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Minnesota Multiphasic Inventory-2 Restructured Form (MMPI-2-RF) Personality Characteristics of Parents Evaluated for Child Neglect

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A doctoral research project submitted to Florida Institute of Technology

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Project:

Minnesota Multiphasic Inventory-2 Restructured Form (MMPI-2-RF) Personality

Characteristics of Parents Evaluated for Child Neglect

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Minnesota Multiphasic Inventory-2 Restructured Form (MMPI-2-RF) Personality Characteristics of Parents Evaluated for Child Neglect Emily C. Burch, M.S.

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ABSTRACT

The primary purpose of this study was to examine Minnesota Multiphasic Personality Assessment-2-Restructured Form (MMPI-2-RF) profiles of parents who underwent psychological evaluation subsequent to substantiated claims by the Florida Department of Children and Families of child neglect. A second purpose was to assess profile differences between this sample and a sample of parents with substantiated claims of child physical abuse, with a particular focus on evaluating comparative levels of internalizing factors, externalizing factors, and defensiveness. Samples were also compared in regards to their levels of substance usage, as this was shown in prior literature to be a salient psychosocial factor contributing to child maltreatment. Results showed general absence of broad-ranging psychopathology, which is unsurprising due to the nature of the evaluation, and is commensurate with earlier studies. Of the 50 MMPI-2-RF scales, 12 showed heightened scores. Notably, neglectful parents demonstrated a significantly lower score on the Aggressivenessrevised scale, than abusive parents, which was hypothesized due to the differences in types of maltreatment (omission versus commission). For internalizing scales, Inefficacy was elevated in both samples, which speaks to the self-concept of

maltreating parents in regards to their sense of personal effectiveness. No differences were noted in terms of substance abuse. Defensiveness was seen in both samples, as expected. However, outright defensive problem denial was not as pronounced as denial of minor social faults (Adjustment Validity and Uncommon Virtues scales). Implications of these findings are discussed.

Keywords: MMPI-2-RF, maltreatment, abuse, neglect, child custody

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Introduction

Imagine, for a moment, an elementary school classroom full of rambunctious first graders. While most of the children are energetic and lively, young Billy sits slumped at his desk, listless and pale. For the past few days, his teacher has noticed him arriving at school seemingly exhausted. Dark circles have popped up under his eyes, and his face appears thinner. Although these symptoms might be attributed to various causes, they may also be a sign of serious child neglect. Billy's teacher arranges a meeting with his mother, wherein she discovers the reality of the situation. Billy's mother has recently become so preoccupied with her nightlife of partying and drug usage that she has been leaving young Billy to care for himself. This situation, although fictitious, is not uncommon.

The Administration of Children and Families (ACF), a federal office under the direction of the Department of Health and Human Services, publishes an annual list of statistics on child abuse and neglect, including characteristics of both victims and perpetrators. The most recent aggregation of research, published in 2014, gives an estimate of 702,000 cases of child abuse and neglect for that year, 75% of which were cases of neglect. The ACF indicates that this is consistent with previous years, where child neglect has been by far the most common type of maltreatment. The next most common type, physical abuse, has an estimated incidence of 17% of all maltreatment cases. More troubling still, the ACF reports that neglect accounts for 72.3% of fatal cases of child maltreatment (Administration of Children and Families, 2016).

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As per offending caregiver characteristics, the ACF reports that 83% of perpetrators were aged 18-44, 54.1% were women, and 48.8% were white. Of substantiated cases, 26% involved parents who abused drugs (as opposed to 8.2% of nonvictims in the general population). Offending caregivers were found to abuse alcohol in 9.2% of cases, as compared to a base rate of 3.8% for caregivers not subject to accusations of maltreatment. A total of 46 states reported 26% of neglect cases were also involved in court litigation. Nationally, 23% of maltreatment cases resulted in the child being removed from the care of the family and placed in foster care. However, this rate varied largely; in four states, less than 10% of children were placed in foster care (Administration of Children and Families, 2016).

Several definitions must be clarified prior to moving forward, as an issue complicating the task of definitions is the notion that child neglect is often subsumed under the larger category of "child maltreatment." Even when the terms "child abuse" and "child neglect" are used, definitions for these terms range from very broad to more specific. The CDC defines child abuse as "words or overt actions that cause harm, potential harm, or threat of harm, while it indicates that neglect is considered "failure to provide needs or protect from harm or potential harm" (Center for Disease Control & Prevention, 2016). Compare this definition to that of the Florida Department of Children and Families (DCF), where child abuse is defined as:

"any willful act or threatened act that results in any physical, mental, or sexual injury or harm that causes or is likely to cause the child's physical, mental, or emotional health to be significantly impaired. Abuse of a child includes acts or omissions. Corporal discipline of a child by a parent or legal custodian for disciplinary purposes does not in itself constitute abuse when it does not result in harm to the child."

Likewise, the DCF definition of neglect is as follows:

"neglect occurs when a child is deprived of, or is allowed to be deprived of, necessary food, clothing, shelter, or medical treatment or a child is permitted to live in an environment when such deprivation or environment causes the child's physical, mental, or emotional health to be significantly impaired or to be in danger of being significantly impaired" (Florida Department of Children & Families, 2014).

These Florida DCF definitions vary somewhat from the Florida statutory definitions of child neglect, presented as follows:

"Neglect of a child" means:

1. A caregiver's failure or omission to provide a child with the care, supervision, and services necessary to maintain the child's physical and mental health, including, but not limited to, food, nutrition, clothing, shelter, supervision, medicine, and medical services that a prudent person would consider essential for the well-being of the child; or

2. A caregiver's failure to make a reasonable effort to protect a child from abuse, neglect, or exploitation by another person.

These statutory definitions, like those of the Florida DCF, include both acts (physically causing something to happen to a child) and omissions (such as failure to

protect the child from harm), similar to the definitions of the CDC. However, they are much more specific in their verbiage.

It is also important to consider that the term "child neglect" encompasses a broad category of experiences, and it is therefore prudent to discuss several subtypes of child neglect. Dubowitz, Pitts, and Black (2004), for example, identify physical, psychological, and environmental neglect subtypes of child neglect. According to their definition, physical neglect involves a failure to provide necessities for the care of the child, such as adequate food, clothing, and shelter. Psychological neglect, by contrast, would involve parents failing to provide emotional nurturance to their children, and environmental neglect would include an unsafe community surrounding the child. Other subtypes of neglect, such as those mentioned in the Florida statutes, might include medical neglect (e.g., failure to provide necessary medical or mental healthcare for the child) and supervisory neglect (e.g., providing inadequate supervision for the child, such as leaving them at home unattended).

Although there is a wealth of research is dedicated to child abuse, few studies focus on child neglect. This is true despite statistics that indicate neglect as the most common type of child maltreatment by a wide margin. Stoltenborgh, Bakermans-Kranenberg, and van Ilzendoorn (2013) discussed this "neglect of child neglect" in the context of their meta-analysis. Their study found that, despite over 300 instances of neglect per 1,000 children, research on the topic is scarce. There is also startling data regarding professional's perceptions of child neglect. For example, Stokes and Taylor (2014) demonstrated that social workers responded differently to fictional vignettes

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involving child maltreatment when the type of harm was child neglect rather than child physical or sexual abuse. Specifically, the study found that social workers endorsed a lower level of risk for the fictional children in these cases, and indicated that they would provide fewer and less intensive services to the family of these neglectful parents.

The current study was undertaken in order to contribute to the scarce body of existing research focusing on child neglect. Specifically, this study involved research regarding parental characteristics in cases of child neglect, which represents a further under-developed area of study.

Review of Literature

Child maltreatment, inclusive of both abuse and neglect, is a hot-button topic with far-reaching ramifications. Indeed, the effects on children are long-lasting and often severe. As adolescents, individuals who have been exposed to childhood neglect or abuse are at higher risk for criminal acts and substance abuse, as well as symptoms of anxiety, depression, posttraumatic stress disorder, and conduct problems. They are also more likely to commit suicide than those who have not been subjected to maltreatment (Skowron & Woehrle, 2012). Additionally, individuals who have been subjected to a history of childhood maltreatment are likely to perpetuate the "cycle of abuse" by later committing acts of maltreatment against their own children (Mattiani, McGowan, & Williams, 1996). In addition to effects on children, parents who commit child maltreatment also exhibit higher rates of depression, anxiety, and substance abuse (Skowron & Woehrle, 2012). They tend to be more withdrawn when interacting with their children, and more emotionally reactive when exposed to an upsetting stimulus. They may also misinterpret their child's behavior as willfully disrespectful even when this is not the case. In addition to these effects on individuals, estimated costs to society related to child maltreatment average over \$100 billion dollars annually, largely taken up by treatment and legal fees (Skowron & Woehrle, 2012). Given the extensive cost to individuals, families, and society, it is especially important to examine characteristics of individuals who commit such acts. In this way, we further our understanding of the topic and how we may advance our efforts in preventing it.

Parental Risk Factors for Child Maltreatment

When studying child maltreatment, an area that is particularly salient involves attempting to identify factors that put parents at risk of maltreating their children, as identifying at-risk parents is an important step towards preventing future child maltreatment. Indeed, risk factors associated with chronic, recurrent child maltreatment are especially important to consider, as was done by Ethier, Couture, and Lachirite (2004). Their research involved 58 families with confirmed severe abuse or neglect reports, voluntarily recruited for the study through Child Protective Services (CPS). Additionally, 29 at-risk families receiving services as at a local community services center participated; these at-risk families demonstrated four or more risk factors for either abuse or neglect. These factors were taken from a list of 22 risk factors compiled by the authors after a search of the literature. Confirmed maltreating parents as well as at-risk parents completed a demographic questionnaire and a psychosocial interview, and were administered the Child Abuse Potential Inventory and the Ravens Progressive Matrices test.

At the time of recruitment, the participants presented with a mean age of 29 years (range = 20-46), with a mean of 9.5 years schooling (range = 3-14). The majority (78.6%) fell below the poverty level of \$20,000 annual income; 23.2% were employed, whereas the remainder received funding through social services. The mean number of children was 2.4 (range = 2-6), with the mean age of the family's oldest child being 51.7 months (SD = 21.9 months). In 55.4% of families, the mother lived alone with her children, and had been for at least four months. The at-risk families

demonstrated a mean of 7.6 risk factors at the beginning of the study. Four years after the initiation of the study, 37 mothers from the confirmed maltreatment sample (representing 63.8% of the initial group) and 25 at-risk mothers (86.2% of the initial sample) participated in a follow-up (Ethier et al., 2004).

In Ethier et al.'s study, chronicity was defined as families whose files (either Child Protective Services or local community service center) remained open at the time of follow-up, and/or who demonstrated high tendencies or high potential for abuse (measured by a score at or above the 95th percentile on the overall scale of the Child Abuse Potential Inventory). Mothers not meeting these criteria were classified as demonstrating transitory problems. Using these criteria, 35 families with chronic maltreatment problems were identified. Transitory and chronic groups showed no significant differences on mother's age, level of education, or employment status. Mothers with a chronic abuse tendency had an oldest child approximately 12 months older than mothers with transitory problems. Ethier et al. found that the risk factor most commonly associated with chronic child maltreatment was the mother's experience of sexual abuse as a child. Mothers with this risk factor showed a 3.75 times higher risk of chronic maltreatment than those without it. Indeed, among the mothers in this study who had been sexually abused, 77.8% were categorized as chronic maltreating parents. Additionally, 80% of mothers placed in foster homes as children demonstrated chronic maltreatment problems. Risk factors that demonstrated clinical but not statistical significance included the initial level abuse potential (indicated by CAP scores), the number of children in the family, and whether or not

the mother had run away from home as an adolescent. In terms of overall maltreatment, both groups demonstrated high percentages of "unavailability of parent figures" (60% of mothers) and "familial unemployment" (76%). As we see here, the maltreating parent's psychosocial factors come heavily into play when influencing the chronicity of the problem.

In addition to psychosocial factors, parental substance abuse has also been shown to have a high correlation with child maltreatment. For example, Kelleher, Chaffin. Hollenberg, and Fischer (1994) conducted a study undertaken to underscore the point that although social and environmental factors are often characterized as the primary risk factors for abuse and neglect, substance abuse is also an important predisposing factor for child maltreatment. This National Institute of Mental Health (NIMH) Epidemiological Catchment Area Study evaluated 11,662 adults in four U.S. communities who completed a structured clinical interview. Maltreatment was measured by self-report in this study, and those who reported behaviors consistent with maltreatment were matched with non-maltreating parents of similar age, race, gender, location, and socioeconomic status as a control sample. Specifically, the NIMH structured interview involved five questions regarding abusive or neglectful behavior; any individuals who answered "yes" to one or more of those questions was categorized in the maltreatment group, whereas individuals who replied "no" to all questions were sorted into the control group. Individuals were also categorized as having an alcohol or drug abuse or dependence disorder on the basis of the Diagnostic and Statistical Manual of Mental Disorders (3rd edition) criteria (Kellher et al., 1994).

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Of the 11,662 respondents in Kelleher et al.'s study, 169 acknowledged engaging in child abuse, while 209 (1.8%) reported engaging in child neglect. Sixteen participants (0.1%) indicated having engaged in both physically abusive and neglectful behavior. The mean age of maltreating parents was 40 years. The abusive parent group was 61% Caucasian, and 51% of individuals possessed a high school diploma. By contrast, the group of neglectful parents were largely non-Caucasian (63%). Additionally, 61% of the neglectful parents did not complete high school (Kelleher et al., 1994).

In terms of substance abuse, 40.2% of abusive parents met criteria for a drug or alcohol disorder, compared to 16% of control subjects (Kelleher et al., 1994). Likewise, 56% of neglectful parents demonstrated substance abuse disorders, compared to 16.8% of matched controls. Indeed, adults meeting criteria for a substance abuse disorder were 2.7 times more likely to physically abuse their children, and 4.2 times more likely to neglect them. Additionally, individuals reporting a history of antisocial personality disorder demonstrated a significant risk of child neglect (26.7% incidence in neglectful parents compared to 1.4% in individuals with no reported neglectful behavior) (Kelleher et al., 1994).

Clearly, parental substance abuse disorders contribute strongly to the risk of both child abuse and neglect, as do psychosocial factors such as those discussed previously. However, it is also important to consider the effect sizes associated with risk factors in order to put the findings into a more meaningful and clinically useful context. Stith et al. (2009) did just that in their meta-analysis of the literature regarding risk factors for child maltreatment. This study was based on the recognition that although various studies have discussed risk factors for abuse or neglect, findings tend to be inconsistent and effect sizes are uncommonly reported. Their study identified 867 studies involving risk factors for child maltreatment, inclusive of both physical abuse and neglect. In order to be included in the meta-analysis, studies needed to meet several criteria. First, they needed to empirically investigate the relationship between at least one risk factor and the incidence of child maltreatment. Additionally, all studies involving any child sexual abuse, failure to thrive, Munchausen's syndrome by proxy, or infanticide were not included due to characterological differences between perpetrators of these acts and perpetrators of acts of physical abuse or neglect. The studies also needed to include a control group of non-maltreating individuals, and the perpetrators were either the child's parents or were behaving in such a role. The included studies also included the relevant information to calculate effect size. After sorting through the 867 studies obtained, 155 were included in the meta-analysis.

