis (2005).

There were no significant differences found between mean personality scale scores of those who experienced different forms of maltreatment during their childhood. However, a number of significant findings were made with regards to differences between the personality scale scores of those who experienced polyabuse during their childhood and those who did not experience polyabuse. Analyses demonstrated significantly higher mean scale scores for those who experienced polyabuse during their childhood on the Avoidant, Depressive, Masochistic and Borderline scales. Additionally, the majority of the personality scales for those who did experience polyabuse during their childhood reached subclinical significance, but the scales associated with the 'normal trio' did not. As previously discussed, the combination of these factors suggests a certain level of general psychopathology. These findings support research (Cohen, Foster et al., 2013; Higgins & McCabe, 2000; Johnson, Kohl & Drake, 2012; Rogosch & Cicchetti, 2004), which suggests that experiencing multiple forms of maltreatment predicts a greater level of adult personality pathology and negative outcomes than experiencing an isolated incident of maltreatment.

This study found that there were no significant differences between the personality traits of those who experienced different types of maltreatment during childhood, despite a number of significant differences between those who experienced polyabuse and those who did not experience polyabuse. Findings support consideration of the question of whether the supposedly discrete categories of maltreatment are distinct, or whether it may be of greater clinical and theoretical utility to consider the experience of maltreatment as a single construct, regardless of the category of maltreatment that an individual experienced. Further,

154

a holistic or ecological approach to risk assessment (one that considers the individual in their wider environment) is increasingly being preferred and, as such, protective factors such as resilience and other risk factors, should be taken into account in future research, and indeed could share equal focus.

This lack of significant differences between the personality traits of those who experienced different types of maltreatment during childhood is partially supportive of previous research. Jungmeen and Dante (2010) found that experiencing any abuse (regardless of type) was related to emotion dysregulation, particularly following the experience of multiple maltreatment types. Similarly, Dixon and Graham-Kevan (2011) found that it was the combination of experiencing both maltreatment and witnessing IPV during childhood that leads to a greater level of psychopathology, rather than any individual form of maltreatment alone. Conversely, Cohen et al. (2013) found that only neglect and emotional abuse were significant predictors of adult personality pathology, a finding that supported previous evidence from Grilo and Masheb (2002) who found that emotional abuse was the only category of child maltreatment significantly associated with personality pathology in adulthood. The current study included self-reported experiences of childhood adversity as well as corroborated evidence. As such, reporting bias cannot be ruled out in that the extent to which these parents experienced maltreatment and adversity may have been under reported.

Intimate Partner Violence (IPV) Involvement

Within the current sample, a much higher percentage of men were perpetrators of IPV than women and a much higher percentage of women were victims of IPV than men. Although this does seem to support common consensus, a number of mitigating factors must also be considered. Males are less likely to report being a victim of IPV and often have a higher threshold than women. Similarly, women are less likely to be prosecuted as a result of

allegations of IPV perpetration. Differences in type of IPV involvement can also be considered in the context of varied personality profiles.

Victims of IPV had significantly higher mean scale scores on the Depressive, Borderline and Masochistic scales than those who had no reported involvement with IPV. The current findings are consistent with findings by Taylor et al. (2009), who suggested that victims of IPV had higher odds of experiencing symptoms of clinical depression. A significant relationship was also found between being a victim of IPV and failing to protect. However, this is expected due to the overlap between being a victim and the criteria for perpetrating Failure to Protect. There was however, no significant relationship found between being a victim of IPV and perpetrating maltreatment or physical abuse, contradicting previous research suggesting a link between these factors (Taylor et al., 2009).

Perpetrators of IPV were found to have a significantly higher scale score on the Histrionic scale than those who were reported to be victims of IPV. This is again notable in the context of the current study as those who perpetrated neglect and physical maltreatment had an elevated mean scale score on the Histrionic scale, as did male polyabusers. This is particularly interesting as a significant relationship was also found between the individuals who perpetrate IPV and individuals who perpetrate physical maltreatment. Whilst no analysis of causality or direction of causality can be completed, it is apparent from the current findings that there is a link between Histrionic personality and the perpetration of IPV and between Histrionic personality and the perpetration of neglect and physical maltreatment. Additionally, there is a link between the perpetration of IPV and the perpetration of physical maltreatment. This is consistent with research that suggested that individuals who were physically abusive towards their partners had higher rates of physically abusing their children (Strauss, 1990). This has implications on risk assessment within child care proceedings as risk of physical abuse towards children may be raised if there is IPV within the family home.

This is particularly significant when considering the findings that there is a significant relationship between being a victim of IPV and perpetrating Failure to Protect as it may suggest that victims of IPV may be more likely to fail to report the perpetration of physical maltreatment towards a child by their partner, or to take evasive action with regards to such behaviour. However, again it must be stressed that such a relationship may simply be due to the criteria for 'Failure to Protect' including being a victim of Intimate Partner Violence.

Cyclical Abuse

Regarding cyclical abuse (perpetrating the same abuse that you experienced) 100% of those who experienced neglect during their childhood went on to perpetrate neglect and 37.5% of those who experienced physical maltreatment during their childhood went on to perpetrate physical maltreatment. These results are in direct contrast to findings by Berlin, Appleyard and Dodge (2011) who found that mothers' experiences of childhood physical abuse, but not neglect, directly predicted the type of maltreatment they perpetrated towards their child(ren). Additionally the current findings do not support the 'cycle of violence' theory. The majority of individuals who experienced any form of childhood maltreatment went on to perpetrate neglect. However, it is imperative that this is interpreted within the correct context. This is not representative of the general population as the current sample is a population within which every individual has perpetrated some form of child maltreatment. Therefore it is important not to interpret the findings outside of this context. Although not strictly cyclical maltreatment, of those participants who witnessed IPV during their childhood 55% went on to become a victim of IPV and 27% went on to become a perpetrator of IPV. Again, this should be interpreted within the current context and, as such, these findings are not applicable to the general population.

Research Questions

To summarise the response to the research questions:

Are particular personality traits present in parents who maltreat their children? Multiple analyses showed a variety of personality traits present within the sample, with varying rates of psychopathology. There was no single child maltreatment perpetrator 'personality profile' found. However, characteristics of the personality types found tended to surround poor self-concept and a need for isolation.

Do the personality traits of parents who maltreat their children differ according to the type of maltreatment perpetrated? Overall, those who perpetrated neglect had significantly higher scores on the Masochistic scale than perpetrators of physical maltreatment. Female perpetrators of neglect had raised means on the Schizoid, Avoidant, Depressive, Dependent, Antisocial and Paranoid scales, with the Schizoid scale being significantly higher than for females who failed to protect. Conversely, male perpetrators of neglect had raised means on only the Compulsive and Antisocial scales with the Compulsive scale being significantly higher than males who perpetrated neglect and physical maltreatment.

Female perpetrators of physical maltreatment showed subclinical elevations on the Narcissistic, Histrionic, and Compulsive scales, whereas male perpetrators showed subclinical elevations on the Antisocial scale alone. However, perpetrators of both neglect and physical maltreatment showed the greatest level of psychopathology regardless of gender. Overall, perpetrators of neglect and physical maltreatment had significantly higher Histrionic scale scores than perpetrators of neglect. Female perpetrators showed elevations on Schizoid, Borderline and Dependent scales and had significantly higher scores on the Schizoid scale than females who failed to protect. On the other hand, male perpetrators had

elevated scale means on the Desirability, Histrionic, Narcissistic, and Antisocial scales. Individuals who failed to protect were exclusively female and showed elevations on the 'normal trio' of personality scales – Histrionic, Narcissistic and Compulsive. Findings are largely consistent with findings from Fontaine and Nolin (2012) who found that personality profiles of perpetrators of neglect and physical abuse were similar, but that perpetrators of physical abuse had an elevated Antisocial scale score, whereas perpetrators of Neglect had an elevated Schizoid scale score.

Findings of the current study also suggest that a consideration of response style is imperative when considering results of any personality assessment. The findings discussed above statistically controlled for such response style, prior to which the number of significant results was somewhat higher. Consideration of the response style of participants also supported the gender differences discussed above. Within the current study the overall profile of female perpetrators of child maltreatment is one of an individual who may seem vulnerable, with a self-defeating personality and a response style which indicates a need or wish for recognition of psychological difficulties, whether these are perceived or actual.

Whilst this cannot be generalised to all females who engage in the perpetration of child maltreatment, it does allow for treatment recommendations to be made regarding a sample that shows similar characteristics. Clearly, in such a sample, self-defeating characteristics would become a key focus for any potential intervention, and one which could be targeted through the delivery of group intervention and potentially aimed at increasing practical skills to boost self-esteem. Such intervention could potentially be delivered in a group context and utilise peer support which would also have favourable ramifications with regards to cost effectiveness when compared to intensive 1:1 psychotherapeutic input. Such intervention could also aim to address issues related to guilt and/or shame associated with

being part of care proceedings, which may also impact upon the presentation of parents within a similar sample.

   What is the impact of negative experiences during childhood and within relationships on personality traits in parents who maltreat their children? Although causality is outside the remit of this research, results suggest that experiencing negative parenting during childhood (represented by time spent in care and experiencing childhood maltreatment) may increase the risk that an individual will perpetrate child maltreatment. Although no control group of non-abusive parents was used so these results cannot be generalised outside of the current sample. No differences were found between the personality of those who experienced different forms of childhood adversity. However, a number of significant findings were made with regards to differences between the personality scale scores of those who experienced polyabuse during their childhood and those who did not experience polyabuse, with those who did experience polyabuse showing a greater level of psychopathology across the personality scales.

   With regard to the effect of negative experiences within relationships on personality, victims of IPV had significantly higher mean scale scores on a number of personality scales.

Limitations and Future Research

   Whilst the current study has a number of strengths, there are also a number of limitations which merit discussion. The first and, perhaps, most notable of these is that no control group was utilised. Ideally a control group of parents who have not perpetrated maltreatment towards their children would have been utilised in order to allow for a deeper understanding of differences in personality types of those who maltreat their children and those who do not. This would have also allowed for additional analyses to be made with regards to the impact that experiencing maltreatment in one's own childhood has on adult

personality and how this relates to whether the individual goes on to maltreat their own offspring. As such, although findings are relevant in this population, they should not be interpreted for generalised use outside of this population. Future research should attempt to include a control group and potentially other groups of interest such as those who break cycles of abuse. This could include individuals who experienced childhood adversity but did not go on to perpetrate maltreatment and those involved in IPV who did not go on to perpetrate maltreatment.

