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Personality assessment in a forensic sample of parents: a study with the Validity and Clinical scales of MMPI-2

Dissertação no âmbito do Mestrado em Psicologia, área de especialização em Psicologia Clínica Forense, orientada pela Professora Doutora Isabel Marques Alberto e co-orientada pela Professora Doutora Rosa Ferreira Novo, e apresentada Faculdade de Psicologia e de Ciências da Educação.

Setembro de 2022

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Abstract

Parents' personality traits and mental stability affects parenting practices and parental competence as well as the child's personality traits and mental stability. In general, Child Custody Processes (CCP) are a result of high-conflict divorces/separations and Child Protection Processes (CPP) begin with suspicion of child abuse and/or neglect. Evaluations followed from these processes are made with the best interest of the child in mind.

The MMPI-2 is the most referred and used instrument in this forensic context. However, no research has been conducted in this area of parenting capacity in the Portuguese population. The present study aims to collect descriptive data from the clinical and validity scales of the MMPI-2 according to process type (CCP vs CPP) and the gender of the parents, and analyze the influence of the age, gender, education, presence of domestic violence and clinical history in terms of mental health in the results of these scales. Additionally, the convergent validity of the MMPI-2 clinical and validity scales will be examined.

The sample consisted of 89 parents involved in CCP (women: n = 13; men: n = 15) and CPP (women: n = 36; men: n = 25). Data collection was based on psychological assessment included in legal proceedings within the scope of parenting (CPP and CCP) and which included the MMPI-2. Data from BSI, BDI-II, STAI-Y, EDS-20 and DESCA were used to assess convergent validity. The Sociodemographic Data Form was used to analyze the influence of some sociodemographic and clinical variables in the MMPI-2 results.

The results indicate that women in CPP tend to report more emotional distress and/or exaggerate their symptomology, while women in CCP tended to show stronger motivation to display themselves in a positive light, denying psychological issues. In general, women tend to present themselves in an overly positive light when compared to men, yet their scores still reflect characteristics such as poor general health, family conflict and emotional lability. Regardless of type of process, results also showed that women at lower educational levels tend to respond carelessly, while women with higher educational levels have a stronger desire for to present themselves in an overly

positive light. Moreover, divorced men present themselves in an overly positive light by endorsing evident but infrequent virtues and are more suspicious, hostile and prone to blame others when compared to married and single men. In all of the sample (n = 89), L (Lie) scale elevations of clinical significance were found.

Results predominately revealed positive moderate correlations between the Clinical scales of the MMPI-2 and BSI, BDI-II, STAI-Y, and the validity scales of MMPI-2 and EDS-20 and DESCA.

Among the limitations presented in the study, there is the need to carry out studies with a larger sample size as the small sample included in this study affects generalizability of the results.

Key Words: MMPI-2, clinical scales, validity scales, personality, child custody, child protection, parent capacity, convergent analysis.

Avaliação da Personalidade numa amostra de pais do contexto forense: um estudo com o MMPI-2

Resumo

Traços de personalidade e estabilidade mental dos pais afetam práticas e competências parentais e influenciam a personalidade e estabilidade mental dos filhos. Em geral, Processos de Regulação do Exercício das Responsabilidades Parentais (PRERP) são resultado de divórcios/separações com elevado conflito parental, enquanto os Processos de Promoção e Proteção de crianças e jovens em perigo (PPP) resultam da suspeita de abuso e/ou negligência infantil. As avaliações decorrentes destes processos são feitas tendo como princípio condutor o Superior Interesse da Criança.

O MMPI-2 é o instrumento mais referido pela literatura e o mais utilizado neste contexto forense. No entanto, nenhuma investigação foi realizada nesta área da parentalidade, na população portuguesa. O presente estudo tem como objetivo obter dados descritivos para as escalas clínicas e de validade do MMPI-2, para pais e mães, em função do tipo de processo (PRERP vs PPP), e analisar a influência da idade, sexo, escolaridade, presença de violência doméstica e história clínica em termos de saúde mental nos resultados das escalas mencionadas. Adicionalmente, pretendeu-se analisar a validade convergente destas escalas com recurso a outros instrumentos.

A amostra foi composta por 89 pais envolvidos em PRERP (mulheres: n = 13; homens: n = 15) e PPP (mulheres: n = 36; homens: n = 25). Os dados foram recolhidos em contexto de avaliação psicológica no âmbito de processos judiciais. Para analisar a validade convergente das escalas Clínicas do MMPI-2 recorreu-se ao BSI, BDI-II e STAI-Y e para as escalas de Validade, usou-se a EDS-20 e DESCA de Validade do MMPI-2. A Ficha de Dados Sociodemográficos foi usada para analisar a influência de algumas variáveis sociodemográficas e clínicas nos resultados do MMPI-2.

Os resultados obtidos indicam que as mulheres em PPP tendem a relatar mais sofrimento emocional e/ou a exagerar a sua sintomatologia, enquanto as mulheres em PRERP tendem a mostrar uma motivação mais forte para se apresentarem de forma positiva, negando os seus problemas psicológicos. Em geral, mulheres tendem a apresentar-se de forma excessivamente positiva quando comparadas com homens, no entanto as suas pontuações continuam a refletir má saúde em geral, conflito familiar e labilidade emocional.

Independentemente do tipo de processo, resultados também demonstraram que mulheres com níveis educacionais mais baixos tendem a responder de forma descuidada, enquanto mulheres com níveis educacionais mais altos demonstram uma maior motivação para se apresentarem de forma excessivamente positiva. Ademais, homens divorciados apresentam-se de forma excessivamente positiva ao sinalizarem em si próprios virtudes que são evidentes mas pouco frequentes, e são mais desconfiados, hostis e propensos a culpar os outros quando comparados com homens casados e solteiros. Em toda a amostra (n = 89), foram encontradas elevações de significância clínica na escala L (Mentira).

No que diz respeito à validade convergente, os resultados revelaram predominantemente correlações positivas moderadas entre as escalas de Clínicas do MMPI-2 e o BSI, BDI-II, STAI-Y, e entre as escalas de Validade e a EDS-20 e DESCA.

Entre as limitações apresentadas no estudo, destaca-se a necessidade de realizar estudos com uma amostra maior dado que a pequena amostra incluída neste estudo afeta a generalização dos resultados.

Palavras chave: MMPI-2, escalas Clínicas, escalas de Validade, personalidade, processos de regulação do exercício das responsabilidades parentais, processos de promoção e proteção de crianças e jovens em perigo, validade convergente.

Agradecimentos

À Professora Doutora Isabel Alberto, um grande obrigada pela paciência, atenção, disponibilidade e prontidão que me demonstrou.

À Doutora Rosa Novo, por ter facultado a base com os dados do MMPI-2 , e às sugestões e orientações relativas à seleção das escalas e das análises a realizar no estudo empírico.

Aos meus pais, Anabela e Constantino, um grande obrigada pelo apoio incondicional, motivação e confiança que sempre me deram e que me ajudaram a chegar até aqui. Obrigada por serem os melhores pais que poderia ter!

Ao meu namorado, Túlio, obrigada por toda a paciência, compreensão, confiança, respeito, amizade e amor. Todos os dias demonstras-me que também podemos escolher a nossa família.

À Matilde, obrigada por todo o apoio, por todos os momentos de desabafo e riso que me trouxeste ao longo do ano. Sem ti tudo teria sido mais difícil.

À Mariana, uma amiga que é quase irmã, obrigada por me demonstrares o verdadeiro significado de amizade e por me acompanhares desde o início da nossa vida académica.

A todas as pessoas que me apoiaram, em especial a Inês, a Marta, a Ana Catarina e a Carlota, obrigada pela preocupação que demonstraram e apoio que me deram ao longo do ano.

Por último, ao meu avô, uma das pessoas mais importantes da minha vida. Apesar de já não estares entre nós, serás sempre lembrado como a pessoa que tornou a minha infância uma infância feliz.

Index

Introduction

The parents' personality traits and mental stability affects parenting practices and parental competence as well as the child's personality traits and mental stability (Atherton & Schofield, 2021; Butcher et al., 2015; Micco et al., 2009). Characteristics such as low self-esteem, poor impulse control, negative emotions and antisocial behavior are correlated with poor parenting and child maltreatment (Pianta et al., 1989) and personality disorders have been associated with high-conflict divorce which harms children (Johnston & Campbell, 1988), highlighting the importance of personality assessment of parents in the Child Custody and Child Protection context. Child Custody Processes occur in a small percentage of divorces which are normally high-conflict (Johnston, 1994) and Child Protection Processes arise from potential or real child abuse and/or neglect (Condie, 2003). Comprehensive parental fitness and parental competence evaluations adopt multisource, multimethod approach (Mandappa, 2004) and are made with the child's best interest in mind (Butcher et al., 2015), for example, if the child's needs are meet in an adequate way.

The MMPI-2 (Minnesota Multiphasic Personality Inventory-2; Butcher, Dahlstrom, Graham, Tellegen and Kaemmer, 1989) is a 567-item instrument that assesses psychopathology and normal and/or abnormal personality (Nichols, 2011). The MMPI-2 is the most frequently used instrument in the Child Custody and Child Protection context (Ackerman et al., 2021). Since its publication, several studies that analyzed the MMPI-2 profiles of parents involved in this forensic context were carried out (e.g., Ackerman & Ackerman, 1992, Bathurst et al., 1997; Bagby et al., 1999; Mandappa, 2004; Pope et al., 2006; Stredny et al., 2006; Resendes & Lecci, 2012; Roma et al., 2014; Redondo et al., 2018; Gambetti et al., 2019; Key et al., 2020). There is an extensive volume of research available internationally in this forensic context of parenting and various studies in Portugal have analyzed the MMPI-2 profiles of individuals in other settings (e.g., clinical, high-stakes assessment). Nonetheless, no studies were conducted in the Child Custody and Child Protection context in Portugal.

The present study will examine the MMPI-2 Validity and Clinical scales' scores of parents according to process type (Child Custody vs Child

Protection), age, gender, education, presence of domestic violence and clinical history in terms of mental health as well as analyze the convergent validity of the Validity and Clinical scales. Thus, the present study will provide the first data from the MMPI-2 Validity and Clinical Scales for fathers and mothers in the judicial context of custody and protection of children.

I – Theoretical Framework

1.1. Personality Assessment: Conceptualization and History

Personality can be defined as consistent behavior patterns and intrapersonal processes originating within the individual (Burger, 2015). Consistent patterns of behavior over time and across situations are referred to as individual differences by personality researchers, while intrapersonal processes include emotional, motivational and cognitive processes that occur within the individuals and affects the way they act and feel (Burger, 2015). In short, personality refers to the individual differences in the way humans think, feel and interact (Boeree, 2006). Over the years, various authors have proposed different definitions of personality, such as Allport (1937), Freud, Eysenck and Costa and McCrae (see McCrae & Costa, 1999; McLeod, 2017; Rennison, 2015; Silva & Nakano, 2011). Personality theories strive to determine which traits/factors can explain individual differences (Boeree, 2006) and the assessment of personality will depend on the theory adopted by the researcher (Silva & Nakano, 2011).

Perception of individual differences has been present since the start of civilization, but only the beginning of formal psychological science and practice has brought them attention (Weiner & Greene, 2017). The first actual advances in the area of personality assessment were made by Robert Woodworth who was tasked with the creation of a checklist that would identify psychologically fragile recruits for World War I by measuring neurotic symptoms (Archer & Smith, 2014; Butcher, 2009; Gibby & Zickar, 2008; Weiner & Greene, 2017). The war ended before Woodworth finished his work and it was never used for its original purpose (Archer & Smith, 2014; Weiner & Greene, 2017). Nevertheless, Woodworth published the Personal Data Sheet (1919, 1920) which became the first formal self-report personality assessment questionnaire widely available (Butcher, 2009; Weiner & Greene,

2017). In 1931, Robert Bernreuter published a multidimensional self-report personality inventory, the first notable advancement since Woodworth's unidimensional measure (Archer & Smith, 2014; Gibby & Zickar, 2008; Weiner & Greene, 2017). The Bernreuter Personality Inventory included distinct personality characteristics such as neurotic tendencies, ascendance-submission and introversion-extroversion and was the predecessor of many multidimensional personality inventories like the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943) (Butcher, 2009; Weiner & Greene, 2017).

At the same time, in opposition to self-report (*objective*) measures, Rorschach with the inkblot technique, and Murray and Morgan with the Thematic Apperception Test (TAT) created the first projective (*subjective*) measures of personality (Butcher, 2009; Weiner & Greene, 2017). Currently, both self-report and projective measures are used in a complementary way in the assessment of personality, allowing psychologists to employ an integrative and holistic approach to understanding a person's personality.

Considering the nature of self-report inventories, aside from being unidimensional or multidimensional, they can assess normal-range personality and/or psychopathology (Weiner & Greene, 2017). As examples of inventories that evaluate normal-range personality there are the 16PF, the EPQ-R, and the NEO-PI-R, while the MCMI-III, PAI, MMPI-2 evaluate both normal-range personality and psychopathology.

The Sixteen Personality Factor Questionnaire (16PF; Cattell, Tatsuoka & Eber, 1949) postulates that normal-range personality can be assessed based on 16 factors and five global dimensions. Individuals differ between low-range and high-range with specific descriptors for each of them which is what characterizes individuals' personalities (Cattell & Mead, 2008; Cattell & Schuerger, 2003). The Eysenck Personality Questionnaire-Revised (EPQ-R; Eysenck & Eysenck, 1993) conceptualizes personality as a construct with three factors, Psychoticism, Extraversion-Introversion and Neuroticism (Boeree, 2006; McLeod, 2017; Muñiz et al., 2005). Cattell and Eysenck's pioneering work led Costa and McCrae to the creation of their Big Five factor model which postulates the existence of five dimensions of personality, namely Neuroticism, Extroversion, Openness to Experience, Agreeableness and Conscientiousness that allow for a comprehensive description of

personality in adults (John, 2021; McCrae & Costa, 1999; Weiner & Greene, 2017). These dimensions each have six specific facets and are measured by the NEO Personality Inventory – Revised (NEO-PI-R; Costa & McCrae, 1992) (John, 2021; Weiner & Greene, 2017).

The MCMI-III (Millon, Millon, Davis, & Grossman, 1994) is a 175-item broadband measure of the major dimensions of psychopathology that aligns with the official diagnostic system (Diagnostic and Statistical Manual of Mental Disorders-IV; DSM-IV; American Psychiatric Association, 1994; Jankowski, 2002). The MCMI-III consists of 28 scales – 11 Clinical Personality Patterns scales, three Severe Personality Pathology scales, seven Clinical Syndrome scales, three Severe Clinical Syndromes and four Modifier Indices (Validity scales) (Jankowski, 2002; Stern et al., 2015). Each personality style scale is characterized by four functional processes (emotional expression, interpersonal conduct, cognitive style, intrapsychic dynamics) and four structural domains (self-image, intrapsychic content, intrapsychic architecture, mood/temperament) that form a specific description of each personality style (Jankowski, 2002). Furthermore, the author of the MCMI, Millon, conceptualized an evolutionary framework for personality in which the interface of three polarities (pleasure-pain, active-passive and self-other) determines an individual's specific personality style as an adaptation to the environment (Jankowski, 2002). The PAI (Morey, 1991) is a self-report 344 item measure that consists of four Validity scales, 11 Clinical scales, five Treatment Consideration scales and two Interpersonal scales (Blais et al., 2011). Interpretation of the responses to the PAI can begin using the individual scales or two-point code types (the two highest of the 11 Clinical scales elevated to a T score of 70 or higher) which allow for the establishment of a specific personality pattern (Weiner & Greene, 2017).

With regard to self-report inventories in the assessment of adult personality, the most used in clinical practice are the MMPI-2 and the MCMI-III, whereas the most taught in clinical psychology training are the MMPI-2 (86%), MCMI-III (38%) and PAI (21%) (Shenawy, 2017; Weiner & Greene, 2017). In the Child Custody and Child Protection context, the MMPI-2/MMPI-2-RF have been the gold standard in personality testing over the decades with over 90% usage (Ackerman et al., 2021).

1.2. Minnesota Multiphasic Personality Inventory-2 – MMPI-2

The MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) is an updated and restandardized version of the MMPI (Ben-Porath & Tellegen, 2008; Butcher et al., 2015; Graham, 1993; Nichols, 2011). The MMPI was developed by Starke Hathaway and J. Charnley McKinley as a tool for routine diagnostic assessments (Graham, 1993). Although the MMPI did not fulfill its original purpose – differential diagnosis of clinical groups – it produced descriptions about individuals and was the most used personality test in the United States of America (USA) in all settings (e.g., psychiatric and medical settings; forensic context) (Ben-Porath & Tellegen, 2008; Butcher et al., 2015; Graham, 1993; Pope et al., 2006). Despite its popularity, concerns rose due to the inadequacy of the original standardization sample as it was a sample of convenience, nonrepresentative, but also due to item content being archaic, obsolete and with poor grammar (Austin, 1994; Ben-Porath & Tellegen, 2008; Butcher & Williams, 2009; Graham, 1993). In 1989, the MMPI Restandardization Committee (James Butcher, Grant Dahlstrom, John Graham, and Auke Tellegen) modernized the content and language of items, eliminated objectionable items, collected nationally representative normative data and developed new scales, creating the MMPI-2 (Austin, 1994; Ben-Porath & Tellegen, 2008; Butcher et al., 2015; Graham, 1993; Nichols, 2011). After its publication, the MMPI-2 continued to be refined with the addition of new scales, for example, two Validity scales, Infrequency-Psychopathology (Fp; Arbisi & Ben-Porath, 1995) and Superlative Self-Presentation (S; Butcher & Han, 1995) as well as the Personality Psychopathology Five (PSY-5) scales (Harkness et al., 1995) (Butcher & Williams, 2009; Weiner & Greene, 2017).