Stith et al. (2009) then analyzed each risk factor for child maltreatment (61 in total) in relation to effect size; the observed mean effect size was r = .22. Five risk factors were found to have large effect sizes associated with child neglect. These risk factors were: the parent-child relationship, the parent's stress level, the parent's level of anger/hyper-reactivity, the parent's self-esteem, and the parent's tendency to perceive the child as a problem. Of these, the parent-child relationship and the perception of the child as a problem were the strongest risk factors for neglect. Although there was some overlap of risk factors for abuse and neglect, neglect often involved risk factors related

more to issues such as personal adequacy and competency (Stith et al., 2009). Based on these differences, we see that although child abuse and neglect are often studied together under the category of "child maltreatment," research may benefit more from separate, focused study of each individual issue.

Parental risk factors for child neglect. Having previously discussed what may put parents at risk of committing acts of maltreatment towards their children, it is additionally important to consider risk factors specifically for neglectful behaviors. Lee, Taylor, and Bellamy (2012), for example, discussed risk factors for child neglect in father-involved families. Previous research has shown elevated rates of depression in individuals with infants and toddlers in general, and the authors hypothesized that neglectful fathers might demonstrate even more heightened symptoms of depression than same-aged peers (Dave, Peterson, Sherr, & Nazareth, 2010, as cited in Lee et al., 2012). Lee et al.'s study, therefore, aimed to investigate paternal depression as a risk factor for child neglect while controlling other known risk factors such as parental substance abuse and low socioeconomic status. The study utilized data from 1,089 families involved in the Fragile Families and Child Well-being Study, involving children born between 1998 and 2000 in large U.S. cities. Fathers were assessed for symptoms of depression, alcohol abuse, stress related to parenting, typical level of involvement with the child, relationship with the child's mother, as well as age, education level, and socioeconomic status (Lee et al., 2012).

The study collected data through interviews with both parents at the time of the child's birth, and when the child was 1, 3, and 5 years of age (Lee et al., 2012). Two

additional interviews were conducted at ages 3 and 5 with the mothers of the children (the In-Home Study Interviews). Mothers were interviewed regarding their experiences of depression, alcohol abuse, parenting stress, and physical aggression between the father and mother. Parents were also administered the neglect subscale of the Parent to Child Conflict Tactics Scale (CTSPC), which measures five types of physical or psychological neglect. Mothers were asked to report whether or not they had carried out neglectful actions, and then asked to report whether or not the child's father had engaged in such behaviors (Lee et al., 2012).

Depression was assessed via the Composite International Diagnostic Interview-Short Form (CIDI-SF), Section A, which utilizes criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Parents were additionally asked to self-report risk factors such as alcohol abuse and perceived stress associated with parenting. Alcohol abuse was defined as consumption of 4 or more drinks in one day in the last 12 months, while parenting stress was assessed using the Parent Stress Index - Short Form. Fathers were asked to provide reports of their daily involvement with the child, as objectively measured by 13 types of child care. Mother-father aggression was assessed by having the mother complete a revised version of the Conflict Tactics Scale measuring physically abusive behaviors. Fathers were also asked to rate the quality of their relationship with the child's mother on a 5-point Likert scale ranging from 1 (poor) to 5 (excellent). Risk factors for neglect were assessed when the children were three years old, and the actual incidence of child neglect within the previous year was assessed when the children were age five. The researchers chose to utilize self-report methods rather than Child Protective Services confirmed reports of neglect due to a tendency for CPS to underestimate the incidence of neglect and misclassify the type of maltreatment present (Lee et al., 012).

Lee et al.'s results showed a 12% incidence of neglect on at least one occasion. This was perpetrated by the father 2.9% of the time, the mother 3.6% of the time, and both parents 5.4% of the time. Additionally, 10% of fathers and 16% of mothers demonstrated clinical symptoms of depression when the child was 3 years of age. Parental depression, perceived stress, father-to-mother physical aggression, poor parental relationship quality, and lower socioeconomic status were all significant predictors of neglectful behaviors. Notably, depressed fathers with three-year-old children were more than twice as likely to have neglected the child by the time the child was five. Parental stress also raised the risk of neglect by 5%. Maternal depression and stress also raised the risk of neglect; however, parental depression remained the strongest risk factor. These findings are especially relevant due to lack of research on fathers in child maltreatment literature (Lee et al., 2012).

In cases of neglect, both maternal and paternal characteristics may serve as strong risk or protective factors. Schumacher, Slep, and Heyman (2001) completed a meta-analysis of risk factors for child neglect, specifically applied to maternal characteristics. A confounding factor of this study was the notion that multiple definitions of neglect were used - which is seen in many studies due to the tendency of various agencies and statutes to use differing definitions. The study also notes the fact that neglect is more difficult to measure than abuse, as it is an act of omission rather than commission - it is more difficult to report failing to perform a required action than to report performing an abusive act. In order to be included in the meta-analysis, a study must have been published in a journal (psychological, medical, or sociological), have used empirical evaluation methods to examine one or more risk factors, and have used either a community sample or a clinical sample along with a comparison group. As a result, 10 studies were identified as meeting these criteria (Schumacher et al., 2001).

The meta-analysis found contradicting reports on the age, race, marital status, and education of the neglecting mother (Schumacher et al., 2001). Low income, however, was found to be a risk factor for child neglect, while sex was not. One of the strongest predictive factors for neglect was the tendency for neglectful mothers to engage in verbal aggression with their children. Overall, neglectful mothers were found to react more negatively to their children, and to interact with them less in general. Mothers exhibiting neglectful behaviors reported higher numbers of marriages and pregnancies than controls. They also demonstrated lower self-esteem, confidence, and social skills. Additionally, they viewed themselves as receiving less social support than peers. Neglectful mothers were also found to demonstrate higher impulsivity on laboratory tasks, but to not report impulsivity when asked about it in a questionnaire, indicating a possible lack of self-awareness in this area. Neglectful mothers were more likely to be diagnosed with substance abuse, obsessive compulsive, and depressive disorders. They also reported more daily stress than controls (Schumacher et al., 2001).

In another study, Shahar (2001) aimed to examine maternal characteristics that serve as risk factors for child neglect through analysis of data from the National Data Archive on Child Abuse and Neglect. The study involved 94 neglectful and 101 nonneglectful families. All families in the sample were considered low-income. Neglectful families were identified by the Georgia Department of Family and Children Services. In all cases, neglect was identified as the major maltreatment concern. Neglectful mothers were matched to control group mothers on several demographic variables. Maternal personality was measured through use of the Maternal Characteristics Scale, which examines interpersonal skills, confidence, and positive interaction with the children. Additionally, the Generalized Contentment Scale was utilized to assess for depression, and the Loneliness Scale was employed to measure maternal feelings of loneliness. Shahar's results showed maternal empathy to significantly correlate inversely with child neglect, whereas maternal depression and loneliness were positively correlated with child neglect (Shahar, 2001).

Additional psychosocial factors such as poverty have also been shown to be strongly correlated with child neglect. Slack et al. (2004) aimed to expand on the previous literature in establishing the link between poverty and child neglect (specifically physical neglect). The correlation between poverty and child neglect has previously been shown to be stronger than the association between poverty and other types of maltreatment. This study used data from the Illinois Families Study, which was a six-year analysis of families receiving social services during the latter half of the 1998 year. The research sample consisted of 583 respondents, all of whom had one or

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more children under the age of three. The study was limited to children of this age range both in order to ensure a homogeneous sample and because neglect is most prominent in this age group. Survey data were linked to Illinois Department of Children and Family Services data. Therefore, the study assessed only those individuals who had cases investigated by CPS (Slack et al., 2004).

Results of Slack et al.'s analysis showed that unemployment was associated positively with CPS maltreatment reports, while social services support was associated negatively with reports (Slack et al., 2004). CPS reports were not significantly correlated with household income. The presence of CPS neglect reports was associated with parental stress, spanking of the children, and frequent viewing of television by the youngest child. Parental warmth served as a protective factor. Perceived financial hardship significantly predicted the presence of CPS reports. Prior CPS involvement and learning disability of the parent were also significant predictors of CPS neglect reports. As expected, child age was inversely associated with neglect reports (Slack et al., 2004). This study delineated specific factors often associated with poverty that were significantly correlated with neglect, thus elaborating on poverty as a broad risk factor.

Personality Characteristics of Maltreating Parents

Before discussing the specific personality research findings regarding maltreating parents, it is important to clarify that although many individuals have traits that may be considered maladaptive, personality in general may become much more pathological for some individuals. The balance between adaptive and maladaptive personality traits is always of clinical significance, especially in legal contexts. For example, a subset of the general population demonstrates clusters of traits that reach levels of severity prominent enough to classify as a recognized personality disorder. This is particularly salient when individuals demonstrate personality disorders that may impact their ability to cope with stressors and to provide the best care for their child. The following studies discuss both deficits in adaptive characteristics (such as executive functioning), as well as the presence of maladaptive characteristics (such as manipulative tendencies).

In terms of executive functioning, Fontaine and Nolin (2010) conducted a study in order to examine so-called "hot" executive functions in parents accused of physical abuse and neglect. Executive function is described as a coordination of cognitive processes involving inhibition, memory, problem-solving, and attention. This study utilized Zelazo and Muller (2002, as cited in Fontaine & Nolin 2010)'s definition of hot executive functioning, which includes the above-defined processes in addition to an emotional component, in contrast to cool executive functioning that does not involve an emotional component. These "cool" processes tend to be more rational, whereas "hot" processes are largely emotional in nature.

The study involved a physical abuse group of 9 mothers and 5 fathers, all between the ages of 23 and 44 years of age (M = 34.14 years; SD = 7.07 years). Of this group, 13 individuals were classified as low socioeconomic status. The neglect group involved 12 mothers and 6 fathers. The average age of participants was 33.33 years (SD = 7.12), and 17 of the individuals were considered low socioeconomic

status. The control group consisted of 11 women and 6 men between the ages of 21 and 56 (M = 34.41, SD = 6.4). Of this group, 11 individuals were in a low income socioeconomic bracket. Participants in the abuse and neglect groups had all been formally accused of either abuse or neglect by Child Protective Services. Participants in all three groups were parents of at least one child, and were comparable in terms of age, IQ, and income.

The physical abuse group demonstrated an average abuse potential of 227.57 (SD = 98.2), while the neglect group had a potential of 206.44 (SD = 79.42) and the control group a potential of 83.88 (SD = 58.09). This potential for physical abuse was measured using the Child Abuse Potential Inventory, which is a screener questionnaire composed of 160 items that ask respondents to agree or disagree to various statements. The instrument consists of six subscales, and the potential for abuse can fall between scores of 0 and 486. A score higher than the cutoff of 166 is considered significant abuse potential. Full Scale Intelligence Quotient (FSIQ) score was obtained using the Wechsler Adult Intelligence Scale-Form III, which includes 2 verbal subtests and 2 nonverbal subtests. Decision-making ability was measured using the Iowa Gambling Task, which is designed to measure ability to incorporate emotional status into the decision-making process. The test was computerized, involving decks of cards, and participants were directed to end the game with the most points possible. Scores on this measure range from -20 to +20; negative scores reflect choosing more "bad" decks (net losses) than good decks, and vice-versa. Participants were also asked to respond to five hypothetical moral dilemmas, based on stages of Kohlberg's 1969 theory of

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morality. Participants were asked to respond openly to each situation, and answers were scored in regards to moral stage by two judges. Scores ranged from 1 (low moral development) to 6 (well-developed moral development). Empathy was measured through use of the Interpersonal Reactivity Index, a 28-item questionnaire involving themes of perspective taking, empathic concern, personal distress, and fantasy. Scores were measured by a 1 to 4-point scale measuring level of agreement.

Abuse and neglect group participants in Fontaine and Nolin's study were recruited via the Quebec Child Protection Services once allegations of maltreatment were made. If both parents in a participating family were accused of maltreatment, only one was included in the study. Control group participants were gathered from various parental organizations or the local early childhood center.

The three groups did not show a statistically significant difference in regards to moral stage. However, a statistically significant difference was demonstrated in regards to the perspective-taking dimension of empathy. Specifically, parents accused of physical abuse demonstrated less ability than the control group to see others' perspectives. Neglect group participants did not show differences in empathy when compared to the control or abuse groups. Performance on the Iowa Gambling Task varied between groups; in particular, the abuse group showed a higher tendency to choose "bad" decks. The neglect group did not show any differences from the abuse group or the control group on the Iowa Gambling Task.

Also important to questions of child maltreatment is the incidence of personality disorders in parents, as such disorders represent a distinct pattern of

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pathology that strongly affects the manner in which individuals interact with each other and their environments. Such a pathology is of particular note as it affects the parent-child dynamic and may play a role in abusive or neglectful behaviors. Fontaine and Nolin (2011) examined the prevalence of personality disorders in parents accused of child maltreatment. Bogacki and Weiss (2007) had previously demonstrated that 64% of their sample of 300 parents accused of abuse or neglect displayed symptoms consistent with the diagnosis of personality disorder. Beyond this study, psychopathology of maltreating parents has been grossly understudied.

Fontaine and Nolin's (2011) study involved three groups, all comparable in age and sex. All individuals had at least one child and were formally accused of maltreatment by Child Protective Services. The groups varied on FSIQ score and socioeconomic status, as well as potential for abuse. The physical abuse group consisted of 10 women and 6 men, aged 23-44 years (M = 33.31, SD = 7.15). Of this group, 15 participants were considered low socioeconomic status. The average abuse potential for this group was 230.06 (SD = 103.65). The neglecting parent group consisted of 17 women and 5 men, aged 25-54 (M = 33.5, SD = 7.7). Of these, 21 individuals were classified as low socioeconomic status. The average potential for abuse for the neglectful parent group was 229.50 (SD = 77.36). The control group consisted of 11 women and 6 men, aged 21-56 (M = 34.56, SD = 5.67). Of these, 9 participants were considered low socioeconomic status, and the average abuse potential was 81.94 (SD = 48.44). Participants for both maltreatment groups were recruited through local youth centers and approached when their maltreatment allegations became formal. The control group was recruited through parent organizations or children's centers.

The potential for physical abuse was measured through the Child Abuse Potential Inventory. The presence of personality disorders was determined using the Millon Clinical Multiaxial Inventory, Third Version (MCMI-III). This instrument consists of 175 true/false statements, and its scales were designed to coordinate with the DSM-IV. The scales consist of 10 clinical scales, 11 basic personality scales, and 3 serious personality disorder scales. Scores between 75 and 84 signify the presence of a personality trait or syndrome, and scores of 85+ indicate prominence of such traits.

The abusive group of parents showed subclinical elevations on paranoid, narcissistic, antisocial, and anxiety scales of the MCMI-III. Neglectful parents reached subclinical elevations on schizoid, paranoid, narcissistic, compulsive, mania, and alcohol scales. The control group, by contrast, reached subclinical elevations on the narcissistic, histrionic, and compulsive scales. Significant differences between the control and maltreating groups involved paranoid, schizotypal, antisocial, borderline, avoidant, alcohol, mania, and anxiety scales.