A second shortcoming of the current study is that neglect was not split into sub-facets of emotional neglect and physical neglect, which may have resulted in different findings. Emotional neglect is likely to have encapsulated the 'Failure to Protect' category in the current study as the definition of emotional abuse (Department of Health, 2006) includes allowing the child to 'hear or see the maltreatment of others, including IPV between parents) so this would suggest that emotional neglect would also encapsulate allowing harm to come to child by an act of omission by oneself whilst in knowledge of an act of commission by another. Cluster analyses could also be performed to ascertain which characteristics of abuse are best fitted to which category of abuse. Additionally, the current research did not take the severity and chronicity of the maltreatment in to account and there was no distinction provided between severity and frequency of maltreatment. This may have had an impact on the findings and future research should consider this prior to collecting data, particularly in light of the findings of the current study regarding the personality of those who perpetrated and experienced polyabuse. Within the current study, the construct of maltreatment is called into question. Future research that considers the severity and chronicity of maltreatment perpetrated and experienced could explore considering maltreatment as a single construct, within which severity and chronicity would contribute. However, measuring severity presents a number of challenges due to its subjective nature. One way of measuring severity would be

to use some form of standardised index which is clearly a lot easier to do if the severity

relates to physical injury rather than psychological damage. If measuring severity in terms of

traumatic impact, expert opinion would have to be sought and potentially victims would have

to be interviewed, but this again presents difficulty.

A final limitation for discussion is that of sample size. Although the current sample

size was larger than many of the samples within previous research on this topic, the size of

the sample did prevent certain analyses from being conducted, namely that of multinomial

regression. Due to the number of participants needed per predictive factor it was not possible

to run a satisfactory regression on the majority of the maltreatment types. Future research

should attempt to address this. Further, when considering findings related to specific

maltreatment types within the current study, excluding neglect, caution must be taken due to

the small size limiting the validity of the findings, particularly with those split by gender.

Collection of data on 'risky' parents presents a number of challenges. Firstly, as noted

within the current study, response style is a notable difficulty as parents are aware that the

results of the assessment may impact upon their access to their child(ren). Future research

could attempt to address this by conducting independent assessments for research purposes

only. However, this is potentially ethically dangerous as the wellbeing of children is at stake.

Additionally, consideration must be made as to whether involvement in proceedings affects

mental health, particularly in those parents who have been involved in lengthy proceedings.

Attempting to address this again presents difficulties as the sample is much less accessible

prior to involvement with the authorities. One method could be to collect a random sample of

all community parents through questionnaires (similar to Fukushima, Iawasaki, Aoki, &

Kikuchi, 2006); however, this again has methodological flaws in that it is a self-selecting

sample, based on self-report. Further, this would present ethical challenges if parents report

that they have perpetrated maltreatment as duty of care must remain towards the child.

CHAPTER 4

The Discussion

Discussion

The main aim of this thesis was to explore the existence of particular personality styles or traits present within parents who maltreat their children, looking specifically at: recent previous research into this area; the reliability and validity of a measure commonly used to assess personality within this population; and an attempt to examine personality traits and interactive factors for this population.

Chapter 1, the systematic literature review, presented a variety of personality traits which have been identified as being associated with parents who maltreat their children. This provided support for the research study (Chapter 3) by demonstrating that there is not one sole category of personality type in this population, and that there are many flaws to the current research in the area, and that further investigation into this area is required.

Within Chapter 1, partial evidence of a personality profile for those who perpetrated child maltreatment was presented; however, there was much discrepancy between the studies as to the personality profiles presented and the methodology in assessing such personality. A variety of personality traits were identified as being associated with parents who maltreat their children. The majority of the reviewed studies reported an association between Cluster B personality traits and the perpetration of child maltreatment. Although all Cluster B traits were named in at least one study, Narcissistic personality traits were named most frequently (4 out of 7 studies) as being linked to the perpetration of personality traits most often. Whilst Cluster A personality traits were evidenced less frequently, Paranoid traits specifically were found most frequently within the higher quality studies (within 2 of the 3 studies assessed as having a quality analysis score of 90% or higher). Of the three clusters, Cluster C personality traits were the least frequently reported although Compulsive traits were reported within a number of studies. It is hypothesised that this is due to many of the characteristics of the

Dependent and Avoidant traits also being linked with the Borderline personality style particularly when they are found in combination with each other. These discrepancies supported the decision to investigate the relationship between perpetration of child maltreatment and personality, presented in Chapter 3.

Chapter 1 also highlighted methodological difficulties in studies examining more than one type of perpetrated maltreatment due to the overlap between maltreatment types acting as a confounding variable. This prompted an awareness that such issues should be considered during analysis of results within Chapter 3 and as such perpetrators were separated into those who perpetrated neglect or physical abuse alone, and those who perpetrated more than one type of abuse. Further, Chapter 1 highlighted the importance of including as much varied information as possible in relation to the personalities of those who maltreat children and as such Chapter 3 investigates the impact of individual's experiences of maltreatment during their own childhood, as well as their experiences of IPV.

To ensure that the current research was useful and current it was vital to assess personality using an up to date, reliable, and valid tool. It was also imperative that this tool was appropriate for use in the current population and widely used by professionals working with the population. As such, an assessment and critique of the MCMI-III was completed in order to gain and present a comprehensive understanding of the measure. This is presented in Chapter 2.

Chapter 2 identified generally good levels of validity and adequate levels of reliability in the MCMI-III as a measure of personality characteristics Additionally it was recognised that the MCMI-III is one of the most well recognised measures of personality and as such has a deluge of research regarding and utilising it, allowing for a comprehensive review. However, limitations of the MCMI-III were highlighted, such as the ability of random

responders to go undetected and the vulnerability of the tool to manipulation. As such the chapter highlighted that although the MCMI-III is a useful tool for the assessment of personality it should be utilised appropriately, in triangulation with other data sources and following clinical interview with the individual. This investigation helped to inform the method of the research presented in Chapter 3 as it was ensured that the MCMI-III profiles were consistent with the final opinion of the assessing clinician within the report presented on the individual within care proceedings.

Chapter 3 consisted of a research study investigating whether particular personality traits were present in a sample of 'risk referred' parents undergoing a psychological risk assessment within care proceedings, and also an examination of how these personality traits relate to their childhood experienced and experiences within relationships. Multiple analyses showed a variety of personality traits

Overall, female participants had higher means than males in general on Cluster A and C and males on Cluster B. The male population had higher means on the 'normal trio' a pattern of elevations often shown within care proceedings. These findings potentially suggest that females show a greater level of psychopathology, or alternatively that males are more adept at manipulating their profiles. Indeed, such a hypothesis was supported by significant differences between the response styles of males and females, with males showing significantly higher scores on the Desirability scale and females showing significantly higher scores on the Debasement scale. As such, these scale scores were factored in to analyses as covariates, following which the majority of differences between the personality scale scores of males and females were not found to be significant. Significant differences remained on the Masochistic scale (with females having significantly higher scale scores than males) and the Antisocial scale (with males being significantly higher than females).

The differences between genders on both personality scale scores and response styles was open to a number of interpretations regarding whether such presentations were a true reflection of the characteristics of each sample or rather a reflection of an attempt to present oneself in a particular manner. If the latter is considered then it may be that females within the current sample attempted to 'fake bad' whereas males attempted to 'fake good'. This in itself is an interesting finding as one could logically assume that individuals going in to assessments within care proceedings would have similar motivations, regardless of their gender. As such, it may be that seemingly converse response styles have a similar goal. For example, females hope that by appearing to accept that they need external assistance and recognising that they have psychological difficulties, the assessor will consider them to have adequate insight and be suitable for reunification with their child(ren) alongside receipt of assistance and input from the Local Authority. Conversely, and more consistently with previous research, males may hope that by attempting to appear in a socially desirable light they will successfully manipulate the assessor in to reporting that they present no psychological risk towards their children. Alternatively, the female profile may be an accurate representation of their personality profile in that common amongst female perpetrators of maltreatment is a self-defeating personality with little self-belief.

This difference in profiles between genders remained throughout the types of maltreatment. For example, the overall sample for perpetrators of neglect was that these individuals had significantly higher scores on the Masochistic scale than perpetrators of physical abuse. However, when separated by gender, female perpetrators of neglect had significantly higher Schizoid scale scores than females who failed to protect, and male perpetrators of neglect had significantly higher Compulsive scale scores than males who perpetrated neglect and physical maltreatment. As such, females again demonstrate characteristics related to poor self-concept whereas the male profile suggests that males who

perpetrate neglect have a lower level of psychopathology than males who perpetrate neglect and physical maltreatment.

Conversely, when considering findings relating to physical abuse, the female personality profile suggests an attempt to 'fake good', with elevations across the 'normal trio'. This is perhaps reflective of female perpetrators of physical maltreatment being concerned that the results of their assessment would have a greater negative impact on them than female perpetrators of neglect.

Findings related to the perpetrators of neglect and physical maltreatment in combination showed a greater level of elevated scale scores. Overall, perpetrators of neglect and physical maltreatment showed significantly higher Histrionic scale scores than perpetrators of neglect only. Female perpetrators showed a consistent level of elevated scale scores across all personality clusters. The only scales not to be elevated within female perpetrators of neglect and physical maltreatment were within the 'normal trio' suggesting that this sample had an overall raised level of psychopathology. However, the only significant finding for the female sample was on the Schizoid scale, with female perpetrators of neglect and physical maltreatment yielding significantly higher Schizoid scale scores than females who failed to protect. Males who perpetrated a combination of neglect and physical maltreatment showed elevated scale scores on scales which suggested a need for attention and lack of empathy, each within the Cluster B group of personality types.

Those who perpetrated Polyabuse had a significantly lower mean on the Compulsive scale than those who perpetrated a single type of maltreatment. This finding, combined with the lack of significant findings relating to the Narcissistic or Histrionic scale suggests that perpetrators of polyabuse have raised levels of psychopathology compared to individuals who

perpetrated a single form of abuse. Additionally, perpetrators of polyabuse showed a significantly raised mean on the Antisocial scale.

Based on the results of Chapter 1 it was decided that Chapter 3 would include an investigation into the sample's experiences of maltreatment during their own childhood, and their involvement in IPV. The results highlighted that the current sample showed a vastly higher rate of having experienced child maltreatment than the UK national average, particularly in terms of experiencing time in local authority care and experiencing neglect. Although no significant differences were found between the personalities of individuals who experienced different types of maltreatment during childhood, significant personality differences were found between those who experienced more than one form of maltreatment during their own childhood and those who experienced one type, or no types, of maltreatment. This is potentially demonstrative of the clinical and theoretical utility of considering maltreatment as a single construct, with experiences along a continuum dependent on severity and chronicity of maltreatment, regardless of the specific category or categories of maltreatment experienced. The lack of any difference between the personality in those who experienced single forms of maltreatment and those who did not experience any form of maltreatment suggests that personality is not a significant mediator in the cycle of maltreatment, unless multiple forms of maltreatment are experienced. This is supportive of previous findings by Finkelhor, Ormrod and Turner (2007).

Implications for Clinical Practice and Future Research

The current findings suggest that in relation to personality there are different risk factors across different types of maltreatment, both in maltreatment perpetration and following the experience of it. Of note is the level of psychopathology related to personality in those who perpetrate more than one type of maltreatment. This suggests that a potentially

greater level of intervention would be required to lower the risk of harm to children in those who have perpetrated more than one type of maltreatment.