The MMPI-2 is a 567-item instrument that assesses psychopathology and normal and/or abnormal personality with easily over 120 interpretable scales, namely 10 Validity scales, 10 Clinical scales and nine Restructured Clinical (RC) scales, 15 Content scales, 27 Content Component scales and 20 Supplementary scales (Erard et al., 2018; Nichols, 2011; University of Minnesota Press, n.d.a; Weiner & Greene, 2017). Additionally, the MMPI-2 includes various subscales – five Superlative Self-Presentation subscales and 27 Clinical subscales (24 Harris-Lingoes subscales and three Social Introversion Subscales) (Nichols, 2011; University of Minnesota, n.d.a;

Weiner & Greene, 2017).

The Validity scales integrated in the MMPI-2 are the Lie (L) scale, the Infrequency (F) scale, the Correction (K) scale, the Back-page Infrequency (Fb) scale, the Variable Response Inconsistency (VRIN) Scale, the True Response Inconsistency (TRIN) Scale, the Cannot Say [?(CNS)] scale, the Infrequency – Psychopathology (Fp) scale, the Symptom Validity (FBS) scale and the Superlative Self-Presentation (S) scale (University of Minnesota Press, n.d.a; Weiner & Greene, 2017). The Superlative Self-Presentation (S) scale has five subdimensions, Belief in Human Goodness, Serenity, Contentment with Life, Patience/Denial of Irritability/Anger and Denial of Moral Flaws (Pope et al., 2006). The Validity scales assess test-taking attitudes such as exaggeration or underreporting of psychopathology and response approaches such as inconsistency of item endorsement (Butcher et al., 2015; Graham, 1993; Weiner & Greene, 2017) and are meant to enhance the accuracy of assessment (Butcher, 2009).

The Clinical scales, namely Hypochondriasis (1 Hs), Depression (2 D), Hysteria (3 Hy), Psychopathic Deviate (4 Pd), Masculinity/Femininity (5 Mf), Paranoia (6 Pa), Psychasthenia (7 Pt), Schizophrenia (8 Sc), Hypomania (9 Ma) and Social Introversion (0 Si), measure common psychiatric diagnoses such as obsessive-compulsive disorder, depression, anxiety and schizophrenia (Butcher et al., 2015; Graham, 1993; Nichols, 2011; University of Minnesota Press, n.d.a). All clinical scales except the Hypochondriasis, Masculinity/Femininity and Psychasthenia have correspondent clinical subscales denominated Harris-Lingoes subscales and Social Introversion subscales that provide additional information to be interpreted (University of Minnesota Press, n.d.a).

The MMPI-2 also includes the Restructured Clinical (RC) scales, designed to address interpretation issues due to demoralization and to eliminate item overlap found in the clinical scales (Ben-Porath & Tellegen, 2008; Bosch et al., 2014; Butcher et al., 2015; Sellbom et al., 2005); the Content scales, organized around four themes and developed to increase incremental validity of the clinical scales (Butcher et al., 1990), the Supplementary scales that provide information not available in Clinical scales, augmenting clinical scale interpretation by focusing on more specific areas of personality function and dysfunction (University of Minnesota Press, 2015b),

and the PSY-5 scales that measure personality traits, not symptoms and which help assess more long-lasting pathology and determine the chronicity of the problem (Harkness & McNulty, 2006; University of Minnesota Press, 2015b).

In 2008, the MMPI-2-RF (Restructured Form) was created by Ben-Porath and Tellegen (Butcher & Williams, 2009; University of Minnesota Press, n.d.b) using factor analysis as opposed to the empirical keying approach used in the MMPI/MMPI-2 (Butcher et al., 2015; Graham, 1993). The MMPI-2-RF is composed of 338 items of the 567-item MMPI-2 and comprises 51 different scales from those in the MMPI-2, specifically 10 Validity scales, three Higher-Order scales, 10 Restructured Clinical (RC) scales, five Somatic/Cognitive scales, nine Internalizing scales, four Externalizing scales, five Interpersonal scales, two Interest scales and five PSY-5 revised scales (Ben-Porath & Tellegen, 2008; Butcher et al., 2015; University of Minnesota Press, n.d.b). Aside from the RC scales of which the MMPI-2-RF was built on, the PSY-5 revised scales and seven revised Validity scales, the scales introduced were completely new (Butcher & Williams, 2009), making the MMPI-2-RF a new self-report inventory (Weiner & Greene, 2017). This measure has been subject to criticism due to its reduced item pool that makes it more vulnerable to response-style distortions (Sellbom, 2005), its minimal relationship to the MMPI-2 and the consequent lack of empirical findings as the findings of the MMPI-2 cannot be used (Weiner & Greene, 2017). Considering the lack of empirical findings, Butcher (2009) questioned whether the MMPI-2-RF has sufficient advantages to counteract its high cost of information loss based on decades of research on the behavioral correlates of the Clinical Scales and other aspects of score configuration. Consequently, the MMPI-2 remained the most used of the two measures as shown by how often they occurred in the title of scholarly articles listed in *PsycInfo* from 2010 to 2015 (MMPI-2: 222; MMPI-2-RF: 103) (Weiner & Greene, 2017) and how often they were used in forensic mental health assessments (from 2012 to 2014, MMPI-2 administrations were estimated at 70% whereas MMPI-2-RF administrations were estimated at 30%) (McLaughlin & Kan, 2016). Furthermore, the MMPI-2 achieved near universal acceptance in the six years after its' publication while the MMPI-2-RF usage has decreased 18% from 2007 to 2014 (Williams & Lally, 2017).

1.3. Parents Personality assessment and the MMPI-2 in Child Custody and Child Protection Context

Personality traits of parents influence parenting practices and child development and well-being (Atherton & Schofield, 2021; Silva & Vieira, 2018) affecting three major types of parental competence: capacity to care, capacity to protect and capacity to change (Haynes, 2010). These competences are tied to the parents' mental stability and personality (Butcher et al., 2015). For example, certain characteristics including low self-esteem, poor impulse control, lower emotional control capacity and antisocial behavior have been found to correlate with poor parenting and child maltreatment (Pianta et al., 1989; Sanders & Morawska, 2018). Personality disorders have been associated with high-conflict divorce which harms children, leading to conduct disorders, depression, academic problems and difficulty when socializing with peers (Johnston & Campbell, 1988; Joyce, 2016). Furthermore, parents with schizophrenia have diminished judgment that is associated with accidents or child neglect (Cassell & Coleman, 1995) as well as "negative" symptoms such as apathy that make socializing with children quite maladjusted (Reupert et al., 2015). Parents who scored higher on psychopathic personality traits tended to report more negative parenting quality (Beaver et al., 2014). Regarding parenting styles and personality as is assessed by the NEO-PI-R, extroversion and amiability have been linked to warm and responsive parenting, neuroticism to stiffness or permissiveness and openness to experience to flexibility (Silva & Vieira, 2018). The parents' mental stability and personality also affects the child's, for example, parents' anxiety has been found to confer a significant risk of anxiety and depression to the children (Micco et al., 2009) and children of high-conflict divorce are two to four times more likely to have clinical emotional and behavioral disturbances (Johnston, 1994).

Evidently, there is a need to assess general psychological constructs such as psychopathology and personality as they may be relevant in the court's decision-making process (Otto et al., 2000). The identification of broad psychological constructs leads to the understanding of parenting lapses and risks to the children (Butcher et al., 2015) as well as the personal qualities and psychological adjustment of parents (Weiner & Greene, 2017).

Comprehensive parental fitness and parental competence evaluations

adopt multisource, multimethod approach (Butcher et al., 2015; Mandappa, 2004), including interviews, observations and testing of the parents and children and measures of personality/psychopathology, among other domains (Gould, 2005). These evaluations are made with the best interest of the child in mind (e.g., if the ideal environment for development of the child is provided, if there is an adequate response to the child's needs and adequate parenting) (Butcher et al., 2015). Regarding the personality assessment in this setting, the MMPI-2 continues to be the most frequently used instrument across all studies over the decades (Ackerman et al., 2021; Butcher et al., 2015; Haynes, 2010; King, 2012; Otto et al., 2000; Pope et al., 2006), followed by the PAI, the MCMI-III and the Rorschach Inkblot Test (Ackerman et al., 2021). The MMPI-2 assesses the examinee's current mental state, emotional functioning, behavior patterns, personality styles, psychopathology and response style (Otto, 2002) which are fundamental topics of these evaluations.

Child Custody Processes (CCP) occur in a small percentage of divorces/separations following parental dispute, family violence, dysfunctional parenting, substance abuse and severe psychopathology (Johnston, 1994) whereas Child Protection Processes (CPP) arise from the observation or suspicion of child abuse and/or neglect (Condie, 2003). Due to the nature of CCP and CPP, parents involved in these processes tend to produce elevated scores in various MMPI-2 scales (see below). Nevertheless, the majority of parents still produce valid interpretable profiles (Pope et al., 2006). Many studies mention elevations that reach statistical significance, yet fall short of clinical significance (Medoff, 1999). That is, although there are meaningful differences between parents involved in these processes and the ones who are not, we cannot assume that these will correlate to psychopathological symptoms as the scores do not reach a T-score elevated enough to affirm this (see Appendix A).

Several studies have analyzed the MMPI-2 profiles of parents involved in CCP and CPP (see Table 1). Considering the Validity and Clinical scales, in general, elevated L, Pd and Pa scores are common among parents involved in both types of legal proceedings. Additionally, the CCP groups tend to have elevated K, S and Hy scores and lower F scores. Despite the number of studies involving the MMPI-2 profiles of parents in these groups, few studies investigated the difference between the two. According to Gready

(2006, as cited in Ellis, 2012), the CCP group reported higher incidence of clinically significant elevations on scales Pd and Pa than did the CPP group, and the CPP group register moderate elevations on most scales. Resendes and Lecci (2012) asserted that the CPP group had elevations on the MMPI-2 clinical scales (especially scales Pd, Sc, D, and Si) and on F, Fb, VRIN, TRIN and L as well as lower scores on K relative to the CCP group. Gambetti et al. (2019) reported general elevations on the Pd and Pa scales, higher L and S scores in women involved in CCP compared to men and higher L, K and S scores in the CPP group in comparison with the CCP group. Additionally, only three studies found gender differences in the scores of MMPI-2 scales in this forensic context, namely, Gambetti et al., 2019, Pope et al., 2006, and Roma et al., 2014. Pope et al. (2006), in a study involving CCP, reported that the majority of the parents did not produce clinically elevated profiles. Nevertheless, women scored higher in the Pa and Pd scales while men scored higher on the Pa and Ma scales. Roma et al. (2014) asserted that women in CCP tended toward "faking-good" (elevated L, K and S scores and low F score) profiles when compared to the men and the normative female population.

Table 1.

Summary of relevant studies about MMPI-2 profiles of parents involved in CCP and CPP

Reference	Results
Ackerman & Ackerman (1992), Ackerman & O'Leary (1995) as cited in Ellis (2012)	CCP. Elevated K scores; elevated scores on Hy, Pd and Pa.
Caldwell (1989, 1995) and Hoppe & Kennedy (1995) as cited in Ellis (2012)	CCP. Elevated scores on Hy, Pd and Pa.
Siegel, 1996	CCP. Elevated scores of validity scales.
Bathurst et al., (1997).	CCP. Elevated scores on Hy, Pd and Pa; elevated L and K scores and low F scores.
Butcher (1997) as cited in Ellis (2012)	CCP. Elevations on L, K, S.
Bagby et al., 1999	CCP. Identified 74% of underreporting using the S scale as opposed to 52% using the L and K; elevations on L, K and S.
Medoff, D. (1999).	CCP. Elevation of scores on validity scales that fail to reach clinical significance.
Hartman-Crouch (2000) as cited in Ellis (2012)	CCP. 82% of the profiles were invalid, defensive, or clinically not significant. Elevations on scales Pd and Pa.
Mandappa, P. (2004).	CCP. Statistically and clinically significant differences on L, K and S. Statistically significant differences on Hs, Hy, Pd, and Pa, but only the last three were clinically significant.
Carr et al., 2005	CPP. Elevated L scores with smaller elevations on F and K.
Gready (2006) as cited in Ellis (2012)	CCP vs CPP. CCP group had higher incidence of clinically significant elevations on Pd and Pa than did the CPP group. CPP group had moderate elevations on most scales.
Pope et al. (2006)	CCP. Mostly non clinically elevated profile, yet 20% of the men and 23.5% of the women had spikes on clinical scales that were above a T score of 65. Most prominent spikes for men on Pa and Ma, while for women spikes occurred on Pa and Pd.

Reference	Results
Stredny et al., 2006	CPP. Elevation on the L scale.
Ezzo et al., 2007	Compared for three types of CCP samples: child maltreatment, unmarried and married. Child Maltreatment group showed more elevations on L, while the Child Non-Maltreatment group tended to show more elevations on K.
Resendes & Lecci, 2012	CPP vs CCP. CPP group with elevations on clinical scales (especially Pd, Sc, D, and Si) and on F, Fb, VRIN, TRIN and L; lower scores on K, relative to the CCP group. Mean scores did not exceed the clinical cutoff.
Carstairs et al., 2012	CPP. Near significant elevation on the L and peaks on clinical scales Pd and Pa.
Roma et al., 2014	CCP. Included S scale and basic clinical scales. Investigated gender effect on the S scale: significantly higher tendency toward ‘‘faking-good’’ profiles on the MMPI-2 among Italian women as compared to men and as compared to the normative Italian female population.
Arce et al., 2014	CCP. Elevations on L.
Key, 2018	CCP. Elevations on L.
Redondo et al., 2018	CCP. Elevations on Hy, Pd and Pa.
Gambetti et al., 2019	Women in CCP higher L and S scores compared to men CPP higher L, K and S scores than CCP General elevations on Pd and Pa
Key et al., 2020	CPP. Elevations on L, Pd, Sc, Ma, Hs, Pa, Mf.
Gambetti et al., 2020	CPP. Elevations on Pd and Pa.

CCP = Child Custody Processes; CPP = Child Protection Processes; L = Lie; F = Infrequency; K = Correction; Fb = Back-page Infrequency; VRIN = Variable Response Inconsistency; TRIN = True Response Inconsistency; S = Superlative Self-Presentation; Hs = Hypochondriasis; D = Depression; Hy = Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity/Femininity; Pa = Paranoia; Sc = Schizophrenia; Ma = Hypomania; Si = Social Introversion.

In Portugal, some studies have analyzed MMPI-2 profiles (e.g., Gonzalez et al., 2019; Gonzalez et al., 2020; Novo et al., 2022) and, more specifically, on the forensic context and “faking-good” profiles (Mesquita, 2012; Machado, 2012). Thus far, no studies involving the MMPI-2 profiles of mothers and fathers involved in CCP and CPP were conducted in Portugal,

which contrasts with the extensive volume of research available internationally. The present study will contribute to the growing empirical data of the MMPI-2 in Portugal, especially in Family Court cases.

II - Objectives

The main goal of this study is to analyze the personality of parents in a forensic sample of Family Court cases, as it is assessed by the MMPI-2. The following were established as specific objectives: a) obtain descriptive statistics of the Validity and Clinical scales of the MMPI-2 in the forensic sample in study considering the type of process and gender of parents; b) compare the results obtained in these MMPI-2 scales by parents involved in CCP and in CPP, according to gender; c) analyze the influence of sociodemographic variables, such as age, education and socioeconomic status, on the results of the Validity and Clinical scales; d) analyze the results of the Validity and Clinical MMPI-2 scales considering the presence of domestic violence (DV) and clinical history in terms of mental health; e) analyze the convergent validity of the Clinical scales of the MMPI-2 with the BSI, the BDI and the STAI-Y, and the convergent validity of the validity scales of the MMPI-2 with the EDS-20 and the DESCA.

III - Methods

Sample

The sample is composed of 89 parents involved in CCP and CPP. In parenting capacity evaluations, both parents can be assessed as is the case of the sample of this study. This leads to violation of independence of observations as parents influence each other (Pallant, 2011). As a result, the statistical analysis was conducted with division of the sample into two groups according to gender: men (n = 40; 45%) and women (n = 49; 55%).

