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OBJECT RELATIONS IN PERSONALITY DISORDER: DEVELOPMENT OF THE "PROBLEMATIC OBJECT REPRESENTATION SCALES" (PORS) FOR THE AAI

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ABSTRACT

Over the past years, there has been an increasing interest in assessing object relations and studying the relationship between problematic object representations and different types of psychological disturbance. These efforts have emphasised the importance of the representation of interpersonal relationships in personality pathology. Representations of interpersonal relationships are given particular emphasis by the Attachment Theory (e.g., Bowlby, 1980/88), which highlights the importance of early relationships with caregivers in personality development. In fact, many patients with personality disorder exhibit significant difficulties in intimate relationships and can therefore be seen as having some degree of attachment disorder. The present study describes the development and reliability analysis of the "Problematic Object Representation Scales" (PORS) to be applied to the Adult Attachment Interview Protocol (George et al., 1996), in an effort to integrate object relations and personality disorder research. Levels of PORS are compared across different diagnostic groups revealing that personality disordered patients exhibit higher levels of "inconsistency", "inappropriate affect valence", and "disturbance of thinking" when compared to patients with other disorders and normal controls. Results also reveal significant associations between some of the PORS and other measures of personality functioning (e.g., *Reflective Functioning*, Fonagy et al., 1998; *Revised Adult Personality Functioning Assessment*, Hill & Stein, 2000) and early adversity (*Childhood Experiences of Care and Abuse*, Bifulco et al., 1994), although these associations seem mostly accounted for by the presence of personality disorder. Hence, the PORS appear to be a reliable method of assessing problematic object representations through the AAI and some of the scales are able to differentiate diagnostic groups on the basis of their object representations. Conclusions are drawn regarding the potential usefulness of the PORS in research and clinical contexts.

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CONTENTS

TABLES AND FIGURES

CHAPTER 4

CHAPTER 5

CHAPTER 6

CHAPTER 1

PERSONALITY DISORDER THEORY AND ASSESSMENT

1.1 Introduction

The importance of the study of personality has been recognised in many cultures since early times with current conceptions of personality and its disorders being the result of a long history. In recent years, there has been a proliferation of new models and theories of personality and an increased recognition of the role of enduring personality characteristics in the development of distinct forms of psychopathology. Personality is today regarded as a complex combination of psychological traits that are deeply rooted and contain many non-conscious dimensions, which manifest themselves in many aspects of the individual's functioning. Personality traits are seen as resulting from a complex composite of biological and acquired dispositions that act as a foundation and influence the way the individuals feel, think, and behave (Millon & Davis, 1996).

Personality disorder, in its turn, is often described as an "*...enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture*". This pattern is thought to be "*...inflexible and pervasive across a broad range of personal and social situations, to lead to clinically significant distress or impairment, and to be stable and of long duration...*" (DSM-IV, 1994, p.686). In a similar way, Kernberg (1984) claims that personality disorders are "*...as constellations of abnormal or pathological character traits of sufficient intensity to imply significant disturbance in intra-psychic and/or interpersonal functioning*" (p.77). Hence, the hallmark of personality disorder seems to be a long-term deviation from a certain cultural pattern, which is pervasive and results in impaired functioning in dealing with oneself and others. Moreover, it is widely accepted that personality disorder forms the basis upon which other less permanent disorders arise, with the personality dysfunction behaviours creating a certain degree of vulnerability to conditions such as depression and anxiety (e.g., Millon & Davis, 1996).

Different terms have been suggested to describe personality disorders (e.g., *character disorders*, *personality trait disturbances*), which have been originated in the context of different theoretical and clinical orientations. In fact, personality can be discussed from any number of perspectives. Major viewpoints include the neurobiological, psychodynamic, cognitive, and interpersonal. Even among the main theoretical frameworks, some perspectives offer a limited account of personality concepts and formulations, while others come up with entire systematic models able to generate classification systems of personality and its disorders (Millon et al., 2001). Next, some of the most important theoretical approaches to personality pathology will be briefly described. This outline merely represents a selection of some of the most systematised personality disorder perspectives and it is by no means intended to be a comprehensive review.

1. 2 Major theoretical approaches to personality disorder

1.2.1 Constitutional / biological theories

Constitutional or biological theories share the assumption that the biological basis of personality has a fundamental importance, claiming that all the aspects of personality are influenced by the first dimension to develop. Once temperament is established, they claim, some pathways in some areas of development are constrained while others are privileged. Hence, these theories emphasise the fact that personality is largely influenced by inborn dispositions and traits that, at the same time, predispose the individual to certain types of personality disorder. Biological theories of personality can be traced back to ancient studies, which sought to relate personality traits with physiognomic characteristics or body shape. In fact, these theories have evolved from the identification of body type and structure associated with certain character dispositions to the study of biological correlates of personality pathology in terms of central nervous system and neurochemical factors (Millon et al., 2001). Psychobiological personality correlates have indeed been looked at by several investigators.

Buss and Plomin (1975), for example, suggested a temperament theory of personality development, including four fundamental temperaments: *activity*, *emotionality*, *sociability*, and *impulsivity*. They propose that temperaments appear

always in combinations. Thus, for example, one possible combination identified is the so-called *extraversion pattern*, which results from a combination of high *sociability* with high *activity*. Moreover, the authors see temperaments as closely linked with adjustment. A child who is high on both *impulsivity* and *emotionality*, for instance, is likely to have problems in adapting to pressures for control of affect.

Also, Cloninger (1987) offered specific methods of classifying both normal and pathological personality variations based on his biosocial theory of personality, which draws from clinical, pharmacological, and biological data. He identifies three neurobiological personality dispositions described in terms of the basic stimulus-response dimensions of *novelty seeking*, *harm avoidance*, and *reward dependence*. Pharmacological evidence is offered that these are associated with specific neurotransmitters. Hence, *novelty seeking* is associated with dopamine, *harm avoidance* with serotonin, and *reward dependence* with noradrenaline. The combination of these three dimensions originates different personality types. Thus, for example, individuals with an obsessional personality, who are often seen as rigid, alienated, and self-effacing, are defined in terms of the basic response characteristics of low in *novelty seeking*, high in *harm avoidance*, and low in *reward dependence*.

In the last years, neurobiological studies of personality disorder have continued to proliferate and recent attempts have been made to integrate these perspectives with contributions from other theories, namely those emphasising the role of environmental factors. For example, very recently Renaud and Guile (2004) have proposed a bi-directional model of personality in which both genetic and environmental factors play a crucial role in the development of normal and disordered personality. Temperamental characteristics would be responsible for the selection or adaptation to the environment, which in its turn influences the development of certain personality traits. According to the authors, this perspective shows promise of ultimately leading to the identification of genetic markers associated with personality disorder.

1.2.2 Psychoanalytic theories

Psychoanalytic theories are among the most important and systematised theories of personality disorder. Psychoanalytic authors have highlighted the importance of aspects such as unconscious processes, defensive operations, and drives in the development of personality structure. They have also emphasised the importance of early intra-psychic and interpersonal difficulties as they continue to exert their influence later in life.

Freud (1932) started off the study of personality pathology by proposing a three-way system of character types described on the basis of the dominance exerted by each of the intrapsychic structures of his model. Hence, *erotic* personalities result from a dominance of the *id* and are characterised by arrest at the *oral stage*; those fixed at the *anal stage*, regulated by a strict superego that dominates all other functions, become *anankastic* or *compulsive* personalities; and those who are dominated by the ego became *narcissistic* personalities. Freud's original conceptions were subsequently developed and several psychoanalytic theorists attempted to introduce modifications to the structural model. Adler and Jung were among the first analysts to present typologies applied to normal characters rather than focusing on clinical symptoms.

The main concept in Adler's (1964) system is the notion of *striving for superiority.* Human beings are seen as conditioned by painful life experiences of inferiority, which leads to an attempt to compensate for the individual weaknesses - *reparative striving.* Interferences in normal development such as inadequate parental attitudes in early childhood, and adverse social conditions evoke strivings for power and superiority in the developing child. This pattern is seen as the basis for social maladjustments and personality disorders. Jung (1946), in his turn, developed the notions *extraversion* and *introversion* as basic dimensions of his model. He proposed four modes of psychological adaptation or functioning - *thinking*, *feeling*, *sensation*, and *intuition* - which are regarded as interacting with the dimension *introversion-extraversion.* Jung created a four-by-two matrix of eight basic types by combining his *introversion-extraversion* dimension with each of the four psychological functions.

After Adler and Jung, other psychoanalysts tried also to emphasise social aspects of personality while maintaining certain aspects of the traditional psychoanalytical approach. For example, Horney (1945) identified three different patterns or modes of interaction with others, which determine specific personality types. Hence "moving toward" people is found in the *compliant type*, "moving against" people in the *aggressive type,* and "moving away" from people in the *detached type.*

Other major developments in psychoanalytical conceptions of personality disorder since Freud's time include *ego psychology* and *object-relations theory.* Ego psychology theories focus on the functions and development of the ego and its influence on personality functioning. Fenichel (1945), for example, classified character organisations into *sublimation* and *reactive* types. *Sublimation types* are able to use instinctual energies in a way that is compatible with the aims of the ego whereas *reactive types* (sub-divided into *avoidant* and *oppositional*) result from conflicting instinctual energy that calls for the organisation of defensive operations.

Object-relation theories emphasise the importance of stable patterns of functioning in intimate relationships and the interpersonal cognitive and affective processes involved in these patterns. These theories have been regarded as one of the major developments in psychoanalysis since Freud's time. They represent in fact a shift from the study of intra-psychic conflict, related for example to sexual drives, toward an emphasis on interpersonal relationships. As an innovation in relation to the classical psychoanalytic view, object-relation theories highlight the importance of self and other representations in mediating functioning in interpersonal situations, and the basic need for relatedness that begins early in life (Westen, 1999). These theories will be addressed in more detail throughout the next chapter since they represent one of the relevant theoretical frameworks upon which the present work is based.

For the time being, just a brief reference should be made to the work of Otto Kernberg whose object-relations theory represents one of the most important approaches to the study of character pathology. He too has departed from the original psychosexual model of early psychoanalysts introducing the concept of

structural organisation of personality. Kernberg (1996) presents a three-way classification of personality disorders: (1) *neurotic*, (2) *borderline*, and (3) *psychotic personality organisations.* These differ in terms of their capacity to integrate the concept of self and significant others, defensive operations (e.g. *splitting*), and capacity for reality testing.

More recently, Fonagy (e.g., Fonagy et al., 1995a; Fonagy, 2000) has proposed a model where personality disorder is seen as originated in a deficit of *mentalization*, defined as the *capacity to think about mental states in oneself and others.* He suggests that the caregiver's capacity to reflect on his/her child's mental state facilitates the child's general understanding of mental states in his/herself and others. This process is regarded as mediated by a secure attachment, which offers the child a chance to learn about the caregiver's mind and thus learn about minds in general. Supporting this model, several studies (e.g., Fonagy et al., 1996) have found levels of low *Reflective Functioning* in the attachment narratives of individuals with borderline diagnosis. It is hypothesised that maladaptive schematic impressions of thoughts and feelings present in these individuals is the result of a continuing defensive disturbance in their capacity to reflect on mental states in themselves and in other people. In fact, some characteristics of the personality disordered, such as unstable sense of self in borderline individuals, are regarded as stemming from the developmental process associated with this incapacity to think in terms of mental states (Fonagy, 2000). This perspective is closely intertwined with attachment theory, whose main formulations and findings will be described in chapter 3.

1.2.3 Interpersonal models

In the last years, interpersonal perspectives have made important contributions to research in personality and its disorders. These perspectives share the idea that personality is best described as the social outcome of interactions with significant figures. Interpersonal theorists argue that internal representations of significant others are present at all times even when the individual is not socially interacting. Hence, all situations are seen as having an interpersonal character and need to be considered in the light of the principles of human interaction (Millon et al., 2001). Many of the interpersonal theories have their roots in psychoanalytic

approaches but they have diverged from them in the sense that they place less emphasis on intra-psychic than on social aspects of personality functioning.

Sullivan (1953), for instance, developed a comprehensive model of the structure and development of personality that emphasises the notion of *power motive* - an expression of biological needs but that goes beyond them. In fact, *power motive* includes not only organisms' efforts to maintain themselves in a stable balance with and in their environment, but to expand and to interact with extended circles of the environment. So the degree to which the *power motive* is fulfilled mainly determines the growth and characteristics of personality. Sullivan outlined a set of personality varieties based on the way the individual interacts with his environment, more specifically regarding the interaction with other people.

One of the most important developments in interpersonal theory, however, is Benjamin's *Structural Analysis of Social Behaviour* (SASB), which includes also aspects of other theories (e.g., object relations). In fact, Benjamim (1996) considered several cognitive, affective, and interpersonal dimensions to arrive at her formulation of personality disorders. The model is based on the work of other authors such as Freud and Sullivan and combines aspects related to sexuality, aggression, and dominance. The SASB is a circumplex model, so it arranges categories in a circle defined by two underlying axis or dimensions: *affiliation* (aggression vs. sexuality) and *interdependence* (dominance/submission vs. independence). Combinations of the four basics describe interpersonal and intrapsychic positions. The SASB also permits one to obtain an operational description of the major interpersonal patterns as well as their impact on oneself since the analysis of behaviour is conducted on three dimensions: focus on others, focus on self, and introjective focus (Benjamin, 1974).

1.2.4 Cognitive theories

For cognitive theorists, it is the way the person appraises interpersonal situations that influences the affective and behavioural responses to those situations. The emphasis is therefore placed not on objective realities or unconscious processes but on how events are construed by the individual (Millon & Davis, 1996). Likewise, the most important source of dysfunctional behaviour is considered to

lie in incorrect attributions. According to this view, individuals continuously perceive and interpret data from the environment and biases or distortions in perception and interpretation of experiences can lead to maladaptive responses. In fact, systematic errors in information processing are thought to play an important role in many forms of psychopathology (Pretzer & Beck, 1996).

Cognitive theories have been applied to several domains, especially to a wide range of Axis I disorders (e.g., depression). More recently, cognitive theories have been also applied to the study of personality and its disorders. Beck, Freeman, and associates (1990) developed a cognitive theory of personality pathology, which involves the notion of *maladaptive cognitive schemas* thought to shape the experiences of personality disordered people. Cognitive schemas or processes influence the way incoming experiences are appraised, and are incorporated into patterns of emotional and behavioural strategies. These habitual modes of reacting become ultimately *crystallised in personality traits.* Hence, distorted cognitive schemas tend to perpetuate biased judgments and cognitive errors in certain types of situations, which, in their turn, leave the individual vulnerable to pathology such as personality disorder (Beck et al., 1990).

Hence, personality disorders have been defined in this perspective as "*pervasive, self-perpetuating cognitive-interpersonal cycles that are dysfunctional enough to come to the attention of mental health professionals*" (Pretzer & Beck, 1996, p. 55). Pathological personality traits are regarded as maladaptive strategies, which are repeatedly activated whenever a problematic situation arises. This happens because these traits lead to persistent dysfunctional beliefs that have taken a structural place in the person's cognitive organization (Beck et al., 1990).

Cognitive theories have also proposed a model of personality disorder development. It is claimed that inherited predispositions play an important role in personality pathology and they are regarded as having resulted from a process of natural selection, which favoured those that guaranteed survival. In this perspective, there is a natural tendency toward certain "*primeval strategies*" contributing to the development of certain personality traits. However, cognitive theory also considers the role of learned personality characteristics. Parents and

significant others are regarded as influencing the development of the child's personality through the processes of modelling of behaviours, verbal communication, and cultural influences they transmit. Finally, this perspective also takes into account traumatic experiences; they are considered as crucial since they occur during the period where initial schemas and interpersonal strategies are being established (Pretzer & Beck, 1996).

Several studies (e.g., Perris et al., 1998; Dreessen et al., 1999; Beck et al., 2001) have recently tried to examine the relationship between specific sets of dysfunctional beliefs and certain types of personality disorder. These studies are based on the assumption that each personality disorder is characterised by certain beliefs related to maladaptive schemas (e.g., narcissistic patients often think that *other people should satisfy their needs*). Self-report measures are typically used in this type of study in order to assess schema-congruent information processing biases and it has been found that patients with different types of personality disorder preferentially endorse the beliefs theoretically linked to their specific disorder.

1.2.5 Evolutionary models

Evolutionary theories of personality disorder highlight the importance of universal postulates in describing personality models. Personality is here regarded as an adaptive style of functioning adopted by the organism in order to achieve adaptation to a specific environment. Personality disorder, in its turn, would correspond to maladaptive functioning patterns resulting from difficulties in adapting or relating to the environment (Millon & Davis, 1996).

Millon and colleagues (2001) proposed a model including different tasks that the individual has to undertake in order to guarantee its successful adaptation. The first one is the immediate survival of the organism, where the polarity *pleasure-pain* has a crucial importance. Behaviour with pleasant consequences would be repeated and generally promote survival, whereas behaviour regarded as painful would have the potential to threaten survival thus being inhibited. Individuals who repeat adverse experiences or who do not repeat pleasurable ones are selected against. The authors include in this group individuals with, for example, sadistic or schizoid personality disorder since they subvert the basic existential aim of

survival by seeking painful experiences or being unable to experience pleasurable ones, respectively.

The aim of sustaining survival is considered as the second universal task. Activities like eating and sleeping are aimed at maintaining the organism alive and are, according to this theory, either managed by assuming a *passive orientation* (the individual submits to environmental demands) or by assuming an *active orientation* (the individual tries to modify the environment according to his needs). Again, natural selection penalises individuals that fail to achieve a successful adaptation. The authors offer the example of individuals with antisocial personality disorder who act impulsively without considering the impact of their actions on the environment.

The third evolutionary task that the individual has to face is to guarantee a successful reproductive style. Individuals either invest in many offspring leaving them to fend for themselves or invest in long gestational periods but look after their offspring. The first strategy could be considered more egotistic or uncaring whether the second more protective or affiliative. A parallel is established between these reproductive styles and different types of personality disorder. For example, *strong self-orientation* is found among narcissistics whereas a *strong other-orientation* among dependents.

Hence, the fundamental aspect of Millon's theory is the fact that personality is regarded as resulting from the interplay of environmental and organism factors. Genetic and biological factors can influence the way the individual experiences the environment and difficulties arise when there is a conflict between individual and environmental demands (Millon & Davis, 1996).

1. 3 Assessment issues in personality disorder

Over the last years, the number of methods devised to assess personality disorder and personality traits associated with psychopathology has largely increased. This proliferation of measures was motivated by several circumstances, the most important of them happening in 1980 when the American Psychiatric Association (APA) officially recognised personality

disorders as a separate group of psychiatric entities by including them in separate "Axis II" in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; APA, 1980). Moreover, within psychology, the increasing interdependence between the disciplines of personality and psychopathology led to the development of convergent research. In fact, researchers from these two fields, whose research interests remained independent for decades, started to be aware of the advantages of applying knowledge obtained in *normal-range* personality research to the domain of psychopathology (Clark & Harrison, 2001).

After the clinical importance of personality disorders has been recognised through the emergence of classification systems and diagnostic categories, there was also an increasing need to develop assessment instruments. One of the fundamental issues in developing assessing methods is the distinction between *dimensional* versus *categorical* approaches (e.g., Farmer, 2000; Millon & Davis, 1996). The fundamental difference between the two is that categorical approaches draw a line between what they consider to be normal versus disordered personality, whereas dimensional approaches assume that personality disorders are artificial categories resulting from arbitrary points on a continuum. For those supporting the dimensional approach, differences along this continuum represent relevant individual differences as opposed to the existence of categories of normal and disordered personality types proposed by categorical perspectives.

The debate that opposes dimensional versus categorical positions has been going on for some years. The dimensional approach has been regarded as having some major advantages over the categorical one, namely in relation to its psychometric properties. Nevertheless, categorical models possess also desirable characteristics such as enabling an easy communication of the diagnosis by using a single category name, which encodes a large amount of information and makes it easier to make decisions in terms of treatment procedures (Farmer, 2000). Over the years, efforts have been made to integrate categorical and dimensional approaches in the measurement of personality disorders, with some DSM-based measures yielding both dimensional scores and categorical classifications (e.g., First et al., 1997).

Along with the debate on dimensional vs. categorical approaches, there is also the issue of the importance given to the number of symptoms vs. impaired interpersonal functioning when making a diagnostic decision of personality disorder. Although the DSM takes into account the degree of social impairment associated with personality pathology, the emphasis is placed on the number of positively addressed symptoms (e.g., mood swings), which provide the cut-off between normal and disturbed personality. Several authors (e.g., Drake & Vaillant, 1985) have claimed however that psychosocial functioning and personality disorder symptoms are intimately associated and that personality disorder translates directly into certain areas of psychosocial functioning such as intimate and work relationships. One of the most important contributions in this area has been made by Hill and colleagues (1989) who devised a measure that directly assesses interpersonal functioning in several real life domains. The APFA (Adult Personality Functioning Assessment) provides a way of directly measuring personality functioning taking into account not only the amount of impairments in psychosocial functioning but also their severity, type of relationships where they occur, pervasiveness across social domains, and persistence over time. Moreover, this measure does not focus on providing a categorical decision as to the presence or absence of personality disorder but rather to offer an overview of the areas of personality functioning most affected.

Despite recent efforts to develop alternative classification systems, the DSMs have been the official measure for the classification and assessment of personality disorders. In the last version of the manual - DSM-IV (APA, 1994) - personality disorders are divided into eleven categories grouped into three clusters. The first cluster includes the *paranoid*, *schizoid*, and *schizotypal* personality disorders and it is characterised by the presence of behaviours that are considered strange and unconventional. The second cluster includes the *histrionic*, *narcissistic*, *anti-social*, and *borderline* disorders, which share a tendency to display attention seeking, over-emotional, or inconsistent behaviour. The third cluster includes the *avoidant*, *dependent*, *compulsive*, and *passive-aggressive* personalities grouped together due to their marked anxiousness and fearfulness.

The classification system employed by the DSMs has been nevertheless criticised by several authors who pinpoint certain problems related to a classification based on a descriptive account of personality disorder symptoms. In fact, despite the several changes that have been introduced since the first version of the manual, personality disorder criteria as expressed in the last version of the DSM are still considered by some authors far from an ideal description of personality disorder core features (e.g., Tyrer, 1995). Limitations that have been highlighted include: (a) the self-report format, which overlooks non-conscious cognitive and affective material that the patient is unable to describe; some authors claim that even the interviews adapted to the DSM are basically interviewer-administered self-report questionnaires (e.g., Westen & Shedler, 1999a); (b) high comorbidity rates associated with personality disorder diagnoses, which suggests a lack of discriminant validity of constructs, instruments, or both (Farmer, 2000; Westen, 1997); (c) lack of agreement between different measures, with low rates of agreement specially between self-report and interview measures (e.g., Perry, 1992); (d) lack of developmental emphasis resulting from exclusive focus on current personality functioning (Zimmerman, 1994); (e) divergence from clinical practice and focus on surface behaviour or symptoms (e.g., Kernberg, 1984; Kernberg, 1996).

However, despite the criticism addressed to the DSMs, they have still been regarded by many as a tremendous advance in that they offer a practical way of identifying the criteria to be taken into account in the diagnostic decision. Because they provide a set of guiding "*operational criteria*", DSMs have played an important role in personality research (Millon & Davis, 1996), with a proliferation of measures designed to assess specifically the criteria included in the manual. Indeed, as described by Clark and Harrison (2001) several assessment methods have been devised to match the criteria expressed in the Axis II and most of these methods have already been adapted to match the criteria expressed in the fourth edition of the manual. Although most of these measures are self-report questionnaires (e.g., *Personality Diagnostic Questionnaire-4*, PDQ-IV, Hyler, 1994; *Millon Clinical Multiaxial Inventory-III*, Millon et al., 1997) there are several interview measures available to assess axis II disorders as well (e.g., *Diagnostic Interview for DSM-IV Personality Disorders*,

Zanarini et al., 1987; *Structured Clinical Interview for DSM-IV Axis II Personality Disorder*, SCID-II, First et al., 1997).

Other methods of assessing personality pathology include those approaches focused on trait dimensions of personality and its pathology. These methods are different from the ones just mentioned in that they do not aim at arriving at a specific categorical diagnosis and are not designed to perfectly match DSM categories. Besides the fact that they only partially match DSM conceptualisations, they differ also in that they assess the target construct in much more depth than the diagnostic-based measures do. Hence, there is a range of single-scale instruments used when one is interested in a particular sub-domain or trait of personality functioning. Again, there is a range of both self-report (e.g., *Inventory of Interpersonal Problems* – IIP, Horowitz, 1979) and semi-structured interview measures (e.g., *Diagnostic Interview for Borderline Patients* - DIB, Gundersoon et al., 1981*; Diagnostic Interview for Narcissism* - DIN, Gunderson et al., 1990) targeting personality pathology. Finally there are also some other trait measures that have been adapted to personality disorder measurement (e.g., *NEO-Personality Inventory-Revised* - NEO-PI-R, Costa & McCrae, 1992; *Tridimensional Personality Questionnaire* - TPQ; Cloninger et al., 1991) although they have been originally developed to measure normal-range traits (Clark & Harrison, 2001).

To this day, measures of personality disorder continue to be developed in the context of different theoretical orientations and by authors inspired by distinct clinical approaches to the treatment of personality disorders. For instance, the work of Westen and colleagues represents one of the most prominent attempts to develop alternative measures to assess personality disorder and associated dimensions. They devised a clinically-based personality disorder assessment procedure (SWAP-200, Westen & Shedler, 1999b), which includes complex aspects such as defensive operations, motivation, conflict among motives, affect regulation strategies, and so on. In this procedure, clinicians are asked to rate their patients according to descriptive statements, which offer both a personality description of a real patient in a given diagnostic category and a composite personality description of a specific type of patient (prototype). Within the framework of object-relation theories and based on clinical observation, Westen (1991a) has also developed a set of measures of dimensions of object relations

and social cognition thought to be relevant to personality disorder, including aspects such as difficulties in representing people in a complex way or incapacity for emotional investment. In fact, some of the most relevant attempts at better understanding interpersonal processes underlying personality disorder symptoms and behaviours have been carried out by authors conducting research within the object-relations theories framework. The basic tenants and formulations of this group of theories will be next described.

CHAPTER 2

OBJECT-RELATIONS THEORIES: ORIGINS AND BASIC FORMULATIONS

2.1 Introduction

Object relations can be broadly defined as the study of conscious and unconscious mental representations of external objects and include cognitive, affective, and experiential components. These mental representations are constantly updated by new experiences with significant people in the outside world and therefore there is a constant and bi-directional interaction between past and present interpersonal relations and the development of object representations (Blatt & Lerner, 1983).

Object-relations theories represent both a reaction to and an extension of the traditional psychoanalytic perspectives on interpersonal interactions. Relational theories reflect a move in psychoanalysis from a more biological, instinct-focused approach to a more interpersonal "nurture-centred" perspective (Bornstein, 1985). This idea is reinforced for instance by Kernberg (1976), who claims that object-relations theory "*represents a synthesis of a more impersonal psychoanalytic metapsychology, of individual psychology and psychopathology, and of a man's transcendence of his biological and psychological development*" (p. 131).

The emergence of object-relations theories marked in fact a turning point in psychoanalysis, with an increasing interest in studying the complex matrix of interpersonal interactions, namely early in life. Childhood relationships with parents have received special attention with the recognition of the formative role of primary human interactions. These are thought to be determinant of the subsequent personality structure, which is intimately linked to the quality of the representational world. In other words, the internalisation of early interactions with significant people helps to progressively organise the concept of self and

others, which in its turn influences subsequent interactions with significant people in the real world (Bornstein & Masling, 1994).

It is thought that when the child develops in an environment that enables gratifying interactions with the caregiver, these mental representations will progress into a differentiation between self and object, along with the integration of positive and negative aspects of the relationship between self and object. However, when the environment fails to provide the opportunity for satisfying interactions this capacity to associate positive and negative attributes in an integrated and complex fashion might be compromised; a deficient capacity to maintain clear boundaries between self and other often arises. These difficulties pave the way for the emergence of psychopathology in interpersonal relations, namely personality disturbance (Diguer et al., 2004).

Object-relations have been influenced by different areas in psychology, which has led to differences in the way several perspectives within the relational model conceptualise the nature of the object, its source, and characteristics. However, object-relations theories have in common the shift from the primacy of drives and instincts to the importance of relationships with others, either real or internalised. For instance, according to Greenberg and Mitchell (1983) these theories share several assumptions which distinguish them from early drive theories: a) the unit of study is no longer the isolated individual but the relational interface between the individual and significant people; 2) in the same way, psychological processes and psychopathology stem from the domain of the relationship; 3) the biological or instinctual needs are recognised to influence human behaviour and affective processes but they are modulated and overridden by the primary motivation – relationship with others.

2.2 The "drive" as inseparable from the "object"

Several authors who have offered reviews on the origin and development of object-relations theories seem to agree that its origins can be traced back to the writings of Freud and his structural/drive conceptions (e.g., Kernberg, 1976; Greenberg & Mitchell, 1983), even if some of the object relational perspectives have greatly diverged from the original drive formulations. Indeed, although

explicitly formulated only by object-relations theories, the idea of a world of representations of self, objects, and relationships among objects ruled by instinctual aggressive and libidinal energies was already implicit in the classical structural model. The early drive theory presupposes the existence of an *object* towards which the drive is directed. The word "object" meant initially the real person who either contributed to or prevented the satisfaction of the infant's instinctual drives. Hence, whereas to the classical theory the object is an external agent that provides gratification and upon which instinctual drives are discharged, for object-relations theories the relation with the object is of fundamental importance in itself, fulfilling the basic need for relatedness (Grotstein, 1982).

A number of formulations within object-relations theory have contributed to the shift in the conceptions associated with the notion of object and its impact on psychological life. Melanie Klein is considered one of the most prominent authors who marked the transition between traditional drive theories and theories of object relations (e.g., Kernberg, 1976; Greenberg & Mitchell, 1983; Fonagy et al., 1995b). She has done so by recreating the concept and nature of drives and their "objects" and attempting to combine the structural model with object-relations theories. Drives are no longer seen as oriented to an unspecified object (capable of satisfying the drive) but include a specified image of the object in the real world that is capable of providing satisfaction. In Greenberg and Mitchell's (1983) words, "*for Klein the object is more basic and essential; drives are inherently and inseparably directed towards objects*" (p. 136).

Klein (1957) arrived at her formulations by observing in her clinical practice that significant character pathology is much more likely to arise in individuals who did not have the opportunity to establish a satisfactory early relationship with a caregiver. In fact, throughout her work, she has attributed crucial importance to the earliest object relation – the relationship with the mother – and considered that this *primal object* forms the basis upon which an adequate development is laid. Klein takes a different perspective in relation to Freud with respect to the subject of pleasure, claiming that the infant is not able to feel complete enjoyment if the *capacity for love* is not satisfactorily attained. Whereas Freud sees the infant's pleasure in being fed as the prototype of sexual pleasure, Klein views this relationship with the mother as not only the foundation for sexual gratification but

of all joy, followed by a feeling of gratitude and closeness with another human being (Klein, 1957).

Klein is concerned with both retaining some aspects of the drive model – for instance, that all relevant components of psychological life are internally derived – while at the same time undertaking a basic shift in the perspective of human motivation and affective life, with the prominent role assigned to object relations. Klein has indeed elaborated on quite a few aspects of the Freudian theory, such as the idea of *internal objects.* She considers that underlying the individual's sense of self, behaviour, and affective states is an intricate system of internalised object relations, fantasies, and anxieties regarding the dynamics existing in this internal world of representations. Individuals are not involved solely with real people but also with internal images of the other. These mental representations are powerful entities that influence both the individual's affects and behaviour. As significant interactions with real people leave a powerful and enduring impression they contribute to delineating the subsequent attitudes and behaviour in the real world (Greenberg & Mitchell, 1983).

Related to this idea of an *internal world of objects* is Klein's formulation of two basic positions. In the beginning, the child is haunted by persecutory fears in a stage termed "paranoid position". The child attempts to avoid the harm that "bad objects" (external and internal) can cause by maintaining representations of them separated from the "good objects". The capacity to integrate "good" and "bad" objects comes later in infancy with the child being able to represent the mother as a whole. The child starts to be able to integrate fractured images of the mother, a complex object with both gratifying and frustrating aspects, and this marks the stage which Klein named "depressive position". Hence, for Klein, representations of the object in the developing child represent a developmental task that is attained when the individual is able to entertain a multifaceted image of the object. The child is then capable of integrating the split-off "good" and "bad", with disappearance of the separation between the idealised and persecutory components of the object (Klein, 1975).

Pathology can arise when, faced with internal or external pressures leading to an increased anxiety, the individual loses their primal "good object" (or its

substitutes) altogether. This leads to a regression or use of early splitting mechanisms employed by the self to protect it from internal and external "bad objects" (Klein, 1957). If persecutory fears are very strong the individual might not be able to work through the "paranoid/schizoid" position and can go back to a state where persecutory fears dominate (Klein, 1975).

2.3 The primacy of the "object" in relation to the "drive"

Along the same lines as Klein, but taking his object-relations theory a step further, Fairbairn felt that the ultimate aim of the libido is the *object*, that is, the primary aim of the infant is to establish relations with other human beings. He claims that psychoanalytic theory and its conceptions of drive/libido need to be revised into a theory of development essentially based upon object-relationships. Libidinal impulses are simply the means for regulating object-relationships and only when these are satisfactory, is true gratification attained - "*it is not the libidinal attitude which determines the object-relationship but the object-relationship which determines the libidinal attitude*" (Fairbairn, 1986, p. 77).

Going further than Klein – who claimed that objects were not secondary to drives but were built into the drives from the start – Fairbairn puts it the other way around with the object being the end rather than the means. He claims that the object is not built into the impulse or drive, but that the main feature of instinctual energy (libido) is that it is inherently *object-seeking*. The real end is to establish a relationship with others and pleasure is just the means for that overriding relatedness goal. Hence, the fundamental innovation of Fairbairn's view in relation to the structural/drive model is the idea that the child is oriented to other people from the start and that relations with others do not arise from the need to turn to an object because of their ability to reduce instinctual tensions. Instead, he sees the early search for contact with others as an adaptive behaviour designed to guarantee the infant's survival. In the same way, psychological disturbance is seen as arising not from conflicts associated with pleasure and drive satisfaction but to problems in the establishment or maintenance of satisfactory relationships with other human beings (Greenberg and Mitchell, 1983). Fairbairn is in fact considered to be the first author adopting a clearly object-relations perspective and to propose that the child is object-oriented from

birth. He is regarded as having "*provided the purest and clearest expression of the shift from the drive/structure model to the relational/structure model*" (Greenberg and Mitchell, 1983, p. 151).

The development of object-relationships is an ongoing process that starts with total dependence upon the object that gradually gives place to mature dependence. Initially, the infant is totally dependent upon the mother, not only in terms of satisfaction of basic physical needs but also satisfaction of its psychological well-being. After this initial stage of *infantile dependence*, there is a transition stage marked by conflict between the wish to advance to mature dependence and differentiation between self and object and a regressive apprehension about letting go of the primary dependence mode. Given the appropriate conditions that permit a safe dependence upon real objects, the child is ultimately able to renounce infantile dependence. For this to happen, the child needs reassurance that he/she is loved and cared for by his/her parents on one hand, and that the parents genuinely accept his/her love on the other. Failure to accomplish such a relationship will result in *substitute satisfactions* represented by internalised objects to which the individual turns to when there is failure to establish real satisfactory relationships in the external world (Fairbairn, 1986).

In fact, Fairbairn has a distinct view with respect to the origin and nature of internal objects. He talks of real relationships that are established throughout development with people in the real world and *internal objects* or representations are seen as a failure or a compensation for the failure to establish such relationships. Psychopathology happens when the ability to follow this natural sequence of relationships with other people is disrupted. He claims that the first internalisations of the object (e.g., the mother) stem from the dilemma of the need for relatedness versus unresponsiveness, absence, or instability on the part of the mother, which leads the child to turn to the imaginary world (Greenberg & Mitchell, 1983).