The paranoid and schizotypal score elevations for maltreating parents may seem unusual; however, this may be due to the tendency for these maltreating parents to be distrustful, uncertain, and have difficulty communicating with others. These characteristics may be heightened by being investigated and monitored by Child Protective Services. Avoidant personality traits may also be due to social isolation and difficulty maintaining friendships; for example, 38% of the abusive group and 32% of the neglectful group reported feeling isolated, while no one from the control group did so. Despite expectations, the physical abuse and neglect group did not differ significantly on the antisocial and borderline scales.

Personality characteristics of neglectful parents. In a singular child neglect investigation regarding characteristics of neglectful parents, Lee (2013) conducted a study exploring the link between paternal characteristics, child neglect, and Child Protective Services (CPS) involvement. Participants included individuals gathered from the Fragile Families and Child Well-Being Study (FFCWS), a community cohort study conducted between 1998 and 2000. This original study aimed to explore parenting quality and child well-being in families with unmarried parents. It did so by conducting phone interviews with both parents at the time of the child's birth, as well as when the child was 1, 3, and 5 years of age. Mothers additionally participated in an In-Home Longitudinal Study of Preschool-Aged Children, an observational study of the mother and child that occurred in the mother's home.

The FFCWS study involved 1,000 biological fathers who self-reported all information during interviews. At baseline (the child's birth), fathers were asked to provide their age, education level, and race. At the 3-year interview, questions included frequency of church attendance, employment status, household socioeconomic status, relevant psychosocial characteristics, relationship quality with the child's mother, perceived support from the child's mother, and the child's health. Although the majority of paternal information was gathered from self-report, additional information was gathered from the mother's interviews. This information included history of neglectful behaviors towards the child and previous CPS involvement.

Mothers participating in the study were administered the Parent-Child Conflict Tactics Scales-Revised in order to screen for neglectful behaviors by either parent towards the child in the previous year. Each mother was asked to report whether or not she or the child's father had left the child home alone, had been unable to show or tell the child he or she loved, was unable to ensure the child was fed, was unable to provide medical attention for the child, or had difficulty caring for the child due to substance usage.

CPS involvement was determined by self-report; mothers were asked whether or not CPS had contacted them about any of the children in their household. Measures of household economic hardship included annual household income, receipt of either governmental and nongovernmental financial assistance, the number of moves the family had experienced in the past two years, whether or not the family had ever had their electricity turned off due to nonpayment, and the number of children in the home.

In order to assess paternal psychosocial characteristics, the Parenting Stress Index-Short Form was used. Additionally, involvement with the child was coded based on how many days of the week the father was responsible for any of 13 types of childcare. The Composite International Diagnostic Interview-Short Form: Section A was utilized in order to measure paternal depression within the past year. Alcohol usage was coded based on paternal self-report. Results showed that 11.85% of mothers reported one or more instances of neglect. Of these, 9% were perpetrated by the mother, and 8.26% by the father. In 5.42% of cases, neglect involved both parents. Hispanic and Other race fathers were found to have heightened odds of neglecting their children. Currently employed fathers also had increased odds for neglect, as did those experiencing paternal depression, parenting stress, and moderately heavy alcohol use (1-3 drinks in one day during the previous year). Paternal childcare behaviors served as a protective factor for child neglect. Paternal depression, stress, and alcohol usage increased the odds of neglect by approximately 50% each. Paternal depression was also associated with CPS involvement, in addition to odds of neglect. The number of children in the home, receipt of financial assistance, and low paternal education were associated with CPS involvement but not the incidence of neglect (Lee, 2013).

Personality Assessment in Child Dependency Evaluations

Personality assessment is an important task in any clinical setting; it allows for clinicians to better understand their client's psychological difficulties with depth and comprehensiveness, especially when the client has difficulty reporting them accurately. Indeed, this is not an uncommon issue – it may be difficult for clients to articulate their difficulties due to many factors, such as defensiveness, denial, repression, or any number of factors. In child dependency evaluations, the information garnered by such an assessment can be invaluable to courts. The information contained in the assessment can shed light on parental characteristics that may impact decision-making in the case. However, ensuring accurate findings in high-stakes situations always deserves special consideration. The findings may be used to make important decisions – in this case, perhaps helping to decide the child's placement –

and it is therefore integral to ensure that assessment practices are thorough and utilize the most valid and reliable instruments. Findings particularly of note in child dependency evaluations may be features of personality disorders, as well as any relevant psychological symptoms such as depression, anger, or hypomania. In these types of evaluations, the most commonly used personality assessment measures are the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF), each of which will be described and discussed in context below.

Prior to proceeding, it is important to distinguish between the terms child custody, parental competency in regards to psychological evaluations. Child custody hearings involve disputes regarding custody of the child due to divorce or parental separation. By contrast, parental competency evaluations involve allegations of child maltreatment and call into question the basic parenting abilities of the caregiver(s). Parental competency evaluations generally involve permanent custody decisions and possible terminations of parental rights, and are also referred to as child dependency evaluations or family access evaluations (Resendes & Lecci, 2012).

MMPI. The Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943) is a widely-used self-report measure of personality and psychopathology, which has extensive use in child custody and child dependency evaluations. The MMPI included three validity scales; Lie (L), Infrequency (F), and Correction (K). The L scale measures a respondent's tendency to deny minor social faults, while the F scale aims to identify patterns of over-reporting psychological

symptoms. By contrast, the K scale is utilized in order to apply a correction factor to scales that are typically impacted by defensiveness on the part of the respondent. Additionally, the test contains ten clinical scales that serve as the core of the personality profile analysis - Hypochondriasis (1), Depression (2), Hysteria (3), Psychopathic Deviate (4), Masculinity-Femininity (5), Paranoia (6), Psychasthenia (7), Schizophrenia (8), Hypomania (9), and Social Introversion (0) (Hathaway & McKinley, 1943).

Yanagida and Ching (1993) conducted a study examining MMPI profiles of maltreating parents. They aimed to discover whether differences in profile elevations would be found based on types of abuse, offending status (active as opposed to passive), or perpetrator sex. Participants involved 80 male and 103 female parents under supervision by Child Protective Services due to confirmed perpetration of either child abuse (physical or sexual) or child neglect. Participants were categorized as engaging in only sexual abuse, only physical abuse, physical abuse as well as neglect, or only neglect. The sample also involved perpetrators that both actively perpetrated abuse (active perpetration) and those that allowed abuse to occur and did not stop or prevent it (passive perpetration). The passive perpetrator sample also involved family members besides parents, such as step-parents and grand-parents (Yanagida & Ching, 1993).

Yanagida and Ching's results showed that one-third of all perpetrators either demonstrated elevated MMPI scores (defined as a T score of 70 or above) on individual scales or combinations of two scales (two-point codetypes) (Yanagida & Ching, 1993). Although there were no scale scores with statistically significant mean differences across the groups. Scale 4 (Psychopathic Deviate) and Scale 9 (Hypomania) were the two most common clinical elevations across all perpetrator groups (Yanagida & Ching, 1993).

MMPI-2. The second edition of the MMPI (the MMPI-2-; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), represents a large-scale revision to the original MMPI with a normative update using a nationally representative standardization sample. Several of the items in the MMPI-2 were dropped or re-worded. The validity and clinical scales remained, with the addition of several new validity scales, a set of 15 content scales (as well content component scales), and a standard set of 15 supplementary scales. A later edition consisted of Restructured Clinical (RC) scales designed to strengthen the core constructs measured by the clinical scales.

Scale	Description
Validity Scales	
Cannot Say (?) Lie (L) Infrequency (F) F Back Scale (FB) Infrequency Psychopathology (Fp) Correction (K) Superlative Self-Presentation (S) Variable Response Inconsistency (VRIN) True Response Inconsistency (TRIN)	Number of unanswered or unscorable responses Presentation in unrealistically favorable light Endorsement of unusual number of symptoms Endorsement of more items later in test Rarely endorsed items Correction for defensive test-taking attitudes Denial of minor faults Inconsistency in responding patterns Contradictory response patterns
	(table continues)

Table 1 List of MMPI-2 Scales

Table 1 (cont.)		
Scale	Description	
Clinical Scales		
Hypochondriasis (1)	Preoccupation with physical functioning	
Depression (2)	Current level of depressive symptoms	
Hysteria (3)	Tendency to utilize denial and repression	
Psychopathic Deviate (4)	Externalized anger and alienation	
Masculinity-Femininity (5)	Adherence to traditional gender roles	
Paranoia (6) Psychasthenia (7) Schizophrenia (8) Hypomania (9) Social Introversion (0)	Sensitivity and suspicion Self-critical introspection and insecurity Disorganized thought processes Symptoms of mania or hypomania Preference for being alone and social discomfort	
Restructured Clinical Scales		
RCd (Demoralization) RC1 (Somatic Complaints) RC2 (Low Positive Emotions) RC3 (Cynicism) RC4 (Antisocial Behavior) RC6 (Ideas of Persecution) RC7 (Dysfunctional Negative Emotions) RC8 (Aberrant Experiences) RC9 (Hypomanic Activation)	General distress and discomfort Specific health concerns Degree of positive emotions Suspicion towards others History of antisocial behavior Persecutory ideation Typical level of negative emotions Sensory, perceptual, cognitive, and motor disturbances Symptoms of mania or hypomania	
Content Scales		
ANX (Anxiety) FRS (Fears) OBS (Obsessiveness) DEP (Depression) HEA (Health Concerns) BIZ (Bizarre Mentation) ANG (Anger) CYN (Cynicism) ASP (Antisocial Practices) TPA (Type A Behavior)	Excessive worry and tension Significant phobias Busy, inefficient cognitive activity Preoccupation with feelings of worthlessness Concern regarding health; dependency Psychotic thought processes Anger and irritability Skepticism and distrust of others Lack of empathy; antisocial attitudes/behaviors Competitive, occupational involvement	
	(table continues)	

(table continues)

Table 1 (cont.)					
Scale	Description Belief in personal shortcomings and inadequacy Aversion to social activity Instability in family relations Degree to which occupational productivity suffers Prognosis for treatment				
LSE (Low Self Esteem) SOD (Social Discomfort) FAM (Family Problems) WRK (Work Interference) TRT (Negative Treatment Indicators)					
Supplemental Scales					
A (Anxiety) R (Repression) Es (Ego Strength) O-H (Overcontrolled Hostility) MAC-R (MacAndrews Alcoholism Scale) Do (Dominance) Re (Social Responsibility) Ho (Hostility) Mt (College Maladjustment) GM (Gender-Role Masculine) GF (Gender-Role Feminine) APS (Addictions Potential) AAS (Addictions Acknowledgement) PK/PS (Post Traumatic Stress Disorder) MDS (Marital Distress)	Resiliency and ability to adapt Anxiety regarding sense of inadequacy Typical style of emotional control Denial and control of aggressive attitudes Prediction of alcoholic tendencies Social dominance Adherence to social convention and tolerance of others Distrust and cynicism towards others Prediction of emotional adjustment Adherence to traditionally male gender roles Adherence to traditionally female gender roles Potential for substance abuse Denial of substance abuse Symptoms of Post-Traumatic Stress Disorder Stress or discord in close relationships				
Personality Psychopathology Five (PSY-5) Scales					
AGGR (Aggressiveness) Psychoticism (PSYC) Disconstraint (DISC) Negative Emotionality/Neuroticism (NEGE) Introversion/Low Positive Emotionality (INTR)	Aggressive tendencies; sense of superiority and control Typical reality testing capability Ability to control impulse; sense of flexibility High emotional distress Degree of emotional satisfaction and comfort with others				

Adapted from Friedman, Bolinskey, Levak, & Nichols (2015)

A study by Stredny, Archer, and Mason (2006) examined personality

characteristics of parents involved in child dependency hearings through usage of the

MMPI-2 and the MCMI-III (Millon, Millon, Davis, & Grossman, 2006). Both instruments are popularly used in such evaluations, and research concerning their usage is critical due to the special demands involved with assessing child dependency examinees (i.e., impression management as well as possibly unique demographic information) (Stredny et al., 2006).

The study involved 127 individuals (either parents or guardians), all ordered by the courts to complete the evaluation at a local community mental health facility. Data were archival in nature, and records with a Cannot Say (item omission) score greater than 30 were excluded. The sample consisted of 42 men and 85 women, all aged between 18 and 61 years (M = 34.08, SD = 8.60). Approximately 5% of the sample was unemployed, and their average level of education was 11.8 years of age. Participants had a mean of 2.7 children, and 58.3% of the sample was 58.3% African American (Stredny et al., 2006).

Stredny et al.'s results showed significantly higher elevations on the Lie (L) scale in relation to the Correction (K) scale, reflecting greater levels of unsophisticated denial than outright defensiveness (Stredny et al., 2006). Participants also demonstrated elevations on the MCMI-III Desirability (Y) scale. These findings are congruent with other indications of impression management in child dependency evaluations. Although elevations on MMPI scales 4 (Psychopathic Deviate), 6 (Paranoia), RC6, and RC3 were relatively common in the sample, they did not often meet the cutoff for interpretation in clinical settings (T score of 65 or over). In terms of the MCMI-III, Histrionic, Narcissistic, and Compulsive scores were the most

elevated; once again, however, this did not typically make reach the cutoff level (Base Rate score of 75 or over) (Stredny et al., 2006).

Resendes and Lecci (2012) produced a report comparing usage of the MMPI-2 in child custody and child dependency evaluations. Child dependency examinees, they hypothesized, should have higher rate of problematic behaviors due to parenting ability being outright questioned (as opposed to child custody evaluations, where there has not been an allegation of maltreatment). Their sample involved 136 individuals seeking court-ordered psychological evaluations as part of their dependency hearings. All individuals were under investigation by Child Protective Services, and 95% of the parents in the sample had children removed from the home as a precaution until the evaluation and hearing were completed. Six allegations were primarily investigated in this study: sexual abuse, physical abuse, serious psychopathology, substance abuse, parental incompetence, and neglect.

Of the individuals in the Resendes & Lecci's sample, 32.4% were suspected of substance abuse, 28.7% of child neglect, 22.7% of physical abuse, 10.4% of serious psychopathology, 2.9% of sexual abuse, and 2.9% of parental incompetence. In terms of overlap, parents suspected of substance abuse problems were frequently subjects of neglect allegations. The sample consisted of 98 women and 38 men, the average age of which was 32.9 (SD = 9.4), who were primarily Caucasian (73%), and had an average of 2.4 children in the home (SD = 4.5). Resendes and Lecci also utilized a comparison sample of 508 participants from an archived child custody evaluation data set who were significantly younger, involved more women, and had a larger average

number of children in the home (Bathurst et al., 1997, as cited in Resendes & Lecci, 2012).

The competency sample produced an elevated Lie (L) score (M = 62.6), which may be considered an indicator of defensive responding and impression management. The mean Correction (K) score was not elevated (M = 52.6), indicating a typical balance between disclosure and defensiveness for this scale. The Infrequency (F) average score for the sample was 58.9, which is not considered clinically significant. The highest mean scale score was for Scale 4 (Psychopathic Deviate, M = 63.3) (Resendes & Lecci, 2012).