In regards to women, 13 (26,5%) are involved in CCP and 36 (73,5%) in CPP. The women in the sample have a mean age of 41 (M = 41,45; SD = 9,916) and were most often divorced (n = 21; 41,9%), followed by single (n = 14; 28,6%) and married (n = 11; 22,4%) women. Regarding the educational level, 38,8% (n = 19) have higher education, 26,5% (n = 13) have completed high school, 22,4% (n = 11) have completed the 9th grade and 8,2% (n = 4) the 6th grade. Considering the professional status, and according to International Labour Organization (ILO; 2008), 28,6% (n = 14) are

unemployed, 18,4% (n = 9) have professional occupations, 14,3% (n = 7) have elementary occupations, 12,2% (n = 6) are service and sales workers, 10,2% (n = 5) are clerical support workers and 2% (n = 1) are managers. Lastly, technicians and associate professionals and retired women comprises 4,1% (n = 2) each of the sample. Of the 49 women, 7 (14,3%) report experiencing abuse in childhood, 46 (93,9%) claim to have never abused substances, 35 (71,4%) have no history of physical illnesses and 21 (42,9%) report presence of mental illness. Psychological/medical care is reported by 44,9% (n = 22) of the sample, of those 10 (20,4%) receive psychological care, 6 (12,2%) receive psychiatric care, 4 (8,2%) receive both and 2 (4,1%) receive other type of care (e.g., neurological care). Concerning the prescribed medication, 31 (63,3%) are not medicated, 15 (30,6%) follow the prescription whereas 3 (6,1%) do not. Regarding DV, 23 (47%) report its presence while 25 (51%) do not. 22,4% (n = 11) report DV as a past occurrence and 24,5% (n = 12) as a past and current occurrence. About the role in DV, 16 (32,7%) report being the victim, 3 (6,1%) the aggressor and 4 (8,2%) both. Lastly, majority of women do not have a criminal record (n = 45; 91,8%) (see Table C1 in Appendix C).

In the male sample, 15 (37,5%) are involved in CCP and 25 (73,5%) in CPP, with a mean age of 41 (M = 41,05; SD = 9,837). Regarding marital status, 47,5% (n = 19) are divorced, 27,5% (n = 11) are single and 22,5% (n = 9) are married. Concerning the educational level, 37,5% (n = 15) have higher education, 30% (n = 12) have completed high school, 25% (n = 10) have completed the 9th grade and 5% (n = 2) the 6th grade. Regarding professional status, 10 (25%) have elementary occupations, 8 (20%) have professional occupations, 3 (7,5%) have armed forces occupations and 2 (5%) are plant and machine operators and assemblers. Additionally, technicians and associate professionals and service and sales workers are equally represented (n = 4; 10%) as well as clerical support workers and managers (n = 1; 2,5%) (ILO, 2008). Of the 40 men, 7 (17,5%) report experiencing abuse in childhood, 33 (82,5%) claim to have never abused substances, 39 (97,5%) have no history of physical illnesses and 36 (90%) do not report mental illness. Psychological/medical care is not reported by most men (n = 34; 85%) with solely 5% (n = 2) reporting psychological care and 7,5% (n = 3) reporting psychological and psychiatric care. Concerning prescribed medication, most men are not medicated (n = 35; 87,5%) while 4 (10%) report taking the

prescribed medication. With regards to DV, 19 (47,5%) report its presence while 21 (52,5%) do not. 32,5% (n = 13) report DV as a past occurrence and 15% (n = 6) as a past and current occurrence. When it comes to the role in DV, 14 (35%) report being the aggressor, 1 (2,5%) the victim and 3 (7,5%) both. Lastly, 50% (n = 20) of men have no criminal record whereas 20% (n = 8) have. Additionally, 30% (n = 12) have an ongoing or closed criminal case in their criminal record (see Tables C2 in Appendix C).

Measures

The present study was based on a set of measures that included a Data Sociodemographic Form, the MMPI-2, the Brief Symptom Inventory, the Beck Depression Inventory-II, the State-Trait Anxiety Inventory, the 20-item Scale of Social Desirability and the Social Desirability Scale.

Data Sociodemographic Form

The Data Sociodemographic Form (see Appendix B) was constructed to gather information on subjects' age, gender, education, profession as well as information regarding history of substance abuse (e.g., type of substance consumed, past and/or current use), history of childhood maltreatment, presence of DV, criminal background and clinical history in terms of mental health (e.g., past and/or current mental disorders, presence of prescribed medication, etc.).

Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen e Kaemmer, 1989; Silva, Novo, Prazeres, & Pires, 2006)

The MMPI-2 is a 567-item instrument that assesses psychopathology and normal and/or abnormal personality (Erard et al., 2018; Nichols, 2011; University of Minnesota Press, n.d.; Weiner & Greene, 2017). The raw scores obtained in the MMPI-2 scales are converted into T scores, which have a mean of 50 and a standard deviation of 10, to facilitate interpretation (Graham, 1993). The MMPI-2 scales included in this study are the Validity and the Clinical scales as shown in Table 2. Regarding psychometric properties, Wise et al. (2010) reported MMPI-2 scales' internal consistencies and test-retest reliability: most scales obtained a good ($0.9 > \alpha \geq 0.8$) or an acceptable ($0.8 > \alpha \geq 0.7$) Cronbach's alpha as seen in Appendix D.

Table 2.

MMPI-2 Validity and Clinical scales Description

Scale type	Scale name	What it measures
Validity scales (Archer et al., 2004; Butcher et al., 2015; Graham, 1993)	Variable Response Inconsistency (VRIN) scale	Tendency to respond inconsistently
	True Response Inconsistency (TRIN) scale	Tendency to respond to items with "True" indiscriminately (nonacquiescence)
	Infrequency – Psychopathology (Fp) scale	Tendency to respond with "True" to items that are rarely endorsed by clinical patients
	Infrequency (F) scale	Tendency to respond in an atypical or deviant manner
	Lie (L) scale	Subjects' unsophisticated tendency to present themselves in a favorable light
	Correction (K) scale	Clinical defensiveness (tendency to deny or exaggerate psychopathology)
	Superlative (S) Self-Presentation scale	Individuals' tendencies to present themselves in an unrealistically positive light
Clinical scales (Butcher et al., 2015; Graham, 1993)	Hypochondriasis (1 Hs)	Excessive worry about the body and fear of concomitant diseases; nonspecific physical symptoms
	Depression (2 D)	Presence of symptomatic depression: poor morale, lack of hope in the future, low mood, general dissatisfaction with one's own status
	Hysteria (3 Hy)	"Hysterical" reactions to stressful events. Specific somatic symptoms and positive appraisal of and attitudes toward oneself and others
	Psychopathic Deviate (4 Pd)	Behavior problems such as negative interpersonal relations with family and authority figures and self- and social alienation
	Masculinity/Femininity (5 Mf)	Areas of interests in vocations and hobbies, aesthetic preferences, activity–passivity, personal sensitivity and restraint traditionally identified as masculine or feminine

Scale type	Scale name	What it measures
Clinical scales (Butcher et al., 2015; Graham, 1993)	Paranoia (6 Pa)	Paranoid symptoms such as ideas of reference, persecutory feelings, mistrust, excessive sensitivity and rigid opinions and attitudes
	Psychasthenia (7 Pt)	Obsessive-compulsive disorder. Inability of the person to resist specific actions or thoughts despite being maladaptive
	Schizophrenia (8 Sc)	Schizophrenia. Bizarre thought processes and peculiar perceptions, social alienation, poor family relationships, difficulties with concentration and impulse control, troubling questions about personal identity
	Hypomania (9 Ma)	Hypomanic symptoms such as behavioral and cognitive hyperactivity, grandiosity, self-centeredness and irritability
	Social Introversion (0 Si)	Introversion-Extroversion

Brief Symptom Inventory (BSI; Derogatis, 1975; Canavarro, 1999)

The Brief Symptom Inventory (BSI; Derogatis, 1975; Canavarro, 1999) is a self-report instrument which assesses the type and severity of symptoms experienced in the last week, comprising 53 items with a Likert scale ranging from 0 (“not at all”) to 4 (“extremely”) (Derogatis, 1993). The BSI assesses psychopathological symptoms, in individuals who are 13 or older, in terms of nine dimensions of symptomatology (Somatization, Obsessions-Compulsions, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism) and three global indices (Global Severity Index (GSI), Positive Symptom Distress Index (PSDI), Positive Symptom Total (PST) (Derogatis, 1993; Groth-Marnat & Wright, 2016).

Derogatis (1975) reported good internal consistency reliability for the nine dimensions, ranging from .71 on Psychoticism to .85 on Depression, which was supported by other independent studies (Croog et al., 1986; Aroian & Patsdaughter, 1989 as cited in Derogatis, 1993). No alpha reliability was reported for the three global indices. Test-retest reliability for the nine

symptom dimensions ranged from .68 (Somatization) to .91 (Phobic Anxiety), and for the three Global Indices from .87 (PSDI) to .90 (GSI) (Derogatis, 1993). In the Portuguese version, internal consistency reliability for the nine dimensions and three indices of the BSI varied between .62 and .80 (Canavarro, 2007).

Beck Depression Inventory-II (BDI-II; Beck et al., 1996; Campos & Gonçalves, 2011)

The Beck Depression Scale (BDI; Beck et al., 1961; Campos & Gonçalves, 2011) is a 21-item self-report instrument that assesses the presence and severity of depression in 13- to 80-year-old individuals (Upton, 2013). In the most recent version of this instrument, the Beck Depression Inventory-II (BDI-II; Beck et al., 1996), respondents rate the intensity of the symptoms on a scale from 0 (least) to 3 (most), allowing a possible range of scores from 0 to 63 (Tohen et al., 2015). In general, the most severe levels of depression are reflected by scores of 40 or 50 whereas the clinically depressed or maladaptively nonclinical populations score in the 14 to 28 range (Groth-Marnat & Wright, 2016). The items focus on several dimensions, specifically sadness, pessimism, past failure, loss of pleasure, feelings of failure, feelings of guilt and punishment feelings, self-dislike and self-criticalness, suicidal thoughts or wishes, crying, agitation, loss of interest, indecisiveness, worthlessness, irritability, sleep disturbances, changes in appetite, difficulties with concentration, loss of energy and loss of interest in sex (Beck et al., 1996; Groth-Marnat & Wright, 2016). In regard to psychometric properties, the BDI-II registered an excellent one-week test–retest reliability coefficient (r = 0.93) and excellent internal consistency coefficient (α=.91) (Beck et al., 1996). In the Portuguese version, internal consistency reliability was .90 (Campos & Gonçalves, 2011).

State-Trait Anxiety Inventory Form Y-1 and Y-2 (STAI-Y; Spielberger et al., 1983; Silva & Campos, 1998)

The Trait-State Anxiety Scale (STAI-Y; Spielberger et al., 1983; Silva & Campos, 1998) is a self-report instrument that measures state-anxiety (how individuals feel at the moment; STAI-Y1) in 20 items and trait-anxiety (how individuals generally feel; STAI-Y2) in 20 items (American Psychological Association [APA], 2011). Items on the state-anxiety scale are rated from 0 (“Not at all”) to 4 (“Very much so”) while items on the trait-anxiety scale are

rated from 0 (“Almost never”) to 4 (“Almost always”), with a higher score indicating a higher level of anxiety (APA, 2011; Spielberger et al., 1983). Concerning psychometric properties, internal consistency coefficients have ranged from .86 to .95, while a 2-month test-retest reliability coefficients have ranged from .65 to .75 (Spielberger et al., 1983). In the Portuguese version, internal consistency coefficients ranged from .88 to .93 (Silva & Campos, 1998).

20- item Scale of Social Desirability (EDS-20; Almiro, Almeida, Ferraz, Ferreira, Perdiz, Dias, Gonçalves, Sousa, & Simões, 2016)

The 20-item Social Desirability Scale (EDS-20; Almiro, Almeida, Ferraz, Ferreira, Perdiz, Dias, Gonçalves, Sousa, & Simões, 2016) is a one-dimensional self-report scale that assesses social desirability. The EDS-20 consists of 20 dichotomous answer items (“yes”/”no”) corresponding to scores of 0 or 1 points (Almiro et al., 2016). The items are presented in the form of questions that refer to a set of behaviors and personal attitudes considered socially desirable which are unlikely or infrequent and are unrelated to psychopathological behaviors (presence or absence of symptoms) (Almiro et al., 2016). In the study conducted by Marques (2016), the EDS-20 registered a good Cronbach’s alpha coefficient ($\alpha = .82$).

Scale of Social Desirability (DESCA; Alberto, Oliveira & Fonseca, 2012)

The Social Desirability Scale (DESCA; Alberto, Oliveira & Fonseca, 2012) was created as an alternative to other measures of social desirability, considering the specificity of assessment in the area of parenting (Oliveira, 2013). DESCA was based on Paulhus’ perspective which recognizes response bias as one of the major problems in psychological assessment (Oliveira 2013). DESCA consists of 15 items rated from 1 (“Completely disagree”) to 4 (“Completely agree”) on a Likert scale (Oliveira, 2013). This instrument assesses three dimensions: “Search for Social Approval” (SSA); “Social Image Management” (SIM) and “Relational Dependency” (RD) (Marques, 2016; Oliveira, 2013). SSA is the conscious and voluntary way of deceiving others with the aim of demonstrating a favorable self-image while SIM refers to the unconscious development of a desirable self-image by building an exaggeratedly positive self-concept (Marques, 2016). The RD factor translates into acting in a socially desirable way in search of security and to ensure

relationships with others (Oliveira, 2013). Regarding psychometric properties, Oliveira (2013) reported an acceptable internal consistency coefficient (α =.760) and an acceptable test–retest reliability coefficient (r = .750).

Procedures

Bibliographic research was conducted with the following keywords in English and Portuguese: MMPI, MMPI-2, MMPI-2-RF, forensic context, personality, parenting, parent, personality assessment and assessment of parenting skills.

Data collection was based on psychological assessment included in legal proceedings within the scope of parenting (CPP and CCP) and which included the MMPI-2. Psychologists responsible for the psychological assessment were informed of the objective and content of the study as well as ethical considerations of confidentiality and anonymity, and authorized data collection by consultation of process files.

Statistical analysis was conducted using versions 22.0 and 27.0 for Windows of the SPSS (Statistical Package for Social Sciences) program. The analysis of subsamples within the gender samples resulted in small and, often, disparate subsample sizes. Additionally, preliminary analysis showed a non-normal distribution on almost all scales. This led to the use of non-parametric tests (e.g., Mann-Whitney U Test, Kruskal-Wallis H Test) (Pallant, 2011). Nevertheless, the Pearson correlation coefficient and the Paired Samples T-Test were conducted. Scores of the MMPI-2 scales of mothers and fathers were paired to examine possible mean differences between them. Some subjects were excluded from this analysis due to the parenting capacity evaluation being conducted solely to evaluate them (men: n = 8; 20%; women: n = 17; 34.7%), leaving 32 (80%) men and 32 (65.3%) women to be paired. Although the Pearson correlation coefficient and the Paired Samples T-Test requires the scores to be normally distributed in the population, it is only needed for small sample sizes (n < 30) (Pallant, 2011).

IV - Results

The results will be presented considering the order of the specific objectives.

4.1. Descriptive statistics of scores of mothers and fathers by CPP and CCP in the Clinical and Validity scales of the MMPI-2

Mean, standard deviation, median, minimum and maximum values of the T scores of the MMPI-2 Validity and Clinical scales for men and women, according to process type are shown in Tables 3 and 4.

Table 3.

Descriptive Statistics of the Validity scales of the MMPI-2

	Gender	Process type	M	SD	Median	Min	Max	n
VRIN	Women	CCP	53,69	10,127	54	34	62	13
		CPP	54,56	10,437	54	34	86	36
		Total	54,33	10,258				49
	Men	CCP	53,33	11,337	52	34	69	15
		CPP	48,24	9,922	46	31	76	25
		Total	50,15	10,628				40
TRIN	Women	CCP	58,31	8,350	58	50	73	13
		CPP	58,83	6,557	58	50	80	36
		Total	58,69	6,989				49
	Men	CCP	59,67	7,228	57	50	65	15
		CPP	57,48	6,501	57	50	72	25
		Total	58,30	6,776				40
F	Women	CCP	51,38	11,737	48	37	79	13
		CPP	57,39	15,117	55	41	113	36
		Total	55,80	14,431				49
	Men	CCP	49,47	10,169	45	39	70	15
		CPP	48,36	9,246	45	39	76	25
		Total	48,78	9,488				40
Fp	Women	CCP	60,62	22,552	57	41	120	13
		CPP	68,75	15,616	73	41	120	36
		Total	66,59	17,836				49
	Men	CCP	59,40	10,953	59,5	48	70	15
		CPP	63,16	15,137	63	41	120	25
		Total	61,75	13,692				40

VRIN = Variable Response Inconsistency; TRIN = True Response Inconsistency; F = Infrequency; Fp = Infrequency – Psychopathology.