Hence, the innovation in Fairbairn's theory consists of the importance given to the object in itself and to the innate tendency to seek significant interactions with real people in the external world. This represents a slight deviation in relation to theories that retain the primacy of internally derived representations, such as

Klein's. Grotstein (1982), for instance, establishes a comparison between Fairbairn's and Klein's account of internal objects. Although similar to Klein, Fairbairn's theory is considered to be distinct in the sense that it is the reality of the perceived love/rejection by the mother (and not fantasy resulting from inability to represent reality) that is the main aspect upon which the psychological life is elaborated. The child is aware from the start of its need for an object and at the same time might experience rejection by that object. This would be followed by the need to keep the idealised quality of the object separated from the bad so that the object is not contaminated with the rejecting qualities. We have then "fantasy in the context of an internal world" (Klein) as opposed to the "phenomenology of experience in the external world" (Fairbairn), with the object more a less resembling the real person (Grotstein, 1982).

2.4 Beyond the "drive": Other developments in object-relations theory

Other authors have provided additional theories that have offered valuable contributions to the field of object-relations. They were not so concerned with challenging the classical basic formulations on the nature of drives and objects, but with offering their own contribution as either alternative or complementary to the structural/drive theory, sometimes inspired by ideas originated in other disciplines.

Winnicott, for instance, offered his own account of the quality of early object-relations, which has been regarded as autonomous and separate from instinctual processes. Unlike other authors, he does not try to integrate (e.g., Kernberg) or modify (e.g., Fairbairn) the drive model in its formulations, but simply establish his theory as a separate relational account (Greenberg & Mitchell, 1983). Winnicott claims that healthy development is made possible by the mother's capacity to meet the infant's needs and respond to its wishes. This creates a favourable environment that enables the child to be aware of its own physical needs; the empathic responses from the mother facilitate the development of a stable sense of self and lead to an harmonious development. He claims that what is needed is not a perfect performance on the part of the mother but simply what he calls "*good-enough mothering*". This is reflected in an adaptation through which the mother temporary identifies with her child in a *living partnership,* which involves

an attentive response to the child's needs and emotional containment. For this to happen, the mother needs to be freed from external reality so she can concentrate on the baby who becomes the object of her preoccupation (Winnicott, 1989). Once more, the most important thing is not the object as a way of satisfying food and protection needs but the relationship with the object in itself.

Winnicott (1989) also claims that because the child is initially so dependent on others, their behaviour must be a crucial aspect of the child's environment. The concept of the individual should be therefore replaced by the concept of environment, when referring to these early stages in the child's life. The baby is seen as a complex phenomenon that includes the baby plus its environment, that is, the child's development depends upon the child's experiences with the mother (as long as she exhibits an adaptive behaviour). Through *good-enough mothering*, the child learns to experience mutuality, which results from the mother's ability to adapt to the baby's needs. It is this *silent communication* that protects the baby from external adversities and that enables the developmental processes to become actual.

Another major advance in object-relations theories was the development of Bowlby's (1969) *theory of attachment,* which has been regarded as being in line with Fairbairn's work. For both, objects are seen as fundamentally accurate reproductions of real relationships with people. Bolwby's theory is considered to be a certain kind of object-relations theory (e.g., Eagle, 1995), but it nevertheless takes the idea of the relational object a step farther away from the original model, when compared to Klein's or even Fairbairn's. The most important thing is not the fantasies or internal representations of the object (Klein) or the representation of the actual object drive (Fairbairn) but the relationship itself, that is, the actual behaviour or interactional pattern exhibited in real human contacts (Kernberg, 1976).

Bowlby's main focus was on the mother-child relationship and the *attachment* to the primary caregiver was seen as the fundamental determinant of psychological life. Disturbance in this first attachment bond is regarded as having an important impact on later development, leading to difficulties and psychopathology.

Bowlby's work has been inspired by other disciplines such as ethology, biology, and evolutionary theory, which have greatly influenced the conceptualisation and methodology used in attachment theory research (Hinde & Stevenson-Hinde, 1991). In fact, attachment models have taken a different direction in terms of theory building based on empirical testing and have made use of a very specific methodology, which has inspired a great deal of research to this day. Bowlby's *attachment theory* will be addressed in more detail in the following chapter as the methodology employed in the current work results from research conducted within the attachment theory framework.

More recently, Otto Kernberg has offered one of the most well known object-relations theories attempting to integrate drive and object-relations theory into one single model. Kernberg (1976) claims that object-relations theory "*represents the psychoanalytic study of the nature and origin of interpersonal relations, and of the nature and origin of intrapsychic structures deriving, fixating, modifying, and reactivating past internalised relations with others in the context of present interpersonal relations*" (p. 56). He talks about *relation units* since representations of self and others are not regarded as existing independently. These units are composed of self and object representations connected by a drive or affect. He has integrated these ideas in his model of *structural analysis,* which describes the link between structural aspects of internalised object relations and three levels of personality organisation or mental functioning.

Kernberg (1976) describes five stages in the development of object relations. In the beginning there is a *normal autism or primary undifferentiated stage*, and a pathological arrest at this point would lead to a failure in developing the self-object image and consequent inability to establish the crucial symbiotic relationship with the mother. The second stage consists of a *normal symbiosis or primary undifferentiated self-object representations,* where there is the establishment of the "good" self-object matrix, which is a basic organiser for an integrated self; difficulty at this stage is marked by lack of differentiation of ego boundaries; at the end of this stage, the self-image and the object-image are differentiated within the core "good" self-object representation. Thirdly, there is the phase of *differentiation of self from object representations*, characterised by a differentiation of the self representations from the object representations also

within the core "bad" self-object representations; this results in an integrated self concept and also in an integration of good and bad object representations into *total object representations.* In the fourth stage, there is the development of *higher level intrapsychic object relations* where there is integration of both self and other libidinal and aggressively invested representations. In the final stage, there is the *consolidation of super-ego and ego integration,* resulting in a stable self and a stable sense of the internal world of integrated object images; the ego identity keeps on developing in the sequence of the interaction with external objects that give opportunity to reshaping the internal structures.

Kernberg has drawn his theory from the observation of severely disturbed patients with narcissistic and borderline personality disorders. He has offered a structural model to explain the different levels of pathological organisation that stem precisely from the failure to accomplish the developmental tasks involved in the aforementioned sequence. In his model of organisation of personality, three personality structures are included: (1) *psychotic* (2) *borderline*, and (3) *neurotic* organisations. The *psychotic* organisation is characterised by lack of integration of the concept of self and significant others, a predominance of primitive defensive operations centring on *splitting*, and loss of reality testing. All patients with this disorder are thought to possess atypical forms of psychosis. The *borderline* organisation is also characterised by identity diffusion (poorly integrated concept of self and others), predominance of primitive defensive operations, and various degrees of superego deterioration, but it is marked by the presence of good reality testing. This category includes all the severe personality disorders: borderline, schizoid, schizotypal, paranoid, hypomaniac, hypocondriasis, narcissitic, and antisocial. Finally, the *neurotic* personality organisation is characterised by normal ego identity and the capacity to establish deep object relations, ego strength (e.g., anxiety tolerance, impulse control), and capacity for emotional intimacy affected only by unconscious guilt feelings. This group includes personality disorders such as the hysterical, depressive-masochistic, and obsessive (Kernberg, 1996).

2.5 Object-relations research

Object-relations theories have helped to bridge the gap between traditional psychoanalysis and other areas of psychology by inspiring empirical research that seeks to test, verify, and expand psychoanalytic ideas. Indeed, one of the major contributions of object-relations theories that have been emphasised is the amount of empirical studies inspired by those formulations (e.g., Bornstein, 1985; Bornstein & Masling, 1994).

There has been in fact increased interest in assessing object relations and devising methods to examine representations of self and others. In a review on recent advances in the assessment of object relations Huprich and Greenberg (2003) distinguish two main lines of research in this area: 1) studies that relate psychopathology to differences in object relations; 2) psychotherapy outcome studies either treating object relations as a mediating factor or as an outcome variable. Hence, the majority of the studies assessing object representations focus on distinguishing diagnostic groups based on their object representations or on evaluating psychotherapy prognosis and outcome based on nature and complexity of object relations. Another line of research less developed but rather promising is investigating the relationship between one's object relations and other variables such as stressful life events and resilience of specific populations.

Several measures of object relations have been devised. They include methods such as those applied to projective tests (e.g., Rorschach Inkblot Method), self and other descriptions, psychotherapy interviews, early memories, and self-report instruments. Across all measures, lower level of object relations seems to be associated with severe psychopathology and poor treatment outcome. However, despite recent efforts to devise effective research programmes there have been also a few concerns with respect to the methodology involved in testing object-relations hypotheses.

Smith (1993), for example, highlights a common problem related to the lack of agreement as to what are the most appropriate methods for obtaining information necessary to characterise an object relationship. There is a certain difficulty in identifying variables that can be used to quantify the assumptions of a given

theoretical formulation. In other words, the process of operationalising the concepts related to object-relations theory seems to be quite challenging. This results in some divergent methods and points of view when designing empirical studies, with respect to the level (e.g., conscious/unconscious), content (e.g., complexity), structure (e.g., differentiation), and motivational aspects (e.g., social causality) of object relations that are being assessed.

Hence, as to the level of analysis for instance, projective studies have typically focused their attention on testing unconscious representations of the object, whereas self-report methods aim at tapping conscious aspects of object relations. In this regard, it is claimed that there has been a shift from assessing unconscious to assessing conscious aspects of descriptions of object relations, motivated by the need to devise more reliable techniques that can adapt to the increasingly sophisticated methods employed in this area. This is however done to the detriment of construct validity as most authors endorse the importance of unconscious representations in object-relations. Hence, differences in theoretical conceptions of object relations and mainly the difficulty in translating those concepts into variables that can be empirically assessed seem to be important issues to take into account regarding data collection and implementation of measurement strategies (Smith, 1993). The major challenge appears to be how to translate the complexity of the theoretical formulations into quantifiable variables, in other words, to combine good reliability with good validity.

Despite these difficulties, object-relations theories seem to have been appropriately integrated in contemporary research projects stemming from different areas of psychology such as developmental and social cognition. One of the most important aspects of research on object-relations has been considered its contribution to further understanding of human psychopathology (Huprich & Greenberg, 2003). Moreover, several authors (e.g., Westen, 1990; Smith, 1993) have highlighted the advantages of using a methodology that distinguishes different dimensions of object relations, instead of treating the phenomenon as unitary, since it has been shown that isolating different dimensions of object relations enables one to differentiate diagnostic groups which otherwise could not be distinguished. This seems to be the most valid and widely used approach in recent attempts to empirically study object relations, with most studies

recognising the multifaceted and relatively independent nature of different aspects of object relations (e.g., Blatt et al., 1979; Bell et al., 1986; Westen, 1990). Although inspired by diverse theoretical orientations, most researchers on object relations tend to agree that they involve relatively stable representations of self and others, which are coloured with affective and motivational qualities. There is also consensus with respect to the fact that early experiences of object relations strongly influence patterns of interpersonal behaviour throughout the individual's life and are a fundamental aspect in the development of different types of psychopathology.

CHAPTER 3

ATTACHMENT THEORY AND ADULT ATTACHMENT MEASUREMENT

3.1 Introduction

Over the last years, attachment theory and research have played a central role in the areas of developmental and clinical psychology and its contributions to the study of emotion and psychopathology have been remarkable. In fact, since its initial formulation, attachment theory has emphasised the crucial role of human attachments in the development of an effective personality functioning (Bowlby, 1980). Attachment theory postulates that it is part of human nature to establish affective bonds to specific individuals and that these bonds are present throughout the life cycle. During the first years of life, individuals become attached to the caregivers who provide comfort and protection (Bowlby, 1988).

Indeed, the infant's attachment behaviours are activated in situations where he or she feels threatened, anxious, tired, or in pain, and attachment behaviours such as touching and clinging have the aim of ensuring the protection of the child. The attachment figure is able to restore a sense of security by increasing the proximity to the child and responding appropriately to his/her distress. When this happens, the child trusts the attachment figure as a "secure base" and feels free to explore his/her surroundings and engage in activities outside the attachment relationship, which are essential to guarantee successful adaptation and survival (Bowlby, 1988).

An attachment relationship can be distinguished from other types of relational bonds by the presence of three basic features: (1) *proximity maintenance* - the child carefully monitors his/her distance from the mother and comes closer to her in face of danger; (2) *separation distress* - if there is a continued inaccessibility of the attachment figure the child shows signs of anxiety and exhibits behaviours to restore proximity; (3) *secure base effect* - the child is able to feel confident

enough to explore the environment if she knows that she can retreat to the mother for comfort in case of danger (Hazan & Zeifman, 1999).

Bowlby's ideas were given an empirical basis by the work of Ainsworth who, inspired by the main formulations of attachment theory, conducted a series of studies with mother-infant dyads (Ainsworth et al., 1978). Later on, attachment theory's basic formulations were also applied to adult development, which has grown to become one of the most important areas in attachment research. In fact, the core features of childhood attachment - desire to maintain proximity, distress upon separation, and reliance upon the attachment figure as a secure base - are considered to apply to adulthood as well as childhood attachments (e.g., Hazan & Zeifman, 1999). Attachment in adults has been studied mainly in terms of individual differences in mental representations of attachment relationships, which are thought to arise from successive interactions with significant figures. These *internal working models* influence subsequent relationships thus mediating the transition between early attachments and the establishment of new attachment bonds (Bretherton & Munholland, 1999).

3.2 The origins of attachment theory: Attachment and psychoanalysis

The basic assumption of attachment theory according to which there is an innate disposition to establish and maintain attachment relationships throughout life was developed on the basis of preliminary observations conducted by Bowlby. He started his studies by the observation of young offenders who had suffered early loss and trauma. In order to investigate the long-term consequences of these traumatic events, Bowlby (1969/1973) gathered information from a variety of fields, including studies on early separation, and concluded that early disturbances in the first attachment relationships such as trauma, abandonment, and loss could lead to enduring distorted modes of thinking and relating which could ultimately lead to the development of psychopathology.

Bowlby, himself a psychoanalyst, saw attachment theory as essentially psychoanalytic. Although many psychoanalysts of his time reacted strongly against his formulations, he viewed attachment theory as a rectification of certain aspects of classical psychoanalytic theory and tried to emphasise the need to

change psychoanalytic theorising into a more precise and systematic approach (Eagle, 1995). Hence, as we have seen earlier, despite having its origins in psychoanalytic theory, attachment theory has departed from the original model by placing less emphasis on instincts and drives and highlighting the crucial importance of the interaction between the child and the environment within an attachment relationship, which is regarded as the main aspect of successful adaptation and psychological well-being.

As Bowlby (1988) himself claimed, the need to develop and maintain attachments to other human beings overrides the satisfaction of instinctual needs: "*intimate emotional bonds are seen as neither subordinate to nor derivative from food and sex...(but) regarded as a principal feature of effective personality functioning and mental health*" (p. 121). Instinctual drives satisfaction is thus relegated to a secondary level and seen as a mere route to accomplishing the basic need for relatedness. Also, actual relationships, rather than fantasised ones, are seen as having an on-going influence in the individuals' development (Eagle, 1995).

However, developments in psychoanalytic theory, namely the emergence of object-relations theories, helped to reconcile attachment theory and psychoanalytic formulations. In Eagle's (1995) words, "*attachment theory can be understood as a particular kind of contemporary psychoanalytic theory or, more specifically, as a particular kind of object-relations theory*" (p.123). Also Fonagy (1999) highlights some points of contact between modern psychoanalytic theories and attachment theory. He claims that both theories: (1) emphasise the importance of the social environment in the study of personality; (2) consider the first years of life, particularly the relationship mother-infant, as having a crucial formative role; (3) regard maternal sensitivity as the fundamental aspect in the quality of mother-infant relationship; (4) emphasise the importance of the early relationship with the caregiver as a determinant in terms of the development of an autonomous sense of self; (5) regard mental representations of relationships as the main determinants of interpersonal behaviour and as accounting for the continuity of the effect of early experiences throughout the life cycle; and (6) see mental representations as influencing behaviour via non-conscious procedures based on the distinction between implicit and declarative memory.

The conceptualisation of internal working models of attachment represents a step further in bringing attachment theory closer to psychoanalytic models. In fact, mental representations of object relations are regarded as a similar construct to *working models of attachment*. They both stem from early relationships with significant figures and influence the way the individual acts, feels, and behaves in subsequent relationships (Levy & Blatt, 1999). Moreover, internal representations of attachment and object relations are regarded as being largely unconscious and, for at least some of the psychoanalytic authors, seen as a relatively accurate representations of actual interpersonal relationships (Eagle, 1995).

3.3 The beginning of attachment research

Attachment theory has, since its initial formulations, emphasised the importance of the emotional bond between the child and its caregiver. Integrating ideas from psychoanalytic, biological, and ethological backgrounds Bowlby (1988) claimed that the tendency to become attached is a biological function present in every human being and that each one of us is genetically programmed to invest time and resources in our offspring. Care-seeking behaviours by the vulnerable and young members of the species and complementary care-giving behaviours enacted by the stronger and resourceful are considered to be a universal tendency. In fact, a major aspect of attachment theory is the idea that attachment behaviours are controlled by the central nervous system and involve similar mechanisms to those associated with the maintenance of basic physiological functions. This biologically programmed system would function as a way of ensuring protection from environmental danger by regulating the proximity of the child to the attachment figure. In other words, proximity and closeness to an attachment figure are maintained within certain limits ensuring the right balance between exploration and safety (Bowlby, 1988).

These specific ideas related to proximity seeking and separation avoidance were given empirical basis by the work of Mary Ainsworth (Ainsworth et al., 1978) on individual differences in attachment relations. Ainsworth is regarded as having contributed both to expand attachment theory formulations and to empirically validate its basic principles. She conducted a series of studies both in Africa and America comparing the way mothers and babies interacted with each other and

reacted to episodes of brief separation. These research efforts led to the development of the "Strange Situation" (Ainsworth et al., 1978), a laboratory procedure intended to offer a standardised way of observing child's and mother's behaviours upon episodes of separation and reunion. This procedure is based on the assumption that the "secure base" phenomenon proposed by Bowlby will be activated when the child is placed in a strange environment and left alone with a stranger. The way the child behaves, not so much upon separation from the mother but upon reunion, is fundamental in the identification of the child's attachment pattern. Hence, *securely attached* (type B) infants will seek the mother for comfort and will be reassured by her presence. *Avoidant* (type A) infants remain engaged in their own activities and remain relatively disinterested in their mother's return, whereas *Ambivalent* (type C) infants do not seem to be comforted by the mother's return and remain distressed, sometimes displaying oppositional behaviours (Ainsworth et al., 1978).

Ainsworth and colleagues (1978) found also that variations in the way mothers respond to their children seemed to influence the patterns of child attachment behaviour. This finding contributed to reinforce Bowlby's idea that organised patterns of care-seeking behaviours are determined and complemented by the caregivers' behaviours towards the child. Ainsworth's tripartite classification of infant attachment patterns and the 'Strange Situation' procedure represented a major breakthrough in attachment empirical research and this method has been widely used in investigating individual differences in infant attachment to this day.

3.4 Internal working models of attachment

As the child develops and repeatedly engages in interaction with his/her caregivers, attachment relationships gradually become internalised and cognitive-affective mental representations of attachment figures are able to replace the actual presence of the attachment figure. In fact, as the individual matures, representations of the attachment figure rather than his or her physical presence can act as a secure base (Eagle, 1996).

Likewise, individual differences in attachment behaviour are not associated only with patterns of behaviour towards the actual attachment figure but are the result

of enduring mental representations of attachment figures and of the relationship with them which influence feelings, thoughts, and expectations in attachment relationships (Main, Kaplan, & Cassidy, 1985). These internal representations or *working models* develop gradually during infancy and childhood and are responsible for the continuity of attachment patterns across the life cycle. Hence, *working models* can be conceived as *"experientially induced, affective-cognitive processes"* (Belsky, et al., 1996, p.111) that include conscious as well as unconscious dimensions based on significant early experiences with the caregivers.

An important feature of internal working models is the fact that they are complementary. In the same way that care-seeking and care-giving behaviours in infancy are interdependent and jointly influence the organisation of attachment patterns, mental representations of attachment are seen as reflecting the interaction between the attached individual and his or her attachment figure. Hence, the term *internal working model* as applied by Bowlby (1973) refers to the individual's internal representation of himself, his attachment figures, and the relationship between them. These internal models serve to regulate, interpret, and make inferences with respect to both the attachment figure's and the self's attachment-related behaviour, thoughts, and feelings (Bretherton & Munholland, 1999).

Another central feature of working models of attachment is their relative resistance to change. Despite their capacity for developmental updating, attachment-related thoughts and behaviours gradually become less accessible to consciousness, becoming more automatic (Bretherton & Munholland, 1999). There is an underlying motivational factor underlying this relative stability, which is related to the desire to reproduce a familiar relationship pattern. Hence, internal working models of self and other are generalised to new relationships or in evaluating established relationships. For example, if an individual's working model includes the expectation of the attachment figure's unavailability, then he is more likely to interpret new experiences in accordance with these expectations. In the same way, maladaptive patterns of attachment can be perpetuated because people emit behavioural cues that will call for reactions that confirm previous working models (Eagle, 1996).

3.5 Measuring mental representations of attachment

Bowlby (1973) claimed that children develop mental representations or internal working models of significant others which guide their subsequent interpersonal interactions throughout development. This idea was given empirical support by the work of Mary Main (e.g., Main et al., 1985) who elaborated on the notion of internal working model and offered an attachment classification system based on internal representations of attachment figures. Her contribution represented a major step in identifying the adult counterparts of secure and insecure infantile attachment patterns and started off a new avenue in attachment research, where new methods of measuring attachment processes other than the direct behavioural observations of proximity seeking behaviour were devised (Slade, 1999).

In fact, beyond infancy, attachment patterns are best assessed with indirect methods designed to tap affective and cognitive processes associated with internal models of attachment relationships. Main and colleagues (1985) developed an interview measure for adults precisely with the aim of capturing attachment-relevant psychological processes associated with the regulation of feeling, thinking, attention, and memory - the *Adult Attachment Interview* (AAI, George, Kaplan, & Main, 1996). The AAI is a semi-structured interview regarding an individual's early attachment relationships and experiences, and evaluations of the effects of these experiences on present functioning. Individuals are requested to give a general description of their relationships with their parents and to support these descriptions with specific biographical incidents. They are also asked about ordinary experiences with parents in which the attachment system is likely to be activated (illness, injury, separation) and about any major experiences of loss, rejection or trauma; finally, they are asked about the meaning they attribute to these experiences in terms of their parents' behaviour and its impact on personality development and on one's own behaviour as a parent (George et al., 1996).

Score patterns determine the assignment of individuals to one of three major attachment categories: a secure category (*autonomous*), and two insecure categories: *dismissing* and *preoccupied.* Individuals classified as securely

attached are able to openly recount their attachment experiences and tend to view attachment relationships as important, recognising their formative value in terms of adult personality. Individuals classified as *dismissing* tend to underplay the importance of attachment experiences and are often excessively brief claiming lack of memory for attachment-related episodes. Individuals assigned to the *preoccupied* category appear confused about present and past experiences and remain over-absorbed with childhood attachment relationships, coming across as over-analytic and emotional. A further category "unresolved /disorganised" is assigned when the individual seems to be unable to work through past trauma or loss and exhibits lapses in the monitoring of discourse when discussing those potentially traumatic events. This category is normally assigned in conjunction with a best-fitting organised category of adult attachment (Main & Goldwyn, 1998).

Main's work suggests that despite the relative stability of attachment working models and the fact that early representations may accurately reflect early interactions, these representations are constantly revised taking into account not only new interpersonal experiences but also insight obtained through meta-cognitive and meta-affective processes that attribute a new meaning to the early experiences with caregivers. These meta-cognitive processes are the basis upon which AAI narratives are translated into distinct attachment patterns and those processes are considered fundamental in the AAI scoring system. This way of studying attachment organisation "*reconciles the two polarities of an emphasis on actual interactional experiences and the conception of internal working models as accurate records of such experiences in one hand, and an emphasis on the role of intra-psychic individual construals and meanings, on the other*" (Eagle, 1995, p. 128).

Analysis of adults' patterns of attachment scored through AAI narratives revealed not only that individuals differed in the way they represented early attachment experiences but also that these differences matched the tripartite system proposed to classify infantile attachment. Hence, the patterns of attachment initially observed in infants by Ainsworth and colleagues (Ainsworth et al., 1978) - *secure*, *avoidant*, and *resistant* – were found to have direct counterparts in adulthood: *secure-autonomous*, *dismissing*, and *preoccupied* (Main et al., 1985).

Secure mothers tended to have *autonomous* children, *dismissing* mothers were likely to have *avoidant* children, and *preoccupied* mothers tended to have *resistant* children. It was also observed by Main and Solomon (1986) that disorganised/disoriented behaviour in infants was linked to maternal behaviour, specifically to disorganisation and dissociation in the discussion of early trauma and loss (Main & Solomon, 1986).

Since the AAI was devised, attachment research has flourished and although most studies have used the measure to assess parent-child relationships, other studies have sought to extend the scope of the interview by applying it as a general measure of "secure-base" behaviour (Crowell et al., 1999). Moreover, a number of authors have tried to expand attachment theory to other interpersonal domains such as romantic relationships. For example, Hazan and Shaver (1987) developed a self-report measure of romantic attachment where individuals are presented with three descriptions of typical behaviours exhibited in the context of a dyadic adult relationship and asked to choose the one that best describes the way they usually behave in romantic relationships. The three descriptions correspond to the *secure*, *avoidant*, and *ambivalent* patterns of attachment in a direct correspondence with the infantile attachment patterns devised by Ainsworth. Also, Bartholomew and Horowitz (1991) proposed a four-way classification of romantic attachment patterns - *secure*, *dismissing*, *preoccupied, and fearful* – which result from considering both the individual's "model of the self" (positive versus negative) and the "model of the other" (positive versus negative). For example, the *fearful* type would result from a combination of a negative model of the self with a negative model of the other. A number of other instruments both self-report and interview measures have been developed over the years some of them still matching the attachment categories first devised by Main and colleagues.

The AAI remains in fact one of the most well used measures of attachment and is widely recognised as having had the crucial role of setting off the study of adult attachment and elucidating the intergenerational processes involved in the transition from mother-infant interactions to adult mental representations of attachment relationships (Grossmann & Grossmann, 1991). The work of Main and colleagues and the development of the AAI represented in fact a tremendous

breakthrough in terms of the expansion of attachment formulations and development of new measures of mental representations of attachment and attachment-related constructs. The AAI itself has been used in the recent years to derive new attachment-associated constructs and coding systems, such as for instance the "Reflective Function" system developed by Fonagy and colleagues (1998), which will be addressed in detail throughout chapter 8. The AAI has in fact been extensively used in several domains of research and the emergence of new scoring systems for the AAI protocol reinforces the recognition of the great potential of the measure in the assessment of attachment-related constructs.

CHAPTER 4

DEVELOPMENT AND RELIABILITY ANALYSIS OF THE PROBLEMATIC OBJECT REPRESENTATION SCALES (PORS)

4.1 Introduction

As we have seen earlier, object-relations theories have emphasised the importance of relationships with others and have highlighted the presence of pervasive difficulties among patients with personality disorder in establishing and maintaining stable object relations (e.g., Diguer et al., 2004). In fact, it has been shown by several authors that patients with personality disorder, namely those with severe disturbance, appear to manifest more difficulties in object representations when compared to patients with other disorders and healthy individuals (e.g., Westen et al., 1990a; Lerner & St. Peter, 1984; Marziali & Oleniuk, 1990). These difficulties include representations of others that are charged with negative affect (malevolence) and problems in offering a complex, balanced, and integrated picture of their significant others.

These findings have been obtained in different studies focused on distinguishing diagnostic groups on the basis of their object relations by using a different range of measures (e.g., *Concept of the Object Scale*, Blatt et al., 1976; *Object Relations Inventory*, Bell et al., 1986; *Social Cognition and Object Relations Scale*, Westen, 1991a). Some agreement has been found as to problematic object relations being associated with severity of pathology. However, despite the fact that most studies have shown that individuals with severe personality disorder tend to expect more negative interactions in relationships with other people, there are other dimensions of object representations that have been less investigated or where the findings obtained are less consistent. For example, some studies have shown that people with borderline diagnosis (severe personality disorder) do not always exhibit cognitive-affective failures when describing other people and that their lack of ability to produce integrated and

complex descriptions of significant others might be circumscribed to certain figures or types of relationships (see e.g., Blatt et al., 1976; Veen & Arntz, 2000).

In fact, as Huprich and Greenberg (2003) point out, there is still need to expand the work on object relations measurement in clinical samples in order to obtain a better understanding of how different forms of psychopathology relate to object relations and to clarify which dimensions are indeed most impaired. The authors also assert that another relevant line of investigation to be integrated into object relations research would be the field of adult attachment. Given the well-established relationship between insecure attachment and the development of pathology and also the theoretical link between *attachment* and *object-relations*, they consider "*the integration and empirical evaluation of the relationship between these constructs very timely*" (Huprich & Greenberg, 2003, p. 690). Furthermore, it is suggested that researchers should try to compare object-relations measures with other instruments of psychopathology and personality in order to assess the usefulness of those measures in predicting psychopathology and daily life functioning. Finally, other aspects that have been proposed as relevant avenues when studying object relations across diagnostic groups are the inclusion of childhood variables (e.g., childhood trauma) and the employment of a longitudinal methodology that can offer some insight in terms of developmental models of psychopathology (Huprich & Greenberg, 2003).

In line with the aforementioned suggestions, efforts were made to integrate attachment theory with the work developed so far in the area of object relations by attempting to devise a number of indicators of pathological object representations to be applied to a measure of adult attachment - the Adult Attachment Interview (George et al., 1996). The remaining suggestions – (a) compare several dimensions of object representations with measures of psychopathology and personality; and (b) study the relation between problematic object representations and childhood adversity variables resulting from retrospective data - will also be addressed in the current work as will be described in subsequent chapters.

4.2 The AAI protocol as a privileged way of assessing object relations in personality disorder

The emergence of object-relations theories and the development of measures designed to assess object relations in disturbed samples have emphasised the importance of interpersonal relationships in personality pathology. In fact, personality disordered patients often exhibit in one way or another impairments in interpersonal functioning (e.g., Nigg, et al., 1992). Authors from different theoretical orientations - cognitive, interpersonal, and psychoanalytic - seem to agree that these pathological patterns of interpersonal behaviour are influenced by past experiences with significant people that influence the way new interpersonal situations are dealt with.

Attachment theory in particular, gives special emphasis to the role of early relationships with caregivers in shaping individuals' development. According to Bowlby (1969/1973), the infant's attachment bond with the primary caregiver is a crucial aspect in the development of representations of self and other that will influence subsequent attachment experiences. As we have seen earlier, attachment theory postulates that the way the individual organises his attachment behaviour throughout the lifecycle results from relatively stable "working models of attachment" or mental representations of significant relationships, which influence the way the individual behaves in attachment-related situations (Main et al., 1985).

In fact, as we have seen before, "working models of attachment" can be seen as another way of describing representations of object relations. They play a major role in human development and are believed to underlie interpersonal difficulties including personality disorder (Levy & Blatt, 1999). Attachment theory and research have in fact offered over the years a great contribution to the understanding of personality disorders and their treatment. Several studies have been corroborating the link between severe types of personality disorder - such as borderline conditions - and insecure classifications on attachment measures such as *preoccupied* or *unresolved for trauma* (e.g., Brennan & Shaver, 1998; Dozier et al., 1999; Fonagy et al., 1999). Therefore, attachment theory seems to be an area of research of considerable relevance to the integration of findings obtained in object relations and personality pathology research. Moreover, using

a task such as the Adult Attachment Interview seems to be a privileged way to study representations of object relations since the measure taps working models of adult attachment, that is, the organisation and functioning of representational processes (e.g., see Crowell et al., 1999).

The use of the AAI to assess dimensions of object relations in personality disorder represents also an effort to integrate two main traditions in the study of object relations – cognitive and psychodynamic approaches. In fact, attachment theory itself represents an integration of dynamic and cognitive thinking. It incorporates crucial psychodynamic tenets such as the importance given to the infant-mother relationship in the first years of life and the emphasis on partly unconscious mental representations, which are seen as the main determinants of interpersonal behaviour (Fonagy, 1999). On the other hand, attachment theory has also drawn from cognitive science and information processing theories, which is evident in the conceptions of the way social stimuli are appraised and new information is incorporated into the existing 'working models'. As some authors have pointed out (e.g., Steven & Cassidy, 1997) there are striking similarities between the way attachment schemas are described and information processing theories, particularly in relation to the role of cognitive processes involving attention and memory.

Cognitive theories hypothesize that personality disorder is characterised by typical maladaptive schemas that deal with the self and others. These cognitive schemas are thought to stimulate selective processing of information resulting in biased interpretations that characterise pathological functioning. Inflexible cognitive schemas are seen as one of the reasons why personality pathology is maintained (e.g., Beck et al., 1990). In a similar way to what has been done in object relations research, several attempts have been made in this area to measure representations of self and other in personality disorder.

The line of research undertaken by social cognitive researchers has typically used experimental methods drawn from cognitive science, such as using adjective lists or brief vignettes illustrating social interactions to assess schema congruent information processing bias (e.g., Veen & Arntz, 2000; Dreessen et al., 1999) or questionnaire measures (e.g., Beck et al., 2001). As opposed to object

relations research, which typically uses projective techniques, cognitive studies try to investigate 'beliefs' and 'assumptions' about others since schemas are, according to cognitive authors, not directly accessible. Attempts have been made to investigate the validity of certain dysfunctional assumptions hypothesised to characterise specific personality disordered patients, namely borderline individuals (e.g., see Arntz, Dietzel, & Dreessen, 1999).

Cognitive studies have in common the fact that they try to examine object representations by isolating individual components and assessing them individually in specific tasks. In fact, the idea that object relations are not a unitary concept - thus composed of different cognitive and affective dimensions - has received increasing support (e.g., Westen, 1990; Tramantano et al., 2003). Westen (e.g., 1991a, 1991b), in particular, has insistently suggested that there should be an integration of social cognitive perspectives with psychoanalytic ideas when studying object relations. He sees this integration as advantageous in the sense that it enables one precisely to examine more effectively cognitive and affective dimensions of object relations and understand how they are manifest in different forms of personality pathology. This aspect of cognitive research has been incorporated in the present attempt to measure object representations through the AAI, that is, an effort has been made to identify specific dimensions of object representations that would be able to be isolated and separately assessed.

Hence, the AAI is proposed as a way of examining different dimensions of object representations manifest in reports about interpersonal relationships with caregivers. One basis for the development of the current scales was precisely the need to break down previously devised broader scales of object representations applied to the AAI protocol and identify discrete dimensions that could be more easily measured. It was hoped that this discrimination of subtle aspects of object representations would allow the development of a reliable coding system that could be empirically tested.

Finally, it is also hoped that by examining representations of object relations through the AAI protocol one can shed some light on some difficulties that have been found in using the original attachment style system in certain clinical

populations, namely with personality disordered patients. It has been indeed difficult to differentiate individuals with personality disorder with regards to attachment since these individuals seem to fall mostly into one attachment category - *preoccupied* style - showing frequently also signs of lack of trauma resolution (e.g., Fonagy et al, 1996). Hence, the proposed scales might be able to offer some further understanding regarding the specific ways in which *preoccupied* styles manifest themselves specifically in the description of attachment figures. In other words, the proposed system may help to pinpoint which difficulties in terms of object representations are more prevalent among these patients (e.g., contradictions, extreme affect) which might contribute to the general preoccupied style exhibited in the description of attachment relationships. As Agrawal and colleagues (2004) put it "*rather than attempting to fit attachment patterns seen in high-risk or clinical samples into descriptors developed for normative populations, what is needed is further description of the specific attachment behaviours and internal models characteristic of the clinical groups themselves*" (p. 101).

4.3 The origins of the Problematic Object Representation Scales (PORS): Overview of a preliminary study

The development of the Problematic Object Representation Scales (PORS) was based on a pilot study that looked at a broader array of pathological dimensions of object relations. These pathological dimensions, developed by Bateman, Chiesa, Fonagy, and Target (2002), were organised into six different scales - *affect*, *aggression*, *sexualisation*, *self representations*, *self/object representations*, and *relatedness* - some of them containing a range of specific sub-scales. These scales were developed based on several different sources including extensive literature research on personality disorder, namely on the interpersonal pathological processes found with personality disordered patients. More specifically, the system was inspired by psychoanalytic theories on personality disorder namely by authors belonging to the object-relations school (e.g., Kernberg, 1984, 1996). Besides their theoretical inspiration, the scales were devised on the basis of the clinical experience of the authors who are experts in the area of attachment research, psychoanalysis, and the treatment of severe personality disorders.