In terms of comparison to the custody sample, statistically significant differences were observed in regards to all validity scales and 8 of the 10 clinical scales (Resendes & Lecci, 2012). Specifically, the competency sample obtained higher mean scores on all scales except K. The largest differences between samples were observed in regards to scales 2, 4, 8, and 0, as well as F, Fb, and TRIN. The results of this study point to some important and statistically significant differences between child dependency and custody groups. Although both groups are posited to present defensively, they demonstrate significant differences on a multitude of variables, as discussed above (Resendes & Lecci, 2012).

Due to the research demonstrating significant defensiveness in individuals undergoing child dependency or child custody evlatuions, Bathurst, Gottfried, and Gottfried (1997) examined MMPI-2 data of 508 parents involved with child custody evaluations with the aim of developing norms for usage with this population. Archival data were collected through private practices in southern California. All 508 parents were involved in child custody evaluations at the time they were administered the MMPI-2. Biological (n=388), step (n=74), and live-in parents (n=46) were included in the study. Individuals married to and living with either biological parent were considered step parents; those who lived with biological parents but no married were considered "live in" parents. The average age was 37.47 (SD = 7.37), and families had an average of 1.47 (SD = .76) children per family (Bathurst et al., 1997).

Bathurst et al.'s results showed that for all sub-groups of the sample, the K scale average was approximately one standard deviation above the mean; the L score mean was more than half a standard deviation above the mean. By comparison, the mean F score was approximately half a standard deviation below the mean. Of the clinical scales, scales 3 (M = 52.3, SD = 7.9), 4 (M = 52.4, SD = 9.0), and 6 (M = 52.4, SD = 9.0) had mean T scores above 50. Additionally, the Overcontrolled-Hostility scale (O-H) was elevated to one standard deviation above the mean (M = 60.00, SD = 10.02). Of the participants, 53% had a T score of 60 or higher; 36% demonstrated a T score of 65 or higher (the cutoff score for profile interpretation in standard clinical settings). There were no significant differences between male and female participants (Bathurst et al., 1997).

Siegel, Bow, and Gottlieb (2012) also examined the usage of the MMPI-2 in child custody cases. They reported that 90% of psychologists involved in such cases utilize the measure, although concerns about parental defensiveness impacting test results are common. The authors criticized previous studies for a lack of clarity regarding inclusion criteria and a failure to distinguish the level of conflict in the investigated cases. Their study aimed to investigate studies involving high conflict child custody cases. The definition of high conflict utilized in this case involving parents having personal protective orders against one another, as well as the presence of allegations regarding domestic violence, psychopathology, child abuse, or substance abuse. Additionally, the litigation needed to include two of the following: a high number of allegations, a prolonged case (over one year), and previous failures in mediation (Siegel et al., 2012).

Siegel et al.'s study aimed to compare high conflict child custody cases to a normative sample. The study involved biological or adoptive parents who were ordered by the courts to complete an evaluation as part of their child custody hearing. The sample consisted of 315 MMPI-2 profiles (168 mothers and 147 fathers) collected from private practices. The average age for women was 38.7 (range = 23-54), and for men, the mean was 42.2 years (range = 24-59). In terms of racial composition, 95% of the sample was Caucasian.

Siegel et al.'s results demonstrated high T-scores on the L, K, and S (Superlative) scales (M = 60.43, 60.89, and 61.41, respectively). The F scale (M = 48.37) had a mean score slightly lower than the test's standardization sample mean. In terms of gender differences, men scored higher than women on scales K and S (M = 61.12 and 63.01, respectively), as well as scale L (M = 58.03) (Siegel et al., 2012).

The highest mean scores for clinical scales involved Scale 3 (M = 56.07 for women, M = 55.71 for men), Scale 4 (M = 56.23 for women, M = 55.38 for men), and

Scale 6 (M = 54.78 for women, M = 54.33 for men) (Siegel et al., 2012). While the fourth-highest elevation for women was Scale 5 (53.88), this scale was significantly lower for men (M = 44.83). Both men and women showed low scores on Scale 0 (M = 44.61 for women, M = 43.98 for men). When compared to previous data sets, the high conflict cases examined in this study involved more significant elevations on L, K, and S, as well as clinical scales 3, 4, and 6 (Siegel et al., 2012).

Overall, the high conflict sample showed heightened tendencies to demonstrate defensiveness, deny perceived flaws, and portray oneself in a generally favorable light. Elevations on scales 3, 4, and 6 as demonstrated by the high conflict sample are associated with resentment, jealousy, and decreased temper control. For men, Scale 5 scores on the low end are interpreted as involving typical masculine attitudes and interests. Conversely, the moderately high scores demonstrated by women in the study are interpreted as assertiveness and competitiveness. Overall, we see that the level of defensiveness in child custody litigation appears to be significantly affected by the degree of conflict in the case at hand. This is particularly of note due to the often high conflict, contentious nature of litigation involving allegations of maltreatment (Siegel et al., 2012).

Ezzo, Pinsoneualt, and Evans (2008) compared cases involving termination of parental rights with two types of custody cases that did not involve child abuse or neglect. One custody group consisted of cases wherein the child was born to married parents, while the other group of cases had parents who were not married at the time of the child's birth. MMPI-2 profiles involving termination of parental rights cases (the

Child Maltreatment sample) were obtained through a juvenile court clinic (n = 76). The same source provided 102 profiles that made up the Unmarried Custodial sample. Ohio law dictates that custody cases involving unmarried parties must be litigated in Juvenile Court, while those involving married couples are litigated in the Court of Common Pleas (Division of Domestic Relations). Therefore, the 105 profiles of married parents (Married Custody Sample), were gathered from private evaluations conducted for this court (Ezzo et al., 2008).

The Child Maltreatment sample consisted of 21 men and 55 women, with a mean age of 34.3 years (SD = 10.2) (Ezzo et al., 2008). In terms of racial composition, 56% were African American, while 41% were Caucasian. The Unmarried Custodial sample involved 46 men and 56 women, with a mean age of 37.1 (SD = 10.1), of which 30% were African American, and 65% were Caucasian. The Married Custodial sample involved 49 men and 56 women, with a mean age of 38.5 (SD = 5.9), 99% of which was Caucasian. Any profiles with VRIN scores over 80 or F scores over 100 were excluded from analysis, yielding final samples of 70 (Child Maltreatment), 100 (Unmarried Custodial), and 105 (Married Custodial) (Ezzo et al, 2008).

A major finding from Ezzo, Pinsoneault, and Evans' Child Maltreatment participants demonstrated higher scores than Unmarried Custodial participants on scales F, 4, 6, and 8 This sample also showed higher scores than Married Custodial participants on L, F, K, 4, 8, 9, and 0, as well as lower scores on scale 3. Unmarried Custodial and Married Custodial participants were largely similar, however, Unmarried Custodial participants showed higher mean scores on Scale L and lower scores on scale 3.

Of the Child Maltreatment group, 56.5% demonstrated one or more clinical elevations, in contrast to 30.3% of the Unmarried Custodial and 26.6% of the Married Custodial group. There was also a significant gender difference shown for scales L, 5, and 0, with women demonstrating higher scores than men on each of these. Both non-maltreatment groups were then combined in order to examine maltreatment more thoroughly as a variable. Child Maltreatment individuals scored 5-9 points higher on scales F, 4, 6, 8, 9, and 0, four points higher on scale 2 and L, and approximately 5 points lower on K. There was again a significant gender difference, showing approximately 3 points higher scores for women on F, 7 points higher on 5. and 5 points higher on 2. Both Child Maltreatment and Non-Child Maltreatment groups showed defensive approaches to test-taking, which is consistent with previous research. Individuals in the Child Maltreatment sample showed more L elevations (mean in the clinical range), whereas Child Non-Maltreatment participants demonstrated more K elevations (mean in the borderline range) (Ezzo et al., 2008).

MMPI-2-RF. A restructured of the MMPI-2, the Minnesota Multiphasic Personality Inventory-2-Restructured Form (Ben-Porath & Tellegen, 2008), is the latest version among the family of MMPI measures, created with the goal of refining the test's ability to measure core constructs related to psychopathology. During the restructuring process, many of the items were removed or re-worded for clarity or use of updated terminology, and the MMPI-2 norms (previously separate for men and women) were combined into one non-gendered norm sample for the MMPI-2-RF (Ben-Porath, 2012). The MMPI-2-RF replaces the MMPI-2 clinical scales with the Restructured Clinical (RC) scales. This shift was prompted by the authors' concerns regarding the psychometric properties of the original Clinical Scales. In particular, it was noted that the original Clinical Scales contained largely heterogeneous groups of items. As a result, discriminant validity between Clinical Scales suffered. Previously, Harris-Lingoes subscales had been used to combat this problem and further delineate pertinent symptom areas. "Codetypes" or consideration of scales in two-point combinations, was also a solution utilized prior to the MMPI-2-RF. However, these solutions came with their own challenges (such as Harris-Lingoes scale items overlapping and individuals not forming well-defined codetypes), and their psychometric properties (as well as efficiency) were also called into question. As a result, focus shifted to further developing Restructured Clinical Scales around which to focus the development of the MMPI-2-RF (Ben-Porath, 2012). The MMPI-2-RF additionally contains new sets of Higher-Order, Somatic/Cognitive, Internalizing, Externalizing, Interpersonal, and Interest scales. Additionally, the Validity and Personality Psychopathology-5 scales have been included and restructured for use alongside the new sets of scales and the Restructured Clinical scales. MMPI-2-RF scales are included in the table below:

Scale Characteristic

Table 2 *MMPI-2-RF Scales*

Validity Scales

CNS - Cannot Say Number of items left unanswered VRIN-r - Variable Response Inconsistency Random responding patterns TRIN-r -True Response Inconsistency Fixed responding patterns Rare symptoms F-r -Infrequent Responses Infrequent Psychopathology Fp-r -Rare symptoms in inpatients Infrequent Somatic Rare somatic symptoms Fs-r -FBS-r - Symptom Validity Symptom over-reporting Likelihood of biased responding RBS -**Response Bias Uncommon Virtues** Denial of minor social faults L-r -K-r -Adjustment Validity Under-reporting of symptoms Higher-Order (H-O) Scales

EID - Emotional / Internalizing Dysfunction	Mood and affect difficulties
THD - Thought Dysfunction	Disordered thinking patterns
BXD - Behavioral / Externalizing Dysfunction	Difficulties controlling behavior

Restructured Clinical (RC) Scales

RCd-(dem) -Demoralization	Generalized dissatisfaction
RC1-(som) -Somatic Complaints	Health concerns
RC2-(lpe) - Low Positive Emotions	Typical lack of positive emotions
RC3-(cyn) - Cynicism	Distrust of others
RC4-(asb) - Antisocial Behavior	Rule-breaking behaviors
RC6-(per) - Ideas of Persecution	Belief that others will harm self
RC7-(dne) - Dysfunctional Negative Emotions	Significant anxiety or anger
RC8-(abx) - Aberrant Experiences	Unusual thoughts or experiences
RC9-(hpm) -Hypomanic Activation	Manic symptoms; over-activation

Somatic / Cognitive Scales

MLS - Malaise	Overall feelings of poor health
GIC - Gastro-Intestinal Complaints	Poor appetite or upset stomach
HPC -Head Pain Complaints	Pain in the head or neck region
NUC -Neurological Complaints	Dizziness, weakness, etc.
COG -Cognitive Complaints	Memory and concentration
problems	

(table continues)

Table 2 (cont.)

Internalizing Scales

SUI - Suicidal/Death Ideation HLP - Helplessness/Hopelessness SFD - Self-Doubt NFC -Inefficacy STW -Stress / Worry AXY - Anxiety ANP - Anger Proneness **BRF** - Behavior-Restricting Fears MSF -Multiple Specific Fears

Externalizing Scales

JCP – Juvenile Conduct Problems Acting out at home/school Drug or alcohol abuse SUB -Substance Abuse AGG - Aggression Violent behavior ACT – Activation Increased level of energy

Interpersonal Scales

FML - Family Problems IPP - Interpersonal Passivity SAV - Social Avoidance SHY - Shyness DSF - Disaffiliativeness

Interest Scales

AES - Aesthetic-Literary Interests Interest in literature, music, etc. MEC - Mechanical-Physical Interests Interest in outdoors, sports, etc.

PSY-5 (Personality Psychopathology Five) Scales, Revised

AGGR-r – Aggressiveness	Goal-directed aggression			
PSYC-r – Psychoticism	Poor reality testing			
DISC-r - Disconstraint	Difficulty controlling behavior			
NEGE-r -Negative Emotionality/Neuroticism-	Anxious symptomatology			
INTR-r - Introversion / Low Positive Emotionality- Loss of pleasure/low sociability				
Table adapted from Ben-Porath & Tellegen (2008)				

Scale Characteristic

Suicidal ideation or attempts Pessimistic view of future Loss of self-confidence Concern that one is inefficacious Preoccupation with pressures Significant anxious symptoms Poor frustration tolerance Fears that interfere with routines Specific phobias

Problems in family relationships Difficulties being assertive Discomfort socially Anxious and quiet around others Dislike of other people

Archer, Hagan, Mason, Handel, and Archer (2012) utilized a sample of 344 MMPI-2-RF profiles gathered as part of archival data from two private practices in Virginia. Their sample of 172 men and 172 women, consisted largely of biological parents involved in child custody litigation. A small number of participants were other caregivers also involved in such litigation. No data on race or socioeconomic status was available; the mean age of individuals was 39.85 years (SD = 7.52, range 20-62). Archived MMPI-2 records were converted to MMPI-2-RF scores through the Q local scoring program in this study (Archer et al., 2012).

In terms of results, 15.1% of men and 18% of women elevated this scale above the clinical cutoff of 65. Clinical elevations occurred in one out of four examinees on at least one RC scale; for women, the commonly elevated scales were RC6 and RC1, for men, RC6 and RC4 were the most frequent elevations. Additionally, participants demonstrated elevated mean scores on L-r (M = 52.28 for men, 52.95 for women) and K-r (M = 57.58 for men, 57.24 for women). This is consistent with previous research regarding MMPI-2 L and K elevations in child custody litigants, as discussed earlier (Archer et al., 2012).

Pinsoneault and Ezzo (2012) conducted the first study directly comparing MMPI-2-RF profiles in cases of child maltreatment versus child non-maltreatment, representing a significant leap forward in an otherwise relatively scarce area of research. The maltreatment sample involved 67 parents, all unmarried and undergoing current, permanent child custody cases. These cases involved 19 men and 48 women,

the mean age of which was 34.0 (SD = 10.1). Of these, 55% were African-American, and 41% Caucasian. Cases were selected through the local Juvenile Court Diagnostic Court, and the maltreatment had been previously documented by the County Child and Family Services. This agency was responsible for referring all cases to the Court in order to receive evaluations and seek permanent custody (Pinsoneault & Ezzo, 2012).