	Gender	Process type	M	SD	Median	Min	Max	n
L	Women	CCP	76,85	11,082	78,5	57	95	13
		CPP	74,39	12,955	76	47	95	36
		Total	75,04	12,421				49
	Men	CCP	69,87	11,218	72	56	83	15
		CPP	72,96	13,040	74	43	96	25
		Total	71,80	12,333				40
K	Women	CCP	58,15	8,821	59	41	74	13
		CPP	54,25	10,958	53	32	72	36
		Total	55,29	10,490				49
	Men	CCP	52,40	9,745	55	33	68	15
		CPP	56,16	8,999	56	37	68	25
		Total	54,75	9,345				40
S	Women	CCP	57,85	8,275	58	45	76	13
		CPP	53,92	10,404	53	36	71	36
		Total	54,96	9,956				49
	Men	CCP	55,27	10,361	58,5	30	68	15
		CPP	57,16	7,232	58	40	67	25
		Total	56,45	8,461				40

L = Lie; K = Correction; S = Superlative Self-Presentation.

Table 4.

Descriptive Statistics of the Clinical scales of the MMPI-2

	Gender	Process type	M	SD	Median	Min	Max	n
Hs	Women	CCP	56,15	9,856	51	35	71	13
		CPP	54,39	11,883	54	43	94	36
		Total	54,86	11,308				49
	Men	CCP	48,80	11,614	49,5	39	81	15
		CPP	50,64	7,659	48	33	66	25
		Total	49,95	9,237				40
D	Women	CCP	57,38	11,222	55	42	83	13
		CPP	59,50	10,898	58	44	88	36
		Total	58,94	10,908				49
	Men	CCP	56,87	11,957	58	45	87	15
		CPP	55,76	7,780	54	38	76	25
		Total	56,18	9,427				40

Hs = Hypochondriasis; D = Depression.

	Gender	Process type	M	SD	Median	Min	Max	n
Hy	Women	CCP	55,00	11,597	56	39	75	13
		CPP	52,58	11,129	49	36	87	36
		Total	53,22	11,185				49
	Men	CCP	52,07	11,373	52	38	76	15
		CPP	50,84	9,733	48,5	34	76	25
		Total	51,30	10,251				40
Pd	Women	CCP	54,46	8,202	58	39	71	13
		CPP	58,44	11,782	55	39	89	36
		Total	57,39	11,009				49
	Men	CCP	53,07	12,798	55,5	35	77	15
		CPP	51,20	8,000	50	40	72	25
		Total	51,90	9,951				40
Mf	Women	CCP	54,54	10,611	55	33	74	13
		CPP	55,64	7,943	56	40	67	36
		Total	55,35	8,625				49
	Men	CCP	52,67	8,130	53	40	66	15
		CPP	51,20	8,699	51	32	72	25
		Total	51,75	8,415				40
Pa	Women	CCP	55,38	8,608	52	34	74	13
		CPP	59,28	14,725	57,5	37	103	36
		Total	58,24	13,403				49
	Men	CCP	54,33	10,362	51	37	83	15
		CPP	49,36	10,602	49	32	72	25
		Total	51,23	10,661				40
Pt	Women	CCP	49,31	8,702	49	38	68	13
		CPP	52,61	11,462	52	31	81	36
		Total	51,73	10,812				49
	Men	CCP	50,27	9,339	54	43	74	15
		CPP	49,20	7,821	49	35	64	25
		Total	49,60	8,320				40

Hy = Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity/Femininity; Pa = Paranoia; Pt = Psychasthenia.

	Gender	Process type	M	SD	Median	Min	Max	n
Sc	Women	CCP	52,69	11,191	51	36	73	13
		CPP	54,61	10,511	53	36	93	36
		Total	54,10	10,611				49
	Men	CCP	48,33	9,232	50	39	70	15
		CPP	49,20	6,922	47	37	63	25
		Total	48,87	7,763				40
Ma	Women	CCP	52,54	9,089	46	37	71	13
		CPP	50,69	9,316	50	41	71	36
		Total	51,18	9,198				49
	Men	CCP	54,67	7,697	52,5	43	75	15
		CPP	51,16	5,437	52	41	62	25
		Total	52,48	6,512				40
Si	Women	CCP	47,92	7,005	48,5	36	65	13
		CPP	51,61	8,320	48,5	38	74	36
		Total	50,63	8,090				49
	Men	CCP	48,60	7,670	48	37	64	15
		CPP	46,96	6,374	45,5	39	63	25
		Total	47,58	6,838				40

Hy = Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity/Femininity; Pa = Paranoia; Pt = Psychasthenia; Sc = Schizophrenia; Ma = Hypomania; Si = Social Introversion.

The Profile plots of Estimated Marginal Means were also created (see Appendix E). A tendency for women to have a higher mean score in CPP as opposed to women in CCP was observed. Conversely, men tended to have a higher mean score in CCP in contrast with men in CPP. However, the mean score of some scales do not reflect this tendency. The L, K, S and Hs scales' mean scores follow a contrary trend: women have a higher mean score in CCP as opposed to women in CPP, men have a higher mean score in CPP in contrast with men in CCP. On the scales Fp and Sc, men have higher mean score in CPP while women have a higher mean score in CCP on the scales Hy and Ma.

4.2. Comparison of results obtained in the MMPI-2 scales by mothers and fathers involved in CCP and in CPP

The Mann-Whitney U Test revealed significant difference in the scale Fp ($U = 142.000$; $W = 233.000$; $p = 0.033$; $d = 0.624$) between women in CCP

and CPP, with a moderate size effect (Cohen, 1988) (see Tables F1 to F3 in Appendix F). When comparing men in CCP and men in CPP, no significant differences were found (see Tables F4 to F6 in Appendix F).

4.3. Comparison of mothers and fathers involved in CCP and CPP: A Paired Samples T-Test

In general, the Paired Samples T-Test indicated that mothers scored significantly higher than fathers in the F scale ($t(31) = 2.136$, $p = 0.041$, $d = 0.511$), the L scale ($t(31) = 2.389$, $p = 0.023$, $d = 0.507$), the Hs scale ($t(31) = 2.688$, $p = 0.011$, $d = 0.679$), the Pd scale ($t(31) = 2.138$, $p = 0.041$, $d = 0.532$), the Mf scale ($t(31) = 2.183$, $p = 0.037$, $d = 0.544$), the Pa scale ($t(31) = 2.881$, $p = 0.007$, $d = 0.729$) and the Sc scale ($t(31) = 3.128$, $p = 0.004$, $d = 0.793$) (see Appendix G).

4.4. Analysis of the influence of sociodemographic variables on the results of the MMPI-2 scales

The influence of age, education and marital status on the results of the MMPI-2 scales were analyzed using a Kruskal-Wallis H Test.

Taking into account subjects' age, the variable age was redesigned into five groups: between 21 - 30, 31 - 40, 41 - 50, 51 - 60, and 61 - 67. With regard to age, there was no statistically significant difference in scores of women and men in the MMPI-2 scales (see Appendix H).

Concerning educational level, significant differences were found in women in the scales VRIN ($\chi2(3) = 9.190$, $p = 0.027$, $d = 0.82$), F ($\chi2(3) = 12.470$, $p = 0.006$, $d = 1.063$), Fp ($\chi2(3) = 12.337$, $p = 0.006$, $d = 1.053$), K ($\chi2(3) = 10.037$, $p = 0.018$, $d = 0.885$), S ($\chi2(3) = 10.175$, $p = 0.017$, $d = 0.895$) and Pa ($\chi2(3) = 8.536$, $p = 0.036$, $d = 0.769$) (see Tables I1 to I3 in Appendix I). Large size effect was observed (Cohen, 1988). There was no statistically significant difference in scores of men considering the educational level (see Tables I4 to I6 in Appendix I).

Regarding marital status, no significant differences were found on women's scores (see Tables J1 and J2 in Appendix J). Contrary to women, the men's sample registered significant differences in the L ($\chi2(2) = 7.078$, $p = 0.029$, $d = 0.81$) (see Table J3 in Appendix J), with a large effect size (Cohen, 1988) and a mean rank score of 24.24 for divorced men, 19.83 for married men and 12.82 for single men (see Table J4 in Appendix J). Additionally,

significant differences were also found in the Pa ($\chi 2(2) = 8.912$, $p = 0.012$, $d = 0.975$) scale (see Table J5 in Appendix J), with a large effect size (Cohen, 1988) and with a mean rank score of 23.37 for divorced men, 22.23 for single men and 10.17 for married men (see Table J6 in Appendix J).

4.5. Analysis of the influence of the presence of DV and clinical history in terms of mental health on the results of the MMPI scales

Due to sample size, the only variable analyzed in the men's sample was the presence of DV. Nevertheless, in the women's sample, a Mann-Whitney U Test was conducted to analyze the MMPI-2 scales results considering the presence of medical history, psychological/psychiatric care, mental illness and DV.

In terms of medical history, significant differences were found on the scores of women in the Fp scale ($U = 155.000$; $W = 785.000$; $p = 0.042$; $d = 0.594$) (see Table K1 in Appendix K), with a moderate size effect (Cohen, 1988) and with a mean rank score of 31.43 for medical history present and 22.43 for no medical history (see Table K3 in Appendix K). As for presence of psychological/psychiatric care, significant differences were found on the scores of women in the TRIN scale ($U = 201.500$; $W = 579.500$; $p = 0.039$; $d = 0.57$) (see Table L1 in Appendix L), with a moderate size effect (Cohen, 1988) and with a mean rank score of 29.34 for presence of psychological/psychiatric care and 21.46 for absence of psychological/psychiatric care (see Table L3 in Appendix L).

Regarding presence of mental illness, significant differences were found on the scores of women in the Sc scale ($U = 180.500$; $W = 586.500$; $p = 0.021$; $d = 0.693$) (see Table M2 in Appendix M), with a moderate size effect (Cohen, 1988) and with a mean rank score of 30.40 for presence of mental illness and of 20.95 for no mental illness (see Table M3 in Appendix M).

As for presence of DV, the Mann-Whitney U Test found significant differences on the scores of women in the K ($U = 168.000$; $W = 493.000$; $p = 0.013$; $d = 0.762$) and S ($U = 176.000$; $W = 501.000$; $p = 0.021$; $d = 0.704$) scales (see Table N1 in Appendix N) with a moderate size effect (Cohen, 1988). The K scale had a mean rank score of 29.70 for presence of DV and 19.72 for absence of DV while the S scale had a mean rank score of 29.35 for presence of DV and 20.04 for absence of DV (see Table N3 in Appendix N).

Additionally, significant differences were found on the scores of women in the Hy scale (U = 180.000; W = 505.000; p = 0.026; d = 0.168) (see Table N3 in Appendix N), with no effect considering sample size (Cohen, 1988). Regarding men, significant differences were found in the scores of Pd (U = 120.000; W = 351.000; p = 0.031; d = 0.724) and Pa (U = 125.000; W = 356.000; p = 0.042; d = 0.673) (see Table N5 in Appendix N), with a moderate size effect (Cohen, 1988). Moreover, the Pd scale had a mean rank score of 24.68 for presence of DV and 16.71 for absence of DV and the Pa scale had a mean rank score of 24.42 for presence of DV and 16.95 for no DV present (see Table N6 in Appendix N).

4.6. Analysis of the convergent validity of the Clinical scales of the MMPI-2 with the BSI, BDI and STAI-Y, and the Validity scales of the MMPI-2 with the EDS-20 and DESCA

As the parental assessment protocol, in addition to the MMPI-2, also includes the BSI, the BDI, the STAI-Y, the EDS-20 and the DESCA, it was considered relevant to define as an additional objective, analyze the convergent validity of the Validity and Clinical scales of the MMPI-2 with these tests. Thus, the Pearson correlation coefficient was used between the Validity scales of the MMPI_2 and the EDS-20 and DESCA, and between the Clinical scales of the MMPI-2 and the BSI, BDI and STAI-Y (Appendix O).

Pearson's Correlation Coefficients in the sample of women

Regarding the women's sample (see Table 5), the Hs scale showed significant positive moderate correlations with the scores of BSI's obsessions-compulsions, BSI's sensitivity, BSI's hostility, BSI's phobic anxiety, BSI's paranoid ideation and BSI's PST. The Hs scale also showed significant positive strong correlations with the scores of BSI's somatization, BSI's depression, BSI's psychoticism, BDI's total score, STAI-Y1 and STAI-Y2 total score.

The D scale showed significant positive moderate correlations with the scores of BSI's somatization, BSI's sensitivity, BSI's depression, BSI's psychoticism, BSI's PST, BDI's total score, and STAI-Y1 total score. Moreover, a significant positive strong correlation was found between the D scale and STAI-Y2.

The Hy scale showed significant positive moderate correlations with the scores of BSI's depression, BSI's anxiety, BSI's PST, BDI's total score, STAI-Y1 and STAI-Y2 total scores. In addition, a significant positive strong correlation was found between the Hy scale and the scores of BSI's somatization and BSI's psychoticism.

The Pd scale showed significant positive moderate correlations with the scores of BSI's sensitivity, BSI's depression, BSI's anxiety, BSI's phobic anxiety, BSI's psychoticism, BSI's PST, BDI's total score, STAI-Y1 and STAI-Y2 total score. A significant positive strong correlation was also found between the Pd scale and BSI's somatization.

The Pa scale showed significant positive moderate correlations with the scores of BSI's somatization, BSI's anxiety, BSI's hostility, BSI's paranoid ideation, as well as significant positive strong correlations with the scores of BSI's obsessions-compulsions, BSI's sensitivity, BSI's depression, BSI's phobic anxiety, BSI's psychoticism, BSI's PST, BDI's total score, STAI-Y1 and STAI-Y2 total score.

The Pt scale showed significant positive moderate correlations with the scores of BSI's somatization, BSI's obsessions-compulsions, BSI's sensitivity, BSI's anxiety, BSI's phobic anxiety, BSI's paranoid ideation, BSI's PST and STAI-Y1 total score. Significant positive strong correlations between the Pt scale and the scores of BSI's depression, BSI's psychoticism, BDI's total score and STAI-Y2 total score was also observed.

The Sc scale showed significant positive moderate correlations with the scores of BSI's somatization, BSI's obsessions-compulsions, BSI's anxiety, BSI's hostility, BSI's paranoid ideation, BSI's PST, BSI's PSD and STAI-Y1 total score, as well as significant positive strong correlations with the scores of BSI's sensitivity, BSI's depression, BSI's phobic anxiety, BSI's psychoticism, BDI's total score and STAI-Y2 total score.

The Ma scale showed significant positive moderate correlations with the scores of BSI's anxiety, BSI's PSD and STAI-Y1 total score. Finally, the Si scale showed significant positive moderate correlations with the scores of BSI's sensitivity, BSI's psychoticism, BDI's total score and STAI-Y2 total score. The remaining correlations of the Clinical scales of the MMPI-2 with the scores of BSI, BDI and STAI-Y were found to be very low or low (e.g., Mf scale.

Table 5.

Women's sample: Pearson's correlation coefficient summary of the Clinical scales with the BSI, BDI-II and STAI-Y

Measure/measure's dimensions	Correlation	Scales
BSI's somatization	Positive moderate	D, Pa, Pt
	Positive strong	Hs, Hy, Pd
BSI's obsessions-compulsions	Positive moderate	Hs, Pt, Sc
	Positive strong	Pa
BSI's sensitivity	Positive moderate	Hs, D, Pd, Pa, Pt, Si
	Positive strong	Sc
BSI's depression	Positive moderate	D, Hy, Pd
	Positive strong	Hs, Pa, Pt, Sc
BSI's anxiety	Positive moderate	Hy, Pd, Pa, Pt, Sc, Ma
BSI's hostility	Positive moderate	Hs, Pa, Sc
BSI's phobic anxiety	Positive moderate	Hs, Pd, Pt
	Positive strong	Pa, Sc
BSI's paranoid ideation	Positive moderate	Hs, Pa, Pt, Sc
BSI's psychoticism	Positive moderate	D, Pd, Si
	Positive strong	Hs, Hy, Pt, Sc
BSI's PST	Positive moderate	Hs, D, Hy, Pd, Pt, Sc
	Positive strong	Pa
BSI's PSDI	Positive moderate	Sc, Ma
BDI total	Positive moderate	D, Hy, Pd, Si
	Positive strong	Hs, Pa, Pt, Sc
STAI-Y1 total	Positive moderate	D, Hy, Pd, Pt, Sc, Ma
	Positive strong	Hs, Pa
STAI-Y2 total	Positive moderate	Hy, Pd
	Positive strong	Hs, D, Pa, Pt, Sc, Si

In the women's sample, significant negative moderate correlations were found between the EDS-20 score and the F scale (see Table 6). The EDS-20 score also showed significant positive moderate correlations with the K and S scales as well as significant very strong correlation with the L scale.

Table 6.