The *affect scales* were intended to assess how individuals deal with experiences involving strong affect, either positive or negative, elicited by the interview. They included aspects such as "down/up-regulation" (reduced/heightened emotional arousal in relation to stressful experiences), and "lability" (e.g., fluctuation of intense affect). The *aggression scales* were aimed at assessing manifestations of angry behaviour present in the language used in descriptions of attachment relationships and included "externally-directed aggression" (e.g., aggressive remarks), "internally-directed aggression" (e.g., self-abasement), and "passive aggression" (e.g., failing to acknowledge aggressive intention). The scale *sexualisation* dealt with the extent to which descriptions of relationships with others have been infused by sexual feelings, that is, whether relational needs are expected to be met through sexual relationships. *Self-representation* scales included aspects related to the way the individual presents himself during the interview and the extent to which he is unable to provide a coherent and differentiated description of his own attributes and relationship roles. It includes aspects such as tendency to "over-valuation" or "under-valuation" of the self. The scales *self/object representation* included dimensions such as "lack of integrated object representations" (e.g., inconsistency), and "inappropriate affect tone" (e.g., hate), when describing attachment figures. Finally, the *relatedness* scales addressed disturbances in the ability to establish mature and satisfying relationships with others and included aspects such as "non-attachment" (e.g., lack of emotional investment), "hostile grievances" (e.g., unjustified resentments), "anxious dependency" (e.g., continuing childish dependent relationship with the caregiver), and "lack of concern towards others" (e.g., selfishness, callousness).

The six scales were submitted to some modifications and refinements conducted by the author and another research student (AB), and involved mainly clarification of scale definitions and instructions for coding. The scales were subsequently submitted to two inter-rater reliability studies. In the first study, the two judges used the revised scales to code a sample of 26 AAI transcripts collected with patients with personality disorder. Inter-rater agreement was good for the scale "sexualisation" ($r = .85$) but low for the remaining scales (ranging from .34 to .44). The second inter-rater reliability analysis involved coding another sample of 16 AAI transcripts by using a combined scoring method of listening to the interview audiotapes in addition to reading the transcripts. Similarly, inter-rater agreement

was good for the scales "sexualisation" and "self-representations" (r = .77 and .73, respectively) and low to moderate for the remaining scales (ranging from .23 to .53). These inter-rater reliability studies enabled to identify some problems that can arise when attempting to devise a method to assess different dimensions of object relations even when that method is developed on the basis of theoretical formulations coupled with knowledge obtained in clinical practice.

In fact, although many of the assessed dimensions have been consistently identified as characterising patients with personality disorder (e.g., Kernberg, 1984, 1996; Dozier et al., 1999), there appeared to be constraints in assessing some of them through the transcript (or audiotape) of an interview. For example, disturbances in *affect* have been identified as one of the most problematic areas in personality disorder functioning. Borderline patients, in particular, have been described as displaying frequent changes in affect state that have a significant negative impact on their close relationships (e.g., strong feelings, tumultuous interactions, mood swings; e.g., Westen, 1991b). However, the reliability for the *affect* scales proved to be difficult to achieve even when using the method of listening to interview audiotapes in addition to reading the transcripts. In fact, *affect* sub-scales, such as for example *emotional lability,* may be difficult to assess out of the clinical context, or at least without a face-to-face interaction, since when scoring the interview the coder has limited access to non-verbal aspects of communication (e.g., voice tone, body language) essential for detecting affect changes. It is thus possible that some of the scales included in the pilot study express dimensions that are not very easy to grasp outside the clinical context, despite their theoretical and clinical relevance. As mentioned before, combining an approach that remains faithful to the theoretical formulations and clinical evidence (validity) with the development of a method of assessment that yields good inter-rater agreement (reliability) seems to be one of the main challenges faced by those attempting to assess object representations, namely in severely disturbed samples.

The development of the Problematic Object Representation Scales (PORS) was based on this initial study, which provided the opportunity to understand how the theoretical formulations on personality disorder modes of relating translate into an interview measure such as the AAI and, more specifically, how they are manifest

in the descriptions of attachment figures. The pilot study also provided the opportunity to identify other possible difficulties in the cognitive-affective representation of interpersonal relations that appeared to be consistently present in the narratives of personality disordered patients. Nevertheless, the PORS departed from the original scales in the sense that they represent only a selection of the aspects described above; some dimensions were not included in the new scales whereas others were developed and expanded in an attempt to narrow down the focus of the analysis. Hence, although the PORS scales maintained certain indicators close to the dimensions addressed by the original scales (e.g., aspects related to affect, aggression, and relatedness) the PORS were intended to adopt a more circumscribed focus, concentrating more on one of the aspects of object relations – cognitive-affective difficulties in *object representations*.

The PORS represent in fact a closer, more detailed, although less inclusive look at problematic object representations. This approach was followed since the task involved in responding to the interview protocol is thought to involve mostly probes calling for representations of significant others. The AAI protocol is therefore a privileged opportunity to evaluate some specific cognitive and affective aspects related to the way other-related information is processed, in a way that is hypothesised to be possible to operationalise. On the other hand, object representations are, as we have seen, one of the most disturbed areas in personality disorder as cognitive and affective distortions in representing other people are often considerable and pervasive among these patients (e.g., Tramantano et al., 2003). For this reason, the efforts to increase reliability by selecting only a group of relevant dimensions of object relations in personality disorder were not considered to come at the cost of construct validity and it was hoped that the compromise involved in losing breadth of scope would prove worthwhile.

Hence, the PORS are intended to look precisely at specific cognitive-affective processes characterising personality-disordered functioning, in particular aspects associated with the processing of other-related information in the context of attachment relationships. It is hoped that combining the main psychoanalytic inspiration with some theoretical and methodological formulations borrowed from socio-cognitive theories can contribute to a more systematic approach, focused

on specific, discrete, and operational dimensions involved in the processing of information associated with object representations.

4. 4 The Problematic Object Representation Scales (PORS)

As we have seen, object relations refers to a series of cognitive and affective processes involved in the representation of significant people and relationships. Under ideal conditions, important figures would be represented in a complex and multifaceted way, and the individual would show an understanding of the interaction of different permanent and momentary psychological characteristics and experiences with significant people (Westen et al., 1990a), as well as recognise the transactional character of the relationship. When this balanced representation is absent, the description of the attachment figure appears to be characterised by aspects such as lack of consistency and extreme evaluations, along with a lack of differentiation between attachment figures or the self and an attachment figure. This incapacity to integrate aspects of the object into coherent, complex mental representations is very often accompanied by an inappropriate affect tone. Moreover, difficulties in making sense of other people's behaviour are likely to arise with the emergence of attributional errors that are often also infused with inappropriate affect tone (e.g., Westen, 1991b).

Reflecting these distortions in the way important attachment figures are represented in the subject's mind, seven scales were devised to assess pathological representations of object relations through the AAI protocol: (a) *inconsistency*, (b) *extreme evaluations*, (c) *inappropriate elaboration*, (d) *lack of differentiation*, (e) *inappropriate affective valence*, (f) *distorted attributions*, and (g) *disturbance of thinking*. These indicators were inspired by the dimensions included in the pilot study as described above, mainly by the original scale "self/object representations". This scale was devised by experts based on empirical observation of patients with personality disorder and literature on object-relations theory (e.g., Kernberg, 1984). Various aspects included in the original scale were broken down into more specific domains originating the scales *inconsistency*, *extreme evaluations*, *inappropriate affective valence*, and *lack of differentiation*. Moreover, other scales such as *inappropriate elaboration* and *disturbance of thinking* were added, reflecting newly emerged aspects observed

when coding the pilot study transcripts, and were therefore empirically derived as well as informed by object relations theory and measurement. The PORS were also inspired by theoretical and research efforts made to combine object-relations and social cognition theories, and particularly influenced by the work of Drew Westen and colleagues (e.g., Westen, 1990; Westen, 1991a). The scales also incorporated aspects of recent attempts to apply cognitive theory to personality disorder, which have identified areas where cognitive functioning is impaired, namely with regards to *distorted attributions* and illogical thoughts in the context of interpersonal relationships (e.g., Beck et al., 1990; 2001).

Since this was intended to be a preliminary approach to using the AAI to study object representations, the scales do not offer an overview of the complete range of level of object representations from "normal" to pathological on each of the proposed dimensions. It is acknowledged that the level of elaboration of cognitive and affective representations of object relations is distributed along a continuum with variations even within specific pathological groups such as personality-disordered patients. However, the main aim of the current study was to explore solely the presence or absence of each of the pathological indicators and evaluate the reliability of the devised dimensions of object representations when applied to the AAI. The scales are thus concentrated on the pathological end of level of object representations and are aimed at identifying simply differences in terms of the presence or absence of problematic object relations among different groups of individuals.

Also, it is important to note that there will be aspects of pathological functioning found in AAI transcripts, namely concerning the individual's relationship with his attachment figures that will not be covered by the present system. The dimensions presented here represent therefore a selection of all the pathological aspects that can be found in the way the individual represents his attachment figures and the relationship with them. Next, these dimensions of object representations will be described in terms of their main focus and applicability to AAI protocol passages. General scoring guidelines and prototype examples for each scale can be found in Appendix A.

A. Inconsistent representations

Psychoanalytic theories have argued that patients with severe personality disorder have some structural deficits that lead to the inability to integrate information, especially when it is affectively charged. This is thought to account for inconsistent narratives particularly those involving interpersonal interactions (Segal et al., 1993). Hence, this type of patient is thought to be more likely to exhibit failures in terms of monitoring and organising interpersonal information and integrating different accounts of a given attachment figure or relationship. In the proposed scoring system, the description of the attachment figure or of the relationship with the attachment figure is considered to be inconsistent when it appears contradictory or shifting throughout the interview, without the subject explicitly recognising it or failing to provide a plausible explanation for the change. It includes instances where, for example, the attachment figure is described as having two or more irreconcilable characteristics or attributes. Two types of inconsistent descriptions are included: *contradiction /oscillation* and *mismatch between semantic and episodic memory*.

(A1) Contradiction is thought to be present when the attachment figure or the relationship with the attachment figure is described in conflicting terms regardless of whether the contradiction appears in the same passage or in different places in the narrative[1]. However, instances where the individual acknowledges and licenses a contradiction in a way that makes it more plausible or credible are not considered for this scale[2]. This sub-scale also includes instances where there is *oscillation* in the way the attachment figure is described across different times in the patient's life[3] and, again, it should only be considered if the shift is extreme and no plausible explanation is given to justify the abrupt change.

(A2) Mismatch between semantic and episodic memory refers to instances where there is inconsistency between the semantic level of attachment figures description and specific episodes recalled. This scale is usually coded in relation

[1] e.g., "*My father is a very domineering person*" vs. "*my father was always the one to give in, he could not really stand up for himself...*"
[2] e.g., "*...I know this may sound contradictory but I think my mother was very sweet but could be also nasty to me and my brother if she was upset...*"
[3] e.g., "*My relationship with my mother was warm, funny...until the age of 5 to 12, ...then torn, unhappy, and depressed*"

to the probes asking for episodes to illustrate the adjectives chosen by the patient to describe his/her caregivers. For example, if the episodes recounted to illustrate the relationship with parents do not support or are unrelated to the adjectives chosen to describe them. A clear episode of mismatch between semantic and episodic memory would be, for example, reporting an instance where the mother figure acts in a hostile way to support the adjective "caring" offered to describe her. Instances where the patient does not provide compelling evidence are also considered in this sub-scale[4]. Moreover, when the subject is repeatedly probed to offer evidence to support an adjective he used and fails to produce a convincing answer, this should count as a mismatch between semantic and episodic memory.

Inconsistent representations can be therefore found in response to any of the AAI probes, although questions where the individual is asked to describe his/her parents or the relationship with them are particularly relevant (e.g., "*I would like you to describe your relationship with your parents as a young child, as far back as you can remember*"). Moreover, the subscale "*mismatch between semantic and episodic memory*" applies almost always to passages where the individual is trying to describe episodes to justify the adjectives chosen to describe an attachment figure (e.g., "*You described your relationship with your mother as 'caring'. Can you think of a memory or incident that comes to mind with respect to the word 'caring'*"?).

B. Extreme evaluations

Patients with severe personality disorder, namely borderlines, have been consistently characterised as unable to provide complex and balanced descriptions of significant others. This often results in their descriptions appearing excessive or extreme. Authors like Kernberg (e.g., 1996) have claimed that this failure to provide an integrated representation of others is associated with the existence of primitive defense mechanisms that ensure the separation of idealised ("all good") and persecutory ("all bad") internalised object relations. Also, authors from cognitive theories (e.g., Beck et al., 1990) have acknowledged the tendency of patients with personality disorder to think in accordance with

[4] e.g., "*She was caring because she forgot my sister on the bus and she didn't forget me*"

distorted schemas of others, which sometimes include this "all-or-nothing" type of thinking - evaluations that are concentrated at the extreme end of a continuum and are mutually exclusive with no possibility for intermediary positions. Although most studies have concentrated on this type of polarised object representations (either positive or negative), other studies have focused on investigating a broader conceptualisation of extreme evaluations, not limited to the concept of split-off representations of "all good" versus "all bad" attributes. For example, some findings support the idea that these patients might be capable of viewing others in extreme but mixed (positive and negative) terms (see e.g., Veen and Arntz, 2000).

Hence, extreme evaluations are here considered as a failure to provide a description of the attachment figure or relationship that is multifaceted and integrated. This results in an imbalanced account of the experiences with the caregivers, who come across as exaggerated versions of real people. They can be represented either in split-off negative versus positive terms - *unidimensional evaluations (splitting)* - or in extreme terms with both valences (the description of the attachment figure includes extreme positive as well as extreme negative aspects) - *bidimensional evaluations.*

(B1) Unidimensional Extreme Evaluations are thought to occur when all feelings and evaluations of the object are "all good" or "all bad", with the possibility of shifts from one extreme to the other in different parts of the narrative. That is, there is no integration of characteristics of different valence on the positive-negative dimension at any given point in the narrative. The person is described in either "black" or "white" terms with no shades of grey in between[5]. The passages frequently include strong expressions and the use of superlative forms of adjectives and adverbs (e.g., *immensely, absolutely, completely).*

(B2) Bidimensional extreme evaluations involve descriptions where all feelings and evaluations of the object are extreme but have different valences on the positive-negative dimension (Veen & Arntz, 2000); an attachment figure can be described for example as "*totally generous and totally insecure*". Descriptions are here in "black" and "white". Positive and negative characteristics are not

[5] e.g., "*My father is a totally selfish human being*"

integrated in a way as to offer a less extreme picture of the attachment figure but they do appear together at a given point in the narrative. Aspects of both positive and negative valence have in fact to refer to the same time frame. For example, if the individual describes the relationship with his parent as "totally secure" when he was a child and as "totally unbearable" as an adult, one cannot say that the description combines aspects of both positive and negative nature, therefore not qualifying for *bidimensional*. Hence, the positive and negative aspects would be in this case treated separately since they do not refer to the same time frame.

Extreme evaluations can occur anywhere in the AAI transcript but particularly relevant for this scale are the passages asking for a description of the relationship with parents in childhood and also the probes where the individual is asked to offer five words or adjectives that reflect the relationship with his or her caregiver in childhood. Interview questions referring to current relationship with parents (e.g., *"What is the relationship with your parents like for you now as an adult?"*) are also of particular relevance.

C. Inappropriate elaboration

It has been shown that certain patients with personality disorder, namely borderlines, often tend to exhibit a preoccupied pattern marked by a lengthy narrative style aimed at maximising the negative affect associated with negative experiences (e.g., see Dozier et al., 1999). At other times, these patients appear overwhelmed by affect and are incapable of offering a satisfactory account in terms of completeness and integration, that is, they provide descriptions that are less elaborated than would be expected. It has in fact been hypothesised that these patients' object representations may be characterised by two opposite forms of pathological representations, as either a tendency to represent people in ways that are too shallow from what would be expected, or to offer complex, over-elaborated descriptions in face of limited available information (Westen, 1990). Other authors (e.g., Tramantano et al., 2003) agree that personality disordered patients might be characterised by opposite tendencies, at times representing people in primitive simplistic ways and at other times representing people in an over-elaborated cognitively sophisticated manner.

Problems in the representation of attachment figures are thus also reflected in descriptions that are either oversimplified and appear to the reader as a limited account of a more complex relationship or that are excessively elaborated. Over-elaborated descriptions often seem to involve an excessive yet unproductive analysis of aspects related to the attachment figures or to the relationship with them. In either case - *oversimplified/superficial* or *pseudo-elaborated* descriptions - the inappropriate elaboration results in a failure to obtain a clear picture of the attachment figure's character or behaviour.

(C1) Oversimplified/superficial descriptions include instances where the individual describes the relationship with the attachment figure in a simplistic manner, which can include both positive and negative attributes. Although extreme evaluations (either *uni or bidimensional*) are often over-simplified, there are cases were the individual may offer an non-extreme but nevertheless over-simplified evaluation in relation to what would be expected for an attachment figure[6]. Lack of elaboration and depth in the description of attachment figures or episodes related to attachment figures suggests that memories of contact with those figures are impoverished and are focused on superficial aspects of the relationship. It is important however to take into account the question being asked, since different interview probes encourage the subject to provide answers with different levels of elaboration/depth.

(C2) Pseudo-elaborated descriptions refer to passages where the individual offers a description of the attachment figure characterised by a certain degree of depth and detail but, due to lack of integration, this description fails to offer a clear picture of the relationship or attachment figure being described. It can be considered as "over-elaborated" in the face of the limited data it is based upon. Long and complex descriptions are not *pseudo-elaborated* per se since attachment figures are expected to be described in somewhat elaborated terms. But when despite being complex and elaborated these descriptions are also confusing, disorganised, or not very illuminating, one should consider the assignment to this sub-scale. Descriptions that classify for *pseudo-elaborated* are usually hard to follow and the subject turns to the use of clichéd expressions or

[6] e.g., "*My mother is ok*".

specialised/professional terms to describe the psychological characteristics of the attachment figure[7].

The subscales included as instances of *inappropriate elaboration* are coded very often in response to relatively open-ended questions where the individual has the opportunity to structure his or her own answer. Hence, as opposed to questions that call for a more direct answer (e.g. "*I'd like you to choose five words or adjectives that reflect your relationship with your mother*" or "*Were you ever frightened or worried as a child?*"), probes that allow the individual to talk freely about his or her attachment figures are more likely to provide rateable material for this scale (e.g., "*I would like you to describe your relationship with your parents as a young child*" or "*Were there many changes in your relationship with your parents after childhood?*").

D. Lack of differentiation

One of the most well documented difficulties in the way patients with personality disorder represent their significant others is the inability to clearly differentiate between different people in terms of their attributes or characteristics. In fact, several studies have found that personality disordered patients tend to exhibit a greater tendency to offer poorly differentiated object representations, with difficulties in defining the other as an independent entity (e.g., Blatt et al., 1979; Westen, 1990, 1991a).

Hence, the inability to differentiate or the tendency to blur the boundaries between self and others represents another pervasive aspect in terms of object representations in personality disorder. In the present system, this tendency is considered to be manifest in passages where people are not clearly differentiated with confusion of points of view and attributes. The individual fails to offer a differentiated description of (1) *different attachment figures* or of (2) *himself and one or more attachment figures*, treating different people as a single unit. This can result in difficulties in determining whose attributes or experiences are being described.

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[7] e.g., *I think my mother had a weakened sense of self that prevented her from understanding the real needs of her family...some constant state of projection of her negativity ...I mean a woman basically lacking in self-esteem and maybe she was looking for a way of achieving her lost potential"*

(D1) Lack of differentiation between attachment figures is present in passages where the individual does not make a distinction between attachment figures assigning the same intentions, feelings, or behaviour to different people as if they were an homogenous group[8]. This can also be manifested in slips of the tongue that reflect confusion between attachment figures[9]. Alternatively, the subject can discuss one particular attachment figure when asked about another one as if they were interchangeable. In this case, the individual typically fails to acknowledge the differences between people and is not simply taking turns in referring to one of the attachment figures and then the other[10].

(D2) Lack of differentiation between an attachment figure and *the self* refers to passages where the identity of the subject and object may become mixed or apparently interchangeable. This may be marked with slips of the tongue that the subject fails to correct[11]. The failure to assign different intentions, behaviour, and opinions to oneself and to the attachment figure reflects confusion and the self and object identities become undifferentiated. Also, the patient can inappropriately focus on other persons rather than himself recounting episodes from another person's perspective[12] or focus on himself when asked about other people's experiences[13].

Instances qualifying for *lack of differentiation* can be found in any passage where an attachment figure or a relationship with an attachment figure is being described. Examples of such probes include: "*I'd like you to choose five words or adjectives that reflect your childhood relationship with your 'father'*"; "*Were your parents threatening to you in any way, maybe for discipline or even jokingly?*"; "*Were there any adults with whom you were close, like parents, as a child?*"

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[8] e.g., "*My parents don't understand how I feel*"; if asked specifically about one of the attachment figures only.

[9] e.g., "*My mother was great, my parents always bought me cakes*"

[10] However, when the interviewer asks about the parents indistinctively, probing for a more general answer (e.g., "*How do you think the experiences with your parents have affected your adult personality?*"), no such coding should be assigned to rate passages where the subject refers to more than one attachment figure as a whole.

[11] e.g., "*I walked me to school everyday*"

[12] e.g., "*Any people that I've lost... hmm let me think... I remember my mother lost her close friend and she was terribly upset by it*"

[13] e.g., "*I think my mother has always got on with my father, we feel he is a nice person to be with*"

E. Inappropriate affective valence

Problems in the representation of object relations are also manifest in the affective valence that accompanies the description of attachment figures. The affective quality of object representations has been undoubtely the most well studied aspect in personality disorder object representations and these patients have been consistently described as having a tendency to produce malevolent representations of significant others, which include aspects such as blaming, violence, disappointment, and resentment (e.g., Nigg et al., 1992 ; Westen, 1990 ; Lerner & St. Peter, 1984 ; Stuart et al., 1990 ; Tramantano et al., 2003). Malevolence is thought to involve a perceptual and affective approach to interpersonal situations infused with expectations of threat, destruction, and painful emotions (Ornduff, 2000). It is also accompanied by cognitive distortions and assumptions about other people's motives and intentions and it mediates the response that the individual exhibits in those situations.

As we have seen, individuals with personality disorder are often described as having the tendency to view others in simplistic terms, as either emotionally gratifying (« good ») or rejecting and unavailable (« bad »). Malevolence is then thought to refer to one side of the split-off representations (« bad », e.g., Kernberg, 1996). Most studies conducted so far tend to automatically classify benign, positive object representations as high level object representations. Here, it is hypothesised that benevolent and malevolent representations lay on opposite extremes of a continuum of disruptive affective valence towards the object and that, at times, benign representations can be also pathological. The current scale includes therefore the other extreme of inappropriate affect valence – positively charged «all good » object representations. Inappropriate negative or positive affect is thus considered to lead to a distortion in terms of the way significant others are described and this scale focuses on discrepancies between the subject's experiences and response, taking also into account the time that has passed between the event and the subject's account. This aspect was maintained from the original scale *self/object representations* used in the pilot study and it resulted from clinical observations with personality disordered patients. They seemed for example to blame one of the parents (malevolence) while holding idealised, unwarranted expressions of gratitute and exoneration in relation to the other caregiver (unjustified benevolence). Hence, the proposed

scale includes both unwarranted (1) *malevolent* and (2) *benevolent* affect tone of object representations.

(E1) Malevolence refers here to the expression of negative feelings in relation to the attachment figure, which is either unjustified (according to the episodes described) or justified but remains too intense given the time that has passed (when for example the individual is reporting events that occurred many years ago, in childhood or adolescence). They include a range of negative feelings such as anger, hatred, disappointment, blame, resentment, feelings of having missed out in life and so on that are expressed either in the content of the description or in the language used by the subject[14]. Note that these emotions can be understandable taking into account the caregiver's behaviour but there is no distancing in relation to the past events and the individual seems to be still somewhat emotionally aroused, more than it would be expected. Inappropriate feelings such as resentment or indifference towards circumstances involving the caregiver are also rateable[15]. It is important to note that despite the fact that the AAI is mainly about past events, the interview is being coded for present feelings/reactions. In other words, past events only count for a rating if the individual is still emotionally aroused by those events[16]. Hence, scales like *malevolence* should be based on the coder's judgement of the current feelings that are expressed in the individual's report of his past feelings.

(E2) Unjustified Benevolence refers to the expression of positive feelings in relation to the attachment figure or relationship with the attachment figure, which is inappropriate according to the episodes described. It includes expressions of praise, gratitude, and exoneration that seem unjustified given the caregiver's behaviour. For example, the individual tries to excuse one parent by blaming the other or tries to normalise experiences of rejection and abuse[17]. At other times, there is a greater distortion in the appraisal of the attachment figure's behaviour

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[14] e.g., "*My mother was just hateful, I can't forgive her even today*"

[15] e.g., "*I was angry that she died, she couldn't have done that to me*"; " *I just felt it was bad that she died because I had to go to funerals and I hate funerals*"

[16] If for example someone says "*I was very angry with my father at the time*" this seems to be a description of a past event that is clearly placed in the past (and no coding should be given). However, there are other more extreme and emotionally charged verbalisations (e.g., "*I was very angry with that bloody bastard*") from which the negative tone has obviously not disappeared.

[17] e.g., "*My mother used to be aggressive sometimes, she was a housewife and was struggling with much to do in the house, I guess that is all part of living in the sixties, people usually punished their children and everybody was ok about it*"

and the inappropriateness of affect is such that the passage strikes the coder as particularly odd or unusual[18].

Inappropriate affective valence can be present in either words used to describe caregivers and the relationship with them or in a more general appraisal of experiences with caregivers which is manifest in an overall unjustified negative or positive tone. Hence, answers to the questions such as the one asking for five words or adjectives that reflect the relationship with parents in childhood can contain, for example, obvious negative expressions which are easily identifiable as "inappropriate affective valence" (e.g., words like "disgusting", "evil" are used to describe the relationship). However, *malevolence* or *unjustified benevolence* can occur anywhere in the interview and be present in more subtle expressions which require considering the context in which they were expressed (e.g., the individual says that the relationship with his or her mother in childhood was 'cruel and unfair' because as a child he or she was not allowed to watch TV after 8pm).

F. Distorted attributions

Patients with personality disorder have also been studied in relation to their problems in producing accurate causal attributions to explain other people's behaviour. For example, Westen (1990) has claimed that patients with personality disorder are more likely to make idiosyncratic attributions, which are often inaccurate or illogical. He considers that these faulty attributions, although resulting at times from a defense against overwhelming affect, are mostly due to the fact that these patients have structural socio-cognitive difficulties in producing logical and accurate attributions; people with personality disorder might simply not be good at reading people even in the face of bearable affects not calling for distortions. Personality disordered patients' attributions have been classified as egocentric, malevolent, inaccurate, and affect-centred. In fact, it is claimed that these patients' attributional style tend to become "polarised by affect" with good intentions being attributed to "good people" and bad intentions to "bad people" (Westen, 1991b).

[18] e.g., "She hit me really hard and I was rolling on the floor, it was wonderful, I thoroughly deserved it"

Hence, understanding social causality is an important aspect in the relationship with the attachment figures since it enables the individual to make sense of other people's intentions, feelings, and behaviours. Being able to produce accurate or logical attributions in the context of object relations and to reason in terms of interpersonal interactions contributes to a more complex and thorough appreciation of attachment figures' behaviours. On the other hand, a rudimentary understanding of social causality can lead the individual to engage in illogical, implausible, or inaccurate attributions that distort the meaning of psychological and interpersonal events. Five sub-scales are considered in this section: (1) *grossly illogical/inaccurate*, (2) *implausible or idiosyncratic*, (3) *biased,* (4) *vague/ shallow,* and (5) *over-detailed /confusing attributions.*

(F1) Grossly illogical or inaccurate attributions include explanations offered by the subject to justify an attachment figure's behaviour or characteristic, which are clearly inadequate and unreasonable. They do not seem to make any sense rather then being simply implausible, peculiar, or hard to picture (as in the next sub-scale). The coder is often startled by this kind of passage as the relationship between cause and effect is obscure, apparently non-existent[19]. However, the explanation is not semantically incomprehensible and there are no non-sense sentences or bizarre words (as in *Incoherence*, see scale G).

(F2) Implausible or idiosyncratic attributions seem unlikely or improbable given the information offered. They can include attributions that sound peculiar or that can only make sense in a specific type of relationship context that is not clearly described by the subject. The causal attribution is not simply exaggerated, self-serving, or defensive as in *biased attributions* (see below) but there is something slightly odd about it that strikes the coder as being a peculiar way of explaining other people's behaviour[20]. However, the coder might still be able to make some sense of the subject's attribution, which distinguishes it from the sub-scale previously described.

Causal attributions are considered *(F3) Biased* when they are not erroneous or illogical but rather biased in a way as to render the explanation only partially

[19] e.g., "*I think my parents behave the way they did because now everything seems clear on my mind*"
[20] e.g., *"I think my mother did that to me because she was Pisces like my father"*

accurate. They include for example the following types of attribution: unwarrantedly egocentric with the self being forced into an explanation[21]; selectively abstract, when it is focused on one single aspect of a situation[22]; over-generalised, when it draws from one situation in order to generalise to others[23], and so on. Other *biased* forms of explaining people's behaviour, include accounts that are self-serving, defensive, or exonerating. *Biased* attributions usually stand out when the coder is reading the transcript as they come across as a rather partial type of judgment.

(F4) Vague/shallow attributions include passages where the subject tries to explain the caregiver's behaviour or characteristics in a very simplistic and non-elaborated manner, often with explanations focused on superficial, observable aspects. This type of attribution includes superficial/simplistic explanations[24], unclear or incomplete attributions[25], and claims of ignorance or lack of insight[26]. This scale is marked by the fact that the patient offers an explanation for the caregiver's behaviour that is too simple or too vague (if any at all) in relation to what would be expected for an attachment figure. When *vague/shallow* attributions are present, the coder is left with the impression that the individual ought to be able to provide a more elaborated response or a clearer picture to explain the caregiver's behaviour. However, recognising the limitations of certain explanations or expressing the idea that the caregiver's behaviour is difficult to account for (e.g., childhood abuse) should not be considered as vague/shallow attributions if they are accompanied by an effort to provide possible explanations or to understand the experience.

Finally, *(F5) Over-detailed/confusing attributions* refer to explanation attempts that seem detailed or complex but ultimately fail to offer a comprehensible justification. Multiple causes are seen as leading to a single event but they are not integrated or the individual offers alternative/incompatible causes for a single event and leaves the interviewer to decide which one is valid. The discourse can be at times very muddled and confusing and it becomes difficult to pinpoint what

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[21] e.g., "*I was the reason of her behaviour, everything she did was because of me*"
[22] e.g. "*I think she was a very depressed person because her mother was depressed as well*"
[23] e.g. "*Everything she was is due to her parents behaviour when she first went to school*"
[24] e.g., "*I think she behaved like that because that was the way she knew*"
[25] e.g., "*Well, I think my parents acted like that because they couldn't find support, I mean...it was difficult...*"
[26] e.g., "*I have no idea why my parents behaved as they did*"

are the causes/attributions being offered to explain a particular behaviour[27]. Over-detailed/confusing attributions are often long and hard to follow and ultimately fail to provide an insight in terms of the individual's understanding of a particular experience or interaction with the caregiver.

Distorted attributions are usually found in passages where the individual is probed to offer an explanation for his/her own or somebody else's behaviour or to try to think about motivations and intentions underlying one's actions. Although any probes added by the interviewer where such questions are asked (e.g., "*Why do you think she did that?*") are likely to produce this type of causal reasoning, there are specific mandatory probes in the interview where instances of *distorted attributions* are more likely to be found (e.g., "*Why do you think your parents behaved as they did during your childhood?*"; "*Which parent did you feel closest to and why?*").

G. Disturbance of thinking

Disturbance of thinking in the context of object relations represents the extreme failure to describe representations of object relations and/or understand social causality in the context of a relationship with an attachment figure. Hence, it is applicable to instances where the subject's account is more severely distorted than in any of the above indicators. The patient seems to have momentarily lost the ability to monitor his thought processes and therefore the content of his discourse, which results in difficulties in the communication process. At times, these difficulties in maintaining an intelligible discourse are the result of overwhelming affect that leads to a defensive breakdown of cognitive-affective processes, which in their turn affects the discourse pattern. It has been shown, as mentioned above, that individuals with personality disorder tend to frequently display signs of lack of trauma resolution (e.g., Fonagy et al, 1996). Indeed, episodes where potentially traumatic events are discussed might constitute narrative passages that are especially prone to this kind of failure in terms of

[27] e.g., "*Yes I do have a lot of theories of why they behaved as they did... certainly my father... he is a second generation immigrant son of Polish... he has this enormous respect for the establishment, Oxford, Cambridge and things like that... but because he was Socialist there was this contradiction of also rejecting the system... so we got contradictory messages,... this is even clear in my little brother who's a member of these extreme left-wing parties... my father rejected all that you know...*"

monitoring one's speech associated with painful object representations. Two sub-scales are included in this section: *incoherence* and *thematic intrusions*.

(G1) Incoherence refers to passages where the patient is unable to maintain an intelligible discourse. It can be reflected in the presence of confused or bizarre statements, meaningless sentences, gross contradictions or paradoxes, which render the passage incomprehensible. The coder cannot actually make sense of what the subject is trying to say[28].

(G2) Thematic intrusions include the perseverance of one particular topic that totally deviates the subject from the question being asked; the individual fails to answer the question being asked and talks about something else. However, *thematic intrusions* are not simply passages that are too detailed, or where the subject is carried away by his own speech into different topics. For this sub-scale to be applied to a particular passage, the change of topic should be sudden or unexpected, in a way that the coder is able to identify which new theme is being brought up to the discussion of a certain topic and also exactly the point where the theme changes. Passages where the incursion into different topics is gradual and follows a logical sequence should not be considered as thematic intrusions. These are generally regarded as mere side comments or temporary changes of subject, often with the subject recovering the main topic under discussion towards the end of the passage.

Instances qualifying for *disturbance of thinking* are also found in response to any AAI probe although particular attention should be paid to passages where the individual is somewhat emotionally aroused such when discussing sensitive topics like loss or abuse in childhood. Any probes asking about the relationship with parents either directly (e.g. "*I would like you to describe your relationship with your parents*") or indirectly (e.g., "*Do you remember ever feeling rejected as a young child?*") are of crucial importance to this scale.

Hence, although instances of problematic object representations can be found throughout the whole transcript, there are specific questions in the protocol that

[28] e.g., "*My grandpa still makes his appearances toward me, I mean, it is a totally different realm now...that's the reason for the pentagrams, I am not satanistic or anything*"

are more likely to elicit from the subject a description in terms object representations. These are considered as particularly relevant for the assessment of the designated indicators and include the questions where the individual is asked to: describe his relationship with his parents; offer five adjectives to describe the relationship with mother and father and justify them with episodic memories; choose to which parent the individual felt closest to and why; identify any changes in the relationship with parents after childhood; and describe his current relationship with his parents. There are other probes that are relevant particularly for the scale *distorted attributions* as they prompt the patient to explain a particular behaviour or characteristic of the attachment figure. These include the probe where the individual is asked to provide an explanation for his caregiver's behaviour in the past. In case perceived rejection by caregivers is present, the question that asks the individual to try to explain why the caregiver has behaved in a rejecting way is also relevant for this section (see relevant protocol probes in Appendix B).

4.5 First reliability study: The first version of the PORS

The organisation of the first version of the PORS was slightly different from the final version presented above. It included only five scales, instead of the final seven, given that the indicators *extreme evaluations, inappropriate elaboration,* and *lack of differentiation* were collapsed into one single scale named *Lack of Complexity* (see overview of preliminary scales in Appendix C). Those three indicators (considered in the preliminary version as sub-scales) reflect in fact a lack of complexity in the description of the attachment figure, with the individual offering a limited view (extreme, under/pseudo-elaborated, or undifferentiated) of the relationship with the caregiver. However, this scale encompassing diverse aspects related to the complexity of object representations later proved to be too wide-ranging and somewhat confusing in terms of the scoring. This led to the subsequent reformulation of the scale into three different sections as they appear in the final version of the scales.