The non-maltreating parent sample involved 91 profiles from unmarried individuals involved in custody battles (permanent or otherwise) at the same agency. An additional 80 profiles from married, non-maltreating parents were obtained through private evaluations, as local law required custody disputes involving married and unmarried individuals to be litigated in different courts. This combined group involved 76 men and 95 women, the mean age of which was 38.4 (SD = 9.4). As per ethnicity, 27% were African American, and 67% Caucasian. Following exclusion of profiles with VRIN-r/TRIN-r scores over 80 or F-r/Fp-r scores of 100 or over, final samples involved 61 Parental Fitness Evaluees and 168 Child Custody Litigants (Pinsoneault & Ezzo, 2012).

Pinsoneault and Ezzo's results showed that 9% of the Parental Fitness Evaluee group presented invalid protocols, compared to 2% of Child Custody Litigant individuals (Pinsoneault & Ezzo, 2012). This group also showed average scores that were 5-7 T-scores higher than the Child Custody Litigant groups on the L-r, THD, RC3, RC6, and FML scales, with a medium effect size. Additionally, a smaller effect size was seen when examining the apparent 4-point difference between groups on scales RC4, RC8, PSYC, and JCP. In terms of gender differences, men scored 5-6 points lower than women on FBS, EID, RC1, MSF, and FML. However, they scored 5-7 points higher than women on BXD, AGGR, and JCP, 10 points higher on DISC, and 14 points higher on MEC (Pinsoneault & Ezzo, 2012).

For overall percentage of elevations, 67% of the Parental Fitness Evaluee group showed one or more clinical elevations, when validity and interest scales were excluded, as compared to 55% of the Child Custody Litigant group (Pinsoneault & Ezzo, 2012). Additionally, 52% of Parental Fitness Evaluees showed two or more elevations, compared to 33% of Child Custody Litigants; when considering six or more elevations, the percentages were 25% and 8%, respectively. The most commonly elevated scales among the Parental Fitness Evaluees were RC6 (Ideas of Persecution, 33%), NUC (Neurological Complaints, 23%), THD (Thought Dysfunction, 21%), JCP (Juvenile Conduct Problems, 18%), MSF (Multiple Specific Fears, 15%), PSYC (Psychoticism, 15%), and RC (Cynicism, 15%) (Pinsoneault & Ezzo, 2012). Among Child Custody Litigants, the most commonly elevated scales were RC6 (14%), NUC (11%), JCP (10%), MSF (9%), SAV (Social Avoidance, 8%), IPP (Interpersonal Passivity, %), AXY (Anxiety, 7%), and STW (Stress/Worry, 7%) (Pinsoneault & Ezzo, 2012).

When comparing Pinsoneault and Ezzo's results to previous MMPI-2 results, we see that MMPI-2-RF scales associated with Scale 4 (Psychopathic Deviate) showed elevations (such as RC3 and JCP). Additionally, similar to MMPI-2 scale 6 (Paranoia) RC6 was elevated in the Parental Fitness Evaluee group. The same pattern was also apparent for Scale 8 (Schizophrenia, associated with THD and PSYC). Elevations were also seen on MMPI-2-RF scale L-r, corresponding with earlier results on the MMPI and MMPI-2 demonstrating L scale elevations (Pinsoneault & Ezzo, 2012).

Defensiveness in Parental Evaluations. Defensiveness presents as a potential obstacle in a number of contexts besides standard clinical settings. Even without allegations of abuse or neglect to raise a test respondent's defenses, people may have a number of reasons to hesitate in representing their symptoms accurately. As such, in high stakes circumstances such as child dependency or custody evaluations, tensions (and defensiveness) tend to run high.

Kauffman, Stolberg, and Madero (2015) conducted a study in order to examine whether or not the previously-observed (on the MMPI and MMPI-2) patterns of defensiveness and impression management among child custody examinees occurred on the MMPI-2-RF. Additionally, the authors chose to examine indicators of impression management on the MCMI-III. All participants involved in the study displayed significant emotional or interpersonal disturbances at the time of assessment. The study utilized archival data from 49 biological parents undergoing child custody litigation. Data was collected from a South California private practice. The mean age of the parents was 38.10 (range = 26-57), and approximately 70% of the sample was Caucasian. All individuals were administered the MMPI-2 and MCMI-III at the time of their evaluations; the MMPI-2 profiles, for the purposes of the study, were converted into MMPI-2-RF profiles using the Q-local scoring program (Kauffman et al., 2015). On the MMPI-2, mean scores were 61.73 for the L scale, 60.84 for the K scale, and 46.13 for the F scale, which is consistent with an under-reporting pattern (Kauffman et al., 2015). On the MMPI-2-RF, L-r and K-r showed similar elevations (M = 59.79 for L-r, M = 59.49 for K-r). MMPI-2 mean scores for the clinical scales clustered around a T score of 50, while MMPI-2-RF mean scores clustered around a score of 45. For the MMPI-2, the highest clinical scale elevations were scale 3 (M = 54.84), Scale 4 (M = 54.60), and Scale 6 (M = 53.29). For the MMPI-2-RF, the only RC scale with a mean score of approximately 50 was RC6 (Paranoia, M = 50.96). RC4 was the second most commonly elevated scale, at a mean score of 46.39. Overall, MMPI-2-RF RC scales were found to be less elevated than MMPI-2 Clinical scales (Kauffman et al., 2015).

MCMI-III profiles had a mean base rate score of 78.00 on the Desirability (Y) scale; this was the only scale with a mean score above the cutoff for profile interpretation in clinical setting (BR of 75 or over) (Kauffman et al., 2015). Scales 4 (Histrionic; M = 74.31), 5 (Narcissistic; M = 68.16), and 7 (Compulsive; M = 71.49) showed moderate elevations. For all other scales, mean base rate scores fell below a score of 35 and were considered extremely low (Kauffman et al., 2015). For the MMPI-2-RF, VRIN-r positively correlated with MCMI-III scales X (Disclosure) and Z (Debasement). The MMPI-2-RF K-r scale was negatively correlated with both of these indices; however, all validity scales (beside Fs-r) correlated with MCMI-III Clinical Personality scales. Additionally, MMPI-2-RF RC scales significantly correlated with MCMI-III Modifying Indices, as well as Clinical Personality scales (Kauffman et al.,

2015).

Overall, Kauffman et al.'s results showed significant correlations between MMPI-2 and MMPI-2-RF validity scales; of the sample, 67% elevated the L-r scale above a score of 55, while 80% elevated the K-r scale above the same score. There were no statistically significant differences between scores on MMPI-2 and MMPI-2-RF validity scales. In terms of MMPI-2-RF RC scales, 43% of the sample elevated RC6 at a score of 55 or higher, which is consistent with heightened levels of suspicion characteristic of child custody litigants. MCMI elevations were also consistent with responding in a socially desirable manner (Kauffman et al., 2015).

Bagby, Nicholson, Buis, Radovanovic, and Fiddler (1999) presented a seminal article regarding defensive responding on the MMPI-2 in a sample of child custody litigants. This is especially relevant due to the significant usage of the MMPI-2 in such evaluations. The authors did so by utilizing a sample of 117 individuals (57 men and 60 women; M = 37.42 years of age, SD = 8.27) who were currently undergoing psychological evaluation as part of a child custody hearing. In addition to considering the L and K scales as measures of fake-good responding, the study utilized the Superlative (S) scale, as well as the additional Wiggins Social Desirability (WSD) scale. Both of these additional scales were selected on the basis of their previously-examined predictive capacity, which demonstrated large effect sizes even with participants who were specifically instructed to fake good (Bagby et al., 1999).

Bagby et al.'s results showed that mean clinical-scale T scores were approximately 50 - that is, at average level. On the basis of identifying profiles with T- scores of 65 or above for the L, K, or both L and K scales, 52% of the custody litigants were considered to present with an underreporting pattern. When the WSD or S scales were considered, 74% of the individuals were considered to have underreported symptoms (Bagby et al., 1999).

Siegel (1996) tested the traditional MMPI-2 norms against those of individuals currently involved in child custody evaluations. This became especially noteworthy due to the increase in divorce rates that occurred during the 1970s and 1980s and the subsequent surge of child custody evaluations (Siegel, 1996).

The study particularly considered the L, K, and F scales. L scale elevations are associated with denial of minor personal or social faults, while K scale elevations indicate defensiveness (Siegel, 1996). F scale elevations are associated with symptom over-reporting; therefore, low F scores are common in cases of under-reporting or symptom denial. This triad of score patterns forms the core of what is considered "impression management," or the tendency to present oneself in a more or less favorable light (depending on individual intent and influenced by context). Typical profiles where individuals attempt to portray themselves positively involve L and K elevations, with most clinical scales below a T score of 50. Use of an L scale cutoff score (raw score of 5) has been shown in previous studies to yield high rates of fake-good profile identification (Siegel, 1996).

The study involved 34 women (M = 35.53 years of age) and 46 men (M = 36.23 years of age), all Caucasian (Siegel, 1996). All participants were involved in initial divorce proceedings involving the question of child custody. Significant

differences between the normative sample and the current study sample were demonstrated in scores for men on L, F, and K scales, while only L and K remained significant for female participants. For men, mean L scores were approximately 2 points higher than the normative sample, F scores 2 points lower, and K scores 5 points higher. For women, mean L were approximately 2 points higher than the normative sample, while K scores showed approximately 5 points of difference (Siegel, 1996).

Cooke (2010) examined the effect of education and socioeconomic level on patterns of defensive responding in a sample pf 50 child custody litigants. He also discussed variations in how to interpret the standard clinical scales in light of defensive reporting patterns - if even to interpret them at all. The MMPI-2 manual offers some guidance that indicates L scores in child custody evaluations may show moderate elevations of 70-79, which may not invalidate the profile; However, in nonclinical settings these profiles "May be Invalid"; even profiles showing slight elevations of 65-69 are considered "Questionably Valid." Similar guidance is given for K and S scales, raising questions of clinical judgement in such areas. In these cases, it is also important to consider the TRIN score; if it shows elevations over 80, the likelihood of faking good becomes more significant (Cooke, 2010).

The mean education level for men in Cooke's study was 17.0 years (SD = 2.65), while it was 16.87 years (SD = 2.71) for women, representing a more educated sample than the MMPI-2 normative sample (M = 14.72 years of education). Socioeconomic status was measured by considering the percentage of individuals with

doctoral degrees, or degrees in law or medicine. For this relatively well-educated sample, K scores were approximately equivalent to those observed in previous studies. S scale scores were significantly higher than the normative mean (2.5 points for men, 1.2 points for women). L scale scores, while higher, did not reach statistical significance. Of the sample, 24% of men and 32% of women had L scores over 65; 35% of men and 30% of women had K scores elevated over 65. Finally, 38% of men and 42% of women showed T score elevations of 65 or above on the S scale. Results suggest that contextual variables such as education and socioeconomic level may play a significant role in determining validity scale elevations, and should be considered in terms of interpretation. As such, it is important to consider additional information (besides litigation status) that may have a bearing on defensiveness in both clinical and forensic contexts (Cooke, 2010).

Arce, Farina, Seijo, and Novo (2015) argue that malingering should always be considered as a rule-out diagnosis in forensic settings, due to the possibility of secondary gain in many cases. This is particularly relevant due to the high stakes in child custody cases. Specifically, parents involved in child custody evaluations often tend to deny negative facets of themselves and over-report positives (Arce et al., 2015).

Their study involved a sample of 488 individuals, of which 244 were actively involved in forensic evaluation (122 mothers and 122 fathers, M = 40.65 years of age) (Arce et al., 2015). The other 244 participants were couples not involved in the process of divorce or child custody decisions (M = 40.65 years of age). All individuals

had lived together for at least five years at the time of the study. Measures included the L scale, the WSD scale, the Positive Malingering Scale (Mp), and the Other Deception Scale (Od). All data were archive data gathered from the Forensic Research Institute of the University of Santiago de Compostela in Spain. Child custody litigants were matched with control group participants on the basis of age, gender, number of children, and duration of marital relationship (Arce et al., 2015).

The scores of the child custody and control groups were compared on each of the impression management scales. Arce et al.'s results showed significant effects for each of the four scales. A large effect size was shown for the WSD scale (more than 1 standard deviation), and a "more than large" effect size was seen for the L, Mp, and Od scales (approximately 1.20 standard deviations). Sensitivity for L, WSD, and Mp was found to be approximately 40-50%, and was much higher for the Od scale at 81%. L and Mp showed 92% and 93% specificity, respectively, while WSD and Od showed specificity rates of 84%. In terms of overall classification, Od correctly classified 83%, while the other scales averaged a correct classification rate of 70%. The Od scale suggested 23.3 times more impression management (a large effect size) in the child custody sample, as compared to 10.3, 6, and 5.7 times more for the L, Mp, and WSD scales, respectively (Arce et al., 2015).

Once the presence of impression management techniques was identified in the profiles, the Clinical, RC, Content, Personality Psychopathology Five, and Supplementary scales were interpreted in order to look for attempted manipulations. For individuals at a high likelihood of impression management (HL-IM), significantly higher scores on 3 were demonstrated. In terms of RC scales, significantly higher means were seen in the HL-IM group on Demoralization (RCD), Antisocial Behavior (RC4), Dysfunctional Negative Emotions (RC7), Aberrant Experiences (RC8), and Hypomanic Activation (RC9), all of which appear to be associated with symptom denial or under-reporting (Arce et al., 2015).

In regards to PSY-5 scales, control groups showed significantly higher scores on the Disconstraint (DISC) and Negative Emotionality/Neuroticism (NEGE) scales than the HL-IM group, consistent with attempts by the latter group to portray themselves as possessing more self-control and as less self-critical (Arce et al., 2015). For Content scales, the control group showed higher scores on Anxiety, Obsessiveness, Depression, Anger, Antisocial Practices, Family Problems, Work Interference, and Negative Treatment Indicators. Finally, in terms of Supplementary scales, control group scores were higher on the A, Mt, and Pk scales than the HL-IM group, and lower on the O-H scale than this group (Arce et al., 2015).

Overall Arce et al.'s results show significant attempts by the HL-IM group to manipulate interpretation of results. They both attempted to enhance positive attributes and deny negative characteristics of themselves. It was also demonstrated that the Clinical scales were not particularly sensitive to the effects of IM, with differences only seen on the Hysteria-Subtle scale, which is associated with the tendency to present oneself favorably as a personality trait (Arce et al., 2015).

Bathurst, Gottfried, and Gottfried (1997) developed a set of norms for child custody litigants for the MMPI-2. They utilized archival data from private practices in southern California. The sample consisted of 508 parents. Subgroups consisted of biological mothers and fathers, stepmothers and stepfathers, and live-in mothers and fathers (living with biological parents, but not married). The mean age of all individuals was 37.47 years (SD = 7.37), with an average of 1.47 (SD = .76) children per family. All parents were undergoing evaluations as part of a court or attorney order (Bathurst et al., 1997).

For the sample of archival data, K scores averaged approximately one standard deviation above the normative sample; L scores averaged approximately one-half standard deviation above the standardized mean (Bathurst et al., 1997). The mean F score, by contrast, was one-half standard deviation below the mean; only 1.8% of litigants demonstrated F scores above the clinical cutoff of 65. This finding was expected due to the tendency of litigants to minimize faults (Bathurst et al., 1997).