Correlations between MMPI-2 Validity Scales and EDS-20 and DESCA for Women (N=43)

	EDS_TOTAL	DESCA_SSA	DESCA_SIM	DESCA_RD	DESCA_TOTAL
VRIN	-,425	-,002	,070	,391**	,197
TRIN	-,255	,231	-,012	,051	,103
F	-,586**	,135	,023	,500**	,269
Fp	,189	,364*	,269	,331*	,416**
L	,850**	,300	,461**	,016	,363*
K	,532*	,054	,156	-,300	-,021
S	,578**	,176	,132	-,382*	-,021

Note: * p < .05, ** p <.01

L = Lie; F = Infrequency; K = Correction; VRIN = Variable Response Inconsistency; TRIN = True Response Inconsistency; Fp = Infrequency – Psychopathology; S = Superlative Self-Presentation; EDS-20 = 20- item Scale of Social Desirability; DESCA = Scale of Social Desirability; DESCA_SSA = Search for Social Approval; DESCA_SIM = Social Image Management; DESCA_RD = Relational Dependency

Pearson's Correlation Coefficients in the sample of men

Concerning men (see Table 7), significant positive moderate correlations were found between the Hs scale and the scores of BSI's depression, BSI's anxiety, BSI's psychoticism, BDI's total score and STAI-Y2 total score. The same was observed in the correlations between the D scale and the scores of BSI's paranoid ideation and STAI-Y2 total score, as well as the correlations between the Hy scale and BDI's total score and STAI-Y2 total score.

The Pd scale showed significant positive moderate correlations with the scores of BSI's depression, BSI's anxiety, BSI's hostility, BSI's paranoid ideation, BSI's psychoticism, BSI's GS, BSI's PST and STAI-Y1 total score. Significant positive strong correlations between the Pd scale and BDI's total score and STAI-Y2 total score was also observed.

In contrast with women's sample, in the men's sample significant positive moderate correlations between the Mf scale and the scores of BSI's phobic anxiety and BSI's psychoticism. The Pa scale showed significant positive moderate correlations with the scores of BSI's somatization, BSI's obsessions-compulsions, BSI's sensitivity, BSI's anxiety, BSI's hostility,

BSI's paranoid ideation, BSI's psychoticism, BSI's GS, BSI's PST, BDI's total score and STAI-Y1 total score. In addition, the Pa scale showed a significant positive strong correlation with STAI-Y2 total score.

Significant positive moderate correlations were found between the Pt scale and the scores of BSI's somatization, BSI's sensitivity, BSI's depression, BSI's anxiety, BSI's phobic anxiety, BSI's psychoticism, BSI's GS, BSI's PST, BDI's total score and STAI-Y2 total score.

The Sc scale and BSI's somatization, BSI's sensitivity, BSI's phobic anxiety, BSI's GS and BSI's PST were found to have significant positive moderate correlations. The Ma scale showed significant positive moderate correlations with the scores of BSI's depression, BSI's hostility, BSI's psychoticism, BSI's GS, BSI's PST, BDI's total score and STAI-Y2 total score as well as significant positive strong correlations with the scores of BSI's somatization, BSI's anxiety and BSI's phobic anxiety.

Lastly, significant positive moderate correlations were found between the Si scale and the scores of BSI's obsessions-compulsions, BSI's sensitivity, BSI's depression, BSI's phobic anxiety, BSI's paranoid ideation, BSI's GS and BSI's PST. The remaining correlations of the Clinical scales of the MMPI-2 with the scores of BSI, BDI and STAI-Y were found to be very low or low.

Table 7.

Men's sample: correlations summary of the Clinical scales with the BSI, BDI-II and STAI-Y

Measure/measure's dimensions	Correlation	Scales
BSI's somatization	Positive moderate	Pa, Pt, Sc
	Positive strong	Ma
BSI's obsessions-compulsions	Positive moderate	Pa, Si
BSI's sensitivity	Positive moderate	Pa, Pt, Sc, Si
BSI's depression	Positive moderate	Hs, Pd, Pt, Ma, Si
BSI's anxiety	Positive moderate	Hs, Pd, Pa, Pt,
	Positive strong	Ma
BSI's hostility	Positive moderate	Pd, Pa, Ma
BSI's phobic anxiety	Positive moderate	Mf, Pt, Sc, Si
	Positive strong	Ma
BSI's paranoid ideation	Positive moderate	D, Pd, Pa, Si
BSI's psychoticism	Positive moderate	Hs, Pd, Mf, Pa, Pt, Ma
BSI's GSI	Positive moderate	Pd, Pa, Pt, Sc, Ma
BSI's PST	Positive moderate	Pd, Pa, Pt, Sc, Ma, Si
BDI total	Positive moderate	Hs, Hy, Pa, Pt, Ma
	Positive strong	Pd
STAI-Y1 total	Positive moderate	Pd, Pa
STAI-Y2 total	Positive moderate	Hs, D, Hy, Pt, Ma
	Positive strong	Pd, Pa

Regarding men's scores, DESCA's dimension RD showed significant negative moderate correlation with the L scale. Additionally, in the women's sample, DESCA's total score showed significant positive moderate correlation with the Fp scale (see Table 8).

Table 8.

Correlations between MMPI-2 Validity Scales and EDS-20 and DESCA for Men (N=36)

	EDS_TOTAL	DESCA_SSA	DESCA_SIM	DESCA_RD	DESCA_TOTAL
VRIN	-,120	,217	-,171	,257	,142
TRIN	-,063	-,225	-,056	-,264	-,311
F	,128	-,134	-,046	-,168	-,174
Fp	,384	-,095	,156	-,357*	-,115
L	,608**	-,179	,201	-,434*	-,166
K	,336	,040	-,035	-,322	-,126
S	,347	-,040	,230	-,266	,009

Note: * p < .05, ** p <.01

L = Lie; F = Infrequency; K = Correction; VRIN = Variable Response Inconsistency; TRIN = True Response Inconsistency; Fp = Infrequency – Psychopathology; S = Superlative Self-Presentation; EDS-20 = 20- item Scale of Social Desirability; DESCA = Scale of Social Desirability; DESCA_SSA = Search for Social Approval; DESCA_SIM = Social Image Management; DESCA_RD = Relational Dependency

V - Discussion

The MMPI-2 is the most used personality assessment measure in the Child Custody and Child Protection context (Ackerman et al., 2021; Butcher et al., 2015; Haynes, 2010; King, 2012; Otto et al., 2000; Pope et al., 2006). Since its publication, in 1989, several studies have concluded that there is a significant statistical difference between the scores of parents assessed in this forensic context and the scores of parents from the normative sample (i.e., Arce et al., 2014; Bagby et al., 1999; Bathurst et al., 1997; Carr et al., 2005; Carstaris et al., 2012; Gambetti et al., 2020; Key, 2018; Key et al., 2020; Mandappa, 2004; Medoff, 1999; Siegel, 1996; Stredny et al., 2006). Furthermore, various authors have also concluded that there is a significant statistical difference between the MMPI-2 scores of parents involved in CCP and the scores of parents involved in CPP (i.e., Gambetti et al., 2019; Gready, 2006 as cited in Ellis, 2012; Resendes & Lecci, 2012;). Additionally, a few studies have found gender differences between mothers and fathers involved in both CCP and CPP (i.e., Gambetti et al., 2019; Pope et al., 2006; Roma et al., 2014). In Portugal, no studies involving the MMPI-2 profiles of mothers and fathers involved in CCP and CPP were conducted.

The present study analyzed: a) descriptive statistics of the MMPI-2

Validity and Clinical scales of women and men involved in the Child Custody and Child Protection context; b) the difference in the scores of MMPI-2 Validity and Clinical scales of parents involved in CCP and CPP, according to gender; c) the influence of sociodemographic variables (i.e., age, education, marital status) on the results of the MMPI-2 scores; d) the association between the MMPI-2 scales and the presence of DV and clinical history in terms of mental health, and e) the convergent validity of the Validity and Clinical MMPI-2 scales with other measures (i.e., BSI, BDI, STAI-Y, EDS-20, DESCA).

In general, according to the profile plots generated, it was found that women tended to have higher mean scores in CPP as opposed to women in CCP, while men tended to have higher mean scores in CCP in contrast with men in CPP. In addition, the Mann-Whitney U Test showed that women in CPP had higher mean rank scores than women in CCP on the Fp scale, suggesting women in CPP endorse more rarely endorsed items by clinical inpatients when compared to women in CCP. Gready (2006, as cited in Ellis, 2012) reports the same for women involved in CPP as their scores were characterized by moderate elevations on most scales, reporting more emotional distress in general. The L, K, S and Hs scales' mean scores follow a contrary trend: women have higher mean scores in CCP as opposed to women in CPP, men have higher mean scores in CPP in contrast with men in CCP. Of these, only the L scale reached scores of clinical significances ($T \geq 70$) for all of the sample. These findings indicate an unwillingness to admit any personal faults in an effort to appear more virtuous than the average person, which is common for parents in the Child Custody and Child Protection context (Butcher et al., 2015). The higher L scores (M = 76,85; SD = 11,082) and lower F scores (M = 51,38; SD = 11,737) partially affirm Roma et al. (2014) findings as women in CCP showed higher tendency toward ''faking-good'' profiles. Gambetti et al. (2019) hypothesized that women in CCP showed a stronger motivation to display themselves in a positive light, denying psychological issues, which could be explained by the cultural role played by women. Similar to Italian culture, Portuguese women tend to be considered the prominent figure in operative parental functioning and, therefore, could be more motivated to deny any psychological problem or imperfection (Wall & Amâncio, 2007). In the same way, Portuguese men tend

to be less defensive, preferring their expected culturally marginal role (Gambetti et al., 2019). In this context, it is possible that women in CPP only report more emotional distress because women in CCP tend to deny psychological distress at a higher rate. One possible explanation may be that mothers in CCP are in conflict with fathers over custody of their children and may feel that registering less psychopathology can put them in a better position to win the court case, while in CPP parents tend to not compete with each other which can result in less defensiveness.

The Paired Samples T-Test found that scores of women were significantly higher than the scores of men in the F, L, Hs, Pd, Mf, Pa and Sc scales. Of these, only the L, Hs, Pd and Pa scales have reached clinical significance. Thus, women in this forensic context have a tendency to present themselves in an overly positive light, yet their scores still reflect poor general health, tiredness, easy fatigability, family conflict, social alienation, dissatisfaction, guilt, persecutory ideas, resentment, sensitivity and emotional lability (Nichols, 2011), which aligns with Gambetti et al. (2019) proposed explanation and may be the reflection of undergoing extremely stressful experiences and real or potential losses (Butcher et al., 2015). Regardless of gender and process type, L scale elevations were found which affirms previous research (i.e., Arce et al., 2014; Bathurst et al., 1997; Siegel, 1996; Stredny et al., 2006; Key, 2018; Key et al., 2020).

With regard to the sociodemographic variables, clinical history in terms of mental health and presence of DV, no studies that analyzed differences between MMPI-2 profiles were found.

Concerning education, men did not register any statistically significant differences. In contrast, women at lower educational levels (i.e., 5th to 9th grade) had higher mean rank scores on the VRIN, F and Fp scales while mothers at higher educational levels (i.e., higher education) had higher mean rank scores in the K and S scales. As for women in lower educational levels, score elevation on the VRIN, F and Fp may suggest exaggerated symptom presentation, but these scales are also sensitive to answering in a careless manner or without attending to the item content (Butcher, 2015). Careless responding tends to be associated with lack of motivation (Denison & Wiernik, 2020). It is possible that women at lower educational levels may feel unmotivated and, as a result, respond carelessly to items due to the idea that

their lower educational level has already negatively shaped the court's perception of them. Additionally, the lack of motivation may appear as a result of stress and potential losses caused by the court proceedings. Regarding women at higher educational levels, K and S score elevations suggest a stronger desire to present themselves in an overly positive light. Underreporting scales such as the K and S scales measure two constructs, self-deception and positive impression management (Bagby, 2006). The first has been broadly defined as a dispositional tendency to think of oneself in a favorable light, whereas positive impression management refers to the deliberate attempt to distort one's responses in order to create a favorable impression with others (Barrick & Mount, 1996). Bearing this in mind, it is possible that women at higher educational levels think of themselves in a more positive light due to the higher education they have received which they may believe will give them an advantage in the court case. In sum, this suggests a stronger incidence of careless responding in women at lower educational levels when compared to women with higher educational levels and a stronger tendency for women with higher educational levels to think of themselves in a more positive light in comparison with women with lower educational levels. However, the validity scales mentioned did not or almost reached clinical significance (see Table P1 in Appendix P), which leads to questioning the real-life impact of the interpreted result.

Concerning marital status, in the men's sample, significant differences were found in the L scale, with a higher mean rank score for divorced men and lowest mean rank score for single men and in the Pa scale, with a higher mean rank score for divorced men and lowest mean rank score for married men. Therefore, divorced men tend to present themselves in an overly positive light by endorsing evident but infrequent virtues and are more suspicious, hostile and prone to blame others (Nichols, 2011) when compared to married and single men. Considering the Child Custody and Child Protection context, divorced men may feel the need to present themselves in this way due to conflict with the other parent. Alike the interpreted result in educational level, the L mean scores of men with different marital status have the same interpretable result and the Pa mean scores of men do not reach clinical significance, questioning the real-life impact of the interpreted result (see Table P2 in Appendix P). Contrary to men, women did not register any

statistically significant differences.

With regard to clinical history in terms of mental health, statistical analysis was not conducted on the men's sample due to the small sample sizes.

Regarding medical history, women with a history of physical illnesses (M = 76.29; SD = 22.040) had a higher mean rank score on the Fp scale as opposed to women with no medical history (M = 62.71; SD = 14.464), indicating that women with a history of physical illnesses often endorse items that are rarely endorsed by clinical patients in comparison with women with no medical history. Concerning this clinically significant result, it is possible that women with a history of physical illnesses believe exaggerating previously reported symptomology may excuse other behavior patterns and psychopathology, which they believe will benefit them in the court's decision.

In regard to psychological/psychiatric care, women who benefitted from this care had a higher mean rank score in the TRIN scale than those who did not have any psychological/psychiatric care. Therefore, women who received psychological/psychiatric care tended to respond inconsistently to items by giving true responses to items indiscriminantly (acquiescence) or by giving false responses to items indiscriminantly (nonacquiescence) (Graham, 1993) in comparison to women who did not receive any psychological/psychiatric care. Notably, the mean score for women who benefitted from psychological/psychiatric care (M = 60.50; SD = 6.353) and the ones who did not (M = 57.22; SD = 7.250) does not reach clinical significance ($T \geq 80$) and, as a consequence, as no interpretable result.

Concerning mental illness, a clinically significant result showed that women with mental illness had a higher mean rank score on the Sc scale when compared to women with no mental illness. Although the Sc scale assesses bizarre thought processes and peculiar perceptions as these are common in people with schizophrenia and other psychotic conditions, the Sc scale assesses a wide variety of content areas related to psychopathological symptoms and associated with severe and prolonged stress (Butcher et al., 2015). Thus, women with mental illness (M = 57.86; SD = 10.683) suffer more social alienation (especially in their relationship with their parents), apathy and depressive withdrawal, loss of impulse control, strange or dissociated experience, cognitive disruption, impaired concentration and memory (Nichols, 2011) when compared to women with no mental illness (M

= 51.29; SD = 9.820).

Regarding presence of DV, an important aspect to mention when interpreting these results is that while statistical analysis only took into account presence or absence of DV, the majority of women with DV in their lives were the victim (n = 16; 32,7%) in comparison with 2,5% (n = 1) of men. Moreover, 35% (n = 14) of men were the aggressor in comparison with 6,1% (n = 3) of women. Thus, women with DV in their lives, which were mainly victims, had a higher mean score on the K and S scales than women with no DV in their lives, indicating a tendency for women in abusive relationships to deny their interpersonal difficulties and their unstable emotionality as well as a tendency to present themselves in an unrealistically positive light when compared to women that are not in abusive relationships (Butcher et al., 2015). It is expected that women who are victims of DV report more psychopathology than the ones who are not, as abused women have been shown to suffer more lasting anxiety and insomnia, severe depression, somatic symptomatology and lower self-esteem (Matud, 2006). Considering the Child Custody and Child Protection context it is possible to comprehend the reason why women in abusive relationships deny their psychopathology and tend to present themselves in an unrealistically positive light as they may believe this can help them win the court case and keep their child. As for the men's sample, men who had DV present in their lives, which were mainly aggressors, had a higher mean rank score on the Pd and Pa scales when compared to men with no DV in their lives, suggesting that men in abusive relationships tended to be more suspicious, hostile, guarded, overly sensitive, argumentative, prone to blame others, angry, impulsive, emotionally shallow and unpredictable (Nichols, 2011) when compared with their counterparts. Additionally, they tend to have more negative interpersonal relationships with family and authority figures which leads to self- and social alienation (Butcher et al., 2015). These results were expected as perpetrators of DV share traits such as high rates of suspicion and jealousy, sudden and drastic mood swings, poor self-control, and higher than average rates of approval of violence and aggression (Moffitt et al., 2001). Lastly, the women's scores did not reach clinical significance for the K scale (women in DV: M = 59.52; SD = 9.278; women with no DV: M = 51.76; 10.365) as well as the S scale (women in DV: M = 58.65; SD = 9.998; women with no DV: M = 51.92; SD = 8.976), while

the men's scores reached clinical significance for both the Pd scale (men in DV: M = 55.16; SD = 9.996; men with no DV: M = 48.95; SD = 9.162) and the Pa scale (men in DV: M = 54.53; SD = 10.767; men with no DV: M = 48.24; SD = 9.879).