4.5.1 Procedure

The preliminary version of the PORS scoring system was used by three independent judges who coded a sample of 10 AAI transcripts resulting from

interviews conducted with personality disordered patients. The author acted as one of the judges and the others were post-graduate students recruited at the Psychology Department - University College London, who volunteered to participate. After the students became familiar with the manual and coding instructions they had the opportunity to study a prototype transcript that had been previously coded to be used as an example; the two volunteer judges then coded on their own another interview transcript in order to practice their acquired skills. Subsequently, the three judges independently coded the 10 AAI transcripts according to the procedures described in the manual. The coders were instructed to look for specific examples of the pathological indicators included in the preliminary version of the scales and give them either 1 point (maybe present) or 2 points (definitely present). Ratings were not discussed between the judges at any point during the study. Overall scores were computed by adding the points obtained for individual examples for each sub-scale. Finally, all scores were entered into a scoring sheet that offered an overview of the extent to which the different pathological modes of personality functioning were present in the subject's discourse.

4.5.2 Results

The scores obtained with the sample of 10 AAI transcripts coded with the preliminary version of the PORS were submitted to statistical analyses. Inter-rater reliability coefficients were calculated between overall scores assigned by the three judges for each individual scale on the 10 coded transcripts. Two intra-class correlation (ICC) analyses were performed: a two-way ICC reflecting the agreement between the author and judge 2 and another one reflecting the agreement between the author and judge 3.

The first ICC analysis revealed that the scales *inconsistency* and *inappropriate affective valence* showed good reliability whereas the scales *distorted attributions* and *disturbance of thinking* appeared to be moderately reliable. For the scale *lack of complexity,* no agreement was found between the judges, as can be observed in Table 4.1. The second two-way ICC analysis comparing the overall scores assigned to each scale by the author and judge 3 revealed that only the scale *disturbance of thinking* obtained a good reliability. Moderate reliability coefficients

were obtained for the scales *lack of complexity* and *inappropriate affective valence*. The scores for scales *inconsistency* and *distorted attributions* showed no agreement between these two judges as can be observed in Table 4.2.

Table 4.1: Values of intra-class correlation coefficients (95% confidence interval) reflecting agreement between judge 1 (author) and judge 2 for the overall score for each of the PORS used in the first version of the manual (N = 10 interviews)

Scales	ICC (single rating)
Inconsistency	.74*
Lack of complexity	-.067
Inappropriate affective valence	.85*
Distorted attributions	.62
Disturbance of thinking	.50

Table 4.2: Values of intra-class correlation coefficients (95% confidence interval) reflecting agreement between judge 1 (author) and judge 3 for the overall score for each of the PORS used in the first version of the manual (N = 10 interviews)

Scales	ICC (single rating)
Inconsistency	.26
Lack of complexity	.63
Inappropriate affective valence	.68
Distorted attributions	.03
Disturbance of thinking	.75*

4.5.3 Discussion

Two intra-class correlation analyses were performed to investigate the reliability of the indicators included in the preliminary version of the PORS. The reliability analyses compared the scores obtained by the author and either judge 2 or judge 3 across a range of transcripts collected with patients with personality disorder. These were considered the relevant analyses since the aim was to assess whether the scores obtained by external judges coincided with the ones obtained by the main judge, who was regarded as the point of reference for comparing the scores.

It was observed that the scale *inconsistency* obtained good inter-rater reliability in one of the two-way analyses (author/judge 2), the same happening with the scale *inappropriate affect valence.* Moreover, for the scale *inappropriate affect valence* the reliability coefficients between the author and judge 3 approached

satisfactory reliability (.68). Similarly, the scale *disturbance of thinking* attained good reliability in one of the two-way analyses (author/judge 3) and moderate reliability in the other (author/judge 2). The scales *lack of complexity* and *distorted attributions* seemed to attain less agreement reaching nevertheless moderate reliability coefficients once again either between the author and judge 3 (for the scale *lack of complexity*) and the author and judge 2 (for the scale *distorted attributions*). These scales obtained low reliability coefficients when the agreement was tested between the scores obtained by the author and the remaining judge.

Hence, results show that three of the proposed scales - *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* - obtained good reliability whereas the other two (*lack of complexity* and *distorted attributions*) obtained moderate agreement between the author and one of the judges. However, this relatively good level of overall agreement was not obtained between any two judges for all the scales, which means that one of the judges seemed to be in agreement with the author for certain scales whereas the other scales were more reliability assessed between the author and the remaining judge. In fact, it seems likely that the observed variation between the reliability coefficients obtained in the separate two-way analysis (author and judge 2 vs. author and judge 3) might be largely attributable to differential rating performance of judge 2 and judge 3 rather than to the scales themselves.

It was therefore considered important to further test the reliability of the system by recruiting another two different judges and investigating whether some of the scales had in fact unacceptable reliability levels or if the lack of agreement found in this preliminary reliability study was due to atypical difficulties in understanding and interpreting certain scales. Nevertheless, given the low reliability coefficients obtained for some of the scales (e.g., *lack of complexity*) - and despite the fact that this low agreement was obtained between the author and only one of the judges - some clarifications to the scales and training procedures were introduced in order to increase the reliability of the system.

4.6 Second reliability study: The final version of the PORS

The preliminary version of the PORS underwent some modifications that consisted mainly in clarifications of the indicators contained in each scale and inclusion of additional examples to illustrate the content of the scales. The scale *distorted attributions,* in particular, was submitted to thorough revision with many examples taken from interview transcripts being added. The scale *lack of complexity*, as mentioned above, was the most substantially modified. It was broken down into three different scales: *extreme evaluations*, *inappropriate elaboration*, and *lack of differentiation*. The fact that many indicators of object representations were initially put together as *lack of complexity* might have made it difficult for the judges to look for scoring instances in the transcripts while keeping in mind such distinct and varied indicators. Hence, three different scales were devised each containing two different sub-scales*: extreme evaluations* (uni vs. bidimensional), *inappropriate elaboration* (over-simplified vs. pseudo-elaborated descriptions), and *lack of differentiation* (between attachment figures vs. between an attachment figure and the self), as described in the final version of the manual (described in 4.4). Finally, one of the sub-scales included in the scale *disturbance of thinking* was removed from the preliminary version - d*iscontinuities in the narrative* - since it appeared to be of little use and somewhat overlapping with the indicator *thematic intrusions.*

4.6.1 Procedure

The final version of the manual was used to code another 12 AAI transcripts resulting from interviews administered with patients with personality disorder. The transcripts were once more coded by the author and two other judges. These were two different students recruited at the Psychology Department, University College London, who were enrolled in psychoanalytic post-graduate courses and who volunteered for the study. Once more, there was a preparation phase where the students had the opportunity to get familiar with the manual (final version) and study the prototype examples prepared for the training. However, this time around, two interview transcripts were coded as practice. Also, the judges met regularly to discuss the ratings of the transcripts as they were being coded in order to prevent coder drift. However, the scores for different indicators or overall

scales were not changed nor discrepancies of any point levels solved by consensus. The idea was just to discuss the transcripts already coded so the judges could use the feedback to code the following interviews, keeping as close to the manual as possible. The same scoring procedures were used in terms of the point levels attributed to each indicator and the same procedure was followed to arrive at sub-scale and scale scores. Once again, all the ratings for overall scale scores were entered into a scoring sheet that offered an overview of the level of the subject's object representations.

4.6.2 Results

The final scores for each scale included in the final version of the manual were submitted to another series of intra-class correlation (ICC) analyses. Once again, 2 two-way analyses (between author and judge 2, and author and judge 3) were performed. As can be seen in Table 4.3, the scales *inconsistency*, *inappropriate affective valence,* and *disturbance of thinking* obtained an excellent inter-rater reliability between the author and judge 2, whereas all other scales obtained good reliability coefficients. Coefficients of agreement were also calculated between the scores obtained by the author and judge 3. All the scales obtained good reliability coefficients except for the scale *inappropriate elaboration,* which attained nevertheless a moderately high reliability coefficient. Once more, the scale *inappropriate affective valence* obtained the highest agreement, as can be seen in Table 4.4.

Table 4.3: Values of intra-class correlation coefficients (95% confidence interval) reflecting agreement between judge 1 (author) and judge 2 for the overall score for each of the PORS used in the final version of the manual (N = 12 interviews)

Scales	ICC (single rating)
Inconsistency	.93*
Extreme evaluations	.87*
Inappropriate elaboration	.77*
Lack of differentiation	.81*
Inappropriate affective valence	.98*
Distorted attributions	.85*
Disturbance of thinking	.93*

Table 4.4: Values of intra-class correlation coefficients (95% confidence interval) reflecting agreement between judge 1 (author) and judge 3 for the overall score for each of the PORS used in the final version of the manual (N 12 = interviews)

Scales	ICC (single rating)
Inconsistency	.80*
Extreme evaluations	.84*
Inappropriate elaboration	.65
Lack of differentiation	.84*
Inappropriate affective valence	.85*
Distorted attributions	.73*
Disturbance of thinking	.75*

4.6.3 Discussion

The scales included in the final version of the PORS appear to have achieved good agreement after some revision and inclusion of extra prototype examples and guidelines for coding. Reliability coefficients ranged from .65 to .98 and most scales obtained coefficients above .70 in both two-way reliability analyses. In particular, the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* appeared to have reached excellent agreement, with reliability coefficients ranging from .75 to .98. These reliability results seem very encouraging since a conservative approach was adopted for the scoring procedure. In fact, reliability coefficients were obtained by comparing absolute numbers of problematic object representation indicators and without averaging scores or correcting minor discrepancies between the judges, which is a procedure that has been adopted in reliability studies intended to test newly devised object representation systems (e.g., Leigh et al., 1992; Segal et al., 1992).

Certain modifications to the procedure are thought to have contributed for the observed increase in the reliability coefficients. The fact that the judges were students who were attending courses in related areas of research might have contributed to a better understanding of the content of the scales and subsequently to a better performance in terms of the scoring. They also received more training than the judges in the preliminary reliability study since they coded an extra practice transcript. Another difference in the procedure from study 1 to study 2 was the fact that the judges met at regular intervals to discuss the ratings. This is thought to have had a significant effect in terms of increasing the reliability results. Finally, the revisions introduced and addition of prototype examples in the

final version of the scales have certainly made them clearer and easier to use, particularly in relation to the scales that first appeared more unreliable such as *Lack of Complexity*.

Although some general knowledge of related areas of research such as developmental and clinical psychology might help to better understand the content of the PORS - and therefore lead to a better performance in terms of the scoring - no prior knowledge of attachment processes or object representation theory is required to use the scales. The voluntary judges were students in post-graduate psychology courses with no prior knowledge of the AAI protocol or scoring systems. Hence, the scoring system included in the PORS was meant to be a relatively objective approach requiring only the study of the manual and the scoring of prototype interview transcripts as practice, which were carried out in less than a week. The student volunteers were, after this initial stage, able to code on their own the sample of AAI transcripts with very satisfactory reliability results. The PORS are thus considered to require minimal prior knowledge, to be a relatively quick and easy system to learn, and to yield satisfactory agreement between judges after a brief period of training.

It seems that the aim of the reliability study has been achieved. The AAI appears to be a reliable measure to assess certain pathological indicators of object representations usually found among patients with personality disorder. The identification of specific dimensions of object representations seems to have contributed to more "quantifiable" or operational scales that yielded good agreement scores between the coders. In fact, it has been claimed that when dimensions along which object relations are assessed are less abstract and involve less inference, the utility of the instrument will increase (e.g., Smith, 1993). Indeed, the development of object representation scales that included more focused, detailed, and operationally defined dimensions of object relations seem to have made it possible to decrease the level of inference needed to assess those dimensions and therefore increase the reliability of the system.

Also, efforts were made to devise a number of specific indicators of problematic object representations that could capture some of the most consistently reported difficulties in the way personality disorder patients represent their significant

others. The scales were then adapted and refined so they could be applied to an interview measure such as the AAI by capturing the relevant dimensions of object representations present in the way personality disordered patients talk about their attachment relationships. This main objective seems to have been accomplished and efforts to strike a balance between good validity and reliability appear to have been achieved.

It is expected that the indicators of object representations included in the scales devised will also possibly enable us to distinguish personality disordered individuals from other groups of patients who may not differ in terms of 'problematic object representations' overall but might do so on the basis of the identified specific components. This issue will be addressed in subsequent chapters as well as the relationship between the PORS and variables related to aspects of interpersonal functioning and early adversity.

CHAPTER 5

STUDY DESIGN: SAMPLE, MEASURES, AND PLANNED ANALYSES

The final version of the Problematic Object Representation Scales (PORS), as described in the previous chapter, will be used to investigate a number of hypotheses which will test associations between levels of problematic object representations and other variables such as attachment style, psychopathology, reflective function, early adversity, and interpersonal functioning. Each of these associations will be studied separately in each of the following chapters by using different measures and slightly different samples and data analysis procedures. This chapter is therefore aimed at giving an overview of the overall study design including issues related to sample recruitment, measures, and planned analyses.

5.1 Sample recruitment

The sample which will be used throughout this work was drawn from two major sources. Some of the participants belonged to an adult follow-up sample of 74 individuals referred to a mental health programme for preschool children at the Menninger Clinic in Topeka, Kansas, conducted between 1969 and 1985 (age at referral: M = 3.8 years, SD = 1.05, range 2-6). From these children treated at the Menninger Clinic, approximately 65% could be located and about 75% of this located group agreed to participate in the follow-up study, which occurred from 1997 to 1999 at the Menninger Clinic then relocated to Houston, Texas. A detailed study of records was conducted and no differences in terms of age, gender, or educational level were identified between those who were available to participate in the study and those who could not be contacted. Exclusion criteria for participation in the study included IQ below 75, psychotic disorder, pervasive developmental disorder, and severe physical handicap. Four individuals with IQ below 75, 3 individuals with psychotic disorder, 8 with pervasive developmental disorder, and 5 with severe physical handicaps were excluded from the study. The procedure for recruiting the follow-up preschool sample involved the study of case records for the identification of potential participants. They were then

contacted by a research assistant who explained the study and obtained informed consent.

The other source of participant recruitment was a group of 47 adults with similar demographic and clinical characteristic to the preschool follow-up sample, including age, educational level, and mental health status. These participants were recruited in the Topeka community by newspaper advertisement and flyers distributed in the area.

A sample of 80 participants, for whom both Adult Attachment Interview (AAI) transcripts and diagnostic information were available, was drawn from these two sources associated with projects conducted at the Menninger Clinic - preschool project sample and community adults. This is the "main sample" used in this study, from which a series of other sub-samples were drawn according to the variables studied in each chapter and availability of data for the different measures (see table 5.1).

Two additional sources of participant recruitment were used. In chapter 6 a different sample of 43 AAI transcripts coded with the original Main and Goldwyn's (1998) attachment system was used to study the relationship between levels of PORS and attachment status. These were participants belonging to a larger sample of 167 parents whose children (aged 2 weeks – 36 moths) were referred to an outpatient infant mental clinic in Topeka for a variety of problems such as emotional and behavioural difficulties, between November 1995 and February 2001. These children were recruited from sources such as GPs, day care centres, and community Health Department.

Finally, in chapter 7, a small number of healthy volunteers (7) were recruited at the University College London campus by advertisement in order to increase the number of participants in the control group.

Table 5.1: "Main sample" (80 participants drawn from the preschool project + community adults) sub-sets used in different studies/chapters

Chapter 6: PORS and attachment classifications	31 participants from "main sample" + 43 participants from additional source (parents)
Chapter 7: PORS and psychopathology	80 participants from "main sample" + 7 participants from additional source (UCL)
Chapter 8: PORS and Reflective Function	77 participants from "main sample"
Chapter 9: PORS and early adversity	70 participants from "main sample"
Chapter 10: PORS and interpersonal functioning	67 participants from "main sample"

5.1.1 Sample size requirements

The "main sample" from which a series of other sub-samples were drawn was composed of 80 participants, as described above. *A priori* power calculations were conducted in order to determine whether each of the sub-samples used in the different chapters had the necessary size to detect an effect if one existed. An α-level of .05 was used and the recommended level of power was .80: 80% chance of detecting an effect if one in fact exists. All preliminary power calculations were performed by using the computer programme G*Power (Faul & Erdfelder, 1992).

In "Chapter 6: PORS and attachment classifications", a preliminary study of levels of problematic object representations across attachment style groups (*secure*, *preoccupied*, and *dismissing*) will be carried out. It was observed that the initial 31 participants from the "main sample" for whom an attachment style classification was available guaranteed only about 45% chance of detecting an effect size (large) among the three groups. Therefore, a larger number of participants was considered necessary to increase power and an additional source of participants was identified (parents). The final 74 (31 + 43) enabled in fact a lower likelihood of failing to detect an effect (type II error) since a total sample size of about 70 ensures a power of .80 in detecting a large effect size.

In "Chapter 7: PORS and psychopathology", another three groups will be compared in terms of their level of problematic object representations: individuals with severe personality disorder, individuals with Axis I disorders, and healthy controls. A total sample of 66 will enable a power of .80 in detecting an effect size

(large). Hence, having approximately 22 participants in each group would enable to detect an effect size among the groups if one existed. From the 80 participants composing the "main sample", 37 had a diagnosis of personality disorder, 29 of Axis I disorders, and 14 were healthy controls. Hence, an additional source of participants (UCL) was identified so the number of healthy controls could be increased. The final overall number of participants included in chapter 7 (N = 87) will allow a 91% chance of detecting an effect (large) if one exists. A medium effect size will only be detected in 50% of the cases.

The number of participants available for the remaining studies (chapter 8-10) did not seem to be a concern, at least in detecting large effect sizes, since these studies involve exploring the association between levels of PORS and another variable (e.g., Reflective Function, early adversity, or interpersonal functioning). In correlation analyses between two variables, a small sample (of 26) suffices to detect a large effect size with .80 of power. Medium effect sizes, however, will have less than the optimal 80% chance of being detected. Hence, in "Chapter 8: PORS and Reflective Function", the 77 participants with available RF scores allow over 99% chance of detecting a large effect size (77% for a medium effect). Similar estimates apply to the samples to be used in Chapters 9 and 10 (see table 5.2).

Finally, multiple regression analyses will also be conducted in the following chapters. The number of participants in each of the studies/chapters was considered to be adequate since regression analyses with 70 cases can have up to 16 predictors and still be able to detect an effect size (large) with .80 of power. With up to 3 predictors the power to detect medium effect sizes is also close to .80. However, some of the regressions conducted (e.g., chapter 9 and 10) will have more than five predictors and in this case the chances of detecting a medium effect size will not be higher than 60%.

Table 5.2: Estimated power which will be obtained for the main analyses conducted in each study

	Power (Large effect)	Power (Medium effect)
Chapter 6: PORS and attachment classifications	.85	.46
Chapter 7: PORS and psychopathology	.91	.50
Chapter 8: PORS and Reflective Function	>.99	.77
Chapter 9: PORS and early adversity	>.99	.73
Chapter 10: PORS and interpersonal functioning	>.99	.71

These preliminary power calculations were intended to offer an idea of the sample size required to perform the planned analyses and determine if the number of participants (for whom data on the relevant measures was available) enabled to detect an effect size. However, after the PORS were used to code the "main sample" of AAI transcripts, it was observed that the data was not normally distributed but positively skewed (see 5.3.1). Exact *a priori* power calculations for non-normal data cannot be computed. When data are normally distributed, the Type I error rate of tests based on this distribution is .05 and we can use this value to calculate power. But when data are non-normal, type I error rate will not be .05 and it is not possible to calculate its exact value which depends on the shape of the distribution (Field, 2005).

On the other hand, the claim that non-parametric tests are less powerful than their parametric counterparts is only true if the assumptions of the parametric tests are met, in other words, parametric tests will have a greater power to detect an effect than non-parametric tests on the same data if these data are normally distributed (Field, 2005). Hence, the use of non-parametric tests throughout this work was not considered to increase the chances of Type II error (accepting that there is no difference between the groups when there is) since the data are non-normally distributed.

5.2 Measures

Four main measures will be used in the following chapters: 1) the Adult Attachment Interview protocol (AAI, George et al., 1996); 2) the Structural Clinical Interview for the DSM-IV (First et al., 1997); 3) the Childhood Experiences of Care and Abuse (CECA, Bifulco et al., 1994); and the Revised Adult Personality Functioning Assessment (RAPFA, Hill & Stein, 2000).

The transcripts resulting from administering the AAI protocol will be used for three purposes: a) to derive an attachment style classification by using both the original attachment system by Main and Goldwyn (1998) and the Dynamic-Maturation Approach by Crittenden (2002); b) to score Reflective Function by using the system developed by Fonagy and colleagues (1998); and c) to derive level of problematic object representations by using the PORS as described in the previous chapter.

The CECA is a retrospective measure about childhood experiences of care and adversity and includes scales about the quality of the relationship with caregivers in childhood, quality of parental care, and details about different forms of abuse such as physical and sexual abuse. The RAPFA assesses interpersonal functioning in a range of specific domains and ascertains the level of successful *role performance* and *role failure* in different areas of the individual's psychosocial functioning (Hill et al., 1989).

A summary table of the measures used in each of the studies and the sub-scales included in each measure/scoring system can be seen in table 5.3 and table 5.4, respectively.

Table 5.3: Measures (SCID-IV, CECA, RAPFA) and AAI scoring systems - Main's (M), Crittenden's (C), RF, and PORS - which will be used in different studies

	SCID-IV	CECA	RAPFA	Attachment M	Attachment C	RF	PORS
Chap 6: PORS and attachment	√			√	√		√
Chap 7: PORS and psychopathology	√						√
Chap 8: PORS and Reflective Function	√					√	√
Chap 9: PORS and early adversity	√	√				√	√
Chap 10: PORS and interpersonal functioning	√		√				√

Table 5.4: Overview of the scales and sub-scales which will be used in the next chapters

	Sub-scales	
SCID-IV	SCID-I (e.g., Major Depressive Episode, Anxiety Disorders) SCID-II (e.g., Borderline Personality Disorder)	
CECA	Antipathy Physical Neglect Psychological Neglect Discord	Physical Abuse Sexual Abuse Psychological Abuse
RAPFA	Work domain Love relationships Friendships	Non-specific social contacts Negotiations
Attachment	Preoccupied Secure (Balanced)	Dismissing Unresolved
RF	Negative RF Lacking in RF Questionable RF	Ordinary RF Marked RF Exceptional RF
PORS	Inconsistency Extreme evaluations Inappropriate elaboration Lack of differentiation	Inappropriate affective valence Distorted Attributions Disturbance of Thinking

5.3. Planned analyses

5.3.1 Non-parametric tests

Preliminary analysis revealed that the distribution of levels of PORS in the "main sample" (and its sub-samples) was positively skewed. Z-scores for skewness and kurtosis were calculated by dividing the values of S (skewness) and K (kurtosis) by their respective standard errors (SE skewness and SE kurtosis). These two values were then compared with known values from the normal distribution. An absolute z-score greater than 1.96 is considered significant at .05 level of significance (see Field, 2005), and indicates non-normality. All the scales included in the PORS, as would be expected, present a non-normal distribution with a higher concentration of scores in the left hand side of the distribution.

Moreover, many individuals obtained the same score and therefore the data transformations normally used with positively skewed data (e.g., log transformations, square root) were not applicable. Hence, throughout the next chapters, non-parametric statistics will be used. Kruskal-Wallis tests and its follow-ups (Mann-Whitney's) will be used to carry out mean comparisons between groups. Associations will be explored by using Kendall's tau-b correlation coefficients and regression analyses will be performed by using a

Bootstrap technique which does not make any assumptions as to the distribution of the data, as will be later explained.

5.3.2 Analytic strategy

As mentioned before, the overall aim of the present work is to study problematic object representations in patients with personality disorder by comparing them with patients with other disorders and normal controls. Moreover, the relationship between problematic object representations and additional variables empirically and theoretically associated with personality pathology (e.g., early abuse, personality functioning) will be explored. The different studies which will be carried out in the following chapters are therefore designed to address this overall aim although each of the chapters has also a more circumscribed emphasis in terms of its specific aims, analytic strategy, and theoretical implications.

Hence, in the next chapter - "PORS and attachment classifications" – the main aim is to show that the newly devised scales (PORS) are distinct from the original attachment style classification systems applied to the AAI. Besides significant associations between the systems, it will be shown that PORS levels do not merely reflect attachment categories and that the PORS do not assess the same dimensions previously tapped by attachment style scoring systems. Hence, the specific aim of this chapter is to contribute to offer support to the adequate discriminant validity of the PORS.

In Chapter 7:"PORS and psychopathology", the main concern will be to show that the PORS are able to distinguish patients with severe personality disorder from other patients and healthy controls. The study conducted in this chapter is therefore focused on trying to investigate whether higher levels of PORS are a distinguishing feature of severe personality disorder (predictive validity) and which scales are most successful in differentiating between different diagnostic groups.

The focus of Chapter 8:"PORS and Reflective Function" is also associated with discriminant validity in the sense that one aims to show that the PORS, although applied to the same instrument as the RF system (AAI protocol), do not measure

the same constructs tapped by this system. It is also hoped that the study conducted in this chapter will help to clarify the role of personality disorder diagnosis in the association between low reflective capacity and problematic object representations.

In Chapter 9: "PORS and early adversity", the main aim will be to investigate the relationship between early abuse/neglect and problematic object representations in adulthood and to study associations between early adversity, high levels of PORS, and presence of severe personality pathology. No direct test of PORS validity is addressed in this chapter although showing that severe personality disorder diagnosis predicts levels of PORS over and above adversity variables highly associated with personality pathology (e.g., sexual abuse) will lend further support to the discriminant validity of the PORS.

Finally, in Chapter 10:"PORS and interpersonal functioning", one is concerned with studying the relationship between problematic object representations and performance in real life relationships focusing on the ability that the PORS have to predict psychosocial impairments (predictive validity) and to investigate the role that personality pathology plays in this association.

Although the main concern in each study is to offer further support to the PORS as a valid measure (see table 5.5), the breath of the measures used and their relevance to developmental models of personality disorder (e.g., Fonagy et al., 1996) will also enable to lend further support to the link between early adversity, poor reflective capacity, problematic object representations, and personality pathology. This issue will be further discussed at the end of chapter 11 (p. 241).

Table 5.5: Types of validity addressed by the different studies

	Validity
Chap 6: PORS and attachment	discriminant
Chap 7: PORS and psychopathology	predictive
Chap 8: PORS and Reflective Function	discriminant
Chap 9: PORS and early adversity	-
Chap 10: PORS and interpersonal functioning	predictive

CHAPTER 6

PRELIMINARY ANALYSES: PORS AND ATTACHMENT STYLE CLASSIFICATIONS

Throughout this chapter a number of preliminary analyses will be carried out by using the final version of the Problematic Object Representation Scales (PORS) as described in chapter 4. The relationship between levels of problematic object representations and different attachment style categories will be explored. This will be done by using two pilot samples of AAI transcripts coded with different attachment style scoring systems: the original Attachment Scoring System (Main & Goldwyn, 1998) and the Dynamic-Maturation Approach (Crittenden, 2002). Analyses will be first conducted separately for each pilot sample/attachment scoring system, by comparing levels of problematic object representations among individuals with different attachment classification patterns. Subsequently, combined statistical analyses will be performed by pooling the two pilot samples and grouping individuals into equivalent attachment patterns in order to examine differences in terms of object representations resulting from collapsing the data obtained with the two scoring systems.

6.1 Relationship between the PORS and Attachment Classifications

Both modern object-relations and attachment theories emphasise the importance of mental representations of relationships as the main determinants of interpersonal behaviour and as responsible for the enduring effect of early experiences in adult life (e.g., Fonagy, 1999; Levy & Blatt, 1999). In fact, both theories maintain that mental representations of self and others are rooted in the early relationship with caregivers and lay the foundations for future interpersonal relationships.

However, authors such as Levy and Blatt (1999) claim that despite the fact that *mental representations* in object-relations theories are in general terms analogous to *internal working models* of attachment, they differ in some important

aspects. Among the aspects differentiating them is the idea that *working models* of attachment put more emphasis on the positive or negative nature of the representations of self and others not considering so much the structure of *cognitive schema,* as object-relations theories do. It is also claimed that object relations are distinguished by a developmental sequence with an increasing level of *complexity*, *abstraction*, and *verbal mediation.* As Fonagy (1999) puts it "*psychoanalytic developmentalists have always been concerned by how self, object, and object relationship representations evolve with development*" (p.468).

Consistently, Diamond and colleagues (1999) offered a preliminary report study comparing results obtained with attachment and object representation measures, as illustrating the *intrapsychic change* attained with a specific type of psychodynamic treatment. Their aim was to attempt to clarify the relationship between attachment-related representations (as assessed by the AAI) and object representations (as assessed by the *Object Representations Inventory*, Blatt et al., 1976). They concluded that "*representational states with respect to attachment as measured on the AAI and psychoanalytic notions of self and object representations (...) are overlapping but not synonymous with each other and may assess somewhat different clinical processes and knowledge structures*" (p. 865). Hence, it seems that despite their common ground, theories of object representations and attachment-related representations do not refer to the same phenomena.

Attachment researchers have not typically focused their attention on exploring the content and structure of mental representations associated with different attachment styles (Levy et al., 1998). There have been however a few studies that have tried to give empirical basis to the theoretical debate on the relationship between *working models of attachment* and *object representations.* Levy and colleagues (1998), for instance, conducted a study investigating the relationship between romantic attachment styles and representations of parents as assessed by written descriptions generated by the participants and rated according to content and structure. The authors found that *securely attached* individuals provided representations of parents that were more differentiated and positive in content (e.g., benevolent) when compared to *insecure* individuals. Results indicated no differences between the two groups of *insecure* individuals (*anxious-*

ambivalent and *avoidant*) in terms of ambivalent parental descriptions, but *insecure* individuals were more ambivalent than *secure* ones. Overall, individuals classified as *secure* produced descriptions of their parents that were more differentiated, elaborated, and benevolent.

Also Hazan and Shaver (1987) found that securely attached individuals tended to report more warmth in the relationship with both parents when compared to *insecure* individuals who tended to describe their parents as cold, rejecting, and unfair. The authors concluded that attachment style is related in a significant way to mental representations, including those associated with relationships with parents.

In another study, Rothstein (1997) investigated the relationship between mental representations of interpersonal relationships (as assessed by Urist's (1977) *Mutuality of Autonomy Scale* and Blatt et al.'s (1976) *Concept of the Object Scale*) and attachment (assessed through the AAI). They hypothesised that securely attached individuals would show more complex and autonomous object representations in the Rorschach when compared to individuals classified as *insecure*. However, no significant differences in quality or developmental level of object representations were found. The authors pointed out that methodological limitations of the study might have compromised its sensitivity, such as the use of a projective measure with a non-clinical sample or the comparison of two different modes of representation (the language-based AAI versus the image-based Rorschach). The question was raised as to whether differences in object representations among attachment patterns might have been found if a narrative based measure of object relations had been used instead of the image-based task involved in the Rorschach.

Next, a series of exploratory analyses will be conducted to investigate differences in terms of levels of problematic object representations across attachment groups as assessed by the AAI. Since the PORS represent an attempt to use the AAI to derive alternative dimensions, it is relevant to explore how the devised scales relate to the attachment style category system originally devised. It is predicted that the level of object representations will be significantly related to attachment

style, with individuals classified as securely attached displaying lower levels of problematic object representations when compared to *insecure* individuals.

It is important however to take into account that several indicators included in the PORS are inevitably associated with some of the criteria included in the classification systems used to derive attachment style categories. In fact, several PORS dimensions are related to some of the criteria used, for instance, in the original Attachment Scoring System, particularly in relation to the scale "*Coherence of transcript*". For example, the scale *inconsistency* included in the PORS covers aspects such as factual contradictions and oscillations of point of view (if they refer to significant figures), which are also taken into account to assess the level of "*Coherence of transcript*" when using the original scoring system. The same partial overlap happens also, for instance, between some indicators of the scale *inappropriate affective valence* and the AAI scale which deals with "*Involved/preoccupied anger*" or between the scale *inappropriate elaboration* and the scale "*Insistence on lack of recall*".

Other scales included in the PORS like *disturbance of thinking* and *lack of differentiation* have also some aspects in common with criteria used to decide the level of an individual's *"Coherence of transcript"*, although those aspects are more diffuse and less anchored to one single scale used in the original Attachment Scoring System. In fact, the scales included in the original system often cut across different PORS dimensions. For example, the scale "*Idealisation*" includes elements of *inconsistency* (e.g., discrepancy between descriptions and episodes used to support them) and use of *extreme evaluations* (e.g., excessive praising), with possibly also some *inappropriate elaboration* (e.g., lack of recall for negative events). Moreover, most of the PORS are tied to a specific significant figure. Inconsistencies, extreme evaluations, inappropriate affect etc. are not considered if they do not refer to a specific attachment figure or attachment related episode. Therefore, despite the predicted relationship between levels of problematic object representations and assignment to the *secure* versus *insecure* attachment patterns, PORS scores are not expected to merely reflect attachment categories.

6.1.1 PORS and attachment style as assessed by the original AAI classification system

6.1.1.1 Method

Participants

A total of 43 participants, most of them female (86%), composed the sample. These were parents from the community who participated in research projects conducted at the Menninger Clinic in Topeka, Kansas, and who belonged to one of the additional sources of participant recruitment as described in chapter 5 (p.85). Participants' ages ranged from 18 to 44 years (M = 27). Approximately 88% of the sample was either single (44%) or married (44%) and the remaining 12% was divorced. Regarding educational level, 38% of the participants were college graduates and 30% had finished high school education. About 15% of the participants completed a post-graduate course.

Materials

The Adult Attachment Interview protocol (George, Kaplan, & Main, 1996, see Appendix D) was administered to all participants. As briefly described before (p.46), this is a semi-structured interview focused upon the relationship with parents during childhood and their perceived impact on adult personality functioning. The protocol starts with several introductory questions used for orientation to the individual's family situation in childhood (e.g., who was in the family, where they lived etc.), as well as warm-up probes about siblings, extended family members, and current living arrangements of family of origin. During this stage, the interviewer tries to ascertain who were the parental figures with major care giving responsibilities in the individual's childhood.

Participants are then asked to provide a general description of the relationship with their parents in childhood and asked to go as far back as they can remember, around the period from 5-12 years of age. Participants are also asked to provide five adjectives or words to describe the relationship with their mother figure in early childhood, and to illustrate those adjectives with specific

autobiographic memories. This series of probes is repeated for the father figure and individuals are then asked to choose the parental figure they felt closer to and why.

Subsequently, several probes are included which inquire about times when the individual was emotionally upset, physically hurt, or ill as a child, and questions are asked about both the individual's and the parents' reactions to those events. This section is followed by probes that address issues such as first separation from parents, possible feelings of early rejection, feelings of being frightened or worried as a child, and occurrence of threatening behaviour by parents (e.g., experience of abuse).

In the next section of the interview, the individual is asked to evaluate the impact of early experiences with caregivers on his adult personality, try to offer an explanation for the parents' behaviours in the past, and provide a description of the relationship with any other significant persons who had care giving responsibilities for the individual during his childhood. Questions are also asked about any significant losses through death occurring both during childhood and adult years. These losses are explored in terms of feelings exhibited at the time of the death and the way they evolved over the years, and also as to the perceived impact of the loss on the individual's personality functioning and relationship to his children in the present. There is an additional probe about any other potential traumatic experience that might have occurred in the past.

The final section of the protocol includes a series of integrative questions tapping aspects related to changes in the individual's relationship with his caregivers occurring between childhood and adolescence and also regarding the quality of the current relationship with parents. Aspects such as sources of satisfaction and dissatisfaction in the relationship are included in this section. The individual is also asked about his current relationship with his child/children (or imaginary child for individuals without any children), including the exploration of feelings experienced upon temporary separation from the child, such as worry/concern.

The interview ends with questions that require the subject to think in terms of his expectations and hopes for the future. Participants are asked to think of three

wishes for their children twenty years on, to name any particular aspect which they feel they might have learnt from their childhood experiences, and to illustrate what they would hope their child might learn from his/her experiences of being parented by the them. These last probes are intended to help participants relax and finish the interview on a positive note.

Procedure

The AAI administration was audiotaped and subsequently transcribed verbatim. The forty-three transcripts were initially coded with the original Attachment Classification System by the group of researchers at the Menninger Clinic who provided this sub-sample of transcripts. Demographic data were also collected regarding participants' age, gender, marital status, and number of years of education. The AAI transcripts were subsequently coded by the author, blind to the Attachment Classification scorings, by using the Problematic Object Representation Scales (PORS).