In terms of clinical scales, three had average T scores above the mean of the normative sample - 3, 4, and 6. Scales 3 and 6 were tied for the highest mean T score at a mean score of 52 (Bathurst et al., 1997). Of the profiles involved in the study, 55% had either scale 3 or 6 as the highest clinical elevation. Despite this finding, few participants scored in the elevated range for clinical scales. The highest percentage was 7.7% elevations on scale 6; Therefore, the vast majority of individuals involved in child custody litigation do not demonstrate clinical elevations. The Overcontrolled-Hostility (O-H) scale was also elevated one standard deviation above the mean, at an average score of 60.00 (SD = 10.02). Of the sample, 36% scored above the clinical cutoff of 65 (Bathurst et al., 1997).

When comparing groups based on gender, it was demonstrated that men scored 2.7 points lower than women on scale F, and 1.8 points lower on scale D (Bathurst et al., 1997). Additional analyses concluded that scores did not significantly vary between biological parents, step-parents, and live-in parents. Therefore, norms based on these results need to take into account the elevated L and K scores common of child custody litigants, as well as the tendency to under-report symptoms (Bathust et al., 1997).

McCartan and Gudjonsson (2016) conducted a study involving 210 participants (144 women and 66 men) participating in child dependency evaluations as part of the United Kingdom court system. Analysis of demographics showed that among the female participants, the mean age was 32.4 years (SD = 8.4, range 18-55). For men, the mean age was 35.2 years (SD = 9.59, range 21-62 years). In terms of employment, 75% of the participant group was unemployed.

In regards to the MCMI-III, men were significantly more likely than women to attempt to present in a socially desirable manner. Women were more likely to display debasement, or the tendency to deprecate themselves. However, neither group showed significant elevation in socially desirable responses, or any other validity indicators. There was also a gender difference in regards to Clinical Personality and Clinical Psychopathology scales; men were more likely to demonstrate narcissistic, sadistic, and antisocial characteristics, as well as alcohol and drug problems. However, average scores for both men and women fell below the cutoff scores for either the presence or prominence of clinically significant symptomatology.

Lenny and Dear (2009) also recognized the importance of detecting impression management, or "faking good" by parents undergoing child custody evaluations. Due to the significant weight of these evaluations, many parents feel the need to present in a socially desirable light, with as few psychological difficulties or undesirable qualities as possible. The significance of these evaluations is also, however, the reason research on the topic of impression management during child custody evaluations is so important. Therefore, the authors conducted a study utilizing two samples of Australian citizens; one of parents recruited through child care centers, and one of students recruited through a psychology class at Edith Cowan University. Of the parent sample, 39 women and 21 men participated (Mean age 43.8 years; SD = 10.51). The student subsample involved 63 women and 15 men, all psychology students (mean age = 24.2 years, SD = 5.68). A minority of these students (11 of the 78 participants) were parents. Participants were randomly assigned to the control (honest) group (n = 30 parents, 33 students) or the experimental group (n = 30 parents, 45 students). The experimental group was instructed to "fake good"; specifically, they were asked to imagine themselves taking part in a custody dispute and attempting to present themselves as a good parent.

Lenny and Dear's results showed that the Desirability (Y), Histrionic (4), Narcissistic (5), and Compulsive (7) scales were significantly higher in the experimental group than the control group. Additionally, the Disclosure (X) and Debasement (Z) scores were significantly lower in this group, as were the number of clinical elevations (base rate 75+) in general. Indeed, the average score for the experimental group on scales besides the aforementioned Y, 4, 5, and 7 was 17.76, which is considered very low. For perspective, the authors presented the average score for the general population (not currently receiving either inpatient or outpatient psychology services of any kind, M = 35), as well as the median score from the clinical norm sample (M = 60). In their study, the average score for the honest group on these same scales was 39.01. In order to ensure real-world applicability of these results, the authors compared their participant data to that from McCann et al. (2001)'s sample of actual child custody litigants, and found very similar average level scores.

In summary, defensiveness represents a potential for concern in psychological evaluations conducted in multiple settings involving scrutiny of personal attributes. As the research has demonstrated, profiles suppressed by defensiveness are a particular obstacle in cases of child custody litigation, as well as in child dependency evaluations involving allegations of maltreatment. The current study aimed to examine MMPI-2-RF profiles of parents accused of neglect in order to establish a sample profile of such an individual. One focus on investigation was the level of defensiveness demonstrated in these profiles, as well as characteristic patterns of elevation such as heightened internalizing or externalizing features.

Rationale and Hypotheses

It is clear that, based on the scarcity of psychological research on the topic, the topic of child neglect has been, in the words of Stoltenborgh et al. (2013), neglected. Despite the earlier-referenced statistics indicating that child neglect represents the vast majority of child maltreatment cases, there is little empirical research to reflect this level of prevalence. Studies regarding physical and sexual abuse, by contrast, are plentiful and involve a variety of research questions and designs. Studies of psychological assessment of and clinical treatment for victims of maltreatment are also quite numerous. However, studies that involve neglectful parents at all typically group these allegations together with those of physically and sexually abusive parents under the umbrella term of "maltreatment," although it has yet to be empirically demonstrated that these sets of parents are similar enough to group together on such a basis. Of the studies on child neglect that are available, fewer still focus on personality as measured by the MMPI, MMPI-2, or MMPI-2-RF. As discussed earlier, the MMPI-2-RF is the latest update in the MMPI family of tests, and research on its use in child dependency evaluations is almost nonexistent. This is limiting due to the widespread usage of this test family in child dependency evaluations. It is only fitting that the most up-to-date version of a commonly-used test should have a breadth of research supporting its usage with this population. As such, the current study aimed to contribute to research regarding personality characteristics of neglectful parents (as measured through the constructs comprising the MMPI-2-RF), while providing a contrast between neglectful parents and parents who have perpetrated other types of

child maltreatment, notably physical abuse.

Because of the scarcity of psychological research regarding parents accused of or charged with child neglect, the first purpose of the current study was exploratory in nature, with the goal of providing MMPI-2-RF reference group data regarding parents undergoing child dependency evaluations as a result of substantiated child neglect allegations. Specifically, the intent was to examine the pattern of high, moderate, and low scores on scales comprising the MMPI-2-RF to identify salient or defining characteristics of neglectful parents, in order to help establish what a sample profile of such an individual might look like. The second part of this study involved a contrast sample of physically abusive parents, enabling the development of specific directional hypotheses. Because physical abuse includes acts of commission, the personality profiles of these abusing parents were expected to demonstrate differences in comparison to neglectful parents who have instead committed an act of omission by failing to provide necessary resources for their child.

Specific hypotheses were as follows:

1. Neglectful parents will demonstrate less pronounced externalizing features than the comparison sample of physically abusive parents, as defined by significantly lower T-scores on MMPI-2-RF scales measuring externalizing tendencies. Scales selected for this analysis were: Juvenile Conduct Problems (JCP), Substance Abuse (SUB), Aggression (AGG), and Activation (ACT) as the primary scales of interest, as well as a selection of four other scales representing the externalizing dimension of personality – Family Problems (FML), Aggressiveness Revised (AGGR-r), Anger Proneness (ANP) and Behavioral/Externalizing Dimension (BXD). Although classified in the test manual as an internalizing scale, the ANP scale is included here in addition to being grouped with the internalizing scales (Hypothesis 2) because it measures characteristics such as the tendency to act out in sudden anger.

2. Neglectful parents will demonstrate more pronounced internalizing features than

the comparison sample of physically abusive parents, as defined through significantly higher T-scores on MMPI-2-RF scales measuring internalizing tendencies. These were: Internalizing Scales Suicidal/Death Ideation [SUI], Helplessness/Hopelessness [HLP], Self-Doubt [SFD], Inefficacy [NFC], Stress/Worry [STW], Anxiety [ANX], Anger Proneness [ANP], Behavior-Restricting Fears [BRF], and Multiple Specific Fears [MSF], as well as a selection of other scales selected to represent the internalizing dimension of personality (Emotional/Internalizing Dimension [EID], Demoralization [RCd], Somatic Complaints [RC1], Low Positive Emotions [RC2], and Dysfunctional Negative Emotions [RC7]).

3. Neglectful parents will show higher rates of substance use problems than physically abusive parents, as measured through current or historical substance abuse diagnoses, history of rehabilitation attendance, and self-reports of substance usage.

4. Both maltreatment samples (neglectful and physically abusive parents) will demonstrate significant defensiveness as measured by MMPI-2-RF validity scales (L-r [Uncommon Virtues] and K-r [Adjustment Validity]) mean scores at least half a standard deviation above the normative mean (i.e., $T \ge 55$), and Restructured

Clinical Scale score means at half a standard deviation below the normative mean or lower (i.e., $T \le 45$).

Methods

Participants

This study's overall sample, inclusive of the child neglect sample and the physical abuse comparison samples, consisted of 186 parents (child neglect N = 127; child physical abuse N = 59) who received psychological testing at an outpatient forensic practice as part of a court-ordered child dependency evaluation. Demographic information for the sample reflected the local community makeup of Orange County, Florida. Individuals were included in this study based on their completion of a child dependency evaluation at this site, the availability of valid MMPI-2 or MMPI-2-RF test scores, and corroborated reports of child neglect or child physical abuse. Any MMPI-2-RF profiles with Cannot Say (CNS) scores > 30 were excluded, as were any profiles with VRIN-r or TRIN-r T-scores > 80. The mean age of this overall sample was 32.48 years (SD = 7.70; range = 18-52). The majority of participants (n = 99, 53.3%) were Caucasian, followed by a significant number of African American (n = 50, 27%) and Hispanic (n = 35, 18.4%) individuals. Collectively, 68% (n = 127) of maltreatment allegations for the overall sample involved child neglect as defined by Florida statutes and Department of Children and Families definitions, while 27% of cases (n = 51) involved child physical abuse, and 4.3% involved both child neglect and child physical abuse (n = 8). This echoes earlierreferenced statistics indicating the relative frequencies of types of maltreatment.

Pertinent statistics regarding demographic variables for the child neglect sample (N = 127) indicate that 28% (n = 35) of the sample were fathers, and 72% (n = 92) were mothers. This uneven gender ratio is commensurate with prior studies identifying higher rates of maltreatment (particularly neglect) amongst mothers. The mean age of the sample

was 32.42 (SD = 7.91). Educational attainment for the sample was as follows; 50.4% (n = 63) of the sample obtained a high school diploma, while 36% (n = 45) completed between 8 and 11 years of education. The remaining minority of the sample completed at least some degree of college work. Approximately half of the sample (n = 64, 50.7%) was not employed at the time of the evaluation. In regards to specific allegations, 36% (n = 45) of cases consisted of the child witnessing domestic violence between his or her parents. Failure to protect the child from abuse by another party comprised 14% of allegations (n = 18). Inability to care for the child due to mental health difficulties consisted of 14% of cases (n = 18). Environmental hazards such as an unsafe living situation were the main focus in 11% of cases (n = 14), and inadequate supervision characterized 10% of allegations (n = 13). Substance misuse in the presence of the child comprised 7% of allegations (n = 9). Medical neglect, or the failure to provide adequate medical or mental healthcare for the child, was present in 5% (n = 6) of the neglect sample. Educational neglect, or failing to ensure the child received adequate schooling, was reported in 3% (n = 4) of cases. Additional descriptive statistics for demographic information related to the child neglect sample, related to family characteristics, legal history, psychiatric history, and substance abuse are presented in Table 3, along with similar descriptive information for the physical abuse comparison sample.

The physical abuse comparison sample (N = 59), was more equal in its gender distribution between fathers (n = 30, 50.8%) and mothers (n = 29, 49.2%). Average age of the sample was 32.05 (SD = 9.34). Educationally, 47.5% of the sample (n = 28) attained a high school diploma, while 35.6% (n = 29) completed between 8 and 11 years of

education. At the time of the evaluation, 49.2% (n = 29) of the sample was unemployed. The ethnic distribution of the comparison sample was also largely Caucasian (n = 24, 40.7%), with the remainder of the sample comprised of African-American (n = 30, 33.9%) or Hispanic (n = 3, 5.0%) individuals.

Table 3

Demographic Variable	Child N	Veglect	Physica	l Abuse	
		M	SD	M SD	
Number of Children	2.98	1.53	3.08	3.12	
Number of Children Victimized	1.98	1.40	1.85	0.87	
Average Victim Age	5.81	4.98	5.72	5.19	
Number of Misdemeanors	5.71	11.14	8.15	17.18	
Number of Felonies	0.66	1.31	0.98	1.28	
Number of Violent Crimes	0.86	1.52	0.81	1.20	
Number of Prior DCF Investigations	1.99	3.27	1.63	3.40	
	Child Neglect		Phys	ical Abuse	
Demographic Variable	N	%	N	%	
History of Domestic Violence Victimization	on 50	40.0	13	22.0	
History of Domestic Violence Perpetration	n 57	45.6	27	45.8	
Child Sheltered with Grandparent	38	30.4	22	37.3	
Child Sheltered with Other Relative	27	21.6	15	25.4	

Demographic characteristics of the child neglect and child physical abuse samples

(table continues)

Table 3 (cont.)

	Child Neglect		Physical Abuse	
Demographic Variable	N	%	N	%
Child Sheltered in Foster Care	38	30.4	14	23.7
Outpatient Treatment History	55	44.0	22	37.3
Inpatient Treatment History	52	41.6	19	32.2
Psychiatric Medication Treatment History	1	19.2	6	10.2
Rehabilitation Treatment History	23	18.4	7	11.9
History of Mood Disorder	36	28.8	16	27.1
History of Substance Abuse Disorder	11	8.8	9	15.3
Currently Diagnosed Personality Disorder	90	72.0	41	69.5
Currently Diagnosed Mood Disorder	72	57.6	28	47.5
Currently Diagnosed Substance Abuse	60	48.0	25	42.4
Currently Diagnosed Psychosis	13	10.4	5	8.5
Nicotine Usage	48	38.4	21	35.6
Alcohol Abuse	39	31.2	15	25.4
Cannabis Abuse	55	44.0	29	49.4
Cocaine Abuse	40	32.2	6	10.2
Opioid Abuse	32	25.6	9	15.3
Hallucinogen Abuse	4	3.2	5	8.5

To review some pertinent statistics from the above table, we see that the child neglect sample had higher rates of both domestic violence victimization and perpetration relative to the comparison sample. Both samples had similar rates of prior crime perpetration in general, though the child neglect sample had somewhat lower rates of misdemeanors. It was also shown to be relatively common for parents in the child neglect sample to have had outpatient or inpatient psychological treatment experiences, and this trend was echoed in the comparison sample. Common diagnoses for parents accused of neglect were personality, mood, or substance use disorders; again, this same pattern was reflected in the physical abuse comparison sample. However, mood disorders were seen more often in parents in the child neglect sample than those in the comparison sample. As seen in Table 3, marijuana and alcohol were common substances of abuse for all parents accused of maltreatment. The child neglect sample showed much higher rates of cocaine and opioid abuse, and lower rates of hallucinogen abuse than the physical abuse sample.