Similar to previous research (Arce et al., 2014; Bathurst et al., 1997; Key et al., 2020; Resendes & Lecci, 2012; Stredny et al., 2006), women's and men's samples obtained an elevated L score ($65 \geq T \geq 79$) which suggests overly virtuous claims and defensiveness as is expected in the Child Custody and Child Protection context. Parents in this context may feel that reporting less symptoms of psychopathology help create a favorable image of themselves to the court, increasing the chances of having custody/keeping their child. In turn, this may be affecting the scores on the Clinical scales.

Comprehensive parental fitness and parental competence evaluations adopt multisource, multimethod approach (Butcher et al., 2015; Mandappa, 2004). As a result, other measures were used to assess symptomology (i.e., BSI, BDI and STAI-Y) and social desirability (i.e., EDS-20, DESCA) and an additional objective was established, namely the analysis of the convergent validity of the MMPI-2. Several studies evaluated MMPI-2's convergent validity with other measures (e.g, Barreto, 2005). However, no studies involving the EDS-20, DESCA, BSI, BDI and STAI-Y were found. Moderate to very strong correlations between the validity scales and the EDS-20 and DESCA were found. These results are expected as the EDS-20 and DESCA, similarly to the validity scales, assess behaviors and attitudes considered to be socially desirable and which are infrequent (Marques, 2016; Oliveira, 2013). Moreover, correlations were higher between the EDS-20 and DESCA and the L scale as it assesses infrequent and improbable virtues with obvious items as opposed to other scales whose items are subtler (Nichols, 2011). Correlations between the BSI, BDI, STAI-Y1, STAI-Y2 and the Clinical scales were moderate to strong. The measures mentioned assess symptomatology with the exception of the STAI-Y2 which measures trait anxiety. Likewise, MMPI-2 Clinical scales assess varied symptomatology. For example, the Hs scale focuses on vague and nonspecific physical symptoms, the D scale addresses symptomatic depression, the Hy scale targets specific somatic symptoms, the Pt scale evaluates abnormal fears, difficulties in concentration and guilt feelings, the Sc scale addresses isolation, self-dissatisfaction, psychomotor

retardation, severe and prolonged stress, the Ma assesses irritability, psychomotor excitement and lability of mood (Butcher et al., 2015; Graham, 1993; Nichols, 2011). However, Clinical scales also assess other aspects related to personality. For example, the Hy scale assesses positive appraisal of and attitudes toward oneself and others, the Pd scale assesses negative interpersonal relations with family and authority figures and self- and social alienation, the Ma scale covers topics such as family relationships, moral values and attitudes, the Si scale assesses a subject's tendency to withdraw from social contact and responsibilities (Butcher et al., 2015; Graham, 1993; Nichols, 2011). Additionally, the MMPI (Hathaway & McKinley, 1943) was developed in an innovative way for the time, using the empirical keying approach as opposed to the typically used logical keying approach. In the empirical keying approach, responses to individual test items were treated as unknowns and empirical item analysis was utilized to identify items that differentiated between criterion groups whereas, in the logical keying approach, responses were keyed according to the subjective judgment of the test author (Graham, 1993). This was executed by collecting and selecting a wide variety of personality-type statements from sources such as psychological and psychiatric case histories and reports, textbooks, published scales of personal and social attitudes (Graham, 1993). Likewise, the BDI was constructed by combining descriptions of patients' symptoms which then were used to structure the scale (Beck & Alford, 2014) and the STAI-Y was constructed using information from other measures and then underwent research like the MMPI (Spielberger & Sydeman, 1994). Similarly, the BSI derived from the SCL-90-R (Symptom Checklist-90-R), a measure constructed by the same author (Derogatis, 1993). Therefore, the moderate to strong correlations seem to align with the similar approaches in test development and the constructs evaluated.

VI - Conclusion

The present study aimed to analyze the data of Validity and Clinical scales of the MMPI-2 in a sample of parents assessed in the context of Family Court Proceedings, and examine the differences of mothers and fathers according to process type (Child Custody vs Child Protection), age, education, presence of domestic violence and clinical history in terms of mental health.

Concomitantly, analysis of the convergent validity of the Clinical scales of the MMPI-2 with the BSI, the BDI and the STAI-Y, and the Validity scales of the MMPI-2 with the EDS-20 and the DESCA was conducted.

The results showed a tendency for women in CPP to report more emotional distress and/or exaggerate their symptomology, while women in CCP tended to show stronger motivation to display themselves in a positive light, denying psychological issues. In comparison to men, the women in this sample showed a tendency to present themselves in an overly positive light when compared to men, yet their scores still reflected characteristics such as poor general health, tiredness, family conflict, social alienation and emotional lability. Regardless of gender and process type, L scale elevations were found.

In regard to the sociodemographic variables studied in this forensic sample, results suggest that:

a) women at lower educational levels tend to respond carelessly when compared to women at higher educational levels;

b) women with higher educational levels have a stronger desire to present themselves in an overly positive light in comparison with women with lower educational levels;

c) divorced men present themselves in an overly positive light by endorsing evident but infrequent virtues and are more suspicious, hostile and prone to blame others when compared to married and single men;

Concerning medical history of the mothers and fathers included in this sample, results suggest that:

a) women with a history of physical illnesses often endorse items that are rarely endorsed by clinical patients in comparison with women with no medical history;

b) women who received psychological/psychiatric care respond more inconsistently to items in comparison to women who did not;

c) women with mental illness suffer more social alienation (especially in their relationship with their parents), apathy and depressive withdrawal, loss of impulse control, strange or dissociated experience, cognitive disruption, impaired concentration and memory when compared to women with no mental illness;

d) when DV is present, women to deny their interpersonal difficulties and their unstable emotionality as well as a tendency to present themselves in

an unrealistically positive light when compared to women that do not suffer DV;

e) men with DV present in their lives are more suspicious, hostile, guarded, overly sensitive, argumentative, prone to blame others, angry, impulsive, emotionally shallow and unpredictable and they have more negative interpersonal relationships with family and authority figures when compared with their counterparts.

Although the present results reach statistical significance, few reach clinical significance. Regarding the convergent validity, the Clinical MMPI-2 scales showed moderate to strong correlations with the BSI, BDI-II, STAI-Y, and the Validity scales of MMPI-2 showed moderate correlations with EDS-20 and DESCA, which meet expectations considering the constructs assessed and the similar approaches in these different instruments.

The current investigation has its limitations. Most of the information collected was reported by the individuals assessed in a forensic context subject to a "faking-good" pattern ruled by dishonesty and defensiveness, leading to low admission of maladaptive behaviors such as substance abuse and/or to random responding. Additionally, there are differences in the MMPI-2 profiles of parents, but the effects of said differences in the ultimate court decision have not been investigated. Future research could examine additional variables (e.g., ultimate court decision) as well as collect additional evidence to support or refute individuals' reported conduct (e.g., substance abuse, childhood maltreatment, etc.). Moreover, it has not been established if the differences in the MMPI-2 profiles of parents in the Child Custody and Child Protection context are a result of true psychopathology and/or situational stresses. Future research should focus on determining the moderators to the deviations in the MMPI-2 profiles of parents in this forensic context from the normative population. Lastly, the sample size included in this study was too small (women: n = 49; men: n = 40) to conduct a statistical analysis with generalizable results. Therefore, future research should strive to use bigger sample sizes.

In sum, this study contributes to the growing empirical data of the MMPI-2 in Portugal, especially in the Child Custody and Child Protection context as no other studies in this context were conducted in the Portuguese population. The present findings indicate the presence of differences in the

MMPI-2 profiles of parents involved in CCP and CPP and highlights the need for future research as well as specific norms for this forensic population.

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Appendices

Appendix A. T-scores interpretation of the MMPI-2 Clinical and Validity scales

Scale	Score	Interpretation
VRIN/TRIN	T ≥ 80	Profile uninterpretable
F	80 ≥ T ≥ 89	Moderate responding to infrequently endorsed items; symptom profiles likely valid
	90 ≥ T ≥ 109	Exaggerated symptom presentation; profile may be invalid
	T = 110	Profile clearly invalid and not interpretable
Fp	70 ≥ T ≥ 99	Exaggerated responding to infrequently endorsed items; symptom profiles may be invalid
	T ≥ 100	Exaggerated symptom presentation; clinical profile likely invalid
L	65 ≥ T ≥ 79	Overly virtuous claims; profile may be invalid due to defensiveness
	T ≥ 80	Clearly exaggerated pattern of overly favorable self-presentation; profile likely invalid
K	65 ≥ T ≥ 69	Test defensiveness; possibly invalid profiles
	T ≥ 70	Extreme test defensiveness; profiles likely invalid
S	T ≥ 65	Pattern of overly favorable self-presentation; possible defensive responding
	T ≥ 70	Exaggerated pattern of overly favorable self-

		presentation; profile likely invalid
Clinical scales	T < 45	Low score; no interpretation
	45 ≥ T ≥ 54	Average score; no interpretation
	55 ≥ T ≥ 64	Moderate score elevation
	65 ≥ T ≥ 74	High scores
	T ≥ 75	Extremely high scores

University of Minnesota Press (2015a, 2015c)

Appendix B. Data Sociodemographic Form

Tipo de Processo:

0=RERP; 1=PPP

Idade:

Sexo:

0=Masculino; 1=Feminino

Estado Civil:

0=Solteiro; 1=União de facto/Casado; 3=Separado/Divorciado; 5=Viúvo

Habilitações Literárias:

0=S/H; 1=1.º Ciclo (1.º ano - 4.º ano); 2=2.º Ciclo (5.º ano – 6.º ano); 3=3.º Ciclo (7.º ano – 9.º ano); 4=Secundário (10.º ano – 12.º ano); 5=Bacharelato; 6 = Licenciatura; 7 = Mestrado; 8=Doutoramento

Profissão:

0=Profissões das Forças Armadas; 1=Quadros Superiores da Administração Pública, Dirigentes e Quadros Superiores de Empresa; 2=Especialistas das Profissões Intelectuais e Científicas; 3=Técnicos e profissionais de Nível Intermédio; 4=Pessoal Administrativo e Similares; 5=Pessoal dos Serviços Pessoais, de Proteção e Segurança e Vendedores; 6=Agricultores e Trabalhadores Qualificados da Agricultura, da Pesca e da Floresta; 7=Trabalhadores qualificados da Indústria, Construção e Artífices; 8=Operadores de Instalações e Máquinas e Trabalhadores da Montagem; 9=Trabalhadores Não Qualificados; 10=Desempregado; 11=Estudante; 12= Reformado

Trajetória de Desenvolvimento

Maus-tratos na infância:

0=NS/NR; 1=Ausentes; 2=Presentes; 3=Alegados

Consumos álcool e substâncias:

0=Nunca Consumiu; 1=Já consumiu e não consome; 2=Consome; 3= Há alegações de consumos

Tipo de consumos:

0=Ausentes; 1=Álcool; 2=Erva/marijuana; 3=Cocaína/anfetamina/ecstasy/crack; 4=Barbitúrico; 5=Heroína/ mescalina; 6=Medicamentos; 7= Outro

História médica:

0=Ausente; 1=Hepatite C; 2=VIH-SIDA; 3=Outro – QUAL:

Doença ou Perturbação Mental:

0=NS/NR; 1= Passada; 2= atual; 3= passada e atual; 4=Alegada

Tipo de doença/perturbação mental

(Descrição do relatório)

Acompanhamento Psicológico/Médico Atual:

0=Ausente; 1=Psicologia; 2=Psiquiatria; 3=Psicologia e Psiquiatria; 4=Outro

Se existe, motivos:

Medicação:

0=Ausente; 1=Presente, cumprida; 2=Presente, não cumprida; *3= Medicação s/ controlo médico*

Violência doméstica atual:

0=Ausente; 1=Presente; 2=Alegada

Papel na Violência Doméstica:

1=Vítima; 2=Agressor; 3=Ambos

Antecedentes criminais:

0=NS/NR; 1=Ausentes; 2=Presente; 3=Alegado

Se sim, tipo de crime:

Appendix C. Sociodemographic characteristics of the sample

Table C1. Sociodemographic characteristics of women

		n	%
Type of Process	CCP	13	26,5%
	CPP	36	73,5%
Age	21-30	7	14,3%
	31-40	15	30,6%
	41-50	20	40,8%
	51-60	5	10,2%
	61-67	2	4,1%
Marital Status	Missings	2	4,1%
	Single	14	28,6%
	Married	11	22,4%
	Divorced	21	41,9%
	Widowed	1	2%
Education	Missings	2	4,1%
	No education	0	0%
	1st – 4rd grade	0	0%
	5th – 6th grade	4	8,2%
	7th – 9th grade	11	22,4%
	10th – 12th grade	13	26,5%
	Higher education	19	38,8%
Profession	Missings	3	6,1%
	Armed Forces Occupations	0	0%

	Managers	1	2,0%
	Professionals	9	18,4%
	Technicians and Associate Professional	2	4,1%
	Clerical Support Workers	5	10,2%
	Service and Sales Workers	6	12,2%
	Skilled Agricultural, Forestry and Fishery Workers	0	0%
	Craft and Related Trades Workers	0	0%
	Plant and Machine Operators and Assemblers	0	0%
	Elementary Occupations	7	14,3%
	Unemployed	14	28,6%
	Student	0	0%
	Retired	2	4,1%
Childhood abuse	DK/NA	0	0%
	Absent	42	85,7%
	Reported	7	14,3%
Drug abuse	Never consumed	46	93,9%
	Consumed but does not consume	1	2%
	Consumed and consumes	2	4,1%
	Consumes	0	0%
	Allegations of consumption	0	0%
Types of drug abuse	Missings	1	2,0%
	No drug abuse	46	93,9%
	Alcohol	0	0%
	Cannabis (Marijuana/Pot/Weed)	0	0%
	Cocaine/amphetamines/ecstasy/crack	1	2%
	Barbiturates	0	0%
	Heroin/mescaline	0	0%
	Medication	0	0%
	Cocaine and Heroin	0	0%
	Cocaine, Hashish and Heroin	0	0%
	Hashish	0	0%
	Heroin and alcohol	0	0%
	Hashish, Cannabis, Cocaine, Heroin, Ecstasy and Shrooms	1	2%
Medical History	No medical history	35	71,4%
	Hepatitis	0	0%
	HIV/AIDS	0	0%
	Other	14	28,6%
Presence of Medical History	No medical history	35	71,4%
	Medical history present	14	28,6%
Mental Illness	No Mental Illness	28	57,1%
	Mental Illness	21	42,9%
Type of Mental Illness	DK/NA	32	65,3%
	Depression	6	12,2%
	Depression and anxiety	2	4,1%
	Depression with suicidal ideation	2	4,1%
	Substance use disorder	1	2%

	Depression with psychosis	1	2%
	PTSD	1	2%
	Suicidal ideation	1	2%
	Suicide attempts	1	2%
	Panic attacks	0	0%
	Bipolar with psychosis	1	2%
	Borderline	1	2%
	PHDA	0	0%
Current Psychological/Medical Care	Missings	0	0%
	No care	27	55,1%
	Psychology	10	20,4%
	Psiquiatry	6	12,2%
	Psychology and Psychiatry	4	8,2%
	Other	2	4,1%
Presence of Psychological/Medical Care	Without Care	27	55,1%
	With Care	22	44,9%
Medication	Missings	0	0%
	No medication	31	63,3%
	Present, taken	15	30,6%
	Present, not taken	3	6,1%
	Medicated without medical oversight	0	0%
Presence of DV	Missings	1	2%
	No DV	25	51%
	DV Present	23	47%
DV	Missings	1	2%
	No DV	25	51%
	Past	11	22,4%
	Current	0	0%
	Past and current	12	24,5%
Type of Violence	Missings	41	83,7%
	Intimate partner violence	2	4,1%
	Child abuse	5	10,2%
	IPV and Child abuse	1	2%
Role in DV	Victim	16	32,7%
	Aggressor	3	6,1%
	Both	4	8,2%
	No DV/DK/NA	26	53,1%
Criminal record	DK/NA	1	2,0%
	No criminal record	45	91,8%
	Present	1	2,0%
	Ongoing/closed criminal case	2	4,1%