The original Attachment Classification System devised by Main and Goldwyn (1998) encompasses different stages of coding, ultimately yielding an *attachment style* classification. Firstly, the coders are instructed to rate the individual's probable experiences with each of the caregivers in childhood. This phase involves classifying experiences with parents in terms of specific criteria characterising the relationship: *loving*, *rejecting*, *involving/role-reversing*, *neglecting*, and *pressuring to achieve*. This initial examination of factual information (probable experiences) helps to illustrate, in general terms, the most common childhood experience exhibited by people with a particular *state of mind* in relation to attachment and provides the coder with an initial idea of the *subject's coherence*. It may also help to better understand subtle distinctions within the same *state of mind* as it happens for example with people classified as *secure* who nevertheless describe negative childhood experiences such as abuse (*earned security*).

Next, several aspects of the individual's *state of mind* with respect to attachment are rated, which include scales for *coherence of transcript*, *idealisation of parent*, *insistence on the lack of recall*, *involved/involving anger*, *passivity or vagueness*

of discourse, *fear of loss*, *dismissing derogation*, *metacognitive monitoring*, and *overall coherence of mind*. Individuals are then assigned to one of five categories reflecting a general attachment pattern based on the adult's "*current state of mind*" in relation to attachment: *Dismissing of attachment* (D), *Secure* (F), *Preoccupied by past attachments* (E), *Unresolved-Disorganised with respect to traumas*, and *Cannot classify* (CC). Each of the first three categories is sub-divided into a number of sub-categories[29] reflecting a continuum in terms of *states of mind* in relation to attachment. The patterns *Unresolved* and *Cannot Classify* are always used with an alternative best-fitting classification and sub-classification assigned in terms of the D-F-E system.

Dismissing (D) individuals undervalue the importance of attachment relationships and experiences and their influence in personal development. There is a tendency to understate the importance of early attachment relationships in current thoughts and feelings as well as in daily life functioning. This is accomplished by either dismissing the shortcomings in parental behaviour during childhood or diminishing the potential harmful effect of that behaviour. Alternatively, *dismissing* individuals can appear as derogatory or condescending in relation to attachment experiences and try to come across as independent, strong, and unaffected by past events. Other individuals classified as *dismissing* may manage to maintain the attachment system relatively *de-activated* by idealising parents' behaviour or by claming lack of memory for childhood events.

Individuals assigned the *Secure* (F) category recognise the value of attachment relationships and experiences and, although they acknowledge the influence of those early experiences in their current personality functioning, they are also "objective" and coherent in their account. Specific biographic memories are offered to illustrate general descriptions of caregivers and these are fluent, non-contradictory, and non-infused with idealisation or angry preoccupation. These individuals seem at ease at discussing childhood attachment relationships and do so in an open, relaxed way. Individuals classified as *secure* often describe

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[29] *Dismissing patterns: D1: dismissing of attachment, D2: devaluing of attachment, D3: restricted in feeling, D4: cut-off from source of fear regarding possibilities of loss*
Secure patterns: F1: some setting aside of attachment, F2: somewhat dismissing or restricting of attachment, F3: secure/autonomous, F4: slightly preoccupied, F5: somewhat resentful/conflicted
Preoccupied patterns: E1: passive, E2: angry, E3: overwhelmed/fearfully preoccupied

experiences of adequate parental behaviour with caregivers who were able to provide a *secure base* for the child through comfort and support. In other instances, individuals classified as *secure* may report inadequate parental behaviour (e.g., rejection, abuse) but are still able to offer an integrated, reflective account of how they managed to evade or overcome the adverse childhood experiences (e.g., through forgiveness).

Preoccupied (E) styles are characterised by an excessive concern or involvement with past experiences and relationship with caregivers. Although these individuals may appear very open and cooperative during the interview, there is often an entangled and unproductive struggle to offer a picture of childhood attachment-related experiences. The individual appears to have a weak sense of personal identity and sometimes his sense of self appears entangled with that of his family. Individuals classified as *preoccupied* seem to find it difficult to 'move on' and remain caught up in past attachment experiences or overwhelming/traumatic episodes, which results in a failure to offer a productive and objective account of childhood experiences. Descriptions infused with passivity and vagueness, fearful and overwhelming affect, anger, conflicting emotions, and over analytic style characterise the *preoccupied* style and may appear at different points in the narrative.

Individuals are classified under the *Disorganised/Unresolved* (U) category on the basis of *lapses in the monitoring of reasoning* (e.g., disorientation in terms of time and/or space) *or discourse* (e.g., prolonged silences, unfinished sentences) when reporting incidents of traumatic experiences such as loss and abuse. Occasionally, there might be also *behavioural reactions,* which may include recounting during the interview extreme disorganised past behaviour related to loss or abuse, without convincing evidence that this behaviour has been since then changed. *Disorganised* individuals' narratives have therefore in common signs that show the inability to overcome an attachment related trauma, which cannot be reconciled with the individual's current functioning. This main U classification is assigned together with a *best-fitting* D, F, or E (or possibly CC) alternative classification.

Finally, the *Cannot Classify* (CC) category is assigned in cases where it is not possible to decide among any of the three organised classifications (D, F, E). There is an incompatible mix of aspects characteristic of different *mental states* with no overriding classification emerging from the narrative analysis. Nevertheless, alternative organised categories must be assigned in addition to the main CC classification.

6.1.1.2 Results

Attachment classification and demographic variables

All organised attachment groups (*secure*, *preoccupied*, and *dismissing*) were primarily female with no significant sex differences among them. Also, no differences in terms of age and marital status were found among the groups, although they differed significantly in terms of educational level, $F(2, 32) = 4.08$, $p=.03$. Pairwise Comparisons with Adjusted Sidak revealed that *secure* individuals appeared to be significantly more educated than *preoccupied* individuals ($p = .04$). Similar results were found when only two groups - *secure* versus *insecure* (*preoccupied* or *dismissing*) - were compared. They differed only in terms of educational level with *secure* individuals being more educated than *insecure* ones ($t = 2.66$, d.f. = 35, $p = .01$). In terms of the category *unresolved*, it was found that individuals assigned to this classification did not differ in any of the demographic variables from individuals assigned to a primary organised classification. However, individuals considered as "cannot classify" differed significantly from the remaining individuals in terms of gender, with significantly more men being assigned to this category ($\chi 2 = 5.82$, d.f. = 1, $p = .02$).

Problematic object representations and attachment classification

Statistical analyses were performed in order to investigate differences in terms of problematic object representations among individuals classified according to the different attachment classification categories ($N = 36$, 7 participants were considered as "cannot classify" and were excluded from the analysis). The first analysis conducted was a non-parametric independent-samples test (Kruskal-Wallis) comparing the scores obtained in the PORS among the three organised

attachment categories described above: *secure*, *preoccupied*, and *dismissing*, regardless of their *unresolved* status. Significant differences were found among the groups for the scales: *inappropriate elaboration* and *inappropriate affective valence*, with the lowest scores being exhibited by the *secure* individuals for the scale *inappropriate elaboration* and by the *dismissing* individuals for the scale *inappropriate affective valence*. Individuals classified as *dismissing* showed the highest scores for the scale *inappropriate elaboration*, whereas *preoccupied* individuals scored higher than the other two groups in the scale *inappropriate affective valence* (see table 6.1). No significant differences were found for other scales among *secure*, *preoccupied*, and *dismissing* individuals.

Table 6.1: Kruskal-Wallis test comparing *secure* (N = 17), *preoccupied* (N = 7), and *dismissing* (N = 12) individuals for levels of PORS

	Mean Rank				
	Secure	Preoccupied	Dismissing	$\chi 2$ (df)	sig.
Inconsistency	16.0	23.6	19.1	2.69 (2)	.26
Extreme evaluations	20.6	22.2	13.4	4.82 (2)	.09
Inap. elaboration	13.2	20.6	24.8	9.18 (2)	.01
Lack of differentiation	17.4	19.4	19.5	.39 (2)	.82
Inap. affective valence	16.9	29.3	14.5	10.94 (2)	.004
Distorted attributions	16.5	18.7	21.2	1.56 (2)	.46
Disturb. of thinking	18.7	23.4	15.3	3.15 (2)	.21

A series of Mann-Whitney Tests (with Bonferroni correction) were performed in order to determine which attachment group(s) differed in terms of problems in object representations, with three two-way comparisons being carried out (see table 6.2). In relation to the scale *inappropriate elaboration*, results revealed a significant difference between *secure* vs. *dismissing*, with individuals classified as *secure* showing lower levels of *inappropriate elaboration* when compared to *dismissing* individuals.

For instance, when asked about how the relationship with his mother was like in the present, one of the participants classified as *dismissing* with regards to attachment simply answered "*Not good*", a typical example of *inappropriate elaboration* (over-simplified description). By contrast, one of the *secure* individuals replied:

"*I guess my expectations of her still being the mom that I always wanted will never happen, you know, and I think that there's still gonna be there and that I have to keep*

remind {sic} me of that. (...) and so, I have a real, I think, I have a lot of, a lot of tolerance for my mom and a lot of love for her".

No significant differences were found between any other attachment category groups for this scale. Regarding the scale *inappropriate affective valence*, significant differences were found between the groups *preoccupied* vs. *dismissing*, and *preoccupied* vs. *secure*, with *preoccupied* individuals showing significantly higher levels of *inappropriate affective valence* when compared to both *secure* and *dismissing* individuals. No significant differences were found between *secure* and *dismissing* individuals.

For example, one of the individuals classified as *preoccupied* described his relationship with his parents in the present by saying:

"I haven't seen my father, in maybe goodness, I quit visiting him when I was 15. He has spotted me around town on occasion, but I never stopped to speak. I have not visited him (...) I'm 30 now, it's been good 10 years that I haven't seen him at all. And I have no need to change that (...)".

Table 6.2: Mann-Whitney tests comparing *secure vs. dismissing*, *preoccupied vs. dismissing*, and *secure vs. preoccupied* individuals in terms of PORS levels

	Secure vs. dismissing		Preoccupied vs.dismissing		Secure vs. preoccupied	
	Mann-U	sig.	Mann-U	sig.	Mann-U	sig.
Inconsistency	82.0	.40	29.0	.26	37.0	.15
Extreme evaluations	58.5	.04	24.0	.09	51.5	.60
Inap. elaboration	42.0	.006	27.0	.20	30.0	.05
Lack of differentiation	89.0	.55	41.5	.97	53.5	.69
Inap. affective valence	85.5	.40	10.0	.004	16.0	.004
Distorted attributions	76.5	.22	35.5	.57	51.5	.58
Disturb. of thinking	82.5	.33	23.0	.08	44.0	.30

When the *insecure* organised patterns – *dismissing* and *preoccupied* – were collapsed into one single category, differences were found only for the scale *inappropriate elaboration*. Hence, a two-way Mann-Whitney Test comparing *secure* (n=17) versus *insecure* (n=23) (3 participants had a mixed "secure"/"insecure" attachment classification - e.g., *secure/preoccupied* - and were not included in this analysis) individuals revealed that the former exhibited

significantly lower levels on the scale *inappropriate elaboration* than the latter (U = 87, p = .002).

Another Mann-Whitney analysis revealed also that individuals classified as *unresolved* (regardless of their best-fitting organised classification, n= 9) showed significantly higher levels on both *inappropriate elaboration* (U = 67, p = .009) and *disturbance of thinking* (U = 78.5, p = .02) scales when compared to individuals who were assigned a primary organised classification.

Finally, significant differences were found for the scale *inappropriate affective valence* when individuals described as "cannot classify" (n=7) were compared with the remaining participants. Significantly higher levels of *inappropriate affective valence* where found among individuals described as "cannot classify" (U = 69.5, p = .05).

Controlling for educational level and gender

Bootstrap Regression analyses were conducted in order to investigate whether the differences found above remained significant when the effect of the demographic variables "educational level" and "gender" were taken into account. Bootstrap analysis is a technique that enables the estimation of a sample distribution without the need to make assumptions regarding the distribution in the population (Fox, 2002). Bootstrap techniques are therefore useful since they do not assume that the sample is normally distributed and do not rely on estimates as most statistical methods do. Instead, the sample itself is used as if it were the population from which a series of different random samples are drawn. This sample simulation is done many times (about 1000) and it derives a series of different means, which illustrate the range of expected variation attributable to the sampling process. When for example comparing two sets of observations, one can test the null hypothesis by assuming that they were derived from the same population (*simulated null hypothesis population*) and then compare their means. This difference is then converted into a p value that results from calculating the probability of getting a difference as big as the one obtained (Fearon, 2003). Bootstrap methods can be applied to various statistical tests such as mean comparisons, analysis of variance, and regressions. All the

Bootstrap Regression analyses conducted throughout this work were performed by using the computer software package "Arc 1.06", which is a statistical tool for regression analyses (Cook & Weisberg, 1999).

Hence, for the first analysis involving the comparison of levels of *inappropriate elaboration* between *secure* and *dismissing* individuals, the categorical variable "attachment group" which had three levels (*secure, preoccupied,* and *dismissing*) was transformed into a *dummy variable* with two levels. Three variables were entered into the regression - a) *secure vs. dismissing*; b) *secure vs. preoccupied*; c) *number of years of education* – with *inappropriate elaboration* entered as the predicted variable. The effect of the variable "*secure* vs. *dismissing*" remained a significant predictor (B = 2.14, Boot p = .007) of levels of *inappropriate elaboration* when the effect of "years of education" was controlled for.

Another Bootstrap analysis was conducted with respect to the scale *inappropriate affective valence.* The following variables were entered into the regression - a) *preoccupied vs. secure*; b) *preoccupied vs dismissing*; c) *number of years of education* – with *inappropriate affective valence* entered as the predicted variable. Both variable levels "*preoccupied* vs. *secure*" (B = -2.13, Boot p = .03), and "*preoccupied* vs. *dismissing*" (B = -2.27, Boot p = .02) remained significant predictors of levels of *inappropriate affective valence*, over and above the effect of educational level.

In relation to the differences in levels of *inappropriate elaboration* found between the *secure* and *insecure* organised patterns, it was observed once more that the effect of attachment category remained a significant predictor of levels of *inappropriate elaboration* when the effect of educational level was controlled for (B = 2.1, Boot p = .04). However, differences found between individuals considered as "cannot classify" and the remaining participants did not retain their predictive value for the scale *inappropriate affective valence* when the effect of gender was taken into account (Boot p > .05).

6.1.2 PORS and attachment style as assessed by the Dynamic-Maturation Approach

Crittenden (2002) has proposed a new system to score the AAI, the *Dynamic-Maturation Approach,* which is aimed at examining attachment patterns among healthy and disturbed individuals. The rationale behind this approach is the realisation that the AAI is a relevant instrument to examine strategies used by healthy and disturbed adults to solve problems, specifically those related to the issue of danger in the environment and to relationships with others. This alternative approach to deriving attachment categories from the AAI protocol is similar to the original system developed by Main and Goldwyn but seeks to increase its reliability and to expand the applicability of the interview to clinical samples.

The interview is seen as a means of examining the way individuals make use of their childhood past experiences to evaluate and respond to danger, that is, to estimate when danger will occur and to decide which is the best action to prepare for it. Crittenden (2002) is therefore interested in looking at developmental processes in adult age that enable a better adaptation to the social environment. She emphasises the importance of the way the information is processed to become meaningful in terms of aspects such as future self-preservation and protection of attachment figures. Hence, central to the *Dynamic-Maturation Approach* is the role of several memory systems (*procedural, imaged, semantic, episodic,* and *working memory)* that are involved when people are faced with threats to safety and that influence the way new situations are dealt with.

Similarly to Main and Goldwyn's system, individuals are classified into three possible organised categories: *dismissing, balanced* (equivalent to *secure*), and *preoccupied.* The key aspect in determining attachment security is, according to Crittenden, environmental and interpersonal cues that inform about *danger* and ways of protecting oneself from it. Individuals are capable of self-protection by attending to danger-relevant information, provided mainly by their *cognitions* and *affect.* The emergence of secure or *balanced* types is conceptualised as resulting from the balance of these two sources of information, which are flexibly integrated. Conversely, when individuals rely almost exclusively on one of the

sources of information, *insecure* patterns are likely to emerge with individuals being classified as *dismissing* (over-reliance on cognition) or *preoccupied* (over-reliance on affect). The *Dynamic-Maturation Approach* offers also a new subset of classifications[30] that are used in addition to the organised attachment patterns. They result from observations with adults from different backgrounds and with problematic histories, including childhood adversity and psychological disorder. Those sub-patterns reflect gradual variations within the overall pattern in terms of the way memory systems operate and transformations of information are processed in order to anticipate and prepare for perceived danger.

6.1.2.1 Method

Participants

A total of 31 participants (17 female, 14 male) composed the sample. This is a sub-group of individuals belonging to the "main sample" which will be used in subsequent chapters and which was recruited for research projects conducted at the Menninger Clinic in Houston (Texas) between 1997 and 1999, by researchers led by Helen Stein and Peter Fonagy. Participants' ages ranged from 19 to 52 (M = 30). Approximately 97% of the sample was either single (52%) or married (45%) and the remaining 3% was divorced. Regarding educational level, about 46% of the participants had attended college during 1-3 years whereas 14% were college graduates. About 18% of the individuals had finished high school education, with the same percentage of individuals having completed post-graduate courses. The sample was composed of 'healthy' individuals (N = 6), patients with personality disorder (N = 11), and patients with other disorders (Axis I, N =14).

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[30] *Dismissing patterns are sub-divided into those which are based on a) idealisation of others - A1: idealising, A3: compulsive caregiving, A5:compulsive promiscuity, and A7: delusional idealisation - and b) negation of self – A2: distancing, A4: compulsive compliance, A6: compusilve self-reliance, and A8: externally assembled self*
Balanced patterns: B1:distanced from the past, B2: accepting, B3:comfortably balanced, B4:sentimental, and B5: complaining acceptance
Preoccupied patterns: C1: threateningly angry, C2: disarmingly desirous of comfort, C3: aggressively angry,C4: feigned helplessness, C5: punitively angry and obsessed with revenge, C6: seductive and obsessed with rescue,C7: menacing, and C8: paranoid

Materials

A modified version of the Adult Attachment Interview protocol adapted to the Dynamic-Maturation approach system (see Appendix E) was administered to all participants.

The Structural Clinical Interview for the DSM-IV (SCID-IV, First, Spitzer, Gibbon, & Williams, 1997) was also used. Both form I and II of the SCID were used. The SCID-I assesses all the disorders included in the Axis I of the DSM and includes the following pathological categories: Mood Episodes (e.g., Major Depressive Episode), Mood Disorders (e.g., Bipolar), Psychotic and Associated Symptoms (e.g., Schizoaffective disorder), Alcohol and Other Substance Use Disorders, and Anxiety Disorders (e.g., Panic Disorder). All the sections follow a structured format with symptom criteria for each disorder being rated as either absent (1), sub threshold (2) or true/present (3). The SCID-II assesses the presence of the 10 personality disorders described in the DSM-IV grouped into three different clusters: Paranoid, Schizoid, Schizotypal (Cluster A), Antisocial, Borderline, Histrionic, Narcissistic (Cluster B), Avoidant, Dependent, and Obsessive-Compulsive (Cluster C). The SCID-II starts with questions that give an overview of the participant's typical behaviour in social situations and interpersonal relationships. A self-report screening questionnaire measure is completed before administering the SCID-II interview to shorten the procedure. Subsequently, each personality disorder is assessed in more detail. Summary score sheets are filled out at the end of SCID-I and SCID-II and a profile sheet is obtained where Axis I and Axis II diagnostic profiles are registered.

Procedure

The same procedure in terms of AAI administration and audiotape transcription was used with interview codings being based on interview transcripts. The AAI transcripts were initially scored with the *Dynamic-Maturation Approach* by a researcher involved in the Menninger Clinic projects. This researcher was trained, certified as a reliable coder, and supervised by Dr. Crittenden. The SCID was also administered to the thirty-one participants and demographic data were collected regarding participants' age, gender, marital status, and number of years of education. The sample of AAI transcripts was then coded by the author, blind

to attachment scoring and psychopathology group, by using the Problematic Object Representation Scales (PORS).

The *Dynamic-Maturation Approach* scoring procedure involves classifying AAI transcripts according to three criteria: a) history of events in childhood, b) memory system operation (*procedural, imaged, semantic, episodic,* and *working memory*) and c) presence of *discourse markers* illustrating transformations of *cognition* or *affect* (e.g., erroneous, omitted, or distorted information). The history of events in childhood involves experiences such as comfort, protection, danger, rejection, etc. and serve as the basis upon which the individual's *adaptation behaviour* and *mental coherency* can be assessed. At this stage, the coder tries to ascertain the level of danger and the type of danger present in the individual's childhood. The way memory systems operate and the presence of certain discourse markers are also crucial aspects in evaluating the speakers mental functioning and in assigning them to a specific attachment pattern.

Hence, in terms of *procedural memory*, *balanced* speakers tend to be cooperative and provide relevant information about their lives whereas *dismissing* speakers may cut-short some relevant aspects of their childhood or focus on other less relevant details. *Preoccupied* speakers often try to seek the interviewer's approval and involve him in the story being told. In relation to *imaged memory,* it is often the case that *balanced* individuals provide lively and spontaneous images when recounting episodes whereas *insecure* individuals either tend to omit them (*dismissing* speakers) or overuse them as an attempt to clarify mixed feelings or replace semantic memories (*preoccupied* speakers). *Semantic memory* differs also between attachment groups with *balanced* individuals being capable of understanding the complexity of past events and describing them in differentiated and genuine ways without attempts at covering up important inconsistencies. *Dismissing* speakers often volunteer distorted verbalisations that are either idealised or derogatory, whereas *preoccupied* individuals usually offer inconsistent, oscillating, incomplete semantic memories reflecting neglect of information from cognitive sources. With regards to *episodic memory*, balanced speakers tend to describe episodes that contain both cognitive (e.g., causal and temporal order) and affective information (e.g., description of feelings). D*ismissing individuals,* in their turn, tend to offer limited

or distorted episode recollections that are for example cut-off before affect arises and which concentrate on the cognitive sources of information. *Preoccupied* speakers tend to do the opposite by focusing more on their feelings than on the factual information, neglecting causal and temporal order. Finally, as far as *working memory* (integrative capacity) is concerned, *balanced* individuals tend to integrate new sources of information with past experience by revising their understanding to better predict the future. *Dismissing* individuals often focus on positive conclusions about their childhood or evade any integrative efforts, whereas *preoccupied* speakers tend to use canned descriptive expressions as a replacement for fresh attempts at understanding past experience.

Linked to the way memory systems operate and appear more or less integrated is the presence of specific discourse markers that seem to characterise individuals with different attachment patterns. Hence *balanced* speakers seem to exhibit fluent speech, with only minor dysfluencies (e.g., hesitations), and to correct or justify any contradictions or inconsistencies (metacognitions). *Dismissing* individuals use several forms of distancing speech (e.g., omitting personal pronouns), tend to use expressions that minimise negative affect, and often use very concise speech lacking in detail and vividness. They also seem very concerned in monitoring their speech and carefully controlling what is said. *Preoccupied* speakers seem to have difficulty in producing organised and coherent speech, sometimes offering confused, vague, or unfinished verbalisations very often infused with contradictions and confusion of points of view. Their discourse often includes markers such as exclamations, childish language, affect-laden images, and pseudo-metacognitions (canned semantic conclusions).

Despite being understood in a theoretically different way, the three organised categories described by Crittenden are meant to correspond to the ones originally defined in the original scoring system. In addition to those categories – *dismissing* (A), *balanced* (B), and *preoccupied* (C) (each with their range of distinct sub-patterns) – individuals can also be classified as *unresolved.* In the Dynamic-Maturation Approach *unresolved* status is designated *lack of resolution for danger* emphasising the central issue of *danger,* which can arise in the face of experiences of loss and trauma. Finally, when individuals show characteristics of

both the *dismissing* and *preoccupied* patterns, with no overriding pattern, they are classified as either A/C (when the two patterns appear alternated) or AC (when the two patterns are blended). These categories have no direct counterpart in Main and Goldwyn's system since their "cannot classify" designation includes more combinations other than A+C.

6.1.2.2 Results

Attachment classification and demographic variables

No differences were found among the organised attachment categories included in the Dynamic-Maturation Approach (*balanced*, *preoccupied*, and *dismissing*) in terms of gender, age, marital status, or educational level. Also, when considering only *secure* versus *insecure* individuals no significant differences in terms of demographic variables were found. However, individuals classified as *unresolved* differed from individuals assigned a primary organised classification in terms of number of years of education ($t = 3.46$, $d.f.= 20$, $p = .002$) with *unresolved* individuals being less educated.

Attachment classification prevalence rates

Attachment prevalence rates were also calculated. It was found that at least half of the participants with Axis I disorders or healthy controls presented a *balanced* attachment style whereas individuals with personality disorder were mostly classified as *preoccupied.* They were also more likely to be *unresolved* and to receive a "cannot classify" attachment status (see tables 6.3 and 6.4).

Table 6.3: Prevalence rates of organised attachment classification categories across psychopathology group

	Psychopathology		
	PD N (%)	Axis I N (%)	Controls N (%)
balanced	4 (40.0)	8 (61.5)	3 (50.0)
preoccupied	5 (50.0)	0 (0)	0 (0)
dismissing	1 (10.0)	5 (38.5)	3 (50.0)

Table 6.4: Prevalence rates of *unresolved* and *cannot classify* status across psychopathology group

	Psychopathology		
	PD N (%)	Axis I N (%)	Controls N (%)
unresolved	7 (63.6)	8 (57.1)	2 (33.3)
cannot classify	1 (9.1)	1 (7.1)	0 (0)

Attachment classification and psychopathology

An association between attachment style category and presence of personality disorder was found ($\chi 2$ = 12.4, d.f. = 4, p = .02). The number of patients with personality disorder assigned to the *preoccupied* category was higher than would be expected by chance, whereas the number of those assigned to the *secure* or *dismissing* category was lower than expected. The opposite happened when healthy controls and patients with Axis I disorders were considered. No association was found between attachment style and psychopathology when the categories *secure* versus *insecure* were compared. The same happened when *unresolved* individuals were compared with those assigned to a primary organised classification.

Problematic object representations and attachment classification

Statistical analyses were performed in order to investigate differences in terms of problematic object representations among attachment categories. The first analysis conducted was a Kruskal-Wallis Test comparing the scores obtained in the PORS across the three organised categories - *balanced*, *preoccupied*, and *dismissing*, regardless of their *unresolved* status (N = 29, 2 participants received combined *preoccupied* and *dismissing* classifications and were therefore exclude from this analysis). Similarly to what was observed with the original attachment category system, significant differences were found among the groups for the scales *inappropriate elaboration* and *inappropriate affective valence* (see table 6.5).

Table 6.5: Kruskal-Wallis test comparing *balanced* (N = 15), *preoccupied* (N = 5), and *dismissing* (N = 9) individuals for levels of PORS

	Mean Rank				
	Balanced	Preoccupied	Dismissing	$\chi 2$ (df)	sig.
Inconsistency	14.6	18.9	13.6	1.38 (2)	.50
Extreme evaluations	17.1	16.0	11.0	4.75 (2)	.09
Inap. elaboration	10.7	18.3	20.3	8.78 (2)	.01
Lack of differentiation	16.1	15.0	13.2	.67 (2)	.71
Inap. affective. valence	14.8	23.1	10.8	7.86 (2)	.02
Distorted attributions	14.6	16.8	14.6	.31 (2)	.86
Disturb. of thinking	17.3	15.8	10.7	4.31 (2)	.12

A series of follow-up Mann-Whitney Tests (with Bonferroni correction) were performed in order to determine which attachment group(s) differed in terms of object representations, with three two-way comparisons being carried out. In relation to the scale *inappropriate elaboration*, results revealed significant differences between the groups *balanced* vs. *dismissing,* with individuals classified as *balanced* showing lower levels of *inappropriate elaboration* when compared to *dismissing* individuals. Regarding the scale *inappropriate affective valence*, significant differences were found between the groups *preoccupied* vs. *dismissing*, with *dismissing* individuals showing significantly lower levels of *inappropriate affective valence* when compared to *preoccupied* individuals (see table 6.6).

Table 6.6: Mann-Whitney tests comparing *balanced vs. dismissing*, *preoccupied vs. dismissing*, and *balanced vs. preoccupied* individuals in terms of levels of PORS

	Balanced vs.dismissing		Preoccupied vs.dismissing		Balanced vs. preoccupied	
	Mann-U	sig.	Mann-U	sig.	Mann-U	sig.
Inconsistency	64.5	.86	12.5	.18	28.0	.40
Extreme evaluations	40.5	.03	13.5	.05	33.5	.69
Inap. elaboration	26.5	.01	15.5	.33	14.0	.03
Lack of differentiation	54.0	.41	20.0	.73	35.0	.82
Inap. affective valence	49.5	.22	2.5	.004	17.0	.06
Distorted attributions	67.5	.99	19.0	.62	32.0	.61
Disturb. of thinking	36.0	.04	15.5	.19	34.5	.78

When the *insecure* organised patterns – *dismissing* and *preoccupied* – were collapsed into one single category, differences were found once more only for the scale *inappropriate elaboration.* The Mann-Whitney Test comparing *secure* (n=17) versus *insecure* (n=14) individuals revealed that the former exhibited

significantly lower levels on the scale *inappropriate elaboration* than the latter (U = 59.5, p =. 01). Another Mann-Whitney analysis was performed between the individuals classified as *unresolved* (regardless of their secondary best-fitting organised classification, n=17) and those individuals who were assigned a primary organised classification. No significant differences were found between the groups.

6.1.3 Combined analyses including transcripts coded with the original AAI Scoring System and with the Dynamic-Maturation Approach

The findings reported above are based on a small number of cases and therefore some of the analyses have little power to detect differences among the groups. Given the similarity of findings obtained when using the original AAI Scoring System and the Dynamic-Maturation Approach, the two groups of transcripts coded with the alternative systems were pooled into one single sample and the same statistical analyses were conducted.

6.1.3.1 Results

Attachment classification and demographic variables

All organised attachment groups included in the combined sample (*secure/balanced*, *preoccupied*, and *dismissing*) were primarily female with no significant sex differences among them. Also no differences in terms of age and marital status were found among the groups. The groups differed significantly in terms of educational level, F (2, 52) = 4.57, p = .02, with *secure* individuals being more educated than *preoccupied* individuals (p = .03, Adjusted Sidak). When only two groups – *secure* and *insecure* – were considered, similar results were obtained. Hence, the two groups differed only in terms educational level with *secure* individuals being significantly more educated than *insecure* ones (t = 3.02, d.f. = 57, p = .004). Individuals classified as *unresolved* did not seem to differ significantly in any demographic variables from individuals assigned a primary organised classification.

Problematic object representations and attachment classification

The first Kruskal-Wallis Test compared the scores obtained in the PORS among the three organised attachment categories described above: *secure/balanced*, *preoccupied*, and *dismissing*, regardless of their *unresolved* status. Significant differences among the three groups were found for the scales: *extreme evaluations, inappropriate elaboration*, and *inappropriate affective valence* (see table 6.7). Plotted mean ranks can be found in figure 6.1.

Table 6.7: Kruskal-Wallis test comparing *secure/balanced* (N = 32), *preoccupied* (N = 12), and *dismissing* (N = 21) individuals for levels of PORS

	Mean Rank				
	Secure/ Balanced	Preoccupied	Dismissing	$\chi 2$ (df)	sig.
Inconsistency	29.9	42.2	32.5	3.8 (2)	.15
Extreme evaluations	37.5	36.4	24.2	8.12 (2)	.02
Inap. elaboration	23.5	38.6	44.4	17.74 (2)	.0001
Lack of differentiation	32.9	33.8	32.7	.03 (2)	.99
Inap. affective. valence	31.2	52.0	24.8	18.86 (2)	.0001
Distorted attributions	30.6	34.8	35.6	1.12 (2)	.57
Disturb. of thinking	35.6	39.0	25.7	5.96 (2)	.06

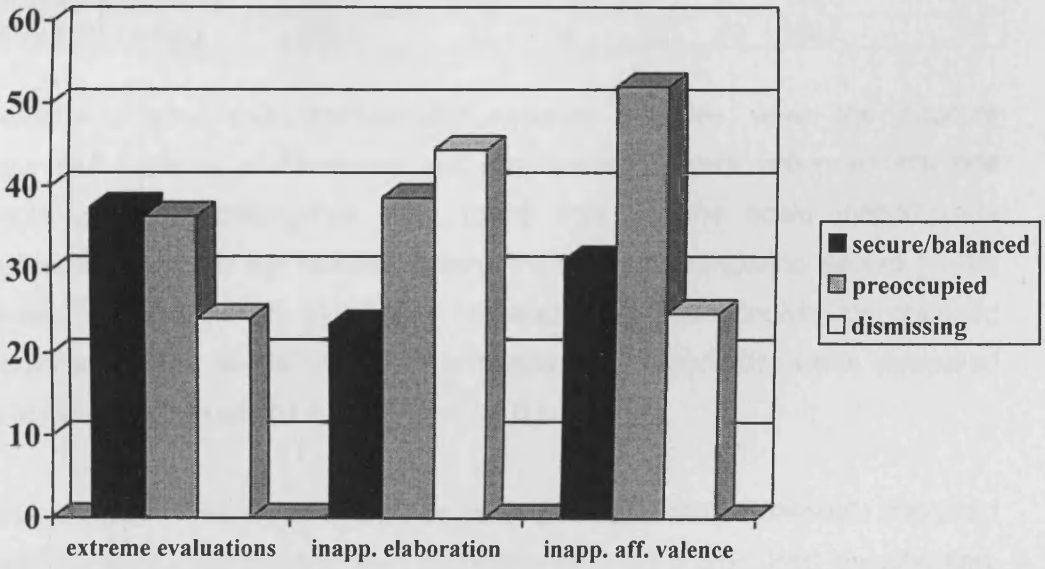

Fig 6.1: Mean ranks for levels of PORS across attachment style category groups

Mann-Whitney Tests (with Bonferroni correction) were performed in order to determine which attachment group(s) differed in terms of problematic object representations. Regarding the scale *extreme evaluations*, significant differences were observed between *secure/balanced* vs. *dismissing* individuals with *dismissing* individuals showing lower levels on this scale. In relation to *inappropriate elaboration*, significant differences were found between *secure/balanced* and both *preoccupied* and *dismissing* individuals, with *secure* individuals exhibiting the lowest scores. Regarding the scale *inappropriate affective valence*, significant differences were found between the groups *secure/balanced* vs. *preoccupied* and *preoccupied* vs. *dismissing* with *secure* and *dismissing* individuals showing significantly lower levels of *inappropriate affective valence* when compared to *preoccupied* individuals (see table 6.8).

Table 6.8: Mann-Whitney tests comparing *balanced vs. dismissing*, *preoccupied vs. dismissing*, and *balanced vs. preoccupied* individuals in terms of levels of PORS

	Secure/balanced vs.dismissing		Preoccupied vs.dismissing		Secure/balanced vs. preoccupied	
	Mann-U	sig.	Mann-U	sig.	Mann-U	sig.
Inconsistency	304.5	.56	83.0	.99	124.5	.07
Extreme evaluations	196.0	.005	82.0	.04	188.5	.92
Inap. elaboration	138.0	.0002	85.5	.12	84.5	.003
Lack of differentiation	333.5	.96	122.5	.89	186.0	.87
Inap. affective valence	266.5	.15	24.0	.0001	66.0	.001
Distorted attributions	284.5	.32	123.0	.91	168.0	.50
Disturb. of thinking	232.0	.03	77.0	.03	169.5	.53

Similarly to what was obtained with separate samples, when the *insecure* organised patterns – *dismissing* and *preoccupied* – were collapsed into one single category, differences were found only for the scale *inappropriate elaboration*. Hence, the two-way Mann-Whitney Test comparing *secure* (n=34) versus *insecure* (n=37) individuals revealed that *secure* individuals obtained significantly lower levels on the scale *inappropriate elaboration* when compared to *insecure* individuals ($U = 292.5$, $p = .0001$).

Another Mann-Whitney analysis was performed comparing individuals classified as *unresolved* (regardless of their secondary best-fitting organised classification, n=26) and individuals who were assigned a primary organised classification. Significantly higher levels of *lack of differentiation* ($U = 450.5$, $p = .04$) were obtained by the *unresolved* individuals when compared to the remaining sample.