Instruments

The study used the Minnesota Multiphasic Personality Inventory, Second Edition, Restructured Format (MMPI-2-RF) to delineate personality characteristics of participants. Specific scales utilized included Internalizing Scales (Suicidal/Death Ideation [SUI], Helplessness/Hopelessness [HLP], Self-Doubt [SFD], Inefficacy [NFC], Stress/Worry [STW], Anxiety [AXY], Anger Proneness [ANP], Behavior-Restricting Fears [BRF], and Multiple Specific Fears [MSF]), as well as a selection of additional scales selected to further represent internalizing qualities - EID (Emotional/Internalizing Dysfunction), RCd (Demoralization), RC1 (Somatic Complaints), RC2 (Low Positive Emotions), and RC7 (Dysfunctional Negative Emotions). Additionally, externalizing scales JCP [Juvenile Conduct Problems], SUB [Substance Abuse], AGG [Aggression], ACT [Activation] were utilized, as well as a selection of other scales selected to represent the externalizing dimension of personality (FML [Family Problems], AGGR-r [Aggressiveness-Revised], ANP [Anger Proneness], and BXD [Behavioral/Externalizing Dimension]).

The MMPI-2-RF Technical Manual provides psychometric evidence for the measure, including statistics for test score reliability and validity. While the Technical Manual provides various samples for comparison (psychiatric inpatient and outpatient groups, and Veteran's Affairs male inpatients), the statistics cited below utilize the normative sample consisting of men and women in the general population as their basis (Tellegen & Ben-Porath, 2008). In terms of test-retest reliability for Validity Scales, coefficients ranged from .40 (TRIN-r) to .84 (K-r). For Higher-Order and Restructured Clinical Scales, test-retest reliability coefficients ranged from .64 (RC6) to .91 (BSD), while for Somatic/Cognitive and Internalizing Scales strong reliability coefficients were also demonstrated (.54 for NUC to .85 for MSF). Externalizing, Interpersonal, and Interest Scales demonstrated coefficients ranging from .60 (DSF) to .92 (MEC), while PSY-5 scales ranged from .84 (INTR-r; AGGR-r) to .93 (DISC-r) (Tellegen & Ben-Porath, 2008). With regard to internal consistency, Validity Scale alpha coefficients range from .20, SEM = 8 (VRIN-r for women) to .69, SEM = 6 (F-r for men) (Tellegen & Ben-Porath, 2008). For Higher Order and Restructured Clinical Scales, coefficients range from .63, SEM = 6 (RC2 for women/RC6 for men) to .89, SEM = 3 (RCd for women). Somatic/Cognitive and Internalizing Scales have alpha coefficients ranging from .34, SEM = 8 (SUI for women) to .73, SEM = 6 (NFC for women), while Externalizing, Interpersonal, and Interest Scale alpha coefficients range from .43, SEM = 7 (DSF for women) to .77, SEM = 5 (SAV/SHY for women). Finally, alpha coefficients for PSY-5 scales ranged from .69, SEM =5 (DISC-

r for women) to .77, SEM = 5 (INTR-r for men) (Tellegen & Ben-Porath, 2008).

In terms of test score validity, the Technical Manual provides a list of intercorrelations between MMPI-2 and MMPI-2-RF scales, showing appropriate convergent validity (Tellegen & Ben-Porath, 2008). The Technical Manual also provides comparisons of sets of scores obtained from various groups in order to firmly establish convergent and discriminant validity. These samples include patients from community mental health centers (outpatient), psychiatric hospitals (inpatient general hospital), and Veteran's Affairs hospitals (inpatient specialized hospital), as well as medical, forensic, and general populations. As the statistics cited above demonstrate, the MMPI-2-RF demonstrates strong psychometric properties and represents a sound instrument around which to center the current study (Tellegen & Ben-Porath, 2008).

Procedure

Following approval from the Institutional Review Board of the Florida Institute of Technology, as well as the Doctoral Research Project committee, archival data were extracted from computerized psychological assessment records stored on-site at an outpatient forensic practice in Orange County, Florida. All individuals utilized in the study provided written consent at the time of their evaluation, and confidentiality was upheld by avoiding extraction of any identifying information. Demographic data and other information relevant to mental health diagnoses or other risk factors for maltreatment were collected from computerized psychological evaluation records. All MMPI-2 and MMPI-2-RF electronic test data were derived through the Q-local scoring program. These test data included item responses, raw scores, and T scores. All MMPI-2 data was later re-scored by hand to produce MMPI-2-RF scores. This procedure involved conversion of MMPI-2 item responses to MMPI-2-RF item responses, followed by conversion of these rescored item responses to raw scores and corresponding T scores. Demographic information and scale scores were then entered into the Statistical Package for the Social Sciences (SPSS) for data analyses.

Prior to analyses, all categories of child neglect were condensed into a single child neglect subsample. This includes substance misuse, educational neglect, inadequate supervision, failure to protect, inability to care for the child due to mental health reasons, exposure to domestic violence, environmental hazards, or medical neglect. The physical abuse subsample included individuals accused of child physical abuse, as well as those accused of both child physical abuse and child neglect. This was reflective of their escalation of their maltreatment beyond acts of omission (child neglect) to acts of commission as well (child physical abuse).

Analyses

Descriptive statistics computed and reported for the sample included means, standard deviations, and percentages in order to reflect pertinent sample demographic characteristics such as age, gender, and number of children. In addition to such basic information, data relating to mental health diagnoses, legal history, substance abuse history, and other relevant risk factors (as well as selected child characteristics) were analyzed. Means and standard deviations were also computed for all MMPI-2-RF T scores.

The primary statistical analyses for the study consisted of Multivariate Analyses of Variance (MANOVAs), followed by univariate Analyses of Variance (ANOVAs) in order to examine differences in frequencies between the child neglect and child physical abuse samples in regards to their MMPI-2-RF T-scores, with the goal of addressing the first two of the four hypotheses proposed earlier. To address the third hypothesis, chi-square analyses were computed to examine differences between samples in regards to substance abuse diagnosis and treatment history. Finally, mean MMPI-2-RF T scores for Validity and Restructured Clinical Scales for the samples were examined in relation to the test's normative mean scores in order to address the fourth hypothesis.

Results

Preliminary computations consisting of MMPI-2-RF scale score means (M) and standard deviations (SD) for the child neglect sample are presented in Table 4, presented for the total sample as well as separately for men and women.

Table 4

Scale	Total Sample		Men		Women
	Μ	SD	М	SD	М
SD					
Validity Scales					
VRIN-r	54.32 10.40		54.32 10.43		53.80 10.40
TRIN-r	57.78 ^a 10.50		51.40 10.29		56.98 ^a 8.43
F-r	56.57 ^a 15.36		56.57 ^a 15.36		56.29 ^a 15.06
Fp-r	55.35 ^a 13.79		55.35 ^a 15.34		54.28 12.44
Fs-r	56.00 ^a 16.14		56.00 ^a 16.14		55.96 ^a 15.93
FBS-r	56.34 ^a 11.50		56.34 ^a 11.75		56.64 ^a 11.00
L-r	69.71° 13.42		69.71° 13.42		69.64° 13.43
K-r	54.97 ^a 9.40		54.97 ^a 9.40		54.71 ^a 9.18
Higher-Order Scales					
EID	48.62 8.80		48.49 8.17		48.67 9.08
THD	53.34 11.57		55.83 ^a 13.15		52.36 10.82
BXD	48.77 10.37		50.20 9.81		48.21 10.58
Restructured Clinical Scales	5				
RCd	49.08 9.27		49.31 8.90		48.99 9.46
RC1	59.02 ^a 9.36		58.71 ^a 9.20		59.13ª 9.47
RC2	48.00 9.28		47.29 9.51		48.28 9.22
RC3	49.30 10.23		51.57 11.31		48.56 9.74
RC4	54.02 11.93		54.97 ^a 12.91		53.64 11.58
RC6	59.52 ^b 14.18		63.29 ^b 15.08		58.04 ^a 13.61
RC7	47.69 11.39		47.29 11.90		47.85 11.25
RC8	50.92 11.28		51.66 11.89		50.63 11.08
RC9	44.90 8.87		46.54 10.59		44.26 8.54
Somatic/Cognitive Scales					
MLS	50.71 9.84		48.60 9.17		51.54 10.01
GIC	51.15 10.75		51.26 10.70		51.10 10.82
HPC	53.93 9.71		53.37 10.85		54.15 9.42
			10100		

MMPI-2-RF Scale Score Means and Standard Deviations for the Child Neglect Sample

(table continues)

Table 4 (cont.)	Total Sample Men		Women		
Scale	M SD	Men SD	M SD		
Somatic/Cognitive Scales	M 5D	M 5D	IVI SD		
COG	51.11 10.61	50.31 10.27	51.43 10.78		
NUC	57.31 ^a 14.12	57.34 ^a 14.44	57.29 ^a 14.07		
NOC	57.51 14.12	57.54 14.44	57.29 14.07		
Internalizing Scales					
SUI	47.07 8.36	48.60 9.17	51.54 10.01		
HLP	45.78 8.28	45.26 6.78	45.99 8.83		
SFD	48.36 7.48	48.26 7.86	48.40 7.37		
NFC	64.64° 16.29	64.40 ^b 15.97	64.73° 16.50		
STW	49.20 10.67	50.08 11.41	48.84 10.40		
AXY	52.60 15.24	51.80 14.18	52.92 15.70		
ANP	50.06 9.82	50.54 10.00	49.88 9.74		
BRF	53.19 12.50	53.34 12.13	53.12 12.71		
MSF	48.88 8.96	47.14 9.99	49.26 9.27		
Externalizing Scales					
JCP	55.86° 13.85	58.91ª 15.32	54.66 ^a 13.12		
SUB	47.77 8.32	48.80 8.66	47.37 8.20		
AGG	44.69 9.96	44.63 9.65	44.71 10.14		
ACT	49.42 12.80	51.51 14.17	48.70 12.20		
Interpersonal Scales					
FML	49.19 12.01	46.57 10.89	50.22 12.32		
IPP	48.73 9.18	49.46 10.58	48.44 8.62		
SAV	49.65 9.16	50.17 8.09	49.44 9.58		
SHY	46.32 6.99	46.66 7.71	46.19 6.73		
DSF	49.21 11.36	50.91 13.40	48.54 10.45		
Interest Scales					
AES	47.21 11.48	44.80 11.56	48.16 11.36		
MEC	52.37 9.75	56.06 ^a 8.59	50.84 9.80		
PSY-5 Scales, Revised					
AGGR-r	40.56 11.48	40.77 10.91	40.48 11.75		
PSYC-r	50.91 12.24	52.80 13.79	50.17 11.57		
DISC-r	51.04 9.51	54.46 8.61	49.70 9.18		
NEGE-r	50.74 9.74	50.91 10.23	50.67 9.78		
INTR-r	49.09 8.95	49.14 9.16	49.07 8.92		

 $\frac{\text{INTR-r}}{\text{a indicates T scores 55-59, b indicates T scores 60-64, c indicates T scores 65 and above.}$

In all categories, decimals have been rounded up.

Examining Table 4 further for the total child neglect sample, nine scales had mean

T scores that fell between 55 and 59, representing a standard deviation of 0.5 points

above the normative sample mean. These scales were: NUC, JCP, RC1, TRIN-r, FBS-r, Fs-r, Fp-r, F-r, and K-r. This K-r elevation is significant, suggesting some level of defensiveness in participants. One scale (RC6) mean fell in the 60-64 range, while two scales, L-r and NFC, had mean T scores above a score of 65, representing the typical cutoff score for clinical interpretation and a standard deviation of 1.5 points above the normative sample mean. One scale, AGGR-r, had a mean T score below the cutoff point of 45 specified in Hypothesis 4.

A MANOVA was computed to compare men and women in the child neglect sample on all MMPI-2-RF T scores to examine gender differences, which was not statistically significant, Wilks' Lambda = .56, F(49, 74) = 1.05, p > .05. However, univariate analyses showed significantly higher mean scores for men on MEC and DISC in regards to the child neglect sample.

MMPI-2-RF means and standard deviations for the physical abuse comparison sample are shown in Table 5 below, and are limited to the selected scales used in the analyses. Because of the relatively small size of this sample, descriptive statistics are not provided separately by gender.

Table 5

MMPI-2-RF Scale Score Means and Standard Deviations for the Physical Abuse Comparison Sample

Scale	Total	Sample
	М	SD
Validity Scales		
L-r	70.31°	10.38
K-r	55.35 ^a	10.31
		(table continues)

	Total	Sample	
Scale	M	SD	
Higher-Order Scales			
EID	47.76	9.44	
BXD	48.74	10.92	
Restructured Clinical Scales	40./4	10.92	
RCd	48.68	10.12	
RC1	48.08	10.12	
RC2	47.23	9.60	
Internalizing Scales		10.01	
SUI	47.65	10.01	
HLP	45.52	8.11	
SFD	48.23	8.05	
NFC	60.25 ^b	17.13	
STW	48.96	11.18	
AXY	53.05	15.96	
ANP	49.21	10.01	
Externalizing Scales			
JCP	55.32ª	13.69	
SUB	47.62	8.44	
AGG	44.80	10.09	
ACT	48.63	12.76	
Interpersonal Scales	10100		
FML	48.65	11.99	
PSY-5 Scales, Revised	10.00	11.77	
AGGR-r	53.81	12.36	

^a designates scores of 55-59, ^b indicates scores 60-64, and ^c indicates scores of 65 or above.

Scales K-r and JCP had T scores averaging approximately 0.5 standard deviations above the normative mean, falling in the range of scores between 55 and 59. This represents a notable elevation for K-r, indicating some defensive denial of symptoms. One score (NFC) fell in the range of 60-64, representing a one-standard deviation difference from the normative mean. Similarly to the child neglect sample, the mean T score for L-r fell above a score of 65, though it was the only scale to do so in this case. Among the central analyses, the result of the one-way MANOVA comparing the child neglect sample and abuse comparison sample on externalizing scale scores (Hypothesis 1) was statistically significant, Wilks' Lambda = 0.78, F(10, 172) = 4.85, p < .001. Univariate Analyses of Variance (ANOVAs) computed to examine group differences for each of these scales showed a significantly lower mean score for the child neglect sample on AGGR-r consistent with the hypothesized direction, F(1,181) = 29.18, but not on the remaining seven externalizing scales.

The MANOVA computed to compare samples on internalizing scales (Hypothesis 2) also showed a statistically significant difference between groups, Wilks' Lambda = .81, F(12, 170) = 3.29, p < .001. An ANOVA found that the child neglect sample showed a significantly higher mean score on NFC, as was expected, F(1,181) = 30.95, but not on the thirteen other internalizing scales.

Chi-square analyses undertaken to address Hypothesis 3 showed that although the child neglect sample had fewer participants with a reported history of substance abuse diagnoses, the difference was not statistically significant, $\chi^2 (1, N = 184) = 1.72, p = .19)$. The two samples also did not differ significantly in terms of their history of substance abuse rehabilitation treatment, $\chi^2(1, N = 184) = 1.25, p = .26$. Finally, the analysis examining rates of substance abuse diagnoses rendered during the dependency evaluation process itself did not show a significant difference between the two samples, $\chi^2(1, N = 184) = .51, p = .47$. Thus, Hypothesis 3 was not confirmed.