Table C2. Sociodemographic characteristics of men

		n	%
Type of Process	CCP	15	37,5%
	CPP	25	62,5%
Age	21-30	7	17,5%
	31-40	13	32,5%
	41-50	14	35%
	51-60	4	10%
	61-67	2	5%
Marital Status	Missings	1	2,5%
	Single	11	27,5%
	Married	9	22,5%
	Divorced	19	47,5%
	Widowed	0	0%
Education	Missings	1	2,5%
	No education	0	0%
	1st – 4rd grade	0	0%
	5th – 6th grade	2	5,0%
	7th – 9th grade	10	25,0%
	10th – 12th grade	12	30,0%
	Higher education	15	37,5%
Profession	Missings	4	10%
	Armed Forces Occupations	3	7,5%
	Managers	1	2,5%
	Professionals	8	20%
	Technicians and Associate Professional	4	10%
	Clerical Support Workers	1	2,5%
	Service and Sales Workers	4	10%
	Skilled Agricultural, Forestry and Fishery Workers	0	0%
	Craft and Related Trades Workers	0	0%
	Plant and Machine Operators and Assemblers	2	5%
	Elementary Occupations	10	25%
	Unemployed	2	5%
	Student	0	0%
	Retired	0	0%
Childhood abuse	DK/NA	1	2,5%
	Absent	32	80%
	Reported	7	17,5%
Drug abuse	Never consumed	33	82,5%
	Consumed but does not consume	3	7,5%
	Consumed and consumes	2	5%
	Consumes	0	0%
	Allegations of consumption	2	5%
Types of drug abuse	Missings	0	0%
	No drug abuse	33	82,5%
	Alcohol	3	7,5%
	Cannabis (Marijuana/Pot/Weed)	1	2,5%
	Cocaine/amphetamines/ecstasy/crack	0	0%

	Barbiturates	0	0%
	Heroin/mescaline	0	0%
	Medication	0	0%
	Cocaine and Heroin	1	2,5%
	Cocaine, Hashish and Heroin	1	2,5%
	Hashish	0	0%
	Heroin and alcohol	1	2,5%
	Hashish, Cannabis, Cocaine, Heroin, Ecstasy and Shrooms	0	0%
Medical History	No medical history	39	97,5%
	Hepatitis	0	0%
	HIV/AIDS	0	0%
	Other	1	2,5%
Mental Illness	No Mental Illness	36	90%
	Mental Illness	4	10%
Type of Mental Illness	DK/NA	36	90%
	Depression	1	2,5%
	Depression and anxiety	0	0%
	Depression with suicidal ideation	0	0%
	Substance use disorder	1	2,5%
	Depression with psychosis	0	
	PTSD	0	0%
	Suicidal ideation	0	0%
	Suicide attempts	0	0%
	Panic attacks	1	2,5%
	Bipolar with psychosis	0	0%
	Borderline	0	0%
	PHDA	1	2,5%
Current Psychological/Medical Care	Missings	1	2,5%
	No care	34	85%
	Psychology	2	5%
	Psiquiatry	0	0%
	Psychology and Psychiatry	3	7,5%
	Other	0	0%
Medication	Missings	1	2,5%
	No medication	35	87,5%
	Present, taken	4	10%
	Present, not taken	0	0%
	Medicated without medical oversight	0	0%
Presence of DV	Missings	0	0%
	No DV	21	52,5%
	DV Present	19	47,5%
DV	Missings	0	0%
	No DV	21	52,5%
	Past	13	32,5%
	Current	0	0%
	Past and current	6	15,0%
Type of Violence	Missings	21	52,5%

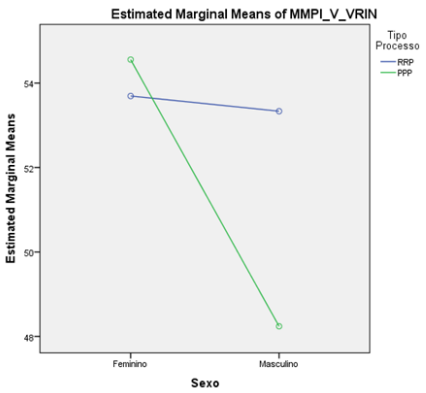
	Intimate partner violence	15	37,5%
	Child abuse	3	7,5%
	IPV and Child abuse	1	2,5%
Role in DV	Victim	1	2,5%
	Aggressor	14	35%
	Both	3	7,5%
	No DV/DK/NA	22	55%
Criminal record	DK/NA	0	0%
	No criminal record	20	50%
	Present	8	20%
	Ongoing/closed criminal case	12	30%

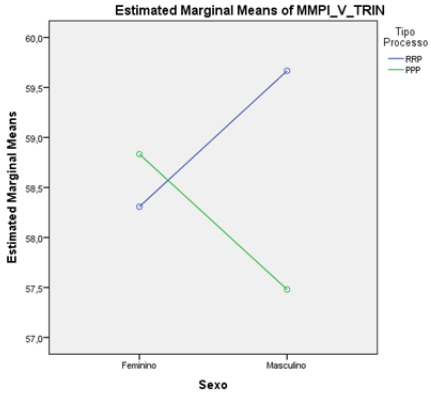
Appendix D. Reliability Coefficients for MMPI-2 (Wise et al., 2010)

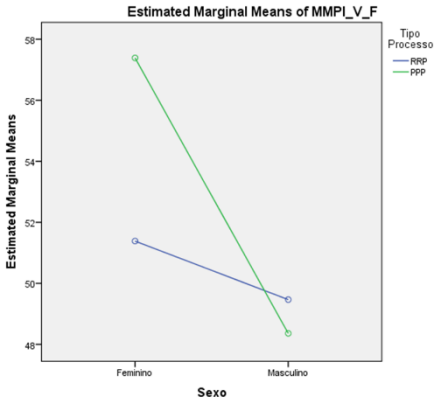
Scales / **Clinical Scales**	**α**	r_{tt}
Hs	.77/.81	.76/.75
D	.59/.64	.79/.80
Hy	.58/.56	.70/.74
Pd	.60/.62	.79/.69
Mf	.58/.37	.83/.74
Pa	.34/.39	.67/.56
Pt	.85/.87	.72/.68
Sc	.85/.86	.72/.54
Ma	.58/.61	.80/.65
Si	.82/.84	.93/.92

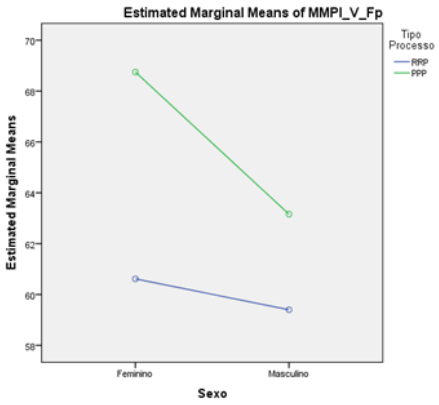
Note: first number is for men, second is for women. Hs = Hypochondriasis; D = Depression; Hy = Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity/Femininity; Pa = Paranoia; Pt = Psychasthenia; Sc = Schizophrenia; Ma = Hypomania; Si = Social Introversion.

Appendix E. Profile Plots of Estimated Marginal Means for men and women, according process type






Estimated Marginal Means of MMPI_V_F
Estimated Marginal Means
Tipo Processo
RRP
PPP
Feminino
Masculino
Sexo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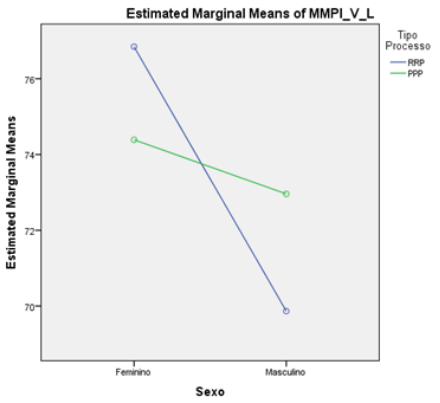
Estimated Marginal Means
Tipo Processo
RRP
PPP
Feminino
Masculino
Sexo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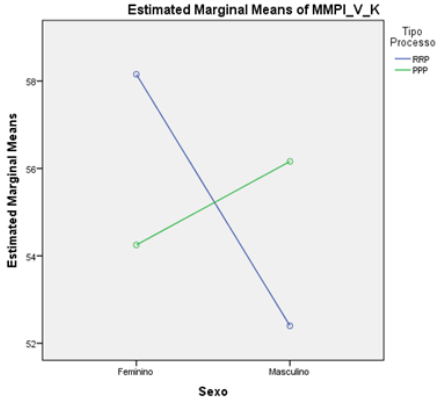
Estimated Marginal Means
Tipo Processo
RRP
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
Tipo Processo
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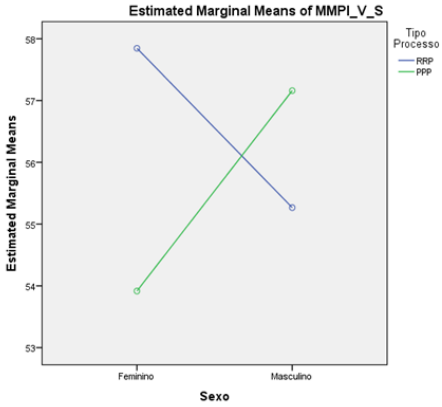
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
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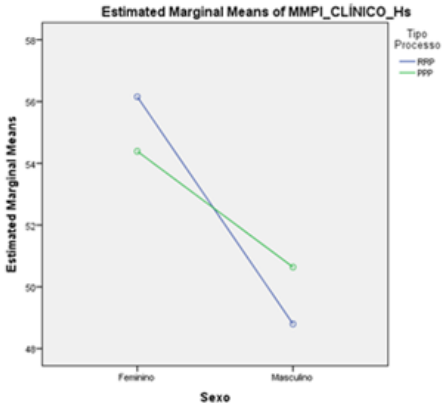
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
Tipo Processo
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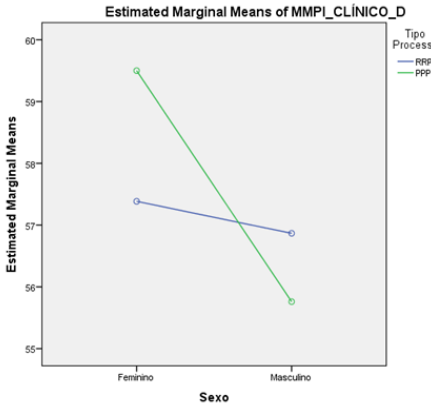
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
Tipo Process
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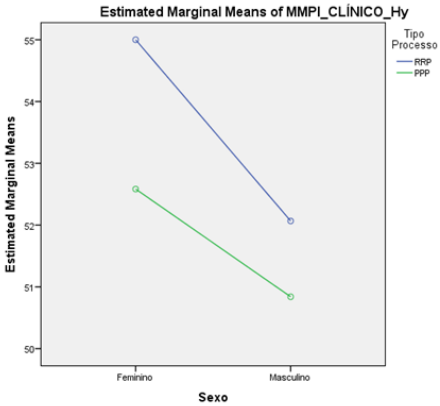
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
Tipo Processo
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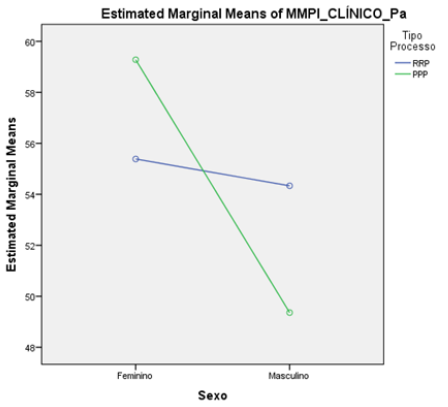
PPP
Feminino
Masculino
Sexo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Estimated Marginal Means
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PPP
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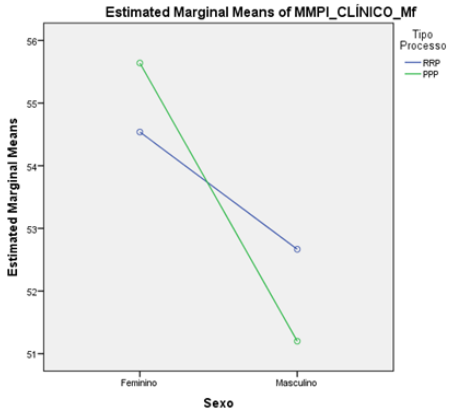
58
56
54
52
50
48
Feminino
Masculino
Sexo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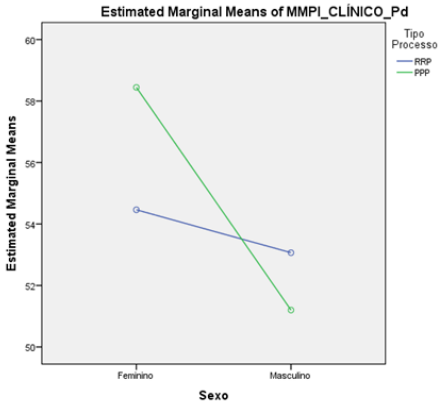
55
54
53
52
51
Feminino
Masculino
Sexo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PPP
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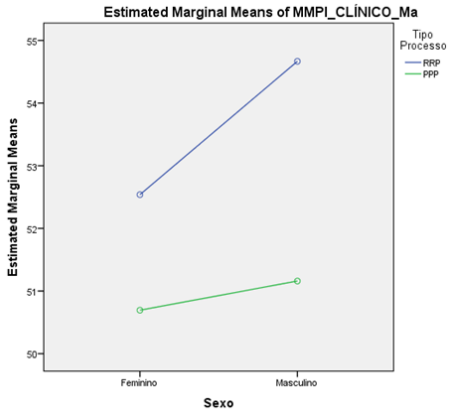
56
54
52
50
Feminino
Masculino
Sexo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PPP
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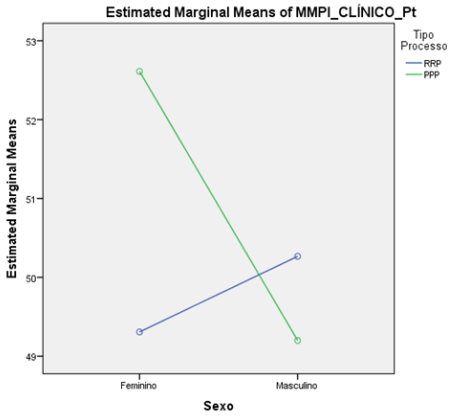
53
52
51
50
Feminino
Masculino
Sexo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Estimated Marginal Means
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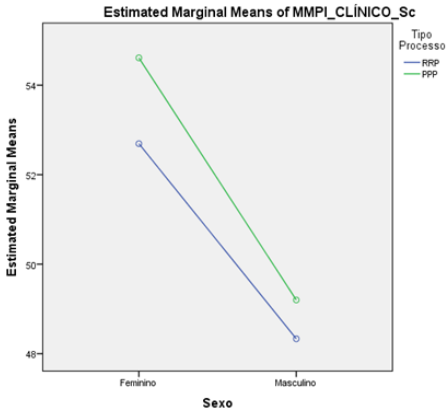
PPP
53
52
51
50
49
Feminino
Masculino
Sexo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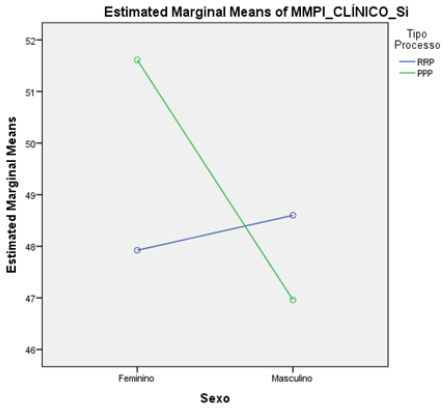
Estimated Marginal Means
Tipo Processo
RRP
PPP
54
52
50
48
Feminino
Masculino
Sexo


Estimated Marginal Means of MMPI_CLÍNICO_Si
Estimated Marginal Means
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52
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Appendix F. Mann-Whitney U Test for Type of Process

Table F1. Women's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	227,500	213,000	173,000	142,000	210,000	184,000	188,500
Wilcoxon W	893,500	304,000	264,000	233,000	876,000	850,000	854,500
Z	-,149	-,512	-1,388	-2,129	-,548	-1,135	-1,032
Asymp. Sig.	,882	,608	,165	,033	,583	,256	,302

Table F2. Women's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	210,500	182,500	204,500	195,500	206,500	195,500	188,500	203,500	203,000	172,500
Wilcoxon W	876,500	273,500	870,500	286,500	297,500	286,500	279,500	294,500	869,000	263,500
Z	-,535	-1,172	-,671	-,875	-,625	-,877	-1,034	-,693	-,705	-1,395
Asymp. Sig.	,592	,241	,502	,382	,532	,381	,301	,489	,481	,163

Table F3. Women's Mann-Whitney U Test: Mean Rank

Process Type	N	Mean Rank
CCP	13	17,92
CPP	36	27,56
Total	49	

Table F4. Men's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	133,500	154,500	179,000	169,500	158,500	147,000	175,000
Wilcoxon W	458,500	479,500	504,000	289,500	278,500	267,000	295,000
Z	-1,521	-,961	-,241	-,514	-,816	-1,135	-,350
Asymp. Sig.	,128	,337	,810	,607	,415	,256	,727

Table F5. Men's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	129,500	184,000	170,500	176,000	169,500	139,000	182,500	162,500	139,000	162,500
Wilcoxon W	249,500	509,000	495,500	501,000	494,500	464,000	507,500	282,500	464,000	487,500
Z	-1,636	-,098	-,477	-,322	-,505	-1,365	-,140	-,702	-1,372	-,700
Asymp. Sig.	,102	,922	,633	,747	,613	,172	,888	,483	,170	,484