Of additional interest is the finding that there are no significant differences in the personality of those who experienced no maltreatment during their childhood and those who experienced a single type of maltreatment in childhood. This suggests that there is a certain level of resilience amongst those who experience maltreatment, or alternatively that outcome is related to factors that are not assessed within the current study. Whilst some literature does suggest that different types of maltreatment affect children in different ways (Berenbaum et al., 2008; de la Vega, de la Osa, Ezpeleta, Granero, & Domenech, 2011; Grilo & Masheb, 2002; Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Koch et al., 2008; Moran et al., 2011; Senn & Carey, 2010) research has also suggested that chronicity of abuse is key to outcome (Anda et al., 2006; Cohen, Perel, DeBellis, Friedman, & Putnam, 2002; Finkelhor, Ormrod & Turner, 2007; Hamilton, Falshaw, & Browne, 2002; Higgins & McCabe, 2000; Higgins, 2004; Johnson, Kohl, & Drake, 2012; Jungmeen & Dante, 2010). The significant differences shown between those who experience polyabuse and a single type of maltreatment or no maltreatment suggest that this should be taken into account when assessing risk or intervention options.

The findings from this thesis also suggest that males and females may potentially have different motivations for perpetrating child maltreatment. This is an area that can only be hypothesised upon within this research due to the quantitative nature of the data collected, and hypotheses relating to the male sample are particularly difficult due to the level of impression management that they appeared to engage in. A key difficulty for females appears to be related to self-concept, with negative self-beliefs and a lack of self-esteem. Future research could address this through the use of interviews with those who have perpetrated maltreatment and the subsequent utilisation of some form of qualitative analysis, potentially

Interpretative Phenomenological Analysis or Grounded Theory. Findings from such investigation could further inform potential risk factors and trigger points as well as assisting in the creation of appropriate intervention. Results from the current study suggest that a key intervention focus could surround building self-belief and breaking down negative self-talk. This could be approached in a number of different ways. The first, and perhaps most accessible, would be intervention delivered in a group context, utilising peering support and practical skills to enhance self-belief. Additionally, such intervention could also aim to address issues related to guilt and/or shame associated with care proceedings. More comprehensive and intensive psychotherapeutic input could also be delivered on a 1:1 basis, such as schema therapy, in order to identify core beliefs and schema modes and assist the individual in developing adaptive coping mechanisms. Within the context of care proceedings timescales related to such input are often not in the 'best interests' of the child (in relation to the child being reunified with their parent). However this does not exclude the parent from undertaking psychotherapeutic input regardless.

The current findings suggest that further exploration of the construct of child maltreatment is warranted and there may be some clinical utility in the consideration of child maltreatment as a single construct with a continuum along which experiences fall depending on the chronicity and perceived severity of the experience.

Although not a finding made with regards to personality in those who perpetrate child maltreatment per se, another implication for clinical practice that can be taken from the current findings is the suitability of the MCMI-III for the assessment of personality in 'risk referred' parents. It can be seen from the overall means of the sample that the MCMI-III does not overpathologise the current sample, and additionally MCMI-III findings were congruent with clinician opinion when this was assessed prior to analysis of the results. These findings, in combination with the strengths of the tool as discussed in Chapter 2 suggest that it remains

a relevant tool to aid the assessment of personality in this population, and this is further supported by the release of the DSM-5 within which the personality traits as measured by the MCMI-III remain.

Conducting research within this population remains a challenge. By the time that parents have come to the attention of the Local Authority, it is often the case that maladaptive parenting has already occurred. As such any sample is likely to consist of parents that have already maltreated a child and have been involved with the Local Authority. Involvement with the Local Authority and psychological assessment within care proceedings is likely to present bias within the data, as shown within the current study in terms of response style. During any assessment that an individual is required to have, particularly those that have the potential for such significant ramifications, it is unlikely that any individual who has some level of psychopathology will present and respond in an entirely true or accurate manner. Certain safeguards can be taken, for example considering validity indices as shown in the current study, but this still does not eliminate this difficulty. Further, involvement with the Local Authority, particularly following the removal of children and initiation of care proceedings is likely to affect an individual's presentation. It may be that individuals become distrusting of external input or authority or conversely an individual may become overly compliant and submissive. During the assessment process it is vital that the clinician considers these difficulties and attempts to combat them by using external sources of information as well as an approach that considers the individual within the environment that they are currently in, have previously been in, and will be in in the future.

The assessment of personality within this population as part of a psychological assessment within care proceedings allows for greater understanding, from professionals and the individual alike, of past behaviour, and also allows greater accuracy in the prediction of future behaviour. For instance if an individual's personality is assessed as being 'Narcissistic'

this may help explain why they have difficulty placing others' needs before their own, and how they might behave in the future if treatment needs are left unaddressed. Ultimately, personality is pervasive and enduring, and as such is difficult to change. However, when personality becomes problematic, with behaviour reaching levels that suggest Personality Disorder, it is possible to help both the individual and external figures understand how and why behaviour may have escalated to this level. Psychotherapeutic input, such as schema therapy, can then begin to address how to change and adapt the problematic behaviour.

When considering personality assessment within this sample the clinician must also be mindful of the context of the assessment in that the child's needs must be considered as paramount. Whilst treatment recommendations can be made, focus should remain on whether there is any psychological reason that the parent may present a risk to the child. The clinician is asked to provide a *psychological* risk assessment, usually looking at whether there is any psychological reason why this parent has perpetrated maltreatment and what the *psychological* risk is that they will do it again, and finally how to reduce such risk. This does not necessarily relate to factors such as the parent having inadequate knowledge of parenting matters (i.e. being unaware that a child should be taken for immunisations or incorrect sterilisations of bottles), rather whether there is any underlying psychological cause for their actions. Due to the pervasive and enduring nature of personality, it remains a key factor in assessing such risk.

Through being aware of both the personality traits of parents who maltreat their children and also through individuals who experience maltreatment and do or don't go on to maltreat, it may be possible to gain further insight and understanding into factors related to breaking the intergenerational cycle of abuse. As such, future research could consider abuse histories of parents who do and do not go on to maltreat their own children in terms of personality and other factors which may aid resilience. In turn this could assist in the

development of treatment approaches for children who disclose maltreatment and also, latterly, for adults for whom their initial disclosure does not occur until later life. An awareness of such factors would also aid risk assessment with an increased ability to assess protective factors in parents who experienced maltreatment during their own childhood.

The assessment of personality and use of personality measurement within research remains a challenge whilst so much inconsistency regarding classification and theory remains. Best practice includes both an interview and a standardised measure, and while the assessments from which the data was taken did follow best practice, the current data set only allows for the results of the measure (MCMI-III). Ideally, clinical judgement would also be included but this may need to take the form of qualitative research. The current research attempted to follow the 3 cluster model which is presented within the DSM-IV-TR. At the time that the research was undertaken this was in order to combat the increasingly dimensional approach suggested for the DSM-5. Whilst the eventual release of the DSM-5 did not include this dimensional approach as the foremost method for the categorisation of personality, the 3 cluster model adhered to within the research did allow for both a semi-dimensional approach whilst also utilising the individual personality types that remain within the DSM-5. However, there are other approaches to personality classification (such as the Five-Factor model) and clearly results may have differed if personality had been assessed and categorised according to this.

Limitations

Limitations are discussed within each chapter, however, it is important to reaffirm their importance with regards to the interpretation of the findings of this thesis.

The discussion of limitations within Chapter 1, the Systematic Literature Review, raised concerns that the results may have been biased by the individual studies investigating

single types of personality rather than evaluating which personality traits were present within their respective samples. This is likely to have skewed the results somewhat as, although the investigator would have been able to report whether their individual personality type was present, they would not have been able to report on other personality traits that may have been present simultaneously. Further, a general criticism applicable to the majority of the studies review within Chapter 1 was that there was a lack of comparison between maltreatment types, potentially preventing a comprehensive understanding of how personality is linked to child maltreatment. One further consideration was regarding the vastly differing assessment styles within the studies reviewed in that studies tended to rely on either a personality inventory or a clinical interview meaning that a true comparison of results was not possible. Additionally, the varying theoretical stances taken within the studies further confounded the comparisons between the studies.

Limitations of the MCMI-III, presented within Chapter 2, largely surround its use as a standalone assessment tool. Other limitations of its' use concern its potential inability to detect random responders and its vulnerability to manipulation. However, providing the tool is *not* used as a stand-alone tool, and best practice regarding personality assessment is employed, these limitations should not prove confounding to the degree that they would invalidate the use of the tool. Chapter 2 also suggests that within the current population particular vigilance should be paid to the presentation of the pattern of elevations termed the 'normal trio', a phenomenon which has been much debated. However, again, as long as the clinician interprets the results of the MCMI-III with due caution and applies knowledge of the individual gained through clinical interview and a review of file information, then the measure should remain a useful and appropriate one. Clearly, within the current research the MCMI-III has been used as a standalone tool. However, this is for research purposes and difficulties associated with alternatives have been discussed.

Chapter 3 identified several limitations within the research study which suggest that further research is needed to attempt replication of the findings and further them. The most notable of the limitations was the lack of control group which meant that it was not possible to compare personality traits in those who perpetrate maltreatment and those who do not. This means that conclusions made with regards to risk must be hesitant, and causal links cannot be made. This also limits the generalisability of the findings in that they can, and *must*, only be applied to the current sample. Future research must ensure to include a control sample, and also perhaps a comparison with perpetrators of IPV who have not perpetrated child maltreatment. Additionally, the perpetration of emotional abuse was not considered within the current study. Emotional abuse is implicated within both neglect and physical maltreatment, however this was not recorded as part of the data collection due to the lack of consideration of it by instructing parties (e.g. 'Emotional Abuse' was not a reason for referral in any case). Whilst future research should attempt to address this, it does pose some difficulty due to the subjective nature of emotional abuse and therefore difficulties in recording it. As discussed there were a number of reasons why perpetrators of sexual abuse were not included in the current sample. However, future research may wish to consider including polyabusers who perpetrated sexual abuse in order to investigate personality and other factors in such perpetrators (rather than in perpetrators of solely sexual abuse).

Further limitations of the research surround the lack of attention paid to different facets of neglect, and also the severity of the maltreatment perpetrated and/or experienced. Certainly future research should address these concerns as this may have had a confounding effect on the findings within the current study.

Conclusion

Of main note within this exploration of the role of personality in child maltreatment is the new empirical data presented in Chapter 3. Multiple analyses showed a number of prevalent personality traits as well as other significant factors relating to the perpetration of child maltreatment. Of notable significance was the difference between the profiles of male and female perpetrators. Response style between the genders differed greatly, with females responding in a manner consistent with those who are asking for help, and males responding in a socially desirable manner. In terms of personality, females generally showed a higher overall level of psychopathology, with significant findings on scales relating to negative self-concept whereas males showed single elevations on personality scales relating to self-enhancement. Furthermore, the personality profiles of males and female who had experienced abuse during their own childhood differed, with females potentially showing a higher level of resilience. Involvement in IPV was also shown to have a significant relationship with the perpetration of Child Maltreatment. Findings largely supported previous research on personality in those who perpetrate Child Maltreatment in that there was no set profile for those who perpetrate Child Maltreatment. However findings highlighted the consistent difference in profile of males and female perpetrators which has not been so significantly and consistently reported previously. As highlighted throughout this thesis, there is a dearth of research relating to this important topic. Thus, despite its limitations, the current research contributes to the literature base, utilising a sample size that although small, is greater in size to sample sizes presented in much of the existing research. It is critical that research into the role of personality in child maltreatment continues to grow in order to ensure the risk-assessment of risk-referred parents adheres to best practice by utilising an up-to-date evidence base and continues to improve in terms of accuracy and harm-reduction.