Controlling for educational level

The differences found between *secure* and *dismissing* individuals for the scale *extreme evaluations*, did not remain significant when the effect of educational level was taken into account. Hence, when a Bootstrap regression analysis entering the variables a) *secure* vs. *dismissing*, b) *secure* vs. *preoccupied,* and c) *educational level* was conducted, it was found that the effect of the variable "*secure* vs. *dismissing*" was no longer a significant predictor of levels of *extreme evaluations* (Boot $p > .05$). In relation to the scale *inappropriate elaboration,* only the differences between the *secure* and *dismissing* groups remained significant ($B = 1.8$, $p = .00001$) when the effect of educational level was cancelled out. The effect of the variable *secure* vs. *preoccupied* was no longer a significant predictor of levels of *inappropriate elaboration* (Boot $p > .05$). Regarding the scale *inappropriate affective valence*, the effect of both variables "*preoccupied* vs. *secure*" ($B = -2.19$, Boot $p = .007$) and "*preoccupied* vs. *dismissing*" ($B = -2.75$, Boot $p = .001$) remained significant, when the effect of educational level was taken into account.

Finally, the differences found between the *secure* and *insecure* attachment category groups remained significant when the effect of educational level was controlled for. Hence, the effect of attachment security ($B = 1.99$, Boot $p = .002$) remained a significant predictor of levels obtained in the scale *inappropriate elaboration.*

6.1.4 Discussion

A number of preliminary analyses were performed which attempted to give an overview of how the PORS relate to attachment classifications. Initially, separate analyses were conducted for interview transcripts coded with the original Attachment Scoring System developed by Main and Goldwyn (1998) and with the Dynamic-Maturation Approach developed by Crittenden (2002). As the results obtained with the two different systems appeared to be very similar, combined analyses were performed by pooling the two samples together and assigning individuals to equivalent attachment categories.

In the first separate analysis, which compared levels of problematic object representations across attachment groups based on the original Attachment Scoring System, significant differences were found for the scales *inappropriate elaboration* and *inappropriate affective valence*. In relation to the scale *inappropriate elaboration,* it was observed that individuals classified as *dismissing* scored significantly higher than *secure* individuals. This result is not surprising since the discourse of *insecure* types, namely of *dismissing* patterns, is characterised by what Main and Goldwyn (1998) call the violation of the maxim of *quantity*. This maxim is one of the criteria included in the scale "*Coherence of transcript*" and refers to the ability to give an account of childhood experiences, which is both succinct and complete. *Dismissing* individuals tend to violate this norm by offering accounts that are too brief and incomplete, or by simply refusing to respond to the interview question. Hence, it would be expected that individuals classified as *dismissing* exhibited significantly higher levels on the *scale inappropriate elaboration* when compared to *secure* individuals, since this scale encompasses descriptions that are too simplistic, brief, and over-simplified (C1: *over-simplified/superficial descriptions*).

Individuals classified as *preoccupied* showed also higher levels of *inappropriate elaboration* when compared to *secure* individuals, perhaps as a reflection of the other extreme end of violation of the maxim of *quantity* marked by inability to produce a succinct account. In fact, the scale *inappropriate elaboration* includes also long, unproductive, and over-elaborated descriptions (C2: *pseudo-elaborated descriptions*), which would be expected to overlap to some extent with the criteria associated with the maxim of *quantity* and therefore contribute to decrease the level of "coherence of transcript". However, despite the trend, differences between *secure* and *preoccupied* individuals did not reach significance as those between *secure* and *dismissing* individuals did. In fact, a closer look at the sub-scale scores, revealed that instances classified as qualifying for *inappropriate elaboration* were mainly assigned to the subscale *C1: oversimplified descriptions* (more associated with the *dismissing* pattern).

As to the scale *inappropriate affective valence*, it was observed that individuals classified as *preoccupied* in relation to attachment obtained significantly higher scores when compared to both *secure* and *dismissing* individuals. The scale

inappropriate affective valence includes criteria related to the expression of negative feelings in relation to an attachment figure, namely anger, hatred, and resentment. *Preoccupied* individuals, as described by Main and Goldwyn, exhibit in fact a discourse pattern marked by angry verbalisations when describing attachment-related episodes (*angry preoccupation*). These include paying excessive attention to minor faults or parents' shortcomings, providing extensive detail about situations involving the blamed parent, and trying to involve the interviewer against him/her. Hence, and although the scale *inappropriate affective valence* includes also expressions of unjustified positive affect (*unjustified benevolence*), a partial overlap between *preoccupied* status and high levels of *inappropriate affective valence* was to be expected.

When the *insecure* organised patterns (*dismissing* and *preoccupied*) were collapsed into one single attachment pattern, significant differences were maintained for the scale *inappropriate elaboration* only. It seems that the differences for the scale *inappropriate affective valence,* found between the *preoccupied* and *secure* groups, were attenuated by having *dismissing* individuals mixed with *preoccupied* ones into one single *insecure* category (since no significant differences were found between the *secure* and *dismissing* individuals for this scale).

As far as the *unresolved* attachment category is concerned, significant differences were found for the scales *inappropriate elaboration* and *disturbance of thinking*. Individuals primarily classified as *unresolved* (regardless of their best-fitting organised category) obtained significantly higher levels on both these scales when compared to individuals who were assigned a primary organised classification. *Unresolved* states of mind in relation to attachment are assigned on the basis of *lapses in the monitoring of reasoning and discourse* (Main & Goldwyn, 1998). These lapses include aspects such long periods of silence, interruption of sentences, and paying unusual attention to detail when discussing experiences of loss and trauma. Although the scale *inappropriate elaboration* refers to instances where the attachment figure or attachment relationship is being described (which is not always the case when discussing loss and trauma), it is not surprising that individuals classified as *unresolved* might show a tendency for higher levels on the scale *inappropriate elaboration* when compared to other

individuals, especially when it comes to difficulties in providing enough information associated with painful memories. Other *lapses of reasoning and discourse* found in *unresolved* individuals' discourse include aspects such as the use psychologically confused statements, sudden changes of topic, or invasion into different topics. These bear some resemblance to some of the criteria used to determine levels of *disturbance of thinking* and therefore some association was also to be expected.

With regards to individuals considered as "cannot classify", it was observed that they displayed significantly higher levels on the scale *inappropriate affective valence* when compared to individuals assigned to an attachment classification. However, these differences did not remain significant when the effect of the variable "gender" was taken into account. This result seems to indicate that there might be an association between gender and levels of *inappropriate affective valence*. This and other associations between levels of PORS and demographic variables will be investigated in the next chapter by using a larger sample.

When attachment categories derived from the *Dynamic-Maturation Approach* were compared in terms of level of problematic object representations, very similar results were obtained. Individuals classified as *secure* showed once more lower levels of *inappropriate elaboration* when compared to *dismissing* individuals. Also, for the scale *inappropriate affective valence*, individuals classified as *preoccupied* exhibited significantly higher levels than *dismissing* individuals, as was found previously. Finally, when *preoccupied* and *dismissing* individuals were grouped together into one single "insecure" category, significant differences were found for the scale *inappropriate elaboration,* in the same way as found when the original scoring system was used – individuals classified as *insecure* revealed significantly higher levels of *inappropriate elaboration* when compared to *secure* individuals. However, no differences were found between individuals classified as *unresolved* and individuals assigned a primary organised category. This might have been due to the fact that, when using the Dynamic-Maturation Approach system, about 47% of the individuals classified as *unresolved* were considered *secure* as the secondary best-fitting category, whereas when the original Attachment Style Scoring system was used, only about 29% of the individuals received a *secure* secondary classification. It is also

possible that the small sample size used with the Dynamic-Maturation Approach might not have been enough to detect differences between *unresolved* individuals and those assigned a primary organised attachment category.

Given the almost identical results obtained for levels of problematic object representations across attachment categories yielded by the two classification systems, combined analyses were performed. Individuals assigned equivalent attachment classifications were thus grouped together and the same statistical tests were carried out. Results for the scale *inappropriate elaboration* were similar to those found by using the original system: *secure* individuals showed significantly lower levels of *inappropriate elaboration* when compared to *dismissing* individuals. However, when using the combined sample, significant differences were also found between *secure* and *preoccupied* individuals, but these differences did not remain significant when the effect of "educational level" was taken into account. In fact, it was found that *secure* individuals were significantly more educated than *preoccupied* individuals and this confounding variable seemed to account, partially at least, for the differences observed between these two groups in terms of levels of *inappropriate elaboration.* As to the scale inappropriate *affective valence,* the differences previously found with the two separate samples were maintained, with *preoccupied* individuals exhibiting significantly higher levels on this scale when compared to both *secure* and *dismissing* individuals.

In addition, another scale appeared to significantly differ among organised attachment category types when the combined method of analysis was used - *extreme evaluations. Dismissing* individuals seemed to obtain significantly lower levels on this scale when compared to *secure* individuals, although this difference was not independent from the effect of educational level. This finding is somewhat surprising since *extreme evaluations* would be expected to be less prevalent among *secure* individuals. However, the fact that *dismissing* individuals tended to score significantly lower than *secure* individuals on this scale may be related to the fact that *dismissing* individuals tend to understate the importance of attachment relationships in childhood and therefore have a flattened discourse style almost deprived of expressions with an intense or 'exaggerated' tone. The aim of this discourse style is, in Main and Goldwyn's words, to maintain the

attachment system relatively deactivated. Also, Crittenden (2002) highlights the fact that *dismissing* speakers show a tendency to over-rely on cognition and therefore succeed in monitoring their speech very cautiously and control what is said. They tend to offer limited episode recollections that are often cut-off before affect arises. This apparent 'lack of spontaneity' may enable *dismissing* speakers to partially avoid the activation of extreme affect, which is manifest in accounts that lack in vividness and intensity and include expressions that minimise affect. Hence, although *dismissing* individuals would be expected to produce some *extreme positive evaluations* associated with the discourse characteristics of their attachment pattern (e.g., idealisation of parents), it seems that the majority of the *dismissive* individuals included in this sample were able to maintain a relatively flat discourse pattern.

As to the comparison of levels of PORS between *unresolved* individuals and those who were assigned a primary organised classification, significant differences were observed for the scale *lack of differentiation.* Individuals classified as *unresolved* tended to exhibit higher levels of confusion between attachment figures and/or between the self and an attachment figure. Differences in this scale were only detected when the combined sample of transcripts was used and the statistical significance of this finding was not as high as that found for other scales. Nevertheless, it seems that certain discourse lapses used when discussing loss and trauma might be associated with less differentiated object representations. Possibly, some of the discourse lapses taken into account when assigning individuals to the *unresolved* category (see Main & Goldwyn, 1998) - such as confusion between the dead person and the self - might also have played a role in the association.

It is important to note that a greater percentage of individuals were classified as *unresolved* when the Dynamic-Maturation Approach was used (55%), when compared to the original Attachment Scoring System (35%). This was probably due to the fact that the sample coded with Crittenden's system included participants with a diagnosed pathology, namely personality disorder, which has been often associated with *unresolved* attachment status (e.g., Fonagy et al., 1996). This might also have accounted for the disparate results obtained with separate versus combined samples when analysing levels of problematic object

representations between *unresolved* individuals and those assigned a primary organised classification.

A surprising finding was the fact that no differences were found for the scale *inconsistency* among the attachment groups. Despite the fact that individuals classified as *preoccupied* or *dismissing* attained higher levels on this scale than *secure* individuals, these differences were not statistically significant. The *inconsistency* scale deals with contradictions and oscillations in the way the attachment figure is depicted and also with mismatches between descriptions of parents and episodes given to support those descriptions. These aspects are somewhat overlapping with some of the criteria used to assess "*coherence of transcript*" within the AAI original scoring system, particularly the so-called *maxim of quality.* It assesses the extent to which the speaker is truthful and has evidence to support his accounts, and includes aspects related precisely to logical contradictions and inconsistency between general descriptions and specific episodes (Main & Goldwyn, 1998). In the same way, Crittenden's system also emphasises the importance of analysing inconsistencies and distortions when assessing the degree of integration of different sources of information and articulation of memory systems, upon which attachment categories are derived (Crittenden, 2002).

However, and despite the fact that contradictory statements are among the most important aspects within the two attachment scoring systems, the relationship between *inconsistency* and attachment insecurity was not expected to be straightforward. For example, the scale "*coherence of transcript*" from Main's Original Scoring System includes criteria other than those associated with violations of *quality* such as violations of the maxims of *quantity*, *manner* etc., which may counterbalance the final score for "coherence of transcript". For example, an individual who presents a highly contradictory account (high on *inconsistency* levels and violating the maxim of *quality*) might not receive a higher score for "coherence of transcript" than another individual who despite not being contradictory offers a very succinct and brief account (violating the maxim of *quantity*). In other words, inconsistencies are not the only aspect taken into account to derive attachment style patterns and therefore are not expected to

translate directly into attachment categories, especially in relation to revealing differences between *dismissing* and *preoccupied* individuals.

Hence, the most robust findings regarding the relationship between attachment style classifications and level of PORS seem to have been found for the scales *inappropriate elaboration* and *inappropriate affective valence*. In all analyses, *secure* individuals seemed to show the lowest levels of *inappropriate elaboration* with significant differences observed between *secure* and *dismissing* individuals. The same consistency was found in relation to the scale *inappropriate affective valence* with *preoccupied* individuals scoring significantly higher when compared to both *secure* and *dismissing* individuals, as would be expected.

Finally, a significant association was found between attachment style categories and psychopathology, with a higher number of individuals with personality disorder being assigned to the *preoccupied* category than would be expected by chance (and a lower than expected number assigned to the *secure* or *dismissing* categories). This finding supports previous research establishing the link between personality disorder and *preoccupied* attachment status (e.g., Fonagy et al., 1996). However, these analyses were based on a very small number of cases. All parents from the community whose interview transcripts were coded with the original Attachment Scoring System had children receiving psychological treatment and therefore were themselves likely to exhibit some degree of psychopathology. Yet, no specific diagnostic information was available. On the other hand, the transcripts coded with the Dynamic-Maturation Approach were collected with individuals who had an identified diagnosis but only thirty-one cases were available. Hence, the association between attachment style and psychopathology group should be interpreted with caution. Despite this methodological limitation preventing more robust analyses of PORS levels across both attachment and psychopathology groups, the next chapter will investigate levels of problematic object representations across different diagnostic groups hopefully contributing to elucidate the relationship between the PORS and psychopathology.

CHAPTER 7

OBJECT REPRESENTATIONS AND PSYCHOPATHOLOGY: "PORS" LEVELS IN PATIENTS WITH PERSONALITY DISORDER, OTHER DISORDERS, AND NORMAL CONTROLS

7.1 Introduction

As we saw earlier, object-relation theories have assumed that individuals hold representations of themselves and others that are affectively charged and influence their approach to interpersonal situations. Those mental representations are largely unconscious and result from internalised childhood experiences that work as templates according to which subsequent interpersonal experiences will be interpreted. Object relations have been studied by different orientations in psychology and described in ways that reflect distinct theoretical emphasis. There is also some variation in the way different perspectives try to establish the link between psychopathology and object relations.

Over the past years, there as been an increasing interest in assessing object relations with several authors attempting to devise new methods or alternative scoring systems for existing measures of object relations. One of the most important lines of research in this area has been precisely the investigation of the relationship between problems in object representations and different types of psychological disorder (see e.g., Huprich & Greenberg, 2003; Bornstein & O'Neill, 1992). Several studies to date have in fact tried to distinguish diagnostic groups based on different aspects of object representations. Next, some examples of such studies will be described. The aim is to offer an overview of some of the most relevant issues in the discussion of differential object relations among patients with diagnosed psychological disorders, particularly with personality pathology.

Blatt and colleagues (1976) used their measure of object relations – *The Concept of the Object Scale* – to study object relations in disturbed samples. In this

measure, human and humanoid figures on the Rorschach Inkblot Method are classified according to several criteria: (a) accuracy of the response, (b) differentiation of the figure in terms of its human characteristics, (c) articulation in terms of specificity of the response, including perceptual and functional details, and (d) integration (for example, the motive of the figures, degree of integration of the object and its action, etc.). High scores on this measure are associated with more mature and integrated object representations. It was observed that patients' answers for human figures were more inaccurately perceived and seen as involved in unmotivated, incongruent, non-specific, and malevolent interaction when compared to controls. Moreover, it was found that patients produced developmentally more advanced responses on inaccurately perceived human figures.

Also, Stuart et al. (1990) used the *Concept of the Object Scale* to study object relations in borderline, depressive, and normal controls. As they had anticipated, borderline patients showed higher levels of malevolent human interaction in the Rorschach figures than did the depressive patients or the normal controls, corroborating the idea that borderlines tend to anticipate malevolent or hostile interactions in interpersonal contexts more than the comparison groups. Also Lerner and St. Peter (1984) used this measure to analyse Rorschach responses in borderline, schizophrenic, and neurotic patients. Perceptually accurate and inaccurate responses were analysed separately and it was observed that schizophrenic patients produced a smaller number of accurate responses and depicted realistic human figures at lower developmental levels than the other patients. However results indicated that borderline patients functioned at the highest developmental level of differentiation, articulation, and integration for inaccurate responses.

The relationship between object relations and psychological disorder has also been studied by using the *Object Relations Inventory* (ORI), another measure created by Blatt and colleagues (e.g., Blatt et al., 1979). This measure includes a series of procedures that involve open-ended descriptions of self and significant others as a means of assessing object relations. Four levels of increased complexity of object representations are described: *sensori-motor* (others are seen as a way to satisfy one's needs), *perceptual* (others begin to be perceived

in more abstract ways), *iconic* (others are perceived as distinct and as having permanent characteristics), and *conceptual* (complete differentiation between self and others is achieved). In addition, responses are scored according to several qualitative dimensions (e.g., *degree of involvement*, *nurturance*). Although this measure has been mainly used in studies about therapy outcomes (see e.g., Huprich & Greenberg, 2003), authors such as Bornestein and O'Neill (1992) used the ORI to compare object relations between healthy and disturbed individuals. They hypothesised that the perception of parents would be significantly more negative among psychiatric patients when these were compared with normal controls. As predicted, it was found that adult inpatients tended to offer more negative, ambivalent, and primitive conceptualisations of their parents when compared to the non-patient group. In particular, the authors reported the inability of psychiatric patients to hold representations of their parents, which are complex, integrated, and portray them as individuals with multifaceted feelings and motivations. The authors concluded that their study offered further support to the idea that the quality of representations of self and other is closely associated with psychological adjustment.

Also, Marziali and Oleniuk (1990), by using a modified version of the ORI scoring system, investigated object relations in a group of borderline patients and observed that they tended to provide more often low level of object representations (e.g. *sensori-motor level*) to describe their parents and other important persons in their lives when compared to their healthy counterparts. Borderlines showed lower, less differentiated levels of object representations, whereas controls offered descriptions at a more differentiated and conceptually complex level.

More recently, in a unique study, Diguer and colleagues (2004) used also the ORI to investigate Kernberg's formulation of differential levels of object relations among the three groups of personality organisation – neurotic, borderline, and psychotic. They also explored differences in terms of psychiatric severity regardless of personality organisation. As predicted, the neurotic group revealed more differentiated object representations than the borderline group, which in its turn showed more differentiated representations than the psychotic group. However, contrary to other studies (e.g., Bornestein & O'Neill, 1992; Westen et

al., 1990a) no significant differences were found among the three groups in relation to the integration of positive and negative aspects to the affective valence of the object. Participants depicted their significant others as moderately good while having some contradictory feelings in relation to them. Finally, psychiatric severity seemed to be more related to object representations than self representations.

Another important contribution to the area of assessment of object relations in clinical samples has been made by Morris Bell. He developed the *Bell's Object Relations Inventory* (BORI, Bell et al., 1986), which is a true-false questionnaire measure that evaluates object relations across four scales: *Alienation*, *Insecure Attachment*, *Egocentricity*, and *Social Incompetence*. This measure has been shown to discriminate patients with borderline personality disorder from other diagnoses such as psychotic disorders. For instance, Bell, Billington, Cicchetti, and Gibbons (1988) compared borderline patients with affective, schizoaffective, and schizophrenic patients on the BORI. They found that borderlines could be distinguished from the other diagnostic groups by a specific pattern of object relation deficits mainly in relation to the "alienation" scale. This scale reflects a lack of trust in others and anticipation of lack of intimacy and satisfaction in relationships. These results seem to support once more the idea that personality disorder is connected to object- relations pathology.

The work of Drew Westen has made undoubtedly one of the major contributions to the assessment of object relations in pathological samples, namely among personality disordered individuals. He refers to the term *object relations* as a combination of "*cognitive and affective functions and structures*" that encompass representations of self and others, ways of interpreting people's reactions, intentions, and interpersonal motivations. According to Westen, 'object relations' is not a single construct but it is a phenomenon composed by interdependent but separate cognitive, affective, and motivational processes with different developmental pathways. He highlights the role of object relations in interpersonal pathology namely in personality disorder and offers an integrated perspective based on both psychodynamic and socio-cognitive orientations. Westen's measure of object-relations - *Social Cognition and Object Relations Scale* (SCORS, 1991a) - is composed of four different dimensions: (a) *complexity*

of representations of people, (b) *affect-tone of relationship paradigms*, (c) *capacity for emotional investment in relationships and moral standards*, and (d) *understanding of social causality*. The measure has been applied to different materials such as the Thematic Apperception Test (TAT), stories based on the Picture Arrangement Subtest of the Wechsler Adult Intelligence Scale Revised (WAIS-R), early memories, interviews, and psychotherapy transcripts (e.g., Leigh et al., 1992; Segal et al., 1993; Nigg et al., 1992).

For example, by applying the SCORS to TAT responses, Westen and colleagues (1990a) found that borderline patients had much lower scores on the four object relation scales when compared to healthy controls. Moreover, borderlines displayed object representations, which were less differentiated, more egocentric and malevolent when compared to major depressives. Also, borderline patients revealed greater difficulties in investing in relationships and moral standards and produced more illogical attributions. However they also found that some borderlines were capable of producing complex representations for some of the TAT cards, similarly to what was found in Lerner and St. Peter's (1984) study (p.127).

In another study, Segal, Westen, and colleagues (1992) applied the SCORS to the stories told to the Picture Arrangement Sub-Test of the WAIS-R and compared object relations among borderline patients, depressive patients, and normal controls. Once more, borderline patients showed more malevolent representations and lower capacity to invest emotionally in relationships when compared to both the depressive and the healthy groups. Also, Nigg and colleagues (1992) used the SCORS this time applied to narratives of early memories in order to study in more detail the affective quality of object representations among borderline patients. Results showed that their early memories were infused with more malevolence when compared to depressive and healthy controls. Moreover, they found that borderline patients perceived their object world as unhelpful and even harmful when compared with other individuals.

In a recent study, Tramantano and colleagues (2003) investigated object representations in patients with borderline personality disorder by using both the

Bell Object Relations Inventory and early memories coded with Westen's *Social Cognition and Object Relations Scale*. They observed that borderline patients exhibited particularly malevolent object representations when compared to non-borderline psychiatric patients as assessed by the SCORS along with acute feelings of *alienation* as measured by the BORI.

Taken together, these studies seem to render strong empirical support for the association between level of object relations and personality pathology, emphasising the importance of studying object relations in clinical samples. Although most studies agree on the fact that negatively charged representations of object relations (malevolence) characterise patients with severe personality disorder (borderline), aspects related to the complexity and differentiation of their descriptions seem to be less conclusive. In some of the studies reviewed (e.g. Lerner & St Peter, 1984; Westen et al., 1990a) it was found that borderline patients were able to produce complex and differentiated object representations. Patients with personality disorder seem to be capable of functioning at a higher level of object representations under specific conditions or with certain type of stimuli and it appears that their often distorted modes of mental representation are not always present. In Westen's (1990) words, "*these tendencies are not manifest at all times, and the conditions for their activation are at this point not entirely clear*" (p. 681). Also, in relation to other aspects of object representations such as the tendency to produce extreme "all good" versus "all bad" object representations, it has been shown that patients with severe personality disorder are capable of viewing others in multidimensional terms and that splitting mechanisms can be limited to certain figures or situations that trigger intense reactions (such perpetrators of abuse in childhood) (see e.g., Veen and Arntz, 2000).

Hence, the aim of the study conducted in this chapter is to assess levels of object representations as measured by the Problematic Object Representation Scales (PORS) in a sample of patients with personality disorder (cluster A, B, and C), who will be compared with patients with other psychological disorders (e.g., depression) and normal controls. It is hypothesised that patients with personality disorder will exhibit higher levels on all problematic object representation scales when compared to healthy controls. Furthermore, it is predicted that patients with

personality disorder will obtain higher levels on the scale *inappropriate affective valence* (e.g., malevolent representations) when compared to patients with other psychological disorders. These differences are expected to be more pronounced when only *severe* personality-disordered patients are considered (cluster A and cluster B). Additionally, exploratory analyses will be conducted to compare patients with personality disorder with patients with other disorders in terms of the remaining object representation scales - *inconsistency*, *extreme evaluations*, *inappropriate elaboration*, *lack of differentiation*, *distorted attributions*, and *disturbance of thinking*. In fact, although the dimensions assessed by these scales have been theoretically and empirically linked to personality disorder, not all studies seem to agree that they are present in personality pathology or that they are unique to this disorder.

7.2 Method

Participants

A total of 87 participants (45 female, 42 male) composed the sample, the majority of whom belonged to the "main sample" recruited by researchers involved in projects carried out at the Menninger Clinic. All participants were American citizens whose age ranged from 19 to 52 (M = 28.4) with 86.2% of Caucasians (3.4% Black, 3.4 % Hispanic, 3.4 % Mixed Race, 2.3% Asian, and 1.1% Native American). More than half of the participants were single and about 43% were married or lived with a partner. Approximately 7% were divorced. Data on number of years of education were also available for most participants included in the sample (N = 70). Participants' education ranged from 10 to 20 years (M = 14) and about 53% of the participants had been in school for 14 years or more.

The sample was composed of patients with personality disorder (N = 37), patients with other psychological disorders (N = 29), and healthy controls (N = 21). The groups were established according to the criteria defined by the Structural Clinical Interview for the DSM-IV. Table 7.1 describes participants' demographic characteristics by group in terms of age, gender, race, and marital status. Available data on number of years of education by group was as follows: patients with personality disorder (N = 26, M = 12.9, SD = 2.0); patients with Axis

I disorders only (N = 23, M =14.3, SD = 2.6); and controls (N = 21, M = 15.1, SD = 2.5).

Table 7.1: Mean and standard deviations for age, gender, race, and marital status

Group	N	Age (X SD)	Gender (%female)	Race (%Caucasian)	Marital status (%without partner)
PD	37	28.7 7.6	46.0	86.5	59.5
Axis I	29	30.0 7.2	44.8	90.0	44.8
Controls	21	25.8 5.4	71.4	81.0	71.0

The personality disorder group included 27 patients with "severe" personality disorder (cluster A and/or cluster B, see table 7.2) and 10 patients with Cluster C personality disorder only (4 *Obsessive-Compulsive*, 4 *Avoidant*, 1 *Passive-Aggressive*, and 1 *Dependent*). Most patients included in the personality disorder group had also concomitant Axis I disorders (89%). Patients included in the group "Axis I disorders only" included mainly patients with alcohol abuse and/or dependence (50%), depression (37%), and substance abuse and/or dependence (36%). There were also patients in this group suffering from Anxiety Disorders (e.g, Posttraumatic Stress Disorder) and Bipolar Disorder.

Table 7.2: Distribution of patients with "severe" Personality Disorder according to the DSM-IV cluster categories (cluster A and/or B) (N =27)

Cluster A + Cluster B (N =3)	Cluster B (Only) (N = 24)
Paranoid + Borderline (N =2) Paranoid + Narcissistic (N = 1)	Borderline Only (N = 8) Anti-Social Only (N = 8) Narcissistic Only (N = 3) Borderline + Anti-Social (N = 4) Borderline + Narcissistic (N = 1)

The results section will concentrate more on the analyses involving patients with severe personality disorder, since the "personality disorders" included in Cluster C are considered a distinct group less associated with what is referred to as "borderline" (severe) personality organisation in object-relations literature and in studies focusing on object representations in personality pathology. Hence, according to psychoanalytic theory, borderline personality organisation is a broader concept than Borderline Personality Disorder and it includes also other Cluster A and B types of personality disturbance (e.g., Kernberg, 1996).

Materials

The Adult Attachment Interview (George, Kaplan, & Main, 1996) and the Structural Clinical Interview for the DSM-IV (SCID-IV, First, Spitzer, Gibbon, & Williams, 1997), as described in the previous chapter (see p. 109), were administered to all participants.

Procedure

All participants were administered the AAI and the Structural Clinical Interview for the DSM-IV. Demographic data were also collected regarding age, gender, marital status, race, and years of education. Most of the data used in the study were collected for the research projects conducted at the Menninger Clinic, namely by Helen Stein and Peter Fonagy. These projects involved also the use of other personality and psychopathology measures. Hence, from the group of AAI transcripts made available by the Menninger Clinic, 80 were used in this study along with the respective demographic and diagnostic data. In order to increase the number of participants in the control group, another seven transcripts were collected with healthy volunteers recruited at the University College London campus by advertisement. After confidentiality issues were addressed and information about the study was given, participants filled out demographic information forms. They were then interviewed with the SCID and subsequently with the AAI, which was fully audiotaped. The interviews took approximately 2 hours to complete. After being paid the standard departmental rate for healthy volunteers (£6 per hour), participants were debriefed and thanked for their participation. SCID-IV scores were then computed and the AAI transcripts were fully transcribed. Finally, the final version of the manual for the PORS was used by the author to code the whole sample of 87 AAI transcripts and overall scores were computed for each scale included in the manual.

7.3 Results

7.3.1. PORS and demographic variables

Several initial analyses were conducted to investigate differences in the level of problematic object representations across groups of individuals differing in terms of the demographic variables gender, age, marital status, race, and educational level. In relation to gender differences (N = 87) it was observed that men exhibited significantly higher scores in the following scales: *inconsistency* (U = 588.5, p = .002), *lack of differentiation* (U = 678.5, p = .02), *inappropriate affective valence* (U = 707.0, p = .03), and *disturbance of thinking* (U = 567.5, p = .001). No significant sex differences were found for the scales *extreme evaluations*, *inappropriate elaboration*, or *distorted attributions*.

No significant correlation was found between the scores obtained in the PORS and participants' age (N = 87), although for all the scales except *inappropriate elaboration* the trend indicated that young participants tended to produce transcripts with higher levels of pathological indicators. In the same way, no differences among the different racial (N = 87) or marital status groups (N = 87) were found for any of the scales included in the PORS.

Finally, significant negative correlations were found between the scores obtained in all the PORS (except for the scale *extreme evaluations)* and number of years of education (N = 70). More educated subjects tended to exhibit lower levels of pathological object representations, as can be seen in table 7.3.

Table 7.3: Correlation coefficients (Kendall's tau-b) between the PORS and number of years of education (N = 70).

	Years of education
Inconsistency	-.32**
Extreme evaluations	-.06
Inappropriate elaboration	-.26**
Lack of differentiation	-.26**
Inappropriate affective valence	-.30**
Distorted attributions	-.21*
Disturbance of thinking	-.39**

* p < .05 **p < .01

7.3.2. Inter-scale correlations

Inter-scale correlations were also calculated for the seven scales included in the PORS: *Inconsistency* (I), *Extreme Evaluations* (EE), *Inappropriate Elaboration* (IE), *Lack of Differentiation* (LD), *Inappropriate Affective Valence* (IAV), *Distorted Attributions* (DA), and *Disturbance of Thinking* (DT). Significant but relatively low correlations were found between the scales, ranging from .19 to .39, as can be observed in table 7.4.

Table 7.4: Correlation coefficients (Kendall's tau-b) among the PORS (N =87).

	I	EE	IE	LD	IAV	DA
I	-	-	-	-	-	-
EE	.24**	-	-	-	-	-
IE	.29**	-.09	-	-	-	-
LD	.28**	.19*	.12	-	-	-
IAV	.39**	.13	.11	.30**	-	-
DA	.16	.11	.12	.33**	.17	-
DT	.39**	.17	.19*	.38**	.38**	.24**

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

7.3.3. Differences in levels of PORS among patients with personality disorder, Axis I disorders, and healthy controls

Psychopathology and demographic variables

No significant differences in terms of age, gender, race, or marital status were found among the three groups included in the sample. However, as could be expected from age of onset of the disorders and its relative effect on academic performance, the groups differed significantly in number of years of education, $F(2, 69) = 5.88$, $p = .004$. A pairwise comparison with adjusted Sidak revealed that individuals with personality disorder were significantly less educated than healthy controls ($p = .004$).

Problematic object representations and psychopathology

Statistical analyses were performed in order to investigate differences in terms of problematic object representations among (a) patients with personality disorder, (b) patients with Axis I disorders only, (c) and healthy controls. The first analysis

(Kruskal-Wallis Test) compared scores obtained in the PORS among the three groups considering all the patients with personality disorder, including also the ones classified as having Cluster C personality disorder only. Significant differences were found among the groups for the scales: *inconsistency inappropriate elaboration*, *inappropriate affective valence,* and *disturbance of thinking*, with personality disordered patients showing higher levels of pathological indicators when compared to Axis I patients, who in their turn attained higher scores than healthy controls. No significant differences were found for the scales *extreme evaluations*, *lack of differentiation*, and *distorted attributions*, as can be seen in table 7.5.

Table 7.5: Kruskal-Wallis tests comparing patients with personality disorder (N = 37), Axis I disorders (N = 29), and healthy controls (N = 21) for levels of PORS

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Inconsistency	53.6	41.6	30.5	11.86 (2)	.003
Extreme evaluations	45.7	44.6	40.3	.94 (2)	.63
Inap. elaboration	52.6	42.8	30.5	11.23 (2)	.004
Lack of differentiation	49.8	42.8	35.5	4.76 (2)	.09
Inap. affective valence	54.2	38.7	33.3	12.64 (2)	.002
Distorted attributions	49.3	43.0	36.0	4.49 (2)	.11
Disturb. of thinking	54.1	42.3	28.4	16.41 (2)	.0001

Follow-up Mann-Whitney Tests with Bonferroni Correction were carried out to investigate differences between each pair of groups. The first analysis compared scores obtained in the PORS between the group of patients with personality disorder and healthy controls. Results revealed significant differences between the two groups for the scales *inconsistency*, *inappropriate elaboration, inappropriate affective valence*, and *disturbance of thinking.* Patients with personality disorder exhibited higher levels of pathological indicators when compared to healthy controls. No significant differences were found for the scales *extreme evaluations*, *lack of differentiation,* and *distorted attributions.*

A second analysis was carried out comparing the group of patients with personality disorder with the group of patients with Axis I disorders. Personality disordered patients obtained significantly higher levels of pathological indicators for the scale *inappropriate affect valence.* No significant differences were found for the remaining scales.

Finally, a third Mann-Whitney analysis was performed comparing the scores obtained in each of the PORS between the group of patients with Axis I disorders and the group of healthy controls. The former revealed significantly higher levels of pathological indicators for the scale *disturbance of thinking* when compared to the latter. No differences were found between the two groups with respect to the remaining scales (see table 7.6).

Table 7.6: Mann-Whitney tests comparing patients with personality disorder vs. healthy controls, patients with personality disorder vs. Axis I patients, and Axis I patients vs. healthy controls in terms of levels of PORS

	PD vs.healthy controls		PD vs. Axis I		Axis I vs. controls	
	Mann-U	sig.	Mann-U	sig.	Mann-U	sig.
Inconsistency	187.5	.001	382.5	.05	221.5	.10
Extreme evaluations	339.5	.33	524.0	.85	275.5	.47
Inap. elaboration	203.5	.002	402.5	.08	205.5	.04
Lack of differentiation	261.5	.03	449.0	.24	252.0	.28
Inap. affective valence	202.0	.002	344.5	.01	265.5	.37
Distorted attributions	271.0	.04	456.5	.27	253.5	.26
Disturb. of thinking	172.0	.0002	376.0	.03	192.5	.01

Controlling for educational level

Several Bootstrap Regression analyses were conducted in order to investigate whether the differences observed between patients with personality disorder and both healthy controls and patients with Axis I disorders remained significant when educational level was accounted for. The categorical variable "psychopathology" which had three levels (Personality Disorder, Axis I Disorders, and Healthy Controls) was transformed into a *dummy variable* with two levels. Hence, three variables were entered into the regressions - a) *personality disorder vs. healthy controls*; b) *personality disorder vs. Axis I disorders*; c) *number of years of education*. The variable level "personality disorder vs. Axis I disorders" remained a significant predictor (B = -1.71, Boot p = .05) of levels on *inappropriate affective valence*. The same happened in relation to the variable "personality disorder vs. healthy controls", which remained a significant predictor for the scales *inconsistency* (B = -2.77, Boot p = .01), *inappropriate elaboration* (B = -1.6, Boot p = .01), *inappropriate affective valence* (B = -2.32, Boot p = .02), and *disturbance of thinking* (B = -2.32, Boot p = .01).