Appendix G. Paired Samples T-Test

Table G1. M, SD, t, df, *p* values for Validity and Clinical scales

	M	SD	t	df	*p*
VRIN	3,406	13,327	1,446	31	,158
TRIN	,156	11,046	,080	31	,937
F	4,969	13,158	2,136	31	,041

Fp	4,000	21,085	1,073	31	,291
L	5,969	14,134	2,389	31	,023
K	2,563	14,341	1,011	31	,320
S	,031	10,745	,016	31	,987
Hs	5,719	12,033	2,688	31	,011
Pd	4,750	12,570	2,138	31	,041
Mf	4,344	11,258	2,183	31	,037
Pa	6,250	12,271	2,881	31	,007
Pt	2,188	9,515	1,300	31	,203
Sc	6,156	11,133	3,128	31	,004
Ma	-1,469	10,346	-,803	31	,428
Si	2,938	9,987	1,664	31	,106

Table G2. Mean and Std. Deviation of Women and Men in the F, L, Hs, Pd, Mf and Pa scales

	M	SD		M	SD
F_W	52,22	11,106	**Pd_W**	56,03	10,751
F_M	47,25	8,417	**Pd_M**	51,28	8,796
L_W	77,38	11,324	**Mf_W**	54,84	9,077
L_M	71,41	12,554	**Mf_M**	50,50	7,654
Hs_W	54,09	9,348	**Pa_W**	55,88	8,237
Hs_M	48,38	7,294	**Pa_M**	49,63	8,717
Sc_W	53,34	9,314			
Sc_M	47,19	6,645			

Appendix H. Kruskal-Wallis H Test for age

Table H1. Women's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	3,726	3,547	2,786	2,582	1,856	3,703	4,426
df	4	4	4	4	4	4	4
Asymp. Sig.	,444	,471	,594	,630	,762	,448	,351

Table H2. Women's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	,895	2,225	1,239	1,861	2,521	8,795	8,466	6,453	2,161	2,743
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	,925	,694	,872	,761	,641	,066	,076	,168	,706	,602

Table H3. Men's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	4,931	4,872	5,231	8,744	1,196	6,082	2,628
df	4	4	4	4	4	4	4
Asymp. Sig.	,294	,301	,264	,068	,879	,193	,622

Table H4. Men's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	6,286	2,798	6,537	4,462	,672	,925	3,862	7,654	9,302	4,738
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	,179	,592	,162	,347	,955	,921	,425	,105	,054	,315

Appendix I. Kruskal-Wallis H Test for educational level

Table I1. Women's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	9,190	,591	12,470	12,337	5,932	10,037	10,175
df	3	3	3	3	3	3	3
Asymp. Sig.	,027	,899	,006	,006	,115	,018	,017

Table I2. Women's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	2,504	5,291	1,725	1,136	4,020	8,536	4,837	6,580	5,125	7,641
df	3	3	3	3	3	3	3	3	3	3
Asymp. Sig.	,475	,152	,631	,768	,259	,036	,184	,087	,163	,054

Table I3. Women's Kruskal-Wallis H Test: Mean Rank

	Educational Level	n	Ranks
VRIN	5th – 6th grade	4	28,25
	7th – 9th grade	11	33,64
	10th – 12th grade	13	22,58
	Higher education	19	18,50
	Total	47	
F	5th – 6th grade	4	23,88
	7th – 9th grade	11	34,91
	10th – 12th grade	13	25,35
	Higher education	19	16,79
	Total	47	
Fp	5th – 6th grade	4	30,63
	7th – 9th grade	11	24,91
	10th – 12th grade	13	32,42

	Higher education	19	16,32
	Total	47	
	5th – 6th grade	4	26,00
	7th – 9th grade	11	13,77
K	10th – 12th grade	13	23,15
	Higher education	19	30,08
	Total	47	
	5th – 6th grade	4	27,13
	7th – 9th grade	11	14,91
S	10th – 12th grade	13	21,00
	Higher education	19	30,66
	Total	47	
	5th – 6th grade	4	17,00
	7th – 9th grade	11	33,64
Pa	10th – 12th grade	13	24,42
	Higher education	19	19,61
	Total	47	

Table I4. Men's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	,494	1,840	2,954	4,339	3,915	7,062	5,401
df	3	3	3	3	3	3	3
Asymp. Sig.	,920	,606	,399	,227	,271	,070	,145

Table I5. Men's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	6,845	3,640	7,720	1,785	5,971	2,074	6,901	3,307	1,380	,819
df	3	3	3	3	3	3	3	3	3	3
Asymp. Sig.	,077	,303	,052	,618	,113	,557	,075	,347	,710	,845

Appendix J. Kruskal-Wallis H Test for marital status

Table J1. Women's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	1,217	3,992	5,746	3,006	,875	3,115	4,253
df	3	3	3	3	3	3	3
Asymp. Sig.	,749	,262	,125	,391	,832	,374	,235

Table J2. Women's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	2,172	2,907	2,725	,882	3,894	1,686	1,284	1,772	3,985	4,228
df	3	3	3	3	3	3	3	3	3	3
Asymp. Sig.	,537	,406	,436	,830	,273	,640	,733	,621	,263	,238

Table J3. Men's Kruskal-Wallis H Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Chi-Square	,247	1,022	3,805	,742	7,078	2,407	3,603
df	2	2	2	2	2	2	2
Asymp. Sig.	,884	,600	,149	,690	,029	,300	,165

Table J4. Men's Kruskal-Wallis H Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Chi-Square	,329	,151	,720	,245	5,494	8,912	,152	1,277	1,536	,581
df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	,848	,927	,698	,885	,064	,012	,927	,528	,464	,748

Table J5. Men's Kruskal-Wallis H Test: Mean Rank

	Marital Status	N	Mean Rank
L	Single	11	12,82
	Married	9	19,83
	Divorced	19	24,24
	Total	39	
Pa	Single	11	22,23
	Married	9	10,17
	Divorced	19	23,37
	Total	39	

Appendix K. Mann-Whitney U Test for Medical History

Table K1. Women's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	225,000	242,500	191,000	155,000	177,000	217,500	238,000
Wilcoxon W	855,000	872,500	821,000	785,000	807,000	322,500	868,000
Z	-,447	-,060	-1,201	-2,036	-1,518	-,610	-,155
Asymp. Sig.	,655	,952	,230	,042	,129	,542	,877

Table K2. Women's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	192,000	218,500	186,500	241,000	175,000	211,500	212,500	223,500	235,000	201,000
Wilcoxon W	822,000	848,500	816,500	871,000	805,000	316,500	317,500	853,500	865,000	831,000
Z	-1,180	-,589	-1,300	-,089	-1,556	-,746	-,722	-,477	-,222	-,975
Asymp. Sig.	,238	,556	,194	,929	,120	,456	,470	,633	,824	,329

Table K3. Women's Mann-Whitney U Test: Mean Rank

	Medical History	N	Mean Rank
Fp	Absent	35	22,43
	Present	14	31,43
	Total	49	

Appendix L. Mann-Whitney U Test for Psychological/Psychiatric Care

Table L1. Women's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	252,500	201,500	264,500	273,500	263,500	296,500	291,500
Wilcoxon W	505,500	579,500	642,500	651,500	516,500	549,500	669,500
Z	-,903	-2,068	-,657	-,483	-,679	-,010	-,111
Asymp. Sig.	,366	,039	,511	,629	,497	,992	,912

Table L2. Women's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	293,000	279,500	284,000	230,500	253,500	293,500	282,500	239,500	245,500	273,000
Wilcoxon W	546,000	532,500	662,000	608,500	506,500	546,500	535,500	617,500	498,500	526,000
Z	-,081	-,354	-,262	-1,341	-,878	-,071	-,293	-1,159	-1,040	-,483
Asymp. Sig.	,936	,724	,793	,180	,380	,944	,770	,246	,299	,629

Table L3. Women's Mann-Whitney U Test: Mean Rank

	Psychological/Psychiatric Care	N	Mean Rank
TRIN	Absent	27	21,46
	Present	22	29,34
	Total	49	

Appendix M. Mann-Whitney U Test for Mental Illness

Table M1. Women's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	270,000	265,500	202,500	214,500	277,500	267,000	219,000
Wilcoxon W	676,000	671,500	608,500	620,500	508,500	498,000	450,000
Z	-,490	-,620	-1,858	-1,641	-,336	-,547	-1,517
Asymp. Sig.	,624	,535	,063	,101	,737	,584	,129

Table M2. Women's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	258,500	258,000	288,000	231,000	263,000	252,500	270,000	180,500	239,500	261,500
Wilcoxon W	664,500	664,000	519,000	637,000	669,000	658,500	676,000	586,500	645,500	667,500
Z	-,721	-,731	-,122	-1,277	-,629	-,843	-,487	-2,300	-1,106	-,658
Asymp. Sig.	,471	,465	,903	,201	,529	,399	,626	,021	,269	,511

Table M3. Women's Mann-Whitney U Test: Mean Rank

	Mental Illness	N	Mean Rank
Sc	Absent	28	20,95
	Present	21	30,40
	Total	49	

Appendix N. Mann-Whitney U Test for Domestic Violence

Table N1. Women's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	244,500	245,000	262,500	248,000	249,000	168,000	176,000
Wilcoxon W	520,500	570,000	538,500	524,000	574,000	493,000	501,000
Z	-,896	-,941	-,519	-,834	-,802	-2,473	-2,304
Asymp. Sig.	,370	,346	,604	,404	,423	,013	,021

Table N2. Women's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	239,000	260,500	180,000	232,500	271,000	271,500	256,000	255,500	255,000	238,000
Wilcoxon W	564,000	585,500	505,000	557,500	547,000	596,500	581,000	580,500	531,000	514,000
Z	-1,007	-,560	-2,228	-1,139	-,342	-,332	-,653	-,662	-,674	-1,023
Asymp. Sig.	,314	,575	,026	,255	,732	,740	,514	,508	,501	,306

Table N3. Women's Mann-Whitney U Test: Mean Rank

	Presence/Absence of DV	N	Mean Rank
K	Absent	25	19,72
	Present	23	29,70
	Total	48	

S	Absent	25	20,04
	Present	23	29,35
	Total	48	
Hy	Absent	25	20,20
	Present	23	29,17
	Total	48	

Table N4. Men's Mann-Whitney U Test: Validity scales

	VRIN	TRIN	F	Fp	L	K	S
Mann-Whitney U	177,500	149,000	187,000	154,000	182,500	199,000	187,500
Wilcoxon W	408,500	339,000	377,000	344,000	372,500	389,000	377,500
Z	-,601	-1,426	-,343	-1,260	-,464	-,014	-,326
Asymp. Sig.	,548	,154	,731	,208	,643	,989	,745

Table N5. Men's Mann-Whitney U Test: Clinical scales

	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
Mann-Whitney U	197,500	142,000	158,500	120,000	149,000	125,000	187,000	190,500	183,000	178,000
Wilcoxon W	387,500	373,000	389,500	351,000	380,000	356,000	418,000	421,500	414,000	409,000
Z	-,055	-1,564	-1,115	-2,161	-1,374	-2,033	-,340	-,245	-,452	-,584
Asymp. Sig.	,956	,118	,265	,031	,169	,042	,734	,806	,651	,559

Table N6. Men's Mann-Whitney U Test: Mean Rank

	Presence/Absence of DV	N	Mean Rank
Pd	Absent	21	16,71
	Present	19	24,68
	Total	40	
Pa	Absent	21	16,95
	Present	19	24,42
	Total	40	

Appendix O. Correlations between MMPI-2 Clinical scales and BSI, BDI and STAI-Y

Table O1. Correlation values for women

	BSI_SOMAT	BSI_OBS_COM	BSI_SENSI	BSI_DEP	BSI_ANX	BSI_HOST	BSI_PHO_ANX	BSI_PARANÓID	BSI_PSYCH	BSI_GSI	BSI_PST	BSI_PSDI	BDI_TOTAL	STAI_Y1_TOTAL	STAI_Y2_TOTAL
Hs	,697**	,457**	,449**	,689**	,395*	,444**	,401*	,414*	,791**	,226	,530**	,343*	,648**	,641**	,640**
D	,469**	,347*	,485**	,584**	,218	,244	,394*	,372*	,597**	,129	,427**	,270	,513**	,400*	,616**
Hy	,659**	,397*	,396*	,590**	,413*	,378*	,481**	,272	,623**	,157	,408*	,256	,563**	,526**	,470**

Pd	,647**	,366*	,482**	,519**	,488**	,340*	,412*	,327	,515**	,358*	,403*	,421*	,584**	,516**	,540**
Mf	,060	,126	,183	,049	,043	,162	,143	,147	,126	-,036	,111	,189	,048	,138	,012
Pa	,542**	,602**	,622**	,646**	,566**	,547**	,644**	,509**	,627**	,336*	,641**	,380*	,619**	,604**	,733**
Pt	,519**	,483**	,509**	,698**	,406*	,366*	,501**	,539**	,691**	,102	,576**	,364*	,669**	,579**	,753**
Sc	,536**	,545**	,620**	,667**	,448**	,414*	,602**	,442**	,615**	,372*	,523**	,478**	,672**	,577**	,658**
Ma	,303	,371*	,193	,315	,445**	,347*	,393*	,320	,280	,225	,334*	,401*	,281	,486**	,348
Si	,199	,342*	,410*	,392*	,098	,183	,282	,383*	,496**	,033	,345*	,293	,434*	,252	,435*

Note: * p < .05, ** p <.01

L = Lie; F = Infrequency; K = Correction; VRIN = Variable Response Inconsistency; TRIN = True Response Inconsistency; Fp = Infrequency – Psychopathology; S = Superlative Self-Presentation; Hs = Hypochondriasis; D = Depression; Hy = Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity/Femininity; Pa = Paranoia; Pt = Psychasthenia; Sc = Schizophrenia; Ma = Hypomania; Si = Social Introversion.

Table O2. Correlation values for men

	BSI_SOMAT	BSI_OBS_COM	BSI_SENSI	BSI_DEP	BSI_ANX	BSI_HOST	BSI_PHO_ANX	BSI_PARANÓID	BSI_PSYCH	BSI_GSI	BSI_PST	BSI_PSDI	BDI_TOTAL	STAI_Y1_TOTAL	STAI_Y2_TOTAL
Hs	,281	,099	,304	,454*	,422*	,224	,355	,182	,423*	,397*	,332	,144	,553**	,406	,567**
D	-,096	,106	,292	,301	,160	,068	,089	,416*	,157	,226	,199	,221	,354	,333	,447*
Hy	,165	,081	,177	,377*	,378*	,047	,251	,069	,341	,290	,257	-,069	,549**	,412	,549**
Pd	,241	,276	,353	,583**	,519**	,438*	,110	,419*	,508**	,508**	,456*	,198	,791**	,485*	,697**
Mf	,322	,261	,365	,365	,315	,286	,409*	,026	,572**	,393*	,391*	,183	,401	,286	,346
Pa	,421*	,414*	,456*	,373	,576**	,551**	,390*	,574**	,457*	,581**	,553**	,240	,521*	,425*	,801**
Pt	,483**	,337	,506**	,528**	,492**	,323	,575**	,226	,537**	,559**	,528**	,201	,538**	,379	,585**
Sc	,407*	,154	,434*	,364	,370	,230	,454*	,212	,392*	,421*	,406*	,075	,325	,242	,396
Ma	,669**	,289	,287	,483**	,640**	,441*	,613**	,199	,489**	,560**	,544**	,149	,438*	,031	,444*
Si	,291	,438*	,526**	,408*	,257	,200	,434*	,525**	,305	,450*	,420*	,397*	,335	,184	,384

Appendix P. Mean and Standard Deviation for Sociodemographic Variables

Table P1. Women's Sample: Mean and Standard Deviation for educational level

	Education Level	M	SD
K	5th – 6th grade	57.00	14.071
	7th – 9th grade	46.82	10.196

	10th – 12th grade	54.54	8.819
	Higher education	60.00	8.894
S	5th – 6th grade	56.75	7.182
	7th – 9th grade	48.09	10.144
	10th – 12th grade	52.54	10.236
	Higher education	59.68	8.035
VRIN	5th – 6th grade	57.00	3.830
	7th – 9th grade	62.36	11.093
	10th – 12th grade	53.38	7.633
	Higher education	49.58	10.232
F	5th – 6th grade	53.75	7.089
	7th – 9th grade	70.55	19.434
	10th – 12th grade	55.69	11.265
	Higher education	49.37	6.906
Fp	5th – 6th grade	71.00	7.659
	7th – 9th grade	70.00	23.862
	10th – 12th grade	76.62	16.949
	Higher education	57.00	11.926

Table P2. Men's Sample: Mean and Standard Deviation for marital status

	Marital Status	M	SD
L	Single	64.00	10.602
	Married	73.11	14.004
	Divorced	75.58	11.251
Pa	Single	54.09	11.140
	Married	43.00	5.123
	Divorced	53.74	10.893