In regards to defensiveness as measured by L-r and K-r (Hypothesis 4), both samples had mean L-r T-scores above the typical clinical cutoff of 65, which represents

1.5 standard deviations above the normative mean (in accordance with Hypothesis 4). The child neglect sample had an average L-r score of 69.71 (SD = 13.42), while the physical abuse comparison sample had an average L score of 70.31 (SD = 13.60). K-r scores for both samples were lower relative to the L-r scores (child neglect M = 54.97, SD = 9.40; child physical abuse M = 55.35, SD = 10.31), and were approximately 0.5 standard deviations above the normative mean. This is still considered a relatively high score in regards to the parameter specified in Hypothesis 4. Neither sample showed a pattern of suppressed Restructured Clinical scores (T < 45). Indeed, only one mean T score for either sample fell below a cutoff point of 45 for clinical interpretation of low scores (AGGR-r for the child neglect sample), and the vast majority of mean MMPI-2-RF T scores for both samples fell in the average range.

Discussion

Although the rate of child neglect in the United States constitutes a societal concern, relatively little research has been undertaken regarding the psychological assessment of neglectful parents. This is particularly surprising due to the frequency of child dependency evaluations that are completed with this population. As such, the primary purpose of this study was to shed light on this under-researched area in the broad topic of child maltreatment, in addition to providing reference test score data for clinicians assessing parents accused of child neglect in child dependency evaluations. The current study is not only useful for contributing to the paucity of research in this topic area, but also in examining personality characteristics that may help characterize neglectful parents and psychosocial risk factors such as substance usage that may aid in future study of and prevention of child neglect.

Although there is some research on the test scores of neglectful parents in regards to the MMPI-2-RF, it is far less plentiful than would be expected given the frequency of the usage of the MMPI family of tests in child dependency evaluations. In the current study, the mean MMPI-2-RF scores were largely in the average range, suggesting the absence of broad-ranging psychopathology. This is not surprising as this is not a sample of individuals who are preventing for psychiatric treatment. This pattern is also commensurate with prior research demonstrating profiles for this population tend to be largely in the average range, save for validity scales (i.e., Stredny et al., 2006, Resendes & Lecci, 2012, Siegel et al., 2012, Archer et al., 2012). Exceptions in the current study were for 12 out of 50 scales showing mean elevations of 0.5 standard deviations or more

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in the total sample (24%). The patterns shown were likewise consistent with prior literature showing guardedness in responding (Scales K and L mean scores), which can to be expected to some extent while parents are under scrutiny as part of the evaluation.

Overall, the total sample did not display broad patterns of psychological disturbance. However, indications of a degree of behavioral adjustment difficulties (JCP mean score) were reported in youth, which may be considered as a context for the current parenting problems. Interestingly, somatic complaints, particularly neurological complaints (NUC), were also endorsed by the child neglect sample. This may reflect difficulties managing stress or adjusting to the legal proceedings and resulting consequences. The same consideration regarding the effects of the evaluation itself on the assessment results may also be applied to the relatively high scores in the child neglect sample in regards to RC6. This may reflect some level of suspicion regarding legal proceedings, which might be considered typical for individuals going through such a process. Indeed, this tendency to view others as a threat is expected in a circumstance where child neglect charges pose a legitimate threat to the future of the family system, and prior research has demonstrated similar patterns (Stredny & Archer, 2006; Archer et al., 2012; Pinsoneault & Ezzo, 2012; Kauffman et al., 2015). Examined separately, men and women in the child neglect sample displayed similar trends overall, with a few noteworthy exceptions. For men, RC6 fell in the 60-64 classification range, representing scores approximately 1 standard deviation above the normative mean. Their heightened RC6 scores represent a higher level of suspicion and persecutory ideas than was seen in women. Some other, smaller differences in the child neglect sample were demonstrated in

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terms of men showing higher scores on RC4 (antisocial behavior), MEC (representing mechanical interest) and DISC (behavioral disinhibition), which are consistent with gender role expectations. Interestingly, men also showed slightly higher scores than women on THD (Thought Dysfunction). Additionally, TRIN-r was several points lower for men than women, falling at an approximate score of 55. Although few significant gender differences were seen, this may be partially attributed to the limited sample size.

As discussed in the introduction to the current study, prior research has shown child neglect to comprise the vast majority (up to 75%) of total maltreatment cases. However, the majority of prior research involving maltreatment involved cases of physical or sexual abuse rather than neglect. Moreover, the studies that did involve child neglect samples examined them in conjunction with other types of maltreatment samples, combined under the umbrella term of child maltreatment. However, this may not be appropriate due to the nature of the allegations, insofar as child neglect involves acts of omission rather than the acts of commission that characterize physical and sexual abuse. One reason for this composite approach might be that definitions for child neglect vary between agencies and even states, which makes child neglect more difficult to measure than other forms of maltreatment. Indeed, some categories of child neglect (such as emotional neglect) are clearly delineated in statutory or agency definitions, while others make no mention of such categories and leave the definitions more vague and open to interpretation. However, the differences between acts of commission (physical abuse and sexual abuse) and omission (child neglect) may also suggest personality differences between groups of parents under investigation for these varied types of maltreatment. Therefore, a second

purpose was to discern whether samples of neglectful and physical abusive parents show distinct and pronounced differences that preclude them being grouped together in future research studies.

In order to identify distinctions in characteristics between the child neglect and child physical abuse parent samples, the first three hypotheses of the study were directed towards comparison of their mean MMPI-2-RF T-scores. It had first been hypothesized that neglectful parents would demonstrate less pronounced externalizing features (Hypothesis 1) than physically abusive parents, as was suggested by prior research. Results showed that the samples actually demonstrated few significant differences in regards to their mean MMPI-2-RF T scores on the externalizing dimension. A statistically significant difference was found for the AGGR-r scale; in regards to this externalizing feature, neglectful parents demonstrated significantly lower scores than the physical abuse subsample, as was expected based on the nature of the alleged offense. The other externalizing scales, JCP, SUB, ACT, FML, AGG, ANP, and BXD did not demonstrate statistically significant differences between groups. However, as noted earlier, the JCP scale score mean for the child neglect sample suggests a history of prior behavioral concerns as a context for the current difficulties despite no current admittance of overt aggression. Despite the child neglect sample showing similarity to the comparison sample for externalizing scales of the MMPI-2-RF, the few differences are informative. For example, the significant difference in AGGR-r scores seen between samples may indicate trait characteristics of aggressiveness and anger being less notably present in the child neglect sample than in the comparison sample. The child neglect sample scores on

AGGR-r may also be lower due to attempts at impression management through denial of aggressive symptomatology - attempts with which the physical abuse sample may have been less successful due to heightened aggressive traits commensurate with their allegations.

In terms of the second hypothesis centered on internalizing features, neglectful parents showed significantly higher scores than the comparison sample on the internalizing scale NFC, as was expected. However, scores for the other internalizing scales SUI, HLP, SFD, STW, AXY, ANP, BRF, and MSF were not significantly different between groups. As such, there is some indication that the two samples differ on the internalizing dimension, although not to the degree hypothesized. A noteworthy finding was the relatively high mean NFC scores (T = 60.25) in the comparison sample, reflecting feelings of ineptness and difficulty with decision-making. Although this was hypothesized for the child neglect sample, it was not expected for the child physical abuse sample. This core concept of heightened, generalized feelings of inefficacy in the broad group of maltreating parents was not echoed in any previous literature, either related specifically to assessment or the topic of child neglect in general. However, this may be partially due to the scarcity of research involving the MMPI-2-RF, in which the NFC scale is new relative to earlier versions of the MMPI. In any case, the high scores in both samples represent a compelling factor that may be contributing to child maltreatment, as they speak to the self-concept of the parents involved in maltreating their children. It is of interest to consider that prior research noted the strong associations of parental depression with child maltreatment, especially child neglect (Lee et al., 2012;

Shahar, 2001). Although this was not seen in the current study, a sense of inefficacy can contribute to difficulties with mood, particularly depressive symptoms. Additionally, nearly half of each sample for this study showed a history of mood disorder as well as either inpatient or outpatient psychological treatment, which may speak to the presence of depressive states currently in remission or below the level of clinical significance.

Substance usage has been shown in the literature to have heightened prevalence rates in maltreating parents and was hypothesized to be a potential source of differentiation between samples. In particular, Hypothesis 3 posited that neglectful parents would show higher reported rates of substance usage than the physical abuse comparison sample, as suggested by prior research literature. This was not supported. Although the child neglect and abuse samples both contained reports of substance abuse (indicated by acknowledged usage as well as diagnostic and treatment history), they did not demonstrate statistically significant differences in regards to frequency of substance usage diagnoses rendered at the time of testing. Neither sample showed high scores on the SUB scale, which had been included in the group of externalizing factors. However, this is consistent with the gap shown between self-report of prior substance abuse problems and the diagnoses rendered at the time of the assessment. For example, nearly 9% of the child neglect sample reported a history of substance abuse disorder; However, 48% of this sample was diagnosed with a substance use disorder as part of the child dependency evaluation. This may represent an escalation of substance abuse behaviors over time. Most common substances of abuse for the child neglect sample were cannabis (44% of participants), alcohol (31% of participants), and cocaine (32% of participants).

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Of the comparison sample, 15% reported a historical substance abuse diagnosis, and 42% were diagnosed with such a disorder at the time of testing. Similar to the child neglect sample, the most common substances of abuse were cannabis (49%) and alcohol (25%).

Finally, there is a wealth of literature regarding defensiveness in child custody litigants, although there is significantly less research available in regards to child dependency cases. It was theorized that this total sample of child dependency cases, inclusive of both the child neglect and child physical abuse samples, would also show high rates of defensiveness, due to the more adversarial nature of maltreatment allegations. As such, Hypothesis 4 assumed that both the child neglect and child physical abuse samples would show a notable level of defensiveness, as measured through heightened scores on scales L-r and K-r as well as a pattern of suppressed Restructured Clinical scale scores. As discussed earlier, both samples showed high scores on L-r, indicative of positive self-presentation. Indeed, both samples' mean T-scores on this scale were above the cutoff score of 65 that defines clinical significance. This is consistent with prior research (Bathurst et al., 1997; Archer et al., 2012; Resendes & Lecci et al., 2012; Kauffman et al., 2015; Cooke 2012, Arce et al., 2015), and these scores were comparable for men and women. Both samples also showed a degree of defensive denial of psychological difficulty, as assessed by K-r scores approximately half a standard deviation above the normative mean score. These findings were consistent with Hypothesis 4 prediction. However, defensive problem denial (K-r) was not as pronounced as an attempt at positive self-presentation (L-r). In fact, there was some admittance of psychological difficulty, evident through mean F-r T-scores across samples. High L-r

scores are typically interpreted at attempts at impression management, or the tendency to present oneself in an unrealistically positive manner. This positive self-presentation is expected, again due to the stakes involved in child dependency proceedings and the desire and motivation to present oneself as a competent parent.

Hypothesis 4 also proposed that Restructured Clinical scale scores for both samples would be suppressed as a result of defensiveness. Contrary to expectation, only one Restructured Clinical scale showed a low score mean (T = 45 or below) across either sample (AGGR-r for the child neglect sample), suggesting that the level of defensiveness demonstrated does not have as wide-spread of a suppressing effect on problem reporting as previously hypothesized. This may be due to several reasons. For example, stigma surrounding psychological difficulty may be perceived as lower for current participants relative to those in studies conducted in earlier decades. This may be due to a true change in sociocultural climate or some other unknown aspect of examinee perception. Another possible explanation might be due to psychometric differences between different versions of the MMPI. Prior research demonstrating defensiveness-related suppressed score patterns across profiles was largely demonstrated on the MMPI-2. By contrast, the MMPI-2-RF is comprised of shorter scales formed from fewer items. As a result, endorsing a fewer amount of items results in greater incremental increase in T-scores. It should be noted that some partial effects of defensiveness may have affected scales not considered in the hypotheses – for example, the externalizing scales rather than the Restructured Clinical scales that were hypothesized to show suppression effects. Defensiveness might have a suppressing effect on these externalizing scales due to the

tendency of parents to inhibit responses endorsing descriptions of such behaviors. This has been suggested in regards to child custody samples and might be expected to a higher degree with child dependency samples, as they involve allegations of maltreatment.

Whether or not the above conclusions suggests that the child neglect and child physical abuse samples are dissimilar enough to warrant separation in research studies remains a matter of further exploration, as the data garnered in this study may not be distinct or extensive enough to warrant such a strong recommendation. In the current study, the two samples were more similar than different, although some noteworthy distinctions were seen. This consideration will likely continue to be a matter of individual research design until more numerous differences between groups are demonstrated. Should ample groups of neglectful and abusive parents be available to researchers, it will likely be informative and beneficial to consider the groups separately (perhaps in combination with a combined comparison sample, if possible).

Limitations of the current study included unequal sample sizes for the child neglect and child physical abuse subsamples. This is because participant data were limited to those available at the outpatient forensic practice from which the data were collected. However, the uneven ratio between types of maltreatment is commensurate with prior research indicating the high prevalence of child neglect in relation to other forms of maltreatment. Nonetheless, this should be considered when interpreting the statistical comparisons between samples. Additionally, the gender ratio for the child neglect sample was skewed in the direction of more women than men, which also echoes prior research regarding demographic information of perpetrators. Finally, participant selection was limited to the local area of Orange County, Florida, and did not include other geographic areas. This is important to note in regards of demographic information, as it may not be representative of national characteristics.

Despite these limitations, this study represents an important advancement in the field of maltreatment research, particularly as it concerns child neglect in relation to other types of maltreatment. With the advent of the MMPI-2-RF as the newest iteration of the MMPI family of tests, additional research with maltreatment populations needs to be conducted to include this latest assessment tool, particularly given high usage rates of MMPI instruments in forensic clinical work. The current study helped establish a sample profile of a parent undergoing a dependency evaluation for allegations of child neglect, which still represents a severely under-developed area of research. Clinically, this may serve as reference material for clinicians to consider when conducting such evaluations with this population. It may also serve as a starting point for further research to consider the questions raised in this study regarding the appropriateness of combined maltreatment groups in assessment literature. The current study helps to combat the so-called "neglect of neglect" (Stoltenborgh et al., 2013) which is seen throughout the literature despite alarming statistics regarding the prevalence of child neglect. By raising awareness as to the characteristics of individuals who neglect their children, prevention and intervention methods may be better informed, developed, and individualized.

Further research would ideally expand upon the current study, including larger and more equally matched samples for child neglect and abuse samples, in regards to total sample sizes as well as gender distribution. National sampling might be pursued in order to examine relevant demographic characteristics as well as profile elevations. Research establishing profile patterns using configural analysis would help to establish what a "typical" profile might look like for a neglectful parent, which would increase clinical utility for dependency evaluations. This would help clinicians compare their client's assessment records to similar profiles, in order to help establish what is and is not typical for such an individual. Eventually, it would be beneficial to decide conclusively whether or not classifying child neglect and abuse groups under an umbrella term of maltreatment is appropriate or not. To reach this point, more profile differences (either in number or significance) may need to be demonstrated in additional studies. It may also be worthwhile for future research to consider a comparison group of sexually abusive parents either in addition to or in place of physically abusive parents, as differences between these groups may be instructive.

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