7.3.4. Differences in levels of PORS among patients with **severe** personality disorder, Axis I disorders, and healthy controls

Psychopathology and demographic variables

No significant differences in terms of age, race, or marital status were found among the three groups. However, as happened with the overall sample, groups differed significantly in number of years of education, $F(2, 63) = 6.58$, $p = .003$. A pairwise comparison with adjusted Sidak revealed, once more, that these differences were highly significant between the control group and the severe personality disorder group ($p = .002$). Moreover, groups differed significantly also in terms of gender, ($\chi 2 = 5.97$, d.f. = 2, $p = .05$), with a significantly higher proportion of men in the personality disorder group.

Problematic object representations and psychopathology

The same analyses were conducted to investigate differences in terms of PORS scores among (a) patients with *severe* personality disorder (Cluster A and/or Cluster B, N = 27), (b) patients with Axis I disorders only (N = 29), and (c) healthy controls (N = 21). Significant differences were found for the scales: *inconsistency, inappropriate elaboration, lack of differentiation*, *inappropriate affective valence*, *distorted attributions*, and *disturbance of thinking*. Once more, patients with personality disorder showed higher levels of problematic object representations than both Axis I patients and healthy controls (who obtained the lowest levels of pathological indicators). No significant differences were found for the scale *extreme evaluations* (see table 7.7).

Table 7.7: Kruskal-Wallis test comparing patients with severe personality disorder (N = 27), Axis I disorders (N = 29), and healthy controls (N = 21) for levels of PORS

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Inconsistency	52.0	36.1	26.4	16.56 (2)	.0003
Extreme evaluations	41.0	39.6	35.7	.99 (2)	.61
Inap. elaboration	48.3	38.6	27.6	10.94 (2)	.004
Lack of differentiation	46.8	37.5	31.0	6.60 (2)	.04
Inap. Affective valence	51.8	34.1	29.3	16.10 (2)	.0003
Distorted attributions	47.2	37.2	31.0	7.47 (2)	.02
Disturb. of thinking	51.6	37.4	25.1	19.35 (2)	.0001

Two additional Mann-Whitney Tests (with Bonferroni correction) were carried out to explore between-group differences. The first analysis compared the scores obtained in the PORS between the group of patients with severe personality disorder and healthy controls. Results revealed significant differences between the two groups for all scales except *extreme evaluations.* Hence, patients with severe personality disorder showed significantly higher levels of pathological indicators for the scales *inconsistency*, *inappropriate elaboration*, *lack of differentiation*, *inappropriate affective valence*, *distorted attributions,* and *disturbance of thinking.*

A second Mann-Whitney test was carried out to test differences between the group of patients with severe personality disorder and the group of patients with Axis I disorders only. Significant differences were found for the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*, with personality disordered patients scoring significantly higher than patients with Axis I disorders (see table 7.8).

Table 7.8: Mann-Whitney tests comparing patients with severe personality disorder vs. healthy controls and patients with severe personality disorder vs. Axis I patients in terms of levels of PORS

	PD vs. controls		PD vs. Axis I	
	Mann-U	sig.	Mann-U	sig.
Inconsistency	101.0	.0001	224.0	.006
Extreme evaluations	244.0	.32	379.0	.81
Inap. elaboration	143.5	.002	281.5	.06
Lack of differentiation	167.0	.01	296.5	.11
Inap. affective valence	118.5	.0004	210.5	.002
Distorted attributions	166.0	.009	289.0	.08
Disturb. of thinking	104.0	.0001	232.0	.007

Controlling for educational level and gender

Several Bootstrap Regression analyses were conducted in order to investigate whether the differences observed between patients with severe personality disorder and both healthy controls and patients with Axis I disorders remained significant predictors of PORS levels when gender and years of education were accounted for. The categorical variable "psychopathology" (Severe Personality Disorder, Axis I disorders, Healthy Controls) was once again transformed into a

dummy variable with two levels. Hence, four variables were entered into the regression - a) *severe personality disorder vs. healthy controls*; b) *severe personality disorder vs. Axis I disorders*; c) *number of years of education*; and d) *gender*. As can be observed in table 7.9, the effect of the variable level "severe personality disorder vs. Axis I disorders" remained a significant predictor for the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*. The variable level "severe personality disorder vs. healthy controls" remained also a significant predictor for the same three scales - *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* - but was no longer a significant predictor of scores obtained in the scales *inappropriate elaboration*, *lack of differentiation*, and *distorted attributions*, when "gender" and "years of education" were controlled for.

Table 7.9: Bootstrap Regression Analysis of effect of diagnostic group on PORS controlling for "years of education" and "gender" (N = 64)

	PD vs. Healthy Controls (B value) Boot p value	PD vs. Axis I (B value) Boot p value
Inconsistency	(-3.13) .01	(-2.48) .03
Inappropriate elaboration	(-1.20) .06	-
Lack of differentiation	(-0.09) .21	-
Inappropriate affective valence	(-2.74) .02	(-2.39) .02
Distorted attributions	(-0.71) .18	-
Disturbance of thinking	(-2.40) .02	(-2.11) .02

Therefore, differences on the PORS between severe personality-disordered patients and both Axis I patients and healthy controls remained significant predictors of levels of *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* when "gender" and "years of education" were taken into account (plotted mean ranks for these scales can be observed in figure 7.1).

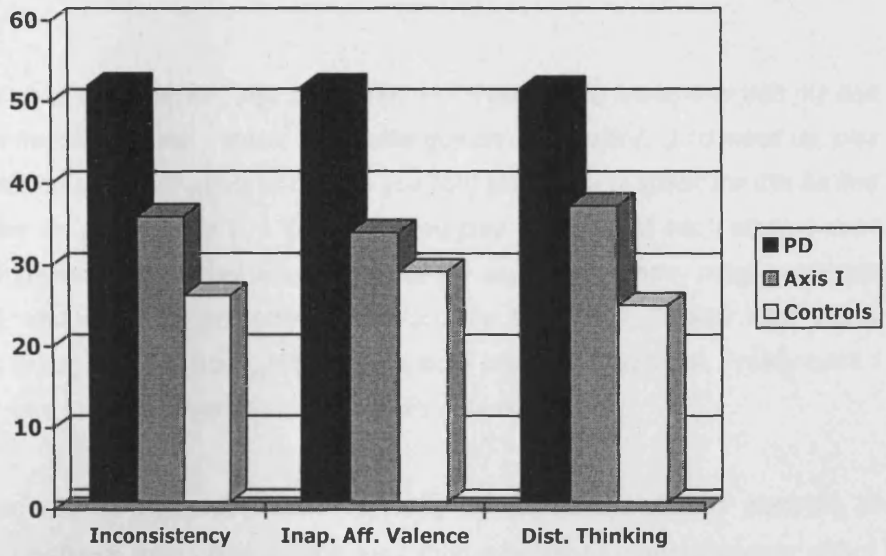

Figure 7.1: Mean ranks for the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* for patients with Severe PD, Axis I disorders, and Healthy Controls (N = 77)

For example, one of the patients with severe personality disorder diagnosis produced the following *inconsistent* account when trying to justify the adjective "kind" he chose to describe his mother:

"*Not really, no memories, it's just that I remember her being kind to everybody, even us. We never got beat or anything like that. Yeah, we got our butt whipped really good when we deserved it. But she, and then what was always weird is after she whipped me good, then she waited till dad got home and then dad did the same thing, after me being punished the first time for it*".

With regards to *inappropriate affective valence*, more specifically *malevolence*, another severe personality disordered patient stated:

"*I think part of my dad's problem was he was a drug addict. The other part is, he is and was an ass hole. And he just never grew up. He was a selfish bastard who basically was waiting for his father to die so he could inherit a lot of money*".

In relation to *disturbance of thinking,* an example of an account characterised by difficulties in sticking to a train of thought was produced by another patient with

severe personality disorder, when asked about times when he was angry with his parents:

"Man, there were lots of times I was angry with 'em.. I mean you know, one with my dad is a fact that he spanked me, I mean, I'd see the guy on weekends (...) I'd mess up, piss somebody off, do somethin' wrong and make you {sic} mad so he'd spank me like he had the right. Like he was my dad (...) You know you play 'em against each other. I don't know if your parents are married or whatever but I'm saying, you know, mom would talk shit on dad, dad would talk shit on mom, uh uh, you know yeah, 'I hear what you're saying,' you know, love that jacket, but as far as mom goes ...I don't know, I really can't. I mean, I am sure I can, I just can't think of no more right now".

These accounts contrast with those typically produced by healthy controls or even Axis I patients who often exhibit less *inconsistencies, inappropriate affect, and disturbance of thinking.* For instance, one of the patients with Axis I disorder, on a similar topic, says:

"I remember being angry about moving to City 1. I didn't want to leave City 2 cause I had friends here. The problems at my school had kind of blown over, so, things were back to normal there an, um, I didn't want to move".

Another individual, assigned to the group of healthy controls, offered the following explanation for being angry with her parents:

"Well, because they never let us go to like camp, and stuff or like sleepovers, we never went to sleepovers. And, like now I understand. But. Still you know it's frustrating when everybody else gets to go, to like their friends' house".

7.3.5 PORS subscales and psychopathology

Comparisons of level of PORS subscales among the three groups were also analysed. Significant differences were observed among individuals with severe personality disorder, patients with Axis I disorders, and healthy controls for both subscales included in the scale *inconsistency* - A1: *contradiction/oscillation* and A2: *mismatch between semantic and episodic memory.* The same happened with the subscales included in *inappropriate affective valence* (E1: *malevolence* and E2: *unjustified benevolence*) and *disturbance of thinking* (G1: *incoherence*

and G2: *thematic intrusions*) (see table 7.10).The differences in terms of levels of problematic object representations found among the three groups included in the sample resulted therefore from a balanced contribution of both subscales included in each scale, with significant differences among the groups in terms of all the subscales involved.

Table 7.10: Kruskal-Wallis test comparing patients with severe personality disorder, Axis I disorders, and healthy controls for PORS subscales included in *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Contradiction/oscillation	50.9	35.8	28.1	14.10 (2)	.001
Mismatch sem./episod.	50.2	36.7	27.8	13.09 (2)	.001
Malevolence	48.2	35.4	32.1	9.93 (2)	.007
Unjustified benevolence	46.7	36.4	32.7	8.04 (2)	.02
Incoherence	47.1	38.0	30.1	10.09 (2)	. 006
Thematic intrusions	50.9	36.1	27.8	18.07 (2)	.0001

Follow-up Mann-Whitney tests (with Bonferroni correction) revealed significant differences between patients with severe personality disorder and normal controls for all the six subscales: *A1*: *contradiction/oscillation*; *A2*: *mismatch between semantic and episodic memory*; *E1*: *malevolence*; *E2*: *unjustified benevolence*; *G1*: *incoherence*; *G2*: *thematic intrusions*. Also, the group of patients with severe personality disorder differed significantly from the group of patients with Axis I disorders for the subscales: *A1*: *contradiction/oscillation*, *A2*: *mismatch between semantic and episodic memory*, *E1*: *malevolence* and *G2*: *thematic intrusions,* as can be seen in table 7.11.

Table 7.11: Mann-Whitney tests comparing patients with severe personality disorder vs. healthy controls and patients with severe personality disorder vs. Axis I patients for PORS subscales included in *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*

	PD vs. controls		PD vs. Axis I	
	Mann-U	sig.	Mann-U	sig.
Contradiction/oscillation	118.0	.0004	235.0	.009
Mismatch sem./episod. mem.	126.5	.001	245.5	.01
Malevolence	165.5	.006	261.0	.02
Unjustified benevolence	183.0	.01	284.0	.04
Incoherence	161.0	.002	296.0	.08
Thematic intrusions	117.0	.0001	238.0	.006

In relation to the remaining subscales, it was observed that the following attained significant differences among the groups: C1: *over-simplified/superficial descriptions*, D2: *lack of differentiation between the self and attachment figures*, F2: *implausible or idiosyncratic attributions*, and F3: *biased attributions* (see table 7.12). In relation to the subscale C1: *over-simplified/superficial descriptions,* significant differences were observed between patients with severe personality disorder and healthy controls, the same happening in relation to the subscale D2: *lack of differentiation between the self and attachment figures*, and F2: *implausible or idiosyncratic attributions.* In relation to the subscale F3: *biased attributions,* significant differences were found between patients with severe personality disorder and both healthy controls and patients with Axis I disorders, as can be seen in table 7.13.

Table 7.12: Kruskal-Wallis test comparing patients with severe personality disorder, Axis I disorders, and healthy controls for the subscales C1, D2, F2, and F3

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$(df)	sig.
Over-simplified descriptions	46.7	39.0	29.1	8.22 (2)	.02
Lack of differ. Self/attach fig.	45.8	38.9	30.4	7.40 (2)	.03
Implausible attributions	44.4	37.2	34.5	8.49 (2)	.01
Biased attributions	47.4	35.5	33.0	15.28 (2)	.0005

Table 7.13: Mann-Whitney tests comparing patients with severe personality disorder vs. healthy controls and patients with severe personality disorder vs. Axis I patients for the subscales C1, D2, F2 and F3

	PD vs. controls		PD vs. Axis I	
	Mann-U	sig.	Mann-U	sig.
Over-simplified descriptions	165.0	.008	303.0	.13
Lack of differ. self/attach fig.	172.5	.008	319.5	.20
Implausible attributions	210.0	.01	318.0	.06
Biased attributions	178.5	.002	268.5	.005

Controlling for educational level and gender

When educational level and gender were accounted for, the variable "severe personality disorder vs. normal controls" remained a significant predictor of scores obtained in the following subscales: *A1*: *contradiction/oscillation* (B = -1.88, Boot p = .02), *A2*: *mismatch between semantic and episodic memory* (B = -1.25, Boot p = .04), *E1*: *malevolence* (B = -1.88, Boot p = .05), F2: *implausible attributions* (B = -.56, Boot p = .001), F3: *biased attributions*

(B = -.48, Boot p = .004), and *G2: thematic intrusions* (B = -1.57, Boot p = .04), whereas it was no longer a significant predictor of levels of C1: *over-simplified/superficial descriptions,* D2: *lack of differentiation between the self and attachment figure,* E2: *unjustified benevolence*, and G1: *incoherence* (Boot p > .05). In relation to the variable "severe personality disorder versus Axis I disorders", it was observed that it remained a significant predictor of levels of *A1: contradiction/oscillation* (B = -1.64, Boot p = .03), *E1: malevolence* (B = -1.73, Boot p = .05), F3: *biased attributions* (B = -.40, Boot p = .005), and *G2: thematic intrusions* (B = -1.29, Boot p = .05), but no longer significant for the subscale A2: *mismatch between semantic and episodic memory* (Boot p > .05).

7.3.6. PORS and personality disorder symptoms

A sub-sample of 78 transcripts taken from the overall sample provided by the Menninger research project was used to investigate the relationship between the PORS and number of self-reported personality disorder symptoms in the SCID-II questionnaire, regardless of assignment to any specific "personality disorder" diagnosis.

Personality disorder symptoms and demographic variables

Initial analyses revealed no significant differences in terms of number of positively addressed symptoms across gender, marital status, or race groups. Likewise, no correlations were observed between age and number of positively addressed symptoms. However, a significant negative correlation was again observed between number of positively addressed symptoms in the SCID-II questionnaire and number of years of education (tau b = -.25, p = .007).

Problematic object representations and personality disorder symptoms

Non-parametric correlations were calculated between the variable "number of positively addressed symptoms in the SCID-II questionnaire" and the scores obtained in the PORS. Significant positive correlations were found for the scales *inconsistency*, *inappropriate affective valence,* and *disturbance of thinking* as can be observed in table 7.13.

Table 7.14: Correlation coefficients (Kendall's tau-b) between the PORS and number of positively addressed symptoms in the SCID-II questionnaire (N =78).

	Number of positively addressed symptoms in SCID-II
Inconsistency	.22**
Extreme evaluations	.07
Inappropriate elaboration	.13
Lack of differentiation	-.06
Inappropriate affective valence	.20*
Distorted attributions	.03
Disturbance of thinking	.19*

* p < .05 **p < .01

Controlling for educational level

However, when Bootstrap Regression analyses were conducted controlling for the effect of "educational level", the number of positively addressed symptoms in the SCID-II questionnaire was no longer a significant predictor of the scores obtained in the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* (Boot ps > .05).

7.4 Discussion

Internal representations of relationships with significant others are extensively regarded as closely associated with the development of different types of psychopathology (Bornstein & O'Neill, 1992). The main aim of the study conducted in this chapter was to assess the level of object representations in individuals with personality disorder and compare them with patients with other disorders (Axis I) and healthy controls. It was hypothesised that individuals with personality disorder, more specifically severe personality disorder (Cluster A and/or Cluster B), would obtain higher levels of problematic object representations as measured by the PORS when compared to healthy controls. Moreover, personality disordered individuals were expected to reveal object representations which would be infused with higher levels of *inappropriate affective valence* (e.g., malevolence) when compared to patients with Axis I disorders. Exploratory analyses were also conducted to investigate differences between the two diagnostic groups in terms of the remaining object representation scales.

The main hypotheses seemed to have been confirmed, as significant differences were found between patients with severe personality disorder and healthy controls for most of the PORS and patients with severe personality disorder obtained significantly higher levels of *inappropriate affective valence* when compared to patients with Axis I disorders. Furthermore, individuals with severe personality disorder seemed to score significantly higher than Axis I patients also for the scales *inconsistency* and *disturbance of thinking*.

Initial statistical analyses were conducted to investigate the relationship between demographic variables such as age, gender, marital status, race, and education and levels of problematic object representations. Gender differences were found for some of the PORS (*inconsistency*, *lack of differentiation*, *inappropriate affective valence*, and *disturbance of thinking*) with men scoring significantly higher than women. In fact, females have been previously found to attain higher level of object representations than males. This difference has been linked to gender identity and social roles according to which women are expected to be more involved and display more sensitivity in interpersonal relationships when compared to men (e.g., Winegar & Levin, 1997). However, it is also possible that more problematic object representations were found among men than women because more men were found to have a diagnosis of severe personality disorder. Additionally, significant correlations were found between level of problematic object representations and number of years of education, with more educated individuals obtaining lower PORS levels, with the exception of the scale *extreme evaluations*. Also, significant but relatively low correlations were found among the PORS suggesting that the scales assess associated but not overlapping dimensions.

The statistical analyses carried out throughout the chapter focused mainly on the comparison of patients with severe (borderline) personality disorder with both patients with Axis I disorders and healthy controls. Initial analyses revealed that the groups differed in terms of educational level, with personality disordered individuals being less educated than normal controls. In fact, it would be expected that severe personality disorder would have a considerable impact on academic performance and therefore affect the overall educational level of the

individuals included in this diagnostic group. Moreover, gender differences were also observed with a significantly higher proportion of men included in the severe personality-disordered group, which may be due to the fact that a considerable number of patients with *anti-social* personality disorder were included in the sample. In fact, anti-social personality disorder has been more frequently diagnosed in men (DSM-IV, 1994).

Significant differences among the three groups were observed for the scales *inconsistency*, *inappropriate elaboration*, *lack of differentiation*, *inappropriate affective valence*, *distorted attributions*, and *disturbance of thinking*. Patients with severe personality disorder attained higher scores on these scales when compared to patients with Axis I disorders and healthy individuals. Follow-up analyses revealed that the group of patients with severe personality disorder differed significantly from the group of healthy controls in all PORS except for the scale *extreme evaluations*. The fact that patients with severe personality disorder seem to score higher in most of the PORS when compared to healthy controls is in line with several studies conducted so far, which show that these patients exhibit less complexity, less differentiation, and more inadequate affect tone in their object representations as well as a poorer understanding of social causality, when compared to healthy controls (e.g., Marziali & Oleniuk, 1990; Westen et al., 1990a). However, it was found that for the scales *inappropriate elaboration*, *lack of differentiation*, and *distorted attributions* the effect of severe personality disorder could not be disentangled from the effects of educational level and gender. In other words, the variable "severe personality disorder versus healthy controls" was no longer a significant predictor of scores obtained in those three scales over and above the effect of educational level and gender. Conversely, the effect of severe personality disorder (vs. healthy controls) was still a significant predictor of levels of *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* over and above the effects of educational level and gender.

The fact that patients with personality disorder did not differ from healthy controls in terms of the presence of *extreme evaluations* was less expected given the theoretical conceptualisations describing the mechanism of *splitting* as one of the important aspects characterising interpersonal functioning in personality disorder

(e.g., Kernberg, 1996). Also, cognitive formulations have emphasised the tendency that these patients seem to have to engage in "all-or-nothing" type of thinking with evaluations that are concentrated at the extreme end of a continuum (e.g., Beck et al., 1990). However, as mentioned before, authors like Veen and Arntz's (2000) have not found evidence of *splitting* among personality-disordered patients, although the methodology used in their study was substantially different from the methods typically used in object-relations research. In their study, it was found that patients with personality disorder did not seem to exhibit more "all good" versus "all bad" representations (*splitting*) when compared to normal controls and were capable of viewing others in mixed extreme terms, mostly both "good and bad" (bidimensional extreme evaluations). Consistently, when using the PORS, no evidence was found for higher levels of *splitting* among patients with severe personality disorder. On the other hand, findings obtained with the PORS do not support the high prevalence of mixed extreme evaluations found by Veen and Arntz, as patients with severe personality disorder did not seem to significantly differ from healthy controls in their general level of *B2: bidimensional extreme evaluations.*

One possible explanation for this finding might have been the frequent co-occurrence of instances qualifying for both *extreme evaluations* and *inappropriate affective valence.* It is possible that an underestimation of double-rating instances might have occurred, that is, transcript passages that would deserve also the coding *extreme evaluations* might have been under-rated due to the more striking impact of the indicators included in the scale *inappropriate affective valence*, especially malevolent expressions (e.g., "my father is a total bastard"). However, it is unlikely that the absence of differences between the groups for the scale *extreme evaluations* is only attributable to under-rating and it seems more reasonable to assume that levels of *extreme evaluations* and *inappropriate affective valence* have a different distribution among the groups. In fact, although associated with *extreme evaluations, inappropriate affective valence* is considered to be a theoretically distinct concept. For example, Baker and colleagues (1992) conducted a study to investigate malevolence and *splitting* present in borderline's ratings of caregivers by having the patients using adjective checklists to characterise their parents. It was found that borderlines rated their parents in more negative terms than did patients with major depression and

normal subjects. However, little evidence was found for *splitting* in borderlines' parental representations. The authors concluded that it is likely that malevolence and *splitting* arise from different developmental processes and involve different phenomena. Hence, the fact that no differences in terms of *splitting* were found with the PORS between patients with severe personality disorder and healthy controls seems also consistently with Baker and colleagues' findings.

As to differences between patients with severe personality disorder and patients with Axis I disorders, it was found that severe personality disordered patients showed significantly higher levels of *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*. In relation to the scale *inconsistency*, it appears that individuals with severe personality disorder are less able to provide a coherent account of their relationship with their parents in childhood and tend to produce a discourse that is more contradictory and less integrated when compared to that of patients with other disorders. In fact, patients with personality disorder are thought to suffer from structural deficits in ego functioning that lead to difficulties in integrating information especially when it refers to interpersonal relationships (Segal et al., 1993). Also, these patients are more likely to exhibit failures in monitoring their thought processes and maintain an intelligible discourse (*disturbance of thinking*) possibly due to overwhelming affect triggered by discussing attachment-related episodes. These can be somewhat disturbing especially when referring to traumatic episodes in relation to which there are frequent signs of lack of resolution (e.g., Fonagy et al, 1996).

Inappropriate affective valence has nevertheless been the most widely researched dimension of object representations among patients with personality disorder. The highly significant differences found here between patients with severe personality disorder and patients with other disorders are in line with most of the studies conducted so far (e.g., Stuart et al., 1990; Segal et al., 1992; Nigg et al., 1992; Westen et al., 1990a; Tramantano et al., 2003). In fact, inappropriate affect tone, in particular malevolence, is the dimension that has been most extensively identified as distinguishing patients with severe personality disorder from patients with other types of psychopathology. For example, Westen and colleagues (1990a) suggest that malevolence seems to be a prevalent marker of *borderline* personality disorder and should therefore be included in its diagnosis.

More severe types of personality disorder have in fact been associated with more negative object representations and with the anticipation of negative interactions in interpersonal relationships (Huprich and Greenberg, 2003).

Malevolence is thought to refer to one side of polarised representations. Most studies have consistently reported the negative affect associated with personality-disordered patients' descriptions but have not found a paralell set of positive representations (Baker et al, 1992). Positive object representations, marked by the expressions of praise, gratitude, or exoneration are often not considered as reflecting problems in object representations. The scale *inappropriate affective valence* offered therefore an innovative view of inappropriate affect tone, which encompasses not only expressions of inappropriate negative affect (anger, resentment, hatred) but also positively charged, idealised, and praising expressions towards a caregiver who appears to have been undeserving of such gratitude (subscale *E2*: *unjustified benevolence*). It was in fact observed that patients with severe personality disorder exhibited significantly higher levels of *unjustified benevolence* when compared to healthy individuals, although the effect of severe personality disorder did not seem to be independent from the effect of demographic variables such as educational level and gender.

Similar analyses looking at levels of PORS subscales among the three groups of individuals included in the sample enabled a more detailed analysis of the contributions of different dimensions of problematic object representations. It was observed that the subscales *A1*: *contradiction/oscillation*, *E1*: *malevolence*, and *G2*: *thematic intrusions* seemed to differentiate patients with severe personality disorder from both patients with Axis I disorders and healthy controls, over and above the effect of demographic variables. Also the subscale *A2*: *mismatch between semantic and episodic memory* appeared to significantly differentiate patients with severe personality disorder from healthy controls even when the confounding variables gender and educational level were controlled for. It was also observed that the scales *F2*: *implausible or idiosyncratic attributions* and *F3*: *biased attributions* seemed to differ between the groups over and above the effect of demographic variables, despite the fact that no significant differences had been found for the overall *distorted attributions* scale.

Follow-up analyses revealed that individuals with severe personality disorder seemed to score significantly higher for the subscales *F2*: *implausible* and *F3*: *biased attributions* when compared to healthy individuals. This finding seems to a certain extent consistent with what Westen et al.'s (1990a) called the "borderline attributional style" characterised by attributions that are peculiar, egocentric, and affect-centred (p. 358). However, Westen and colleagues found also that these patients tended to produce more non-causal or grossly illogical attributions when compared to healthy individuals. This was not confirmed when using the PORS since no significant differences were observed with respect to the subscale *F1*: *grossly illogical or inaccurate attributions.*

Furthermore, when using the PORS, individuals with severe personality disorder appeared to exhibit significantly higher levels on the subscale *F3*: *biased attributions* when compared to patients with Axis I disorders. In Westen and colleagues (1990a) study no differences were found between borderlines and other patients in terms of understanding of social causality, although their comparison group included major depressives only and their causality scale did not address exactly the same dimensions tapped by the PORS. Westen and colleagues found that despite the fact that patients with personality disorder produced more often grossly illogical attributions than major depressives, overall, no differences in terms of mean scores for the scale "understanding social causality" were found between the two groups. Westen and colleagues claim that individuals with major depression are not expected to differ from borderlines in their understanding of social causality given "*the cognitive constriction characteristic of depressives, which should apply to their representations of people as well*" (p. 356). Results obtained with the PORS are consistent with this claim in that no differences between patients with severe personality disorder and Axis I disorders in terms of the overall scale *distorted attributions* were found. However, PORS differences between the two groups were found not for the lowest level of causality reasoning (*illogical attributions*), as in Westen et al.'s study, but for a "milder" failure to engage in accurate causal reasoning (*biased attributions*).

In fact, it has been claimed that severe personality disordered patients' attributional styles might be selective and vary according to circumstances and

figures in relation to which the causal attributions are being made. Some authors have indeed found selective impairments in these patients' attributional style and found that illogical attributions are not present at all times. For instance, Stuart et al. (1990) observed that borderline patients showed cognitive-developmentally higher levels of subject's attributions of intentions (psychological mindedness) when compared to other patients, although these cognitively advanced answers were only found when the figures depicted where mostly malevolent. Also Westen and colleagues, in the same study reported above, observed that about 45% of the borderlines included in the sample were capable of complex attributions. It seems therefore that personality-disordered patients' attributional styles are not yet clearly understood and that these patients do not seem to form a uniform group in relation to this specific dimension of object representations.

Finally, in relation to the scale *lack of differentiation,* no significant differences were found between patients with severe personality disorder and Axis I patients. The only significant differences for this scale were found between patients with severe personality disorder and healthy controls, although the effect of personality disorder on levels of *lack of differentiation* was not significant over and above the effects of demographic variables. Once more, this is line with Westen et al.'s (1990a) study where no differences in terms of complexity of representations were observed between borderline patients and major depressives. Although Westen's scale "complexity of representations of people" is a broader scale encompassing also other dimensions, it seems to cover some aspects related to the individual's ability to differentiate people's attributes and points of view as included in the scale *lack of differentiation.* These findings suggest that patients with personality disorder may not have more difficulties in producing differentiated object representations when compared to other patients. This seems also consistent with Lerner and St. Peter's (1984) study, where it was found that borderline patients were capable of functioning at high levels of differentiation in terms of their object representations when compared to other psychiatric groups.

Hence, it seems that the indicators present in the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* seem to be the most discriminative, between patients with severe personality disorder and patients

with Axis I disorders and between patients with severe personality disorder and healthy controls. Also, the final statistical analysis looking at the relationship between personality disorder symptoms and levels of PORS, revealed significant positive correlations between the same three scales and the number of positively addressed symptoms in the SCID-II questionnaire. However, it was found that the effect of number of personality disorder symptoms on those three scales was not significant over and above the effect of educational level.

Similar results were found for the analyses looking at differences in levels of PORS among patients with personality disorder regardless of their severity (Cluster A, B, and C), Axis I patients, and normal individuals. Once more, the three groups were compared in terms of their demographic variables and significant differences were observed between patients with personality disorder and healthy controls, with the former being less educated than the latter. This difference was however slightly less pronounced than the one observed when only patients with severe personality disorder were included in the analyses, as would be expected.

Moreover, when the whole sample was used, patients with personality disorder obtained significantly higher levels of problematic object representations when compared to healthy individuals for the scales *inconsistency*, *inappropriate elaboration*, *inappropriate affective valence*, and *disturbance of thinking*. Once more, no differences were found for the scale *extreme evaluations*. Also, levels of *lack of differentiation* and *distorted attributions* did not seem to differ between the groups. As to the differences between patients with personality disorder and patients with Axis I disorders, once again patients with personality disorder obtained significantly higher levels of *inappropriate affective valence* when compared to individuals with Axis I disorders, but no differences were found this time for the scales *inconsistency* and *disturbance of thinking* (as found when only severe personality disorder was considered). It appears that these two scales are able to differentiate individuals with severe, but not with any type of personality disorder, from patients with Axis I disorders. In other words, individuals classified according to the DSM-IV as having Cluster C personality disorder might not be more prone than Axis I individuals to provide descriptions of parents that are contradictory and oscillating (*inconsistency*) or exhibit difficulties in the discourse

pattern such as paradoxical sentences or thematic intrusions (*disturbance of thinking*).

Hence, the study conducted with the PORS seems to corroborate the main findings obtained in previous studies. It offered convergent evidence for the widely accepted link between problematic affect tone of object representations and personality pathology, more specifically the tendency to hold malevolent representations of significant others. On the other hand, findings obtained with the PORS seem to challenge the view that severe personality disorder cannot be differentiated from other disorders on the basis of cognitive deficits as found in several studies (e.g., Hibbard et al., 1995; Westen et al., 1990a). In fact, in addition to the scale *inappropriate affective valence*, two other scales - *inconsistency* and *disturbance of thinking,* which address dimensions that are of a more cognitive nature - seem to have attained significantly higher levels among severe personality disordered individuals when compared to both individuals with Axis I disorders and healthy controls. This seems to be an important finding given that a conservative approach was adopted in systematically trying to disentangle the effect of personality disorder from potentially confounding demographic variables. The ability of the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* to discriminate individuals with severe personality disorder from both healthy controls and patients with Axis I disorders seems to be therefore a robust finding.

CHAPTER 8

PROBLEMATIC OBJECT REPRESENTATIONS AND REFLECTIVE FUNCTION

8.1 Introduction

The concept of "Reflective Function" developed by Fonagy and Target (1997) refers to a "*mental function, which organises the experience of one's own and other's behaviour in terms of mental state constructs*" (p. 680). Reflective Function is associated with the notion of "theory of mind" - ability to attribute ideas, feelings, and thoughts to explain other people's behaviour (e.g., Baron-Cohen et al., 1985). It is also linked to Main's (1991) notion of "metacognitive functioning", defined as the ability to think about one's mind and monitor one's own thinking processes. Reflective Function (RF) represents an expansion of those concepts to the realm of interpersonal interaction, more specifically, to the capacity to attribute mental states to oneself and to other people in the context of attachment relationships (Fonagy & Target, 2005).

Reflective Function is thought to develop in the context of a secure relationship with the caregiver who creates opportunities for the child to learn about people's minds (Fonagy & Target, 2003). The mother's ability to identify the child's feelings helps the child to start representing his/her own internal states and the complex process of starting to name feelings, which the child cannot see in the external world, is thus enabled (Balbernie, 2003). For this to happen, the parent needs to be able to recognise the child's feelings and emotions while at the same time containing those feelings by putting them into perspective. This type of interaction with the caregiver gives the child the opportunity to have his/her feelings and emotions acknowledged by another mind and also to learn that those feelings are not the same as external reality (Fonagy & Target, 1991).

In fact, according to Fonagy and Target (2003), besides the biological function of attachment associated with providing protection to the young members of the

species, the attachment bond between the child and his/her caregiver has also the aim of enabling the development of mentalizing capacity, along with other functions such as stress regulation and attentional mechanisms. These three elements – *mentalizing capacities*, *attentional mechanisms*, and *ability to regulate stress* – are central aspects of what Fonagy and Target (2003) call the Interpersonal Interpretative Mechanism (IIM), which is regarded as essential when appraising and reacting to new situations. The three components of the IIM are regarded as each playing a role in the development of an individual's resilience, developed in the context of a secure attachment relationship. Mentalization, in particular, is especially important in protecting the individual from adverse experiences and psychological disorder as one's own and other people's minds can be understood and thought about in a way that enables the individual to see his interpersonal experiences as meaningful and thus have some control over them (Fonagy & Target, 2003).

On one hand, the caregiver's ability to adopt a reflective stance towards the infant increases its chances of developing a secure attachment. In fact, levels of Reflective Function in parents were found to be associated with attachment security of their child, with individuals scoring high on RF being more likely to have a child who is securely attached when compared to individuals scoring low on RF (Fonagy et al., 1991). On the other hand, the *parent's theory about the child's mind* enables the development of social-cognitive skills related to attribution of feelings and motives to other people and helps the child to contain his/her affects. There is no need for the adoption of defensive mechanisms to protect him/herself from the mind of a caregiver who is unable to recognise mental states, as happens in insecurely attached relationships (Fonagy et al., 1995a). In other words, a secure attachment to the caregiver creates a safe environment where the development of mentalizing ability is encouraged (Fonagy, 2000).

When the mother's response to the child reflects the actual child's feelings and emotions (*contingency*) and at the same time the mother shows that her response reflects the child's internal state and not hers (*markedness*), conditions are created for the development of an effective internalisation of the *caregiver's mirroring displays* which are essential for the development of mentalizing capacity (Fonagy & Target, 2003). If either of these conditions systematically

fails, the child will have restricted access to opportunities to learn about her own mind and other people's and therefore may be more vulnerable to adverse experiences and psychopathology. Hence, when the child does not experience *contingent mirroring* she will develop a tendency to represent internal states that are not "real" since there is a mismatch between the actual affect felt by the child and its reflection on the caregiver's mind. On the other hand, when *markedness* fails, that is, when the caregiver does not make it clear that she is not expressing her own feelings but the child's, the tendency for representing mental states as external reality arises (Fonagy & Target, 2003).

This failure on the part of the caregiver creates conditions to the development of impairments in the way one's own and other people's minds are represented and foundations are laid for serious interpersonal pathology, namely personality disorder. In fact, difficulties in object representations, which are manifested in internal and external terms, are prevalent among patients with personality disorder (Fonagy, 1991). These difficulties in representing internal states and external reality, which are often undifferentiated, are rooted in the incapacity to think in terms of mental states. These patients tend to treat internal states as equivalent to reality, which makes them unable to consider different perspectives and see beyond their immediate feelings and ideas (*psychic equivalence*); what they think and feel is assumed to be actual (Fonagy & Target, 1991).