References

Adshead, G. (2003). Dangerous and severe parenting disorder? Personality Disorder, parenting and new legal proposals. *Child Abuse Review, 12,* 227 – 237.

Afifi, T. O., MacMillan, H. L. (2011). Resilience following child maltreatment: a review of protective factors. *Canadian Journal of Psychiatry, 56,* 266 – 272.

Afifi, T. O., Mather, A., Boman, J., Fleisher, W., Enns, M. W., MacMillan, H., & Sareen, J. (2011). Childhood adversity and Personality Disorders: Results from a nationally representative population-based study. *Journal of Psychiatric Research, 45*, 814 – 822.

Alink, L. R. A., Cicchetti, D., Kim, J., & Rogosch, F. A. (2009). Mediating and moderation processes in the relation between maltreatment and psychopathology: Mother-child relationship quality and emotion regulation. *Journal of Abnormal Child Psychology, 37,* 831 - 843.

Allport, G. W. (1961). *Pattern and growth in personality*. New York, NY: Holt, Rinehart and Winston.

Aluja, A., Garcia, L. F., Cuevas, L., & Garcia, O. (2007). The MCMI-III Personality Disorders scores predicted by the NEO-FFI-R and the ZKPQ-50-CC: A comparative study. *Journal of Personality Disorders, 21,* 58 – 71.

American Educational Research Association.(1999). *The Standards for Educational and Psychological Testing (revised).* Washington, DC.

American Psychiatric Association. (1952). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC.

American Psychiatric Association. (1968). *Diagnostic and Statistical Manual of Mental Disorders* (2nd Edition). Washington, DC.

American Psychiatric Association. (1980). *Diagnostic and Statistical Manual of Mental Disorders* (3rd Ed., Revised). Washington, DC.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th Ed.). Washington, DC.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th Ed.). Washington, DC.

Anda, R. F., Felitti, V. J., Bremner, J. D. Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: a convergence of evidence from neurobiology and epidemiology.

Andrews, G., Slade, T., & Peters, L. (1999). Classification in psychiatry: ICD-10 versus DSM-IV. *British Journal of Psychiatry, 174*, 3 -5.

Archer, R. P., Buffington-Vollum, J. K., Stredny, R. V., & Handel, R. W. (2006). A survey of psychological tests use patterns among forensic psychologists. *Journal of Personality Assessment, 87*, 85–95.

Austin, W. G., & Drozd, L. D. (2012). Intimate Partner Violence and Child Custody Evaluation, Part I: Theoretical Framework, Forensic Model, and Assessment Issues. *Journal of Child Custody, 9,* 250 – 309.

Azar, S., Barnes, K., & Twentyman, C. (1988). Developmental outcomes in physically abused children: Consequences of parental abuse or the effects of a more general breakdown in caregiving behaviors? *Behavior Therapist, 11*, 27 – 32.

Azar, S. T., Povilaitis, T. Y., Lauretti, A.F., & Pouquette, C. I. (1998). The current status of etiological theories in intrafamilial child maltreatment. In: Lutzker, J. R. (Ed) *Handbook of Child Abuse Research and Treatment*. New York: Plenum Press, pp 3– 30.

Bagby, R., & Marshall, M. (2004). Assessing underreporting response bias on the MMPI-2*.* Assessment, 11*, 115 – 126.*

Ball, S. A., Rounsaville, B. J., Tennen, H., & Kranzler, H. R. (2001). Reliability of Personality Disorder symptoms and personality traits in substance-dependent inpatients. *Journal of Abnormal Psychology, 110*, 341 – 352.

Beck, A. T., & Steer, R. A. (1987). *Beck Depression Inventory manual.* San Antonio, TX: Psychological Press.

Beck, A. T., & Steer, R. A. (1990). *Beck Anxiety Inventory manual.* San Antonio, TX: Psychological Press.

Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. *Psychological Bulletin* 114: 413–434.

Belsky, J., Steinberg, L., & Draper, P. (1991). Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. *Child Development, 62,* 647 – 670.

Berenbaum, H., Thompson, R. J., Milanak, M. E., Boden, T., & Bredemeier, K. (2008). Psychological trauma and schizotypal Personality Disorder. *Journal of Abnormal Psychology, 117*, 502 – 519.

Berlin, L. J., Appleyard, K., & Dodge, K. A. (2011). Intergenerational continuity in child maltreatment: Mediating mechanisms and implications for prevention. *Child Development, 81,* 162 – 176.

Bishop, J. S., & Leadbeater, J. B. (1999). Maternal social support patterns and child maltreatment: Comparison of maltreating and non-maltreating mothers. *American Journal of Orthopsychiatry, 69,* 172–181.

Blais, M. A., Holdwick, D. J., McLean, R. Y. S., Otto, M. W., Pollack, M. H., & Hilsenroth, M. J. (2003). Exploring the psychometric properties and construct validity of the MCMI-III Anxiety and Avoidant personality scales. *Journal of Personality Assessment, 81*(3), 237 – 241.

Blettner, M., Sauerbrei, W., Schlehofer, B., Scheuchenpflug, T., & Friedenreich, C. (1999). Traditional reviews, meta-analysis and pooled analyses in epidemiology. *International Journal of Epidemiology, 28*, 1 - 9.

Blood, L., (2008). The Use of the MCMI-III in Completing Parenting Capacity Assessments. *Journal of Forensic Psychology Practice, 8,* 24 - 38.

Bogacki, D. F., & Weiss, K. J. (2007). Termination of parental rights: focus on defendants. *The Journal of Psychiatry & Law, 35*, 25 – 46.

Boisvert, M. J. (1972). The battered child syndrome. *Social Casework, 53,* 475 – 480.

Bools, C. N., Neale, B. A., & Meadow, S. R. (1994). Munchausen syndrome by proxy: a study of psychopathology. *Child Abuse and Neglect, 18*, 773 – 788l

Bow, J. N., Flens, J. R., & Gould, J. W. (2010). MMPI-2 and MCMI-III in forensic evaluations: A survey of psychologists. *Journal of Forensic Psychology Practice, 10,* 37 – 52.

Bow, J. N., Flens, J. R., Gould, J. W., & Greenhut, D. (2005). An analysis of administration, scoring, and interpretation of the MMPI-2 and MCMI-II/III in child custody evaluations. *Journal of Child Custody, 2*(4), 1 – 22.

Bourget, D. G., Grace, J., & Whitehurst, L. (2007). Filicide, the murder of a child by a parent. *Journal of American Academy of Psychiatry and Law, 35*, 74–82.

Bradshaw, K. M., Donohue, B., Cross, C., Urgelles, J., & Allen, D. N. (2011). Examination of the relationship between parental satisfaction and child maltreatment potential while considering social desirability. *Journal of Family Violence, 26,* 545 – 549.

Briere, J., & Elliott, D. (2003). Prevalence and psychological sequale of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse and Neglect*, *27*, 1205 – 1222.

Brockington, I. (2004). Post-partum psychiatric disorders. *Lancet, 363*, 303 – 310.

Browne, K. D., & Hamilton, C. E. (1999). Police recognition of the links between spouse abuse and child abuse. *Child Maltreatment, 4*, 136 – 147.

Butchart, A., Putney, H., Furniss, T., & Kahane, T. (2006). *Preventing child maltreatment: a guide to taking action and generating evidence.* Geneva: World Health Organisation.

Butcher, J. N., Dahlstrom, W. G., Graham, J. R., Tellegen, A. M., Kreammer, B. (1989). *The Minnesota Multiphasic Personality Inventory-2 (MMPI-2) Manual for Administration and Scoring.* Minneapolis, MN: University of Minneapolis Press.

Campbell, K. A., Cook, L. J., LaFleu, B. J., & Keenan, H. T. (2010). Household, family, and child risk factors after an investigation for suspected child maltreatment. *The Archive of Pediatric Adolescent Medicine, 164,* 943 – 949.

Cattell, R. (1943). *The scientific use of factor analysis in the behavioural and life sciences.* New York, NY: Penum.

Center for Disease Control. (2009). Understanding intimate partner violence. Fact Sheet. Retrieved from www.cdc.gov/violenceprevention.

Charter, R. A. (2000). Random responding to objective tests. *Journal of Psychoeducational Assessment, 18*, 308 – 315.

Charter, R. A., & Lopez, M. N. (2002). Millon Clinical Multiaxial Inventory (MCMI-III): The inability of the validity conditions to detect random responders. *Journal of Clinical Psychology, 58*(12), 1615 – 1617.

Children Act (1989). London: HMSO.

Children and Family Court Advisory and Support Service (CAFCASS). *Cafcass care and private law demand statistics.* Accessed at http://www.cafcass.gov.uk/leaflets-resources/organisational-material/care-and-private-law-demand-statistics.aspx

Choca, J. P. (2004). *Interpretive Guide to the Millon Clinical Multiaxial Inventory (3rd Ed.).* Washington, DC: American Psychological Association.

Christoffersen, M. N., Corcoran, J., DePanfilis, D., & Daining, C. (2008) Cognitive-behavioural therapy for parents who have physically abused their children. *Cochrane Database of Systematic Reviews,* Issue 3.

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: *Consequences for children's development. Psychiatry,56,* 96–118.

Cohen, L. J., Foster, M., Nesci, C., Tanis, T., Halmi, W., & Galynker, I. (2013). How do different types of childhood maltreatment relate to adult personality pathology? *The Journal of Nervous and Mental Disease, 201,* 234 – 243.

Cohen, J. A., Perel, J. M., DeBellis, M. D., Friedman, M. J., & Putnam, F. W. (2002). Treating traumatized children: Clinical implications of the psychobiology of posttraumatic stress disorder. *Trauma Violence & Abuse*, *3*(2), 91–108.

Coid, J., Yang, M., Tyrer, P., Roberts, A., & Ullrich, S. (2006). Prevalence and correlates of personality disorder in Great Britain. *The British Journal of Psychiatry, 188*, 423 – 431.

Conaway, L. P., & Hansen, D. J. (1989). Social behavior of physically abused and neglected children. *Clinical Psychology Review, 9*, 627 – 652.

Cortina. J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78,* 98–104.

Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences, 13*, 653 – 665.

Costa, P. T., &Widiger, T. A. *Personality Disorders and the Five-Factor Model.* Washington, DC: APA.

Cox, C. E., Kotch, J. B., & Everson, M. D. (2003). A longitudinal study of modifying influences in the relationship between domestic violence and child maltreatment. *Journal of Family Violence, 18*, 5 – 17.

Craig, L. A., Browne, K. D., Beech, A., & Stringer, I. (2006). Differences in personality and risk characteristics in sex, violent and general offenders. *Criminal Behaviour and Mental Health, 16*(3), 183 – 194.

Craig, R. J. (1999). Testimony based on the Millon Clinical Multiaxial Inventory: Review, commentary, and guidelines. *Journal of Personality Assessment, 3(*2), 290 – 304.

Craig, R. J. (2006). *Essentials of Millon Inventories Assessment.* Book chapter (Millon Clinical Multiaxial Inventory-III) received by email from Author, May 2012.

Craig, R. J., & Olson, R. E. (1992). Relationship between MCMI-II scales and normal personality traits. *Psychological Reports, 71,* 699 – 705.

Craig, R. J., & Weinberg, D. (1993). MCMI: Review of the literature. In R. J. Craig (Ed.), *The Millon Clinical Multiaxial Inventory: A clinical research information synthesis.* (pp. 23 – 70). Hillsdale, NJ: Erlbaum.

Craissati, J., Minoudis, P., Shaw, J., Chuan, S. J., Simons, S., & Joseph, N. (2011). *Working with Personality Disordered offenders. A practitioners guide.* Ministry of Justice, National Offender Management Service.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334.

Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of Borderline Personality: Elaborating and extending Linehan's theory. *Psychological Bulletin, 135*(3), 495 – 510.

Cuevas, L., Garcia, L. F., Aluja, A., & Garcia, O. (2008). Exploratory and confirmatory factorial structure of the MCMI-III Personality Disorders: Overlapping versus non-overlapping scales. *European Journal of Psychiatry, 22*(2), 59 – 68.

Dahlstrom, W., Welsh, G., & Dahlstrom, L. (1972). *An MMPI Handbook*. Minneapolis: University of Minnesota Press.

Daubert v. Merrell Dow Pharmaceuticals, Inc., 2786 L.Ed.2d (U.S. 113 S.Ct. 1993).

Davison, S. E. (2002). Principles of managing patients with Personality Disorder. *Advances in Psychiatric Treatment, 8*, 1 – 9.

De la Vega, A., de la Osa, N., Ezpeleta, L., Granero, R., & Domenech, J. M. (2011). Differential effects of psychological maltreatment on children of mothers exposed to intimate partner violence. *Child Abuse & Neglect, 35,* 524 - 531.

Department for Education (2012) Characteristics of children in need in England, 2011-12, final. DfE. Table D5 Available online at http://www.education.gov.uk/rsgateway/DB/SFR/s001095/index.shtm

Dinwiddie, S. H. & Bucholz, K. K. (1993). Psychiatric diagnoses of self-reported child abusers. *Child Abuse & Neglect, 17*, 465 – 476.

Dixon, L., Browne, K. D., & Hamilton-Giachritsis, C. (2005). Risk factors of parents abused as children: A mediational analysis of the intergenerational continuity of child maltreatment (Part I). *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 46,* 47–57.

Dixon, L. & Graham-Kevan, N. (2011). Understanding the nature and etiology of intimate partner violence and implications for practice and policy. *Clinical Psychology Review, 31,* 1145 – 1155.

Dubowitz, H. (2000). What is physical abuse?. In: Dubowitz, H., & DePanfilis, D. *Handbook for child protection practice*. London: Sage Publications, 15–17.

Dyce, J., O'Connor, B. P., Parkins, S. Y., & Janzen, H. L. (1997). Correlational structure of the MCMI-III Personality Disorder Scales and comparisons with other data sets. *Journal of Personality Assessment, 63*(3), 568 – 582.

Dyer, F. J., & McCann, J. T. (2000). The Millon Clinical Inventories, research critical of their forensic application, and Daubert criteria. *Law and Human Behavior, 24(*4), 487 – 497.

Egeland, B., Bosquet, M., & Chung, A. L. (2002). Continuities and discontinuities in the intergenerational transmission of child maltreatment: Implications for breaking the cycle of abuse. In K. D. Browne, H. Hanks, P. Stratton, & C. Hamilton (Eds.). *Early prediction and prevention of child abuse: A handbook* (pp. 217–232). New York: Wiley.

Egeland, B., Erickson, M. F., Butcher, J. N., & Ben-Porath, Y. S. (1991). MMPI-2 Profiles of women at risk for child abuse. *Journal of Personality Assessment, 57*, 254 – 263.

Egger, M., Schneider, M. & Smith, D. (1998). Spurious precision? Meta-analyses of observational studies. *British Medical Journal, 316*, 140-144.

Ehrensaft, M. K., Cohen, P., & Johnson, J. G. (2006). Development of Personality Disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology, 115*, 474–483.

Esbec, E. & Echeburua, E. (2011). New criteria for Personality Disorders in DSM-V. *Actas espanolas de psiquiatria, 31*, 1- 11.

Evans, A. (1980). Personality characteristics and disciplinary attitudes of child-abusing mothers. *Child Abuse and Neglect, 4*, 179 – 187.

Evans, D. (2002). Systematic reviews of interpretive research: Interpretive data synthesis of processed data. *Australian Journal of Advanced Nursing, 20*, 22 – 26.

Ezzo, F. R., Pinsoneault, T. B., & Evans, T. M. (2007). A comparison of MMPI-2 profiles between child maltreatment cases and two types of custody cases. *Journal of Forensic Psychology Practice, 7*, 29 – 43.

Falkov, A. (1996). *A study of working together Part 8 reports: Fatal child abuse and parental psychiatric disorder,* London: Department of Health.

Farmer, R. F. (2000). Issues in the assessment conceptualization of Personality Disorder. Clinical Psychology Review, 20, 823 – 851.

First, M. B. & Pincus, H. A. (1999). Classification in psychiatry: ICD-10 vs. DSM-IV. A response. *British Journal of Psychiatry, 175*, 205 – 209.

Flett, G. L., Hewitt, P. L., Endler, N. S., & Bagby, R. M. (1995). Conceptualization and assessment of personality factors in depression. *European Journal of Personality, 9*, 309–350.

Folsom, W. S., Christensen, M. L., Avery, L., & Moore, C. (2003). The co-occurrence of child abuse and domestic violence: An issue of service delivery for social service professionals. *Child and Adolescent Social Work Journal, 20,* 375 – 387.

Fontaine, D., & Nolin, P. (2012). Personality Disorders in a sample of parents accused of physical abuse or neglect. *Journal of Family Violence, 27*, 23 – 31.

Foreman, D. (1998). Maternal mental illness and mother-child relations. *Advances in Psychiatric Treatment, 4*, 135 – 143.

Forsman, M., & Langstrom, N. (2012). Child maltreatment and adult violent offending: population-based twin study addressing the 'cycle of violence' hypothesis. *Psychological Medicine, 42,* 1977 – 1983.

Francis, C. R., Hughes, H. M., & Hitz, L. (1992). Physically abusive parents and the 16-PF: A preliminary psychological typology. *Child Abuse & Neglect, 16*, 673 – 691.

Freud, S. (1909). Analysis of a phobia of a five-year old boy. *Pelican Freud Library, 8, Case Histories 1.*

Friedrich, W. N., Tyler, J. A., & Clark, J. A. (1985). Personality and psychological variables in abusive, neglectful, and low-income control mothers. *Journal of Nervous and Mental Disease, 173*, 449–460.

Fromm, S. (2001). *Total estimated cost of child abuse and neglect in the United States: Statistical evidence.* Chicago, IL: Prevent Child Abuse America. Retrieved from http://member.preventchildabuse.org/site/DocServer/cost_analysis.pdf?docID=144

Fukushima, O., Iwasaki, K., Aoki, S., & Kikuchi, J. (2006). Parents' narcissism and aggression against children: When parents attribute misfortune to their child. *Japanese Journal of Social Psychology, 22,* 1 – 11.

Gaudin, J., Polansky, N. A., Kilpatrick, A. C., & Shilton, P. (1993). Loneliness, depression, stress, and social support in neglectful families. *American Journal of Orthopsychiatry,63*, 597–605.

Gilbert, R., Widom, C. P., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet, 373,* 68 – 81.

Glaser, D. (2002). Emotional abuse and neglect (psychological maltreatment): a conceptual framework. *Child Abuse and Neglect, 26,* 697 – 714.

Graham-Bermann, S., Gruber, G., Howell, K., & Girz, L. (2009). Factors discriminating among profiles of resilience and psychopathology in children exposed to intimate partner violence (IPV) *Child Abuse & Neglect, 33,*648-660.

Graziano, A. M., & Mills, J. R. (1992). Treatment for abused children: When is a partial solution acceptable? *Child Abuse & Neglect, 16*, 217–28.

Great Britain Office for National Statistics, Department for Education and Skills. *Referrals, Assessments and Children and Young People on Child Protection Registers.* Available online: http://www.dfes.gov.uk/rsgateway/DB/SFR/ 2005.

Grilo, C., & Masheb, R. M. (2002). Childhood maltreatment and Personality Disorders in adult patients with binge eating disorder. *Acta Psychiatrica Scandinavica, 106,* 183-188.

Grove, W. M., & Vrieze, S. I. (2009). An exploration of the base rate scores of the Millon Clinical Multiaxial Inventory-III. *Psychological Assessment, 21* (1), 57 – 67.

Gudjonsson, G. H., & Sigurdsson, J. F. (2000). Differences and similarities between violent offenders and sex offenders. *Child Abuse & Neglect, 24*(3), 363 – 372.

Halon, R. L. (2001). The Millon Clinical Multiaxial Inventory—III: The normal quartet in child custody cases. *American Journal of Forensic Psychology,19*, 57–75.

Hamilton, C. E., Falshaw, L., & Browne, K. D. (2002). The link between recurrent maltreatment and offending behaviour. *International Journal of Offender Therapy and Comparative Criminology, 46*, 75 – 94.

Hamilton, M. (1959). The assessment of anxiety states by rating. *British Journal of Medical Psychology,32,* 50–55

Hart, S., Dutton, D., Newlove, T. (1993). The relevance of Personality Disorder among wife assaulters. *Journal of Personality Disorders, 7*, 329 – 341.

Hartley, C. (2004). Severe domestic violence and child maltreatment: considering child physical abuse, neglect, and failure to protect. *Child and Youth Services Review, 26,* 373 – 392.

Hazler, R. J., & Denham, S. A. (2002). Social isolation of youth at risk: Conceptualizations and practical implications. *Journal of Counseling and Development, 80*(4), 403-409.

Herrenkohl, T. I., & Herrenkohl, R. C. (2007). Examining the overlap and prediction of multiple forms of child maltreatment, stressors, and socioeconomic status: A longitudinal analysis of youth outcomes. *Journal of Family Violence, 22*, 553 – 562.

Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Moylan, C. A. (2008). Intersection of child abuse and children's exposure to domestic violence. *Trauma, Violence & Abuse, 9*, 84 – 99.

Hesse, M., Guldager, S., & Linneberg, I. H. (2012). Convergent validity of the MCMI-III clinical syndrome scales. *British Journal of Clinical Psychology, 51,* 172 – 184.

Higgins, D. J. (2004). The importance of degree versus type of maltreatment: A cluster analysis of child abuse types. *The Journal of Psychology, 138*, 303 – 324.

Higgins, D. J., & McCabe, M. P. (2000). Multi-type maltreatment and the long-term adjustment of adults. *Child Abuse Review, 9*, 6 – 18.

Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse & Neglect, 26*(6 - 7), 679 - 695.

Holdwick, D. J., Hilsenroth, M. J., Castlehury, F. D., & Blais, M. A. (1998). Identifying the unique and common characteristics among the DSM-IV Antisocial, Borderline, and Narcissistic Personality Disorders. *Comprehensive Psychiatry, 39*, 277 – 286.

Hopwood, C. J., Donnellan, M. B., Blonigen, D. M., Krueger, R. F., McGue, M., Iacono, W. G., & Burt, S. A. (2011). Genetic and environmental influences on personality trait stability and growth during the transition to adulthood: A three-wave longitudinal study. *Journal of Personality and Social Psychology, 100*(3), 545 – 556.

Hosmer, D. W., Lemeshow, S., & Sturdivant, R. (2013). *Applied Logistic Regression, 3rd Edition*. Wiley

Hsu, L. M. (2002). Diagnostic validity statistics and the MCMI-III. *Psychological Assessment, 14*(4), 410 – 422.

Huntsman, L. (2008). *Parents with mental health issues: Consequences for children and effectiveness of interventions designed to assist children and their families.* Centre for Parenting & Research, Ashfield, Australia.

Hyler, S. E., & Rieder, R. O. (1987). *PDQ–R: Personality Diagnostic Questionnaire– Revised*. New York: New York State Psychiatric Institute.

Lally, S. J. (2003). What tests are expected for use in forensic evaluations? A survey of experts. *Professional Psychology: Research and Practice, 34,* 491-498.

Loranger, A. W. International personality disorder examination (IPDE) manual. (1994). Psychological assessment resources, In.: Odessa, FL.

Johnson, J. G., Cohen, P., Brown, J., Smailes, E. M., & Bernstein, D. P. (1999). Childhood maltreatment increases risk for Personality Disorders during early adulthood. *Archives of General Psychiatry, 57*(7), 600 – 606.

Johnson-Reid, M., Kohl, P. L., & Drake, B. (2012). Child and adult outcomes of chronic child maltreatment. *Pediatrics, 129,* 839 – 846.

Jones, H. (2012). An empirical evaluation of Millon's personality measures for a 'risk-referred' parenting population. *Unpublished Masters Dissertation, University of Birmingham.*

Jungmeen, K., & Dante, C. (2010). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology and Psychiatry, 51*, 706 – 716.

Kaufman, J. & Zigler, E. (1989). The intergenerational transmission of child abuse. In D Chiccetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect.* Cambridge University Press, Cambridge, pp. 129 – 150.

Kempe, C. (1978). Recent developments in the field of child abuse. *Child Abuse and Neglect, 2*, 261 – 267.

Kempe, C. H. (1969). The battered child and the hospital. *Hospital Practice, 4,* 44 – 57.

Kent, J., Weisberg, H., Lamar, B., Marx, T. (1983). Understanding the etiology of child abuse: A preliminary typology of cases. *Children and Youth Services Review, 5*, 7 – 29.

Klevens, J., & Leeb, R. T. (2010). Child maltreatment fatalities in children under 5: Findings from the National Violence Death Reporting System. *Child Abuse & Neglect, 34,* 262 – 266.

Koch, J. B., Lewis, T., Hussey, J. M., English, D., Thompson, R., & Litrownik, A. J. (2008). Importance of early neglect for childhood aggression. *Pediatrics, 121,* 725–731.

Kohl, P. L., Jonson-Reid, M., & Drake, B. (2009). Time to leave substantiation behind: Findings from a national probability study. *Child Maltreatment, 14,* 17–26.

Kokkevi, A., & Agathonos, H. (1987). Intelligence and personality profiles of battering parents. *Child Abuse & Neglect, 11*, 93 – 99

Kolko, D. J., & Swenson, C. C. (2002). *Assessing and treating physically abused children and their families. A cognitive-behavioral approach.* London: Sage Publications.

Lampel, A. K. (1999). Use of the Millon Clinical Multiaxial Inventory – III in evaluation child custody litigants. *American Journal of Forensic Psychology, 17*, 19 – 31.

Lansford, J. E., Miller-Johnson, S., Berlin, L. J., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2007). Early physical abuse and later violent delinquency: A prospective longitudinal study. *Child Maltreatment, 12,* 233–245.

Lecrubier, Y., Sheehan, D. V., Weiller, E., Amorim, P., Bonora, I., Sheehan, K. H., & Dunbar, G. C. (1997). The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: Reliability and validity according to the CIDI. *European Psychiatry, 12*(2), 224–231.

Lenny, P., & Dear, G. E. (2009). Faking good on the MCMI-III: Implications for child custody evaluations. *Journal of Personality Assessment, 91*(6), 553 – 559.

Light, R. J. (1973). Abused and neglected children in America: A study of alternative policies. *Harvard Educational Review, 43*, 556 – 598.

Lowenthal, B. (1999). Effects of maltreatment and ways to promote children's resiliency. *Childhood Education*, 204 – 209.

Lund, S. N. (1975). *Personality and personal history factors of child abusing parents*. Unpublished doctoral dissertation, University of Minnesota.

MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., & Jamieson E. (2001). Childhood abuse and lifetime psychopathology in a community sample. *American Journal of Psychiatry, 158,*1878 - 1883.

Malinosky-Rummell, R., & Hansen, D. J. (1993). Long-term consequences of childhood physical abuse. *Psychological Bulletin*,*114*, 68–79.

Markan, L. K., & Weinstock, D. K. (2005). Expanding forensically informed evaluations and therapeutic interventions in family court. *Family Court Review, 43*, 466 – 480.

McCann, J. T., Flens, J. R., Campagna, V., Collman, P., Lazzaro, T., & Connor, E. (2001). The MCMI-III in child custody evaluations: a normative study. *Journal of Forensic Psychology Practice, 1*(2), 27 – 44.

McCloskey, L. A. (2001). The 'Medea Complex' among men: the instrumental abuse of children to injure wives. *Violence and Victims, 16*, 19 – 37.

McDougall, W. (1932). Of the words, character and personality. *Character and Personality, 1*, 3 – 16.

Melnick, B., & Hurley, J. R. (1969). Distinctive personality attributes of child-abusing mothers. *Journal of Consulting and Clinical Psychology, 33*(6), 746 – 749.

Millon, T. (1981). *Disorders of personality: DSM-III, Axis II.* New York: Wiley.

Millon, T. (1987). *Manual for the Millon clinical multiaxial inventory-II (MCMI-II).* Minneapolis, MN: National Computer Systems.

Millon, T. (1994). *MIPS: Millon Index of Personality Styles manual.* San Antonio, TX: Psychological Corporation.

Millon, T. (1994). *Millon Clinical Multiaxial Inventory-III manual.* Minneapolis, MN: National Computer Systems.

Millon, T. (1996). *Disorders of Personality: DSM-IV and Beyond*. New York, NY: Wiley-Interscience.

Millon, T., & Davis, R. D. (1996). *Disorder of personality* (2nded.). New York: Wiley.

Millon, T., Millon, C., Davis, R., & Grossman, S. (1997). *Millon Clinical Multiaxial Inventory-III manual* (2nd ed.). Minneapolis, MN: National Computer Systems.

Milner, J. S. (1994). Assessing physical child abuse risk: The Child Abuse Potential Inventory. *Clinical Psychology Review, 14*, 547–583.

Milner, J. S., & Dopke, C. (1997). Child physical abuse: Review of offender characteristics. In D. A. Wolfe & R. J. McMahon (Eds.), *Child abuse: New directions in prevention and treatment across the lifespan. Banff international behavioral science series* (Vol. 4, pp. 27-54). Thousand Oaks, CA: Sage Publications, Inc.

Milner, J. S., & Wimberley, R. C. (1979). An inventory for the identification of child abusers. *Journal of Clinical Psychology, 35*, 95 – 100.

Montgomery, S. A., & Asberg, M. (1979). New Depression Scale Designed to be Sensitive to Change. *British Journal of Psychiatry, 134,*382 - 389.

Moran, P., Coffey, C., Chanen, A., Mann, A., Carlin, J. B., & Patton, G. C. (2011). Childhood sexual abuse and abnormal personality: a population-based study. *Psychological Medicine, 41,* 1311 – 1318.

Morey, L. C. (1991). Classification of mental disorder as a collection of hypothetical constructs. *Journal of Abnormal Psychology, 100*, 289 – 293.

Mueller, E., & Silverman, N. Peer relations in maltreated children. In Cicchetti, D., & Carlson, V. (1989). *Child maltreatment: Theory and research on the causes and*

consequences of child abuse and neglect. Cambridge: Cambridge University Press, 529 – 578.

Nunnally, J. C. (1978). *Psychometric theory (2ⁿᵈ Ed.)*. New York: McGraw-Hill.

O'Connor, B. P. (2005). A search for consensus on the dimensional structure of Personality Disorders. *Journal of Clinical Psychology, 61*, 323 – 345.

O'Connor, B. P. (2002). The search for dimensional structure differences between normality and abnormality: A statistical review of published data on personality and psychopathology. *Journal of Personality and Social Psychology, 83*, 962 – 982.

O'Connor, B. P., & Dyce, J. A. (2001). Rigid and extreme: A geometric representation of Personality Disorders in five-factor model space. *Journal of Personality and Social Psychology, 81*, 1119 – 1130.

Ostendorf, F. (2002). Generalizability of the relationships between Personality Disorders and the Big Five Factors of personality. Contribution to the Symposium 'Personality and Personality Disordered' at the 11th European Conference on Personality, July 21-25. Jena, Germany.

Palmer, R. L. (2002). Dialectical behaviour therapy for borderline Personality Disorder. *Advances in psychiatric treatment, 8*, 10 – 16.

Paulson, M. J., Afifi, A. A., Thomason, M. L., & Chaleff, A. (1974). The MMPI: A descriptive measure of psychopathology in abusive parents. *Journal of Clinical Psychology, 30*, 387 – 390.

Paulson, M. J., Schwemer, G. T., & Bendel, R. B. (1976). Clinical application of the Pd, Ma, and (OH) experimental MMPI scales to further understanding of abusive parents. *Journal of Clinical Psychology, 32*, 558 – 564.

Paz, I., Jones, D., & Byrne, G. (2005). Child maltreatment, child protection and mental health. *Current Opinion in Psychiatry, 18*, 411 – 421.

Pears, K. C., & Capaldi, D. M. (2001). Intergenerational transmission of abuse: A two-generational prospective study of an at-risk sample. *Child Abuse & Neglect, 25*, 1439 – 1461.

Perepletchikova, F., Ansell, E., & Axelrod, S. (2012). Borderline Personality Disorder features and history of childhood maltreatment in mothers involved with child protective services. *Child Maltreatment, 17*, 182 – 190.

Piersma, H. L. Ohnishi, H., Lee, D. J., & Metcalfe, W. E. (2002). An empirical evaluation of Millon's dimensional polarities. *Journal of Psychopathology and Behavioral Assessment, 24* (3), 151 – 158.

Pinherio, P. (2006). *Statement to the United Nations general assembly – third committee agenda item 62. Promotion and protection of the rights of children.* http://www.violencestudy.org/IMG/pdf/IE_Statement_GA-06.pdf

Pinsoneault, T. B., & Ezzo, F. R. (2012). A comparison of MMPI-2-RF profiles between child maltreatment and non-maltreatment custody cases. *Journal of Forensic Psychology Practice, 12,* 227 – 237.

Polansky, N. A., Gaudin, J. M., & Kilpatrick, A. C. (1992). The Maternal Characteristic Scale: A cross validation. *Child Welfare, 71,* 271–280.

Quinnell, F. A., & Bow, J. N. (2001). Psychological tests used in child custody evaluations. *Behavioural Sciences and the Law, 19,* 491 – 501.

Radford, L., Corral, S., Bradley, C., Fisher, H., Bassett, C., Howat, N., & Collishaw, S. (2011). *Child abuse and neglect in the UK today*. London: NSPCC.

Rantanen, J., Pulkkinen, L., & Kinnunen, U. (2005). The Big Five personality dimensions, work-family conflict, and psychological distress: A longitudinal view. *Journal of Individual Differences, 26*, 155 – 166.

Reiger, D. A., Kuhl, E. A., & Kupper, D. J. (2013). The DSM-5: classification and criteria changes. *World Psychiatry, 12*, 92 – 98.

Retzlaff, P. D. (2000). Comment on the validity of the MCMI-III. *Law and Human Behaviour, 24*(4), 499 – 500.

Retzlaff, P. and Dunn, T. (2003). Clinical use of the MCMI-III Psychopathology of Incarcerated Sex Offenders. *Journal of Personality Disorders,* 17, 306-317.

Retzlaff, P. D., & Gibertini, M. (1987). Air Force pilot personality: Hard data on the "right stuff". *Multivariate Behavioral Research, 22*, 383 – 399.

Retzlaff, P., Stoner, J., & Kleinsasser, D. (2002). The use of the MCMI-III in the screening and triage of offenders. *International Journal of Offender Therapy and Comparative Criminology, 46*(3), 319 – 332.

Rogers, R. (2003). Forensic use and abuse of psychological tests: Multiscale inventories. *Law and Psychiatry, 9*, 316 – 320.

Rogers, R., Salekin, R. T., & Sewell, K. W. (1999). Validation of the Millon Clinical Multiaxial Inventory for Axis II Disorders: Does it meet the Daubert standard? *Law and Human Behavior, 23*(4), 425 – 443.

Rogosch, F. A., & Cicchetti, D. (2004). Child maltreatment and emergent personality organization: Perspective from the five-factor model. *Journal of Abnormal Child Psychology, 32*, 123 – 145.

Rossi, G., Van den Brande, I., Sloore, H., & Hauben, C. (2003). Convergent validity of the MCMI-III Personality Disorder scales and the MMPI-2 scales. *Journal of Personality Disorders, 17*, 330 – 340.

Rottman, B. M., Ahn, W. K., Sanislow, C. A., & Kim, N. S. (2009). Can clinicians recognise DSM-IV Personality Disorders from five-factor model descriptions of patient cases? *American Journal of Psychiatry, 166*, 427 – 433.

Royal College of Psychiatrists. (2011). Parents as patient: supporting the needs of patients who are parents and their children. *Royal College of Psychiatrists, London.*

Salovey, P., & Mayer, J. D. (1989). Emotional intelligence. *Imagination, Cognition, and Personality, 9,* 185–211.

Sanislow, C. A., Grilo, C. M., Morey, L. C. Bender, D. S., Skodol, A. E., Gunderson, J. G., Shea, M. T., Stout, R. L., Zanarini, M. C., & McGlashan, T. H. (2002). Confirmatory factory analysis of DSM-IV criteria for Borderline Personality Disorder: Findings from the collaborate longitudinal Personality Disorders study. *American Journal of Psychiatry, 159*, 284 – 290.

Saulsman, L. M. (2011). Depression, Anxiety, and the MCMI-III: Construct Validity and Diagnostic Efficiency. *Journal of Personality Assessments, 93*(1), 76 – 83.

Saulsman, L. M., & Page, A. C. (2004). The five factor model and Personality Disorder empirical literature. A meta-analytic review. *Clinical Psychological Review, 23*, 1055 – 1085.

Scott, K. M., Smith, D. R., & Ellis, P. M. (2010). Prospectively ascertained child maltreatment and association with DSM-IV Mental Disorders in young adults. *Archives of General Psychiatry, 67*, 712 – 719.

Scott, J., Varghese, D., & McGrath, J. (2010). As the twig is bent, the tree inclines. Adult mental health consequence of childhood adversity. *Archive of General Psychiatry, 67*, 111 – 112.

Schneider, C., Hoffmeister, J. K., & Heifer, R. E. *A predictive screening questionnaire for potential problems in mother-child interaction.* IN Heifer, R. E., & Kempe, H. (1976). *Child abuse and neglect: The family and the community*: Cambridge, MA: Ballinger.

Schreier, H. (2002). Munchausen by proxy defined. *Pediatrics, 110*, 985 – 988.

Senn, T. E., & Carey, M. P. (2010). Child maltreatment and women's adult sexual risk behaviour: Childhood sexual abuse as a unique risk factor. *Child Maltreatment, 15*, 324 – 355.

Shahar, G. (2001). Maternal personality and distress as predictors of child neglect. *Journal of Research in Personality, 35,* 537 – 545.

Shipman, K., Edwards, A., Brown, A., Swisher, L., & Jennings, E. (2005). Managing emotion in a maltreating context: A pilot study examining child neglect. *Child Abuse & Neglect, 29*(9), 1015 - 1029.

Shlonsky, A., Schumaker, K., Cook, C., Crampton, D., Saini, M., Backe-Hansen, E., & Kowalski, K. (2009). Family group decision making for children at risk of abuse and neglect (Protocol). *The Cochrane Library.*

Sidebotham, P., Bailey, S., Belderson, P., & Brandon, M. (2011). Fatal child maltreatment in England, 2005 – 2009. *Child Abuse & Neglect, 35*, 299 – 306.

Sidebotham, P., Golding, J., & The ALSPAC Study Team. (2001). Child maltreatment in the "Children of the Nineties". A longitudinal study of parental risk factors. *Child Abuse & Neglect, 25.* 1177 – 1200.

Skodol, A., Clark, L. A., Bender, D. S., Krueger, R. F., Morey, L. C., Verheul, R., Alarcon, R. D., Bell, C. C., Siever, L. J., & Oldham, J. M. (2011). Proposed changes in Personality and Personality Disorder assessment and diagnosis for DSM-5 Part I: Description and Rationale. *Personality Disorder: Theory, Research, and Treatment, 2*, 4 – 22.

Skodol, A. E., & Bender, D. S. (2009). The future of Personality Disorders in DSM-5? *American Journal of Psychiatry, 166*, 388 – 391.

Smith, S. M., Hanson, R., & Noble, S. (1973). Parents of battered babies: A controlled study. *British Medical Journal, 4,* 388 – 391.

Somwaru, D., & Ben-Porath, Y. (1995). Assessment of the Personality Disorders with MMPI-2. Clinical workshops on the MMPI-2 and MMPI-A and the 30th annual symposium on recent developments in the use of MMPI, MMPI-2 & MMPI-A, Florida. As Cited in Rossi, G., Van den Brande, I., Sloore, H., & Hauben, C. (2003). Convergent validity of the MCMI-III Personality Disorder scales and the MMPI-2 scales. *Journal of Personality Disorders, 17*, 330 – 340.

Spinetta, J. J. (1978). Parental personality factors in child abuse. *Journal of Consulting and Clinical Psychology, 46*, 1409 – 1414.

Spitzer, R. L., Endicott, J., & Robins, E. (1978). Research diagnostic criteria: Rationale and reliability. *Archive of General Psychiatry, 35,* 773 – 782.

Sroufe, L. A. (2005). Attachment and development: a prospective, longitudinal study from birth to adulthood. *Attachment & Human Development, 7*, 349 – 367.

Stanley, N. & Penhale, B. (1999). The mental health problems of mothers experiencing the child protection system: identifying needs and appropriate responses. *Child Abuse Review, 8*, 34 – 45.

Straus, M. A. (1990). Ordinary violence, child abuse and wife beating: What do they have in common? In M. A. Straus, R. J. Gelles, *Physical violence in American families: Risk factors and adaptations to violence in 8145 families* (pp. 403 –424). New Brunswick, NJ: Transaction.

Stith, S. M., Liu, T., Davies, C., Boykin, E. L., Alder, M. C., Harris, J. M., Som, A., McPherson, M., & Dees, J. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behaviour, 14*, 13 – 29.

Strack, S. (1991). Factor analysis of MCMI-II and PACL basic personality scales in a college sample. *Journal of Personality Assessment, 57*, 345 – 355.

Strack, S. (2005). Combined use of the PACL and MCMI-III to assess normal range personality styles. In R. Craig (Ed.), *New directions in interpreting the Millon Clinical Multiaxial Inventory-III (MCMI-III)* (pp. 94 – 128). Hoboken, NJ: Wiley.

Strack, S., & Millon, T. (2007). Contributions to the dimensional assessment of Personality Disorders using Millon's model and the Millon Clinical Multiaxial Inventory (MCMI-III). *Journal of Personality Assessment, 89*(1), 56 – 59.

Stredny, R. V., Archer, R. P., & Mason, J. A. (2006). MMPI-2 and MCMI-III characteristics of parental competency examinees. *Journal of Personality Assessment, 87*(1), 113 – 115.

Streiner, D. L. (2003). Being inconsistent about consistency: When coefficient alpha does and doesn't matter. *Journal of Personality Assessment, 80,* 217-222.

Streiner, D. L., & Norman, G. R. (2008). *Health Measurement Scales – A Practical Guide to their Development and Use (4th Ed.).* Oxford, England: Oxford University Press.

Tau, M. (2012). *Risk assessment for family law professionals: Protecting ourselves & others.* Workshop presented at the annual conference of the Association of Family and Conciliation Courts, California Chapter, Santa Monica, CA

Taylor, C., Guterman, N., Lee, S., & Rathouz, P. (2009). Intimate partner violence, maternal stress, nativity, and risk for maternal maltreatment of young children. *American Journal of Public Health, 99,* 175 – 183.

Thomas, D., Leicht, C. Hughes, C., Madigan, A. and Dowell, K. (2003). Emerging practices in the prevention of child abuse and neglect. US Department of Health and Human Services. Available at:

http://www.childwelfare.gov/preventing/programs/whatworks/report/report.pdf

Thomas-Peter, B. A., Jones, J., Campbell, S., & Oliver, C. (2000). Debasement and faking bad on the Millon Clinical Multiaxial Inventory-III: An examination of characteristics, circumstances and motives of forensic patients. *Legal and Criminological Psychology, 5,* 71 – 81.

Toth, S. L., Manly, J. T., & Cicchetti, D. (1992). Child maltreatment and vulnerability to depression. *Development and Psychopathology, 4,* 97–112

Trocme, N., Tourigny, M., MacLaurin, B., & Fallon, B. (2003). Major findings from the Canadian incidence study of reports child abuse and neglect. *Child Abuse and Neglect, 27*, 1427 – 1439.

Tsiandis, J., Kokkevi, A., & Agathonos-Marouli, H. (1981). Parents of abused children in Greece: Psychiatric and psychological characteristics. Results of a pilot study. *Child Abuse * Neglect, 5*, 281 – 285.

Tuchman, S. (2003). Personality characteristics of parents who have been court-ordered to have supervised visitation with their children: An exploratory study. *UMI Dissertation Services,* Ann Arbor: MI.

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2012). *Child Maltreatment 2011*. Available from http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment.

UNICEF.(1989). *Convention on the Rights of the Child*. Website: http://www.unicef.org/crc/fulltext.html.

Verhagen, A. P., de Vet, H. C. W., de Bie, R. A., Kessels, A. G. H., Boers, M., Bouter, L. M., & Knipschild, P. G. (1998). The Delphi List: A criteria list for quality assessment of randomized clinical trials for conducting systematic reviews developed by Delphi consensus. *Journal of Clinical Epidemiology, 51*(12), 1235 – 1241.

Wakefield, J. C. (2013a). DSM-5 and clinical social work: Mental Disorder and Psychological Justice as goals of clinical intervention. *Clinical Social Work Journal, 41*, 131 – 138.

Wakefield, J. C. (2013b). DSM-5: An overview of changes and controversies. *Clinical Social Work Journal, 41*, 139 – 154.

Wakefield, J. (2013c). DSM-5 and the general definition of Personality Disorder. *Clinical Social Work Journal, 41*, 168 – 183.

Warner, M. B., Morey, L. C., Finch, J. F., Gunderson, J. G., Skodol, A. E., Sanislow, C. A., Shea, M. T., McGlashan, T. H., & Grilo, C. M. (2004). The longitudinal relationship of personality traits and disorder. *Journal of Abnormal Psychology, 113*, 217 – 227.

Watson, D. (2000). *Mood and temperament.* New York: Guildford.

Wekerle, C., Wall, A. M., Leung, E., & Trocme, N. (2007). Cumulative stress and substantiated maltreatment: the importance of caregiver vulnerability and adult partner violence. *Child Abuse and Neglect, 31*, 427 – 443.

Whisman, M. A. (2006). Childhood trauma and marital outcomes in adulthood. *Personal Relationships, 13*, 375 – 386.

Widiger, T. A. (1999). Millon's dimensional polarities. *Journal of Personality Assessment, 72*(3), 365 – 389.

Widiger, T. A. (2011). Personality & Psychopathology. *World Psychiatry, 10*(2), 103 – 106.

Widiger, T. A., & Samuel, D. B. (2005). Evidence-based assessment of Personality Disorders. *Psychological Assessment, 17*(3), 278 – 287.

Widom, C. S., Czaja, S. J., & Dutton, M. A. (2008). Childhood victimization and lifetime revictimization. *Child Abuse & Neglect, 32,* 785–796.

Widom, C. S., DuMont, K., & Czaja, S. J. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Archives of General Psychiatry, 64*, 49–56.

Wiehe, V. R. (2003). Empathy and narcissism in a sample of child abuse perpetrators and a comparison sample of foster parents. *Child Abuse & Neglect, 27*, 541 – 555.

Wise, E. A., Streiner, D. L., & Walfish, S. (2010). A Review and comparison of the reliabilities of the MMPI-2, MCMI-III, and PAI presented in their respective test manuals. *Measurement and Evaluation in Counseling and Development, 42,* 246 – 254.

Wolfe, D. A. (1985). Child-abusive parents: An empirical review and analysis. *Psychological Bulletin, 97,* 462 – 482.

Wolfe, D. A. (1999). *Child abuse: Implications for child development and psychopathology* (2nd ed.). Thousand Oaks, CA: Sage

Woodward, V., & Webb, C. (2001). Women's anxieties surrounding breast disorders: A systematic review of the literature. *Journal of Advanced Nursing, 33*, 29 – 41.

World Health Organisation. (2006). *Preventing child maltreatment: A guide to taking action and generating evidence.* Available at

http://whqlibdoc.who.int/publications/2006/9241594365_eng.pdf

World Health Organisation. (2010). *International Statistical Classification of Diseases and Related Health Problems, 10th Edition.* Available at

https://www.emedny.org/icd/ICD10Volume2_en_2010.pdf

Wright, L. (1970). Psychological aspects of the battered child syndrome. *Southern Medical Bulletin, 58*, 14 – 18.

Wright, L. (1976). The "sick but slick" syndrome as a personality component of parents of battered children. *Journal of Clinical Psychology, 32*, 41 – 45.

Appendices

Appendix A

Definition of Child Maltreatment Categories (Department of Health, 2006)

Neglect is the persistent failure to meet a child's basic physical and/or psychological needs in a manner that is likely to seriously impair his or her health or development. There are many ways in which children can be neglected, including:

failure to provide adequate food, clothing or shelter

failure to protect children from potential harm or danger

inadequate supervision

inadequate medical attention

inadequate emotional support and attention

Child physical abuse is generally defined as the use of physical force against a child, which includes a range of violent behaviours such as hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning and suffocating. It is also child abuse if a carer fabricates the symptoms of, or deliberately induces illness in a child (Schreier, 2002).

Sexual abuse involves forcing or enticing a child or young person to take part in sexual activities (including prostitution), whether or not he or she is aware that the activity is abusive. It includes both physical (including penetrative acts such as rape, anal or oral sex) and non-physical acts, such as exposing one's sexual parts to a child (flashing), forcing children to look at sexual imagery (e.g. pornography) or encouraging a child to behave in other sexually inappropriate ways (DoH, 2006).

Emotional abuse is the persistent emotional maltreatment of a child that may severely impair the child's psychological development, such as:

- devaluing the child – making him/her feel worthless, unwanted or unloved

- valuing the child only insofar that he or she fulfils the needs of others

- placing unrealistic or age-inappropriate expectations upon the child

- overprotecting and/or isolating the child from others

- allowing the child to see or hear the maltreatment of others, including domestic violence between parents

- seriously intimidating or bullying the child, causing him/her to feel frightened or endangered.

Emotional abuse is typically involved in all types of maltreatment, although it also frequently occurs on its own (Glaser, 2002)

Appendix B - *Quality Assessment Form*

Study Name:
Authors (year):

Sample – Were the participants representative of the sample/sampling bias	
	Score
a) Very representative of parents who maltreat their children	3
b) Somewhat representative of parents who maltreat their children	2
c) Biased sample	1
d) No description of the derivation of the sample	0
Reason for score given:	

Measure of Personality	
a) Utilisation of a valid, standardised measure of personality, in combination with clinician opinion	3
b) Utilisation of a valid, standardised measure of personality OR clinician opinion	2
c) Utilisation of an measure of personality that has not been evidenced as valid	1
d) Unclear/vague description of characteristics to do with personality types	0
Reason for score given:	

Categorisation of Child Maltreatment	
a) Corresponding evidence from professionals and parent	3
b) Data from one source external to the family (i.e. hospital report; local authority report etc.)	2
c) Self-report by parents	1
d) No explanation of how child maltreatment was categorised	0
Reason for score given:	

Study design	
Sample Size/Power	
a) Sufficient level of power reported	2
b) No power calculation reported but large sample	1
c) No power calculation reported (or insufficient) and small sample size	0
Personality Focus	
a) All major DSM and/or ICD personality types considered	2
b) One major DSM and/or ICD personality types considered	1
c) No explanation of focus and vague, descriptive terms used.	0
Maltreatment Focus	
a) All maltreatment types considered (excluding sexual abuse)	2
b) Focus on one over-arching maltreatment type (i.e. neglect; physical abuse)	1
c) Focus on one very specific form of maltreatment (i.e. starving; factitious illness disorder)	0
Control Group	
a) Control group used	1
b) No control group used	0
Analysis	
a) Multivariate analysis/logistical regression analysis	2
b) Bi-variate analysis	1
c) Inappropriate or unclear analysis	0

Confounding variables	
a) Considered and accounted for adequately	1
b) Not accounted for and/or not considered	0
TOTAL SCORE	
	19
	%

Appendix C – Table of Excluded Studies

Author(s) and date	Title of paper	Reason for exclusion
Bools, Neale & Meadow (1994)	Munchausen syndrome by proxy: A study of psychopathology	The study is based on mothers with 'Munchausen Syndrome' (outdated terminology) alone and doesn't provide information on other forms of maltreatment. Of the 'approximately' 100 eligible mothers only 19 were contacted as it was deemed 'inappropriate' to contact the others. Not only is the study therefore very specific regarding abuse type but the sample is not representative of mothers with Munchausen Syndrome. Data from other mothers was included but this was only where appropriate and was inconsistent. It was based on historical information with much information missing. Diagnoses and investigation largely related to AXIS-I disorders. Diagnosis of Personality Disorder inconsistent – some from PAS scores, other times from 'clinician judgment'
Billick & Jackson (2007)	Evaluating parents in child custody and abuse cases and the utility of psychological measures in screening for parental psychopathy or antisocial personality.	Review/commentary for book chapter
Davidson & Jennings (1995)	Personality inferences drawn about abusive mothers	This was related to personality that others (lay people) assumed abusive mothers had
Davison (2002)	Principles of managing patients with personality disorder	General review/commentary of patients with personality disorder – no new data on parents.
Dinwiddie & Bucholz (1993)	Psychiatric diagnoses of self-reported child abusers	Population drawn, in part, from those going through alcoholism treatment – confounding variable. Based on self-report.
Jaffee (2005)	Family violence and parent psychopathology: Implications for children's socioemotional development and resilience.	Literature review for book chapter
Shahar (2001)	Maternal personality and distress as predictors of child neglect.	Only in one state of the USA (Georgia), only low-income families, personality not clearly defined or measured. Title states personality, discussion talks about empathy but measures are not empathy or personality specific – all feels very confused. Reanalysis of data from a database. Not particularly appropriate way of answering the question. Says matched 'on a host of variables' but doesn't state which ones. Measurements –

		partially. Dropout rates – doesn't state original dropout rates but during statistics dropout rates from data not similar between groups. Only some results significant. Limitations are not discussed. Results are partially clear. Effect size not noted.

Appendix D

Data Extraction Sheet

General Information	
Authors/Year	
Date of Extraction	
Eligibility re-verification	

Specific Information	

Sample used :
   -   Gender
   -   Age
   -   Number
   - Ethnicity	

Sample recruitment	
Control recruitment	
Assessment measure	
Assessment environment	
Dropout rates	

Results
   -   Data
   -   Reported clearly?
   -	

Limitations	

Analysis	
Statistics technique used?	
Significant finding?	

Size of effect?	
Overall study quality score?	215

Appendix E

MMPI-2 and MMPI-2-RF Scales Referenced

F – Infrequency (faking bad)

Pd – Psychopathic Deviate

Pa - Paranoia

Sc - Schizophrenia

Ma - Hypomania

Si – Social Introversion

K – Defensiveness (denial/evasiveness)

RC3 - Cynicism

RC4 – Antisocial Behavior

JCP – Juvenile Conduct Problems

FML – Family Problems

RC6 – Ideas of persecution

THD – Thought Dysfunction

RC8 – Aberrant Experience

PSYC - Psychoticism