In fact, borderline personality disorder is regarded as a disturbance of attachment, which did not create the conditions for the child to learn about other people's minds. The child was not able to find his/her affects reflected in another person's mind and did not develop the ability to mentally represent these affects in a symbolic way (Fonagy & Target, 1991). Although it is recognised that many factors can contribute to the development of borderline pathology, Fonagy and colleagues (1995a) suggest that poor reflective capacity may be a prerequisite for borderline conditions. In this perspective, personality disorder is thought to be a developmental pathology linked to the need to avoid thinking of the caregiver's thoughts and intentions in the context of a dysfunctional or abusive attachment relationship. The inhibition of the mentalizing capacity serves therefore a defensive purpose (Fonagy, 2000).

The consequence of this mode of operating is increased vulnerability to the negative impact of thoughts and feelings, which are perceived as real (Fonagy & Target, 1991). In fact, individuals with personality disorder seem more vulnerable to inflexible and simplified object representations, which are increased by deficits in mentalization. Reflective capacity helps to reduce the impact of other people's incongruent behaviour as it opens up the possibility to generate alternative explanations for somebody else's actions. Hence, personality disorder patients' deficits on mentalizing might make them more prone to see malevolent intentions behind other people's behaviours (Fonagy, 2000).

Therefore, the aim of the study carried out in this chapter is to investigate the relationship between levels of Reflective Function and Problematic Object Representations. It is hypothesised that individuals with low reflective capacity will display higher levels on the PORS, especially *inappropriate affective valence*, when compared to individuals with higher levels of Reflective Function ability. Also, a certain degree of association between *distorted attributions* and RF levels is expected. In fact, low mentalizing ability seems to limit the capacity to consider different perspectives and to generate alternative explanations for other people's behaviours (Fonagy & Target, 1991; Fonagy, 2000), which might make these individuals more prone to attributional errors. Moreover, levels of Reflective Function will be compared across personality disordered patients, patients with Axis I disorders, and healthy controls. According to Fonagy and colleagues' (1996) study, it is expected that patients with personality disorder will exhibit lower levels of Reflective Function when compared to both Axis I patients and healthy controls.

8.2 Method

Participants

A sub-sample of 77 participants drawn from the "main sample" (provided by the Menninger Clinic projects) was used to study the relationship between Reflective Function and the PORS. The sub-sample included 36 women and 41 men, aged between 19 and 52 (M = 28.4) mainly Caucasian (87%). About 48% of the sample was single whereas around 44% of the participants were married or lived

with a partner. Data on educational level was also available for most participants included in the sample (N = 61). Number of years of education ranged between 10 and 20 (M = 13.7). About 47% of the participants had been in school for 14 years or more. The sub-sample included patients with personality disorder (N= 35, 27 of whom with "severe" personality disorder - Cluster A and/or B), patients with Axis I disorders (N = 28) and healthy controls (N =14).

Materials

The Adult Attachment Interview (George, Kaplan, & Main, 1996) as described in previous chapters was administered to all participants.

Procedure

The seventy-seven transcripts were initially coded with the RF Scoring System by the group of researchers involved in the Menninger Clinic Project. These researchers were trained and certified as reliable coders in the RF system. Demographic data were also collected regarding participants' age, gender, marital status, and number of years of education. The AAI transcripts were subsequently coded by the author, blind to RF scorings, by using the Problematic Object Representation Scales (PORS).

Participants' level of Reflective Function (RF) is derived from AAI transcripts by using a coding system developed by Fonagy and colleagues (1998). This coding system is based on instances where mentalization is explicit in the attachment narrative. Passages counted as moderate to high RF include: (1) the interviewee's *awareness of the characteristics of mental states in themselves and in others* (e.g., recognising that mental states can be disguised and are difficult to infer, acknowledging the defensive nature of certain mental states, etc.); (2) the ability to *identify possible mental states, which may explain one's own and other people's behaviours and that establish accurate and plausible links between mental states* (e.g., producing accurate attributions, considering different perspectives, taking into consideration how others perceive oneself, etc.); (3) the *ability to make reference to developmental aspects of mental states* (e.g., revising feelings and thoughts since childhood, making links across generations,

explaining behaviours and mental states in terms of family dynamics, etc.); (4) the *interaction with the interviewer, which is considered an indicator of the participant's willingness to think in terms of mental states in the context of other relationships* (e.g., not assuming knowledge and taking into account that the interviewer may have a different state of mind in relation to a certain topic being discussed, recognising the impact on the interviewer of the story being told, etc.).

The coders are advised to be aware of potentially misleading instances of non-explicit mentalizing efforts, which should not count as indicators of Reflective Function. These include the mere naming or reference to mental state terms and also expressions that denote "learned, or clichéd reflective statements". These statements do not reflect a genuine mentalizing effort and might refer to commonly used expressions borrowed from conversations or therapy sessions. Also, the use of diagnostic terminology (e.g., attribute a psychiatric condition to oneself or others) or descriptions of personality characteristics are not considered reflective per se, without further elaboration in terms of mental state references.

These parameters are used to rate individual passages, which are then combined to assign the participants to an overall RF score, which ranges from –1 (negative RF) to 9 (exceptional RF). Individuals classified as having "*Negative RF*" (-1) tend to avoid thinking in reflective terms during the interview often by being hostile or evasive, generally perceiving the interview questions as an intrusion (-1A: *rejection of RF*). They can also make bizarre and inappropriate assumptions and give odd explanations for their own or other people's behaviour, which come across as irrational and confusing (-1B: *unintegrated, bizarre, or inappropriate RF*).

Participants are considered as "*Lacking in RF*" (1) when mentalizing instances are almost or totally absent from the interview, although with no active repudiation of RF (as in "Negative RF"). These transcripts are marked by lack of understanding of one's and other people's mental states and attributions are limited to concrete or sociological explanations, or even claims of ignorance concerning mental states (1A: *disavowal*). Another subtype of the "*Lacking in RF*" classification is the use of self-serving distortions. The individual passively

evades mentalizing by providing egocentric and self-aggrandizing accounts of interpersonal interactions (1B: *distorted/self-serving RF*).

A classification of "Questionable RF" (3) is assigned when the individual makes some attempts at thinking in terms of mental states but these are not explicit or lack in enough detail. Mentalizing efforts present in the interview are superficial, simplistic, clichéd (3A: *naïve/simplistic*), or excessively detailed but unconvincing and irrelevant (3B: *over-analytical/hyperactive*). A score of 3 is also assigned in cases of incongruent RF, for example when the interview contains instances of RF combined with instances of marked disavowal (3C: *miscellaneous low RF*).

Participants classified as having an "Ordinary RF" (5) level provide an account where explicit reflection is present and that shows evidence of indicators of high to moderate RF (described above). Individuals assigned to this category show ordinary understanding of mental states and display a relatively consistent model to organise their experience in terms of thoughts and feelings (5A: *ordinary understanding*). Alternatively, this category is assigned when instances of sophisticated reflection (7 or higher) are mixed with passages that have low or absent reflection (lower than 3), resulting in a mixed coding protocol (5B: *inconsistent understanding*).

Individuals classified as having "Marked RF" (7) produce transcripts that include various instances of RF with some of them being sophisticated, unusual, or complex/elaborated. There is a consistent model of one's own and other people's minds and the individual is able to maintain his somewhat sophisticated understanding of mental states throughout the interview. Individuals with "Exceptional RF" (9) show the same features as those assigned to "Marked RF" but their transcripts show exceptional sophistication in terms of reflective capacity or ordinary understanding when discussing an extremely sensitive topic, in which even ordinary levels of RF can be considered exceptional.

Even numbers are assigned when the coder feels that a transcript falls between two odd ratings or when not all the criteria for each category are fulfilled. Overall ratings are based on the interview protocol as a whole. However, some of the interview probes (*demand questions*), which specifically invite the participant to

think in terms of mental states (e.g., *why did your parents behave as they did during your childhood?),* carry more weight in the overall rating than the remaining probes (*permit questions*, e.g., questions about background and early family situation). Also, non-reflective answers to *permit questions* should not affect as much the overall rating as if they were given to *demand questions.*

8.3 Results

Reflective Function and demographic variables

No significant differences in terms of RF scores were found among gender, race, or marital status groups. Also, no significant correlation was found between age and level of RF. However, number of years of education seemed to correlate significantly with levels of RF. Individuals with higher levels of RF seemed to be more educated than individuals with low RF levels (R = .40, p = .001).

Reflective Function prevalence rates

A higher prevalence of negative or absent RF was found among patients with personality disorder when compared to Axis I patients and healthy controls. Also, a lower proportion of patients with personality disorder produced transcripts were Reflective Function was present, as can be observed in table 8.1.

Table 8.1: Prevalence rates of Reflective Function in patients with personality disorder (N = 35), Axis I disorders (N = 28), and healthy controls (14)

	RF levels N (%)		
	PD	Axis I	Controls
Negative/Absent RF (lower than 3)	14 (40.0)	5 (17.9)	4 (28.6)
Questionable RF (3)	8 (22.9)	6 (21.4)	4 (28.5)
Presence of RF (higher than 3)	13 (37.1)	17 (60.7)	6 (42.9)

Reflective Function and psychopathology

In order to investigate differences in levels of Reflective Function across the three groups included in the sample – a) patients with personality disorder, b) patients with Axis I disorders, and c) healthy controls – Analyses of Variance (ANOVAs) were conducted and performed separately for the sample including all personality

disordered patients and the sample including only severe cases of personality disorder.

When considering all personality-disordered individuals, initial analysis revealed differences in levels of Reflective Function across the three groups, $F(2, 76) = 3.15$, $p = .05$. Follow-up tests revealed that patients with personality disorder obtained significantly lower levels of Reflective Function when compared to Axis I patients ($p = .05$). Another independent-sample Analysis of Variance (ANOVA) was conducted by including only patients with **severe** personality disorder, Axis I disorders, and normal controls. As was observed for the analyses including all personality disordered individuals, differences were found between the three groups, $F(2, 68) = 3.27$, $p = .04$, with patients with severe personality disorder showing significantly lower levels of Reflective Function when compared to patients with Axis I disorders ($p = .05$).

Problematic object representations and Reflective Function

Non-parametric correlation analyses (Kendall's tau-b) were calculated between the scores obtained in the PORS and the overall level of Reflective Function. Highly significant negative correlations were found between RF scores and the scales *inconsistency*, *inappropriate elaboration*, and *inappropriate affective valence*. No significant correlations were found for the remaining scales as can be seen in table 8.2.

Table 8.2: Correlation coefficients (Kendall's tau-b) between the PORS and RF scores (N = 77)

	RF overall score
Inconsistency	-.25**
Extreme evaluations	.06
Inappropriate elaboration	-.23*
Lack of differentiation	-.11
Inappropriate affective valence	-.20*
Distorted attributions	-.10
Disturbance of thinking	-.08

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

Controlling for educational level and psychopathology

In order to investigate whether the relationship between Reflective Function and the scales *inconsistency*, *inappropriate elaboration*, and *inappropriate affective valence* remained significant when both the effects of "educational level" and "psychopathology" were accounted for, Bootstrap Regression analyses were conducted. The categorical variable "psychopathology" which had three levels (Personality Disorder, Axis I disorders, and healthy controls) was transformed into a dummy variable with 2 levels. Hence, four variables were entered into the regressions - a) *reflective function*; b) *educational level*; c) *personality disorder vs. healthy controls*; d) *personality disorder vs. Axis I disorders*, entering each of the PORS as the predicted variable.

It was observed that the effect of Reflective Function was still significant on the levels of *inappropriate affective valence* (B = -.62, Boot p = .02), when both educational level and psychopathology were taken into account. Likewise, the effect of the variable c) *personality disorder vs. healthy controls* was also still significant (B = -2.62, Boot p = .009). The effects of b) *educational level* or d) *personality disorder vs. Axis I disorders* were no longer significant. For the scales *inconsistency* and *inappropriate elaboration,* it was observed that the effect of Reflective Function was no longer significant when educational level and psychopathology were taken into account. For the scale *inconsistency*, only the effect of "personality disorder vs. healthy controls" (B = -2.92, Boot p = .02) remained significant, whereas for the scale *inappropriate elaboration* the effect of educational level (B = -.24, Boot p = .03) and "personality disorder vs. healthy controls" (B = -1.34, Boot p = .03) remained significant predictors.

When considering only the group of patients with severe personality disorder, Axis I disorders, and healthy controls, it was observed that the effect of Reflective Function was still significant on the levels of *inappropriate affective valence* (B = -.62, Boot p = .02), when both educational level and psychopathology were taken into account.

For example, one of the participants with low RF, who was not assigned to the severe personality disorder group, still provided the following *malevolent* representation of his mother:

"*I don't know him [father] very well. I don't... I only know things what my mom has told me and she's a liar, she's a liar*".

Likewise, the effect of the variable "severe personality disorder vs. healthy controls" was also still a significant predictor of levels of *inappropriate affective valence* (B = -3.04, Boot p = .008), as found with the group of all patients with personality disorder. However, when only patients with severe personality disorder were considered, the effect of the variable "severe personality disorder vs. Axis I disorders" approached significance (B = -1.93, Boot p = .05).

Once again, for the scales *inconsistency* and *inappropriate elaboration*, it was found that the effect of Reflective Function was no longer significant when educational level and psychopathology were controlled for. The effect of "severe personality vs. healthy controls" was the only significant predictor of the scores obtained in the scales *inconsistency* (B = -3.63, Boot p = .004) and *inappropriate elaboration* (B = -1.48, Boot p = .02).

RF and PORS subscales

Correlation analyses were also performed between RF scores and PORS subscales. It was observed that RF correlated significantly with the subscales A1: *contradiction/oscillation* (tau-b = -.25, p = .005), A2: *mismatch between semantic and episodic memory* (tau-b = -.21. p = .02), *C1: oversimplified/superficial descriptions* (tau-b = -.20, p = .03), E1: *malevolence* (tau-b = -.21, p = .03), and *G1: incoherence* (tau-b = -.19, p = .05). However, when the effects of both "educational level" and "psychopathology" were controlled for, it was observed that the effect of Reflective Function was a significant predictor only for the scales *E1: malevolence* (B = -.53, Boot p = .02) and *G1: incoherence* (B = -.37, Boot p = .001).

8.4 Discussion

Reflective Function or mentalization enables human beings to make sense of their own and other people's behaviours and to infer mental states, which makes it possible to find meaning in interpersonal interactions and also anticipate other people's behaviours. The development of Reflective Function is also adaptive since, from a range of possible representations of self and other, the individual can choose, in a flexible way, the one that seems more accurate to explain a given interpersonal interaction (Fonagy et al., 1998).

It was hypothesised that levels of Reflective Function would be associated with problems in object representations, particularly *inappropriate affective valence,* expressed in the context of an attachment related narrative. The main hypothesis seems to have been confirmed with a significant association found between Reflective Function scores and levels of *inappropriate affective valence.* Individuals scoring high on this scale tended to exhibit lower RF scores when compared to those individuals showing low levels of *inappropriate affective valence.* Also, it was observed that levels of *inappropriate affective valence* seemed to be predicted by levels of Reflective Function even when the effect of demographic variables and personality disorder were taken into account.

Initial analyses revealed a significant positive correlation between number of years of education and RF scores. Fonagy (2000) has previously found that Reflective Function seemed to correlate only negligibly with educational background. In fact, correlations between educational level and Reflective Function are not present in the current sample when the diagnostic groups are analysed separately (severe personality disorder, Axis I patients, and healthy controls). Indeed, it is likely that the lower levels of RF found here among less educated patients might have been at least partially due to the fact that these included a disproportionate higher number of individuals with personality disorder. In other words, the relationship between educational level and Reflective Function might be at least partially accounted for the presence of personality disorder.

In fact, initial analyses revealed significant differences in terms of RF scores among patients with personality disorder, Axis I disorders, and healthy controls. Patients with personality disorder, especially with Cluster A and/or B disorders, were found to attain the lowest levels of Reflective Function. This is consistent with Fonagy et al. (1996) study where it was found that borderline patients differed from patients with other disorders in terms of their RF scores, which were found to be significantly lower. However, follow-up tests revealed that significant differences were only found here between the group of patients with personality disorder and Axis I disorders and not between patients with personality disorder and healthy controls. In fact, although average RF levels found here in patients with personality disorder and Axis I disorders were similar to those found by Fonagy and colleagues (1996), individuals in the current control group seemed to exhibit considerable lower RF capacity (M = 3.1, SD = 1.5) when compared to the control group used in Fonagy and colleagues' study (M = 5.2, SD = 1.5). It is likely that the small size of the control group might have limited the range of RF scores available and therefore compromised the ability to detect significant differences involving this group.

Correlation analyses were calculated between PORS levels and RF scores. Significant negative correlations were observed for the scales *inconsistency*, *inappropriate elaboration*, and *inappropriate affective valence*. Hence, a series of analyses were conducted to investigate the relationship between RF scores and levels of *inconsistency*, *inappropriate elaboration*, and *inappropriate affective valence* when the effects of both educational level and psychopathology were taken into account.

The first series of analyses considered all patients with personality disorder, that is, also those with Cluster C pathology. In relation to the scale *inappropriate affective valence*, it was observed that the effect of RF scores was still significant when the variables "educational level" and "psychopathology" were considered. The same happened in relation to the effect of the variable "personality disorder vs. healthy controls". It seems therefore that *inappropriate affective valence* is independently predicted by levels of RF and presence of personality disorder (versus absence of psychopathology). Educational level was not a significant predictor of levels of *inappropriate affective valence*. In fact, dimensions of a

more 'affective' nature would be expected to be less affected by educational background when compared to other more cognitive dimensions (e.g., *inappropriate elaboration*).

In relation to the scale *inconsistency*, it was observed that the effect of RF was no longer a significant predictor of levels obtained in that scale when the effects of educational level and psychopathology were controlled for. Only the effect of "presence of personality disorder versus absence of pathology (healthy controls)" remained a significant predictor of *inconsistency* scores. It seems that the predictive value of RF levels in terms of difficulties in maintaining a consistent, non-contradictory account of attachment relationships (*inconsistency*) cannot be disentangled from the effect of presence of personality disorder. For the scale *inappropriate elaboration*, similar results were found. RF scores did not remain significant over and above the effect of personality disorder diagnosis. Once more, the variable "personality disorder vs. healthy controls" remained a significant predictor. However, also the effect of "educational level" seemed to retain its predictive value. It appears that presence of personality disorder (as opposed to absence of psychopathology) together with low academic achievement independently predict inability to provide a succinct and complete description of attachment figures and relationships (*inappropriate elaboration*).

Similar results were obtained in the second series of analyses considering only patients with severe personality disorder (Cluster A and/or B). The effect of Reflective Function was still a significant predictor of levels of *inappropriate affective valence* over and above the effects of educational level and psychopathology. Also, once more, the effect of "severe personality disorder vs healthy controls" remained a significant predictor of *inappropriate affective valence* levels. However, it was observed that also the effect of the variable "personality disorder vs Axis I disorders" approached significance when educational level and psychopathology were controlled for. It seems that when only severe personality pathology is considered, levels of *inappropriate affective valence* are significantly predicted by levels of RF, presence of severe personality disorder vs. Axis I disorders, and presence of severe personality disorder vs. absence of any diagnosis. *Inappropriate affective valence* seems therefore to be able not only to distinguish personality disorder patients from healthy controls and

Axis I patients but also to discriminate individuals with different levels of Reflective Function capacity.

In relation to the scales *inconsistency* and *inappropriate elaboration*, it was observed that the effect of RF score lost its significant predictive value when educational level and psychopathology were taken into account. Only the effect of the variable "severe personality disorder vs. healthy controls" remained significant, with no significant effect of "educational level" being observed this time for the scale *inappropriate elaboration* (as found when all the patients with personality disorder were considered). Hence, it seems that when considering only severe personality disorder, the effect of the variable "severe personality disorder versus healthy controls" is the sole predictor of levels of *inappropriate elaboration*. It appears that educational level can 'moderate' the detrimental effect of personality pathology on this dimension of problematic object representations but only if the personality disorder group is not composed solely of severely disturbed individuals.

Further analyses conducted with PORS subscales revealed that the subscale E1: *malevolence* seemed to be significantly associated with RF scores and therefore accounting for the significant differences observed in relation to the scale *inappropriate affective valence*. It seems that, consistently with Fonagy (2000), low reflective capacity is associated with increased likelihood of representing one's attachment figures in a negative tone. Moreover, another subscale – G1: *incoherence* – appeared to be independently associated with levels of RF in the expected way, with individuals scoring high on this scale having lower levels of Reflective Function than those individuals exhibiting low *incoherence* levels. *Incoherence* passages refer to instances where the individual is unable to maintain an intelligible discourse reflected in bizarre statements, meaningless sentences, or gross contradictions. These coincide in fact with some of the criteria characterising the discourse of individuals classified as having "Negative RF" (-1), especially the subcategory *unintegrated, bizarre, or inappropriate RF* (-1B).

No other subscales appeared to be associated with RF scores over and above the effects of psychopathology and educational level. It was in fact surprising that

none of the subscales included in *distorted attributions* (nor the overall scale) were associated with RF capacity. It was expected that individuals with low mentalizing ability would produce more attribution errors than those exhibiting higher levels of Reflective Function. In fact, as it was discussed above, low Reflective Function makes it more difficult to entertain alternative explanations for other people's behaviour and to adopt a flexible approach when reasoning about other's feelings or behaviours (e.g., Fonagy, 2000). Although individuals with low RF scored higher on the scale *distorted attributions* than individuals with high RF, this trend did not reach significance in the present sub-sample. In fact, most of the individuals included in this sub-sample showed few problems in terms of causal reasoning and therefore the narrow range in terms of *distorted attribution* scores may not have provided enough variability to detect significant associations.

Hence, Reflective Function seems to be highly associated with levels of *inappropriate affective valence* and this association seems to be maintained when the effect of the variables *educational level* and *psychopathology* are taken into account. Despite the fact that severe personality disorder is a strong predictor of levels of *inappropriate affective valence*, the effect of Reflective Function is still significant over and above this relationship. Low Reflective Function is considered to be at the root of personality disorder (e.g., Fonagy & Target, 2003) and, on the other hand, interpersonal difficulties present in severe personality disorder might aggravate reflective capacities. If low RF contributes to the development of personality disorder and personality disorder is one of the factors leading to reflective difficulties, the significant individual contribution resulting from the somewhat artificial separation of the effect of these two variables (Reflective Function and severe personality disorder) on levels of *inappropriate affective valence* seems noteworthy.

This idea that personality disorder and associated problems in object representations arise in the context of dysfunctional interpersonal relationships (which inhibit mentalizing capacity) will be next addressed, with particular emphasis placed on the relationship between early adversity and development of problematic object representations.

CHAPTER 9

PROBLEMATIC OBJECT REPRESENTATIONS AND EARLY ADVERSITY

9.1 Introduction

As emphasised throughout this work, object representations are strongly influenced by early relationships with caregivers who shape the individual's capacity to establish and maintain interpersonal relationships. Traumatic experiences in the individual's developmental history are likely to have a considerable negative effect, since the intense nature of the trauma creates disorganisation and instability in the person's sense of self and others. These impairments are thought to lead to further psychological and interpersonal difficulties (Ornduff & Kelsey, 1996). According to this view, child maltreatment is a special harmful kind of trauma as it entails disturbance of the primary relationship with the caregiver (Ornduff, 2000). Attachment theory, in particular, has posited that child abuse victims are more likely to develop negative representations of their attachment figures. Negative *working models* of self and others among maltreated individuals can in fact be regarded as stemming from dysfunctional experiences with parental figures in childhood (Toth et al., 2000).

An object-relations framework has been used to understand adversity in childhood with an increasing interest in studying the sequelae of child maltreatment. Studies conducted so far agree that the experience of abuse seems to have a significant negative effect in interpersonal functioning (Ornduff & Kelsey, 1996). More specifically, a range of studies looking at the relationship between abuse in childhood and object relations, have found that individuals who were physically and sexually abused show more deficits in terms of their object relations (Twomey et al., 2000). Many of these studies have focused on samples of children or adolescent abuse survivors but other studies, taking a retrospective approach with adult samples, have been reported.

Westen and colleagues (1990b) investigated the relationship between history of adversity (e.g., maternal separations, neglect, physical and sexual abuse) and object relations in psychiatrically disturbed adolescent girls. Object relations were measured from TAT responses using the *Social Cognition and Object Relations Scale* (Westen, 1991a). They hypothesised that the history of adverse developmental variables would be associated with a higher prevalence of problems in object relations in adolescence, and that specific types of childhood adversity would have a differential impact on different dimensions of object relations. It was found that individuals who had suffered sexual abuse, physical abuse, or neglect had lower scores particularly on the affect tone scale. History of neglect appeared also associated with more negative representations of interpersonal relations and with a higher frequency of illogical attributions.

Also by using the SCORS to code TAT stories produced by children and adolescents, Freedenfeld et al. (1995) compared the level of object relations between individuals with and without history of physical abuse. As expected, history of physical abuse appeared linked to more malevolent object representations, lower ability to make an emotional investment in relations and moral standards, and less accurate, and logical causal attributions to explain interpersonal interactions. No differences were found for the SCORS scale assessing complexity of object representations. The authors concluded that their findings were in accordance with the view that victims of physical abuse tend to see the world and interpersonal relationships as more dangerous and unpredictable and that this might be associated with the abusive relationship they experienced with their parents.

Ornduff and colleagues (1994) used the same method to study object relations in survivors of sexual abuse. They compared the TAT stories produced by sexually abused female children with a clinical sample of female children without history of abuse. It was found that sexually abused individuals exhibited more primitive and simple depictions of people, had less ability to invest emotionally in relationships with others, and more difficulties in making adequate causal attributions. However, impairments in object relations were mainly attributable to more negative tone of their interpersonal relationships. Later on, Ornduff and Kelsey (1996) looked at the impact of both sexual and physical abuse on object

representations. Their sample included sexually abused, physically abused, and non-abused but clinically distressed comparison girls. They found significant differences between abused versus non-abused individuals, with the former showing more impaired object representations than the latter. On the other hand, differences were also found between victims of sexual and physical abuse. Sexually abused females showed impairments mainly on the level of affect quality of object representations, which the authors interpreted as a tendency to see others as more malevolent and threatening. Physically abused individuals showed broader impairments with both more negative affect tone and less capacity for investment in relationships and moral standards, focusing more on the gratification of their own needs then on establishing a genuine emotional bond with others. The authors concluded that sexual and physical abuse have differential detrimental effects but they both impact on affective rather than cognitive dimensions of object representations.

In a retrospective study about childhood maltreatment and history of suicide attempts, Twomey et al. (2000) found that dimensions of object relations fully mediated the relationship between early maltreatment and suicidal behaviour. Women who had suffered sexual, physical, or emotional abuse, or emotional or physical neglect exhibited greater deficits in object representations. The dimension of object relations that seemed to best account for the relationship between abuse and suicidal behaviour was *Alienation* as measured by the BORI (*Bell's Object Relations Inventory*; Bell et al., 1986), which is related to a basic lack of trust and inability to achieve intimacy and satisfaction in relationships.

In a study about object relations in sexually abused males, Morrell and colleagues (2001) found also that history of sexual abuse appeared associated with disturbed object relations especially in the levels of *Alienation,* this time measured by the *Bell's Object Relations and Reality Testing Inventory* (BORRTI, Bell et al., 1986), a modified version of the BORI. The authors found no evidence of increased levels of disturbed object relations among individuals with a history of physical abuse or abandonment by parents and suggested that sexual abuse might have a unique connection with disturbed object relations.

Elliot (1994) studied a sample of adult female professionals who had been sexually abused as children. A great number of sexual abuse survivors were recruited and were asked to fill out self-report measures of object relations and family environment. Women with history of abuse reported significantly more impairments in object relations than non-abused women. They showed more interpersonal discomfort and difficulties in establishing emotional bonds, maladaptive interpersonal patterns, and interpersonal sensitivity when compared to non-abused women. It was found that the abuse experience was independently associated with current interpersonal problems over and above the distress caused by dysfunctional family environments.

Hence, taken together, these studies seem to give support to the association between child abuse and impaired object representations. These findings have been particularly relevant to understand the link between history of maltreatment and personality pathology, as these patients have been found to be more likely to report histories of abuse. For example, Nigg et al. (1991) investigated object representations in a group of adult borderline patients and found that history of sexual abuse appeared associated with extremely malevolent object representations. Borderline individuals reported early memories depicting others as more harmful, unhelpful, and malevolent. The authors claimed that "*some portion of borderline subject's malevolent object world may be linked more specifically to sexual abuse than to borderline diagnosis*" (p. 868) and recognise the importance of further studying borderline patients' deficits in object representations in connection to early abuse experiences.

Indeed, several authors have acknowledged the similarity of symptoms exhibited by borderline patients and child abuse survivors, especially victims of sexual abuse (e.g., Shearer, et al., 1990; Westen, et al., 1990c). These findings have led to research efforts which have focused on the connections between personality disorder diagnosis and early adversity. For example, borderline patients have been distinguished from other psychiatric patients on the basis of higher levels of sexual and physical abuse (e.g., Westen et al., 1990c; Hermann et al., 1989, Ogata et al., 1990), verbal abuse (e.g., Zanarini et al., 1989), and neglect (e.g., Zanarini et al., 1997).

Also, Fonagy and colleagues (1996) found that borderline patients could be distinguished from other patients by higher prevalence of reported abuse and neglect. Moreover, the probability of abuse and personality disorder diagnosis being associated was higher when Reflective Function levels were low. According to the authors, certain individuals with personality disorder who suffered childhood adversity manage to deal with the abuse by abstaining from inferring their caregiver's thoughts and therefore manage to avoid the idea that their attachment figure wanted to harm them. The developmental link between early adversity and severe personality disorder is therefore established on the basis of inhibition of reflective capacity, which serves a defensive function (Fonagy & Target, 2003) but has adverse consequences in terms of interpersonal pathology.

Hence, the aim of the study carried out in this chapter is to investigate the relationship between early adversity, such as abuse and neglect, and object representations in a sample composed of patients with severe personality disorder, other disorders, and normal controls. Consistently with object-relations theory and with the studies described above, it is expected that history of early adversity will be associated with higher levels of distortion in object representations. More specifically, it is hypothesised that abused individuals will have comparatively higher problematic object relations as measured by the PORS when compared to non-abused individuals. As seen above, affective dimensions of object relations seem to be the ones more consistently associated with early abuse and therefore abused and non-abused individuals, namely those who suffered physical or sexual abuse, are expected to show significant differences on the scale *inappropriate affective valence*. No additional hypotheses in relation to other kinds of abuse / early adversity are made, as few studies have focused on other early adversity variables such as neglect, domestic violence, or emotional abuse. Early adversity history among different diagnostic groups will also be explored. Patients with severe personality disorder are expected to report more abuse and neglect when compared to other patients and normal controls. Finally, lower levels of Reflective Function are expected to be associated with childhood adversity and to 'moderate' the relationship between child abuse and severe personality disorder diagnosis.

9.2 Method

Participants

A sub-sample of 70 participants drawn from the "main sample" provided by the Menninger research projects was used to study the relationship between reported adversity in childhood and the PORS. The sub-sample included a total of 31 female and 39 male participants aged between 19 and 51 (M = 28.1), the majority of whom were Caucasian (88.6%). About 43% of the sample was single whereas 49% were married or lived with a partner. Data on number of years of education was also available for most of the participants included in the sample (N = 57). Number of years of education ranged between 10 and 20 (M = 13.7). About 49% of the participants had been in school for 14 years or more. The sub-sample included patients with severe personality disorder (Cluster A and/or B, N= 27), patients with Axis I disorders (N = 29) and healthy controls (N =14).

Materials

The Adult Attachment Interview (George, Kaplan, & Main, 1996) was administered to all participants.

The Childhood Experience of Care and Abuse (CECA, Bifulco et al., 1994) was also used. This is a retrospective interview measure about childhood experiences of care and adversity to be used with adult samples. The measure includes scales dealing with the quality of the relationship with parents in childhood (e.g., antipathy), quality of parental care (e.g., supervision, discipline, neglect), details about physical and sexual abuse, questions related to the presence of discord and family violence between the parents, among others. There are also additional scales including other experiences such as psychological abuse, role reversal, financial hardship, school life, friendships etc. The CECA is a semi-structured open-ended measure, which allows a certain degree of flexibility in the interview process and enables new scales to be added or discarded according to the research interests. Most of the main CECA scales, normally used in studies focusing on risk factors of adult psychopathology, were used in this study - Antipathy, Neglect, Discord, Physical Abuse, and Sexual Abuse (see Appendix

F). Also, one of the additional adversity scales was used: Psychological Abuse (Bifulco et al., 1996).

The scale *Antipathy* deals with issues such as perceived criticism, displeasure, coldness, rejection, or hostility shown by the parent towards the child. It includes general reports of hostile or disapproving remarks by the parent, statements expressing difficulties in pleasing the parent and feelings of being a burden, specific indications of hostility such as favouring another child, or examples that illustrate how the parents were cold, distant, or rejecting. Pervasive and personalised criticism of the child is especially relevant for this scale as opposed to criticism focusing on specific actions or behaviours. The scale *Neglect* reflects the degree to which the parents failed to respond to the child's material (*Physical Neglect*) or emotional needs (*Psychological Neglect*). Aspects taken into account in this scale include the extent to which the parents made sure the child was well cared for in terms of food, clothes, attention, and emotional support. *Discord or tension* in the home refers to either explicit conflict such as arguments and fights between the members of the family or to a tense atmosphere in the home where for example family members stop talking to each other. Arguments between the children without involving the parents are not considered in this scale.

Physical abuse concerns the extent to which the child was the target of physical violence by any of the parents or caretakers. Violent acts such as kicking, punching, biting, burning, or hitting with an object are considered for this scale as well as hitting across the face or head. Being grabbed, pushed, or smacked do not count as physical abuse. *Sexual abuse* is considered when the subject reports inappropriate sexual contact usually with an adult perpetrator. Any sexual contact with an adult before age 10 is considered as probable sexual abuse, although in adolescence it is more difficult to establish a definition of inappropriate sexual contact. The age difference and social status of the sexual partner should be taken into account in these cases. Aspects such as degree of sexual contact, coercion, frequency, and number of perpetrators have also crucial importance. *Psychological abuse* refers to *cruel behaviour, which has the potential to affect the child's social, cognitive, or emotional development.* It can encompass verbal and non-verbal acts and includes behaviours such as humiliating the child, terrorising, extreme rejection, deprivation of basic needs,

taking away toys or favourite objects, inflicting great emotional or physical pain, exploitation, cognitive disorientation, and emotional blackmail (Bifulco et al., 2002; Moran et al., 2002).

Procedure

The seventy participants were interviewed with both the AAI protocol and the CECA by the group of researchers involved in the Menninger Clinic projects. These researchers were trained and certified as reliable coders in the CECA scoring system and the interviews were coded according to the procedures described in the manual (Bifulco et al., 1996). The AAI protocol was administered in a first session on its own. The CECA was administered subsequently in a different session by the same interviewer. It was made clear to the participants that some of the interview probes might had been asked before and that the idea was to get a clearer description of what happened in more specific areas of family life over time. Therefore, it was ensured that participants understood that a different focus and interview approach was to be undertaken despite some possible overlap of the questions included in the AAI and CECA interview protocols. Demographic data were also collected regarding participants' age, gender, marital status, and number of years of education. The AAI transcripts were subsequently coded by the author, blind to CECA scorings, by using the Problematic Object Representation Scales (PORS).

The CECA interview starts with questions about demographic information and family arrangements and progresses to probes about the quality of the relationship with parents during the first 18 years of the individual's life. The questions related to the quality of the relationship with parents are repeated for each of the family arrangements. The first of these arrangements begins at birth and a new arrangement starts whenever parental figures change through death, divorce, remarriage etc. and remain responsible for childcare for at least 12 months.

The CECA scoring procedures are mostly "interviewer based" in that the decisions about quality of care and presence of abuse are made by the interviewer and based on factual information provided by the participant. In other

words, the scoring of the material collected during the interview intends to be an objective assessment of the individual's past experiences, not necessarily reflecting the way he or she appraises those experiences or judges their severity. In fact, general descriptions of parental behaviour do not suffice. Actual instances of events should be provided by the individuals to justify the severity of the ratings. The detailed and flexible style of the CECA enables the interviewer to probe for enough detail so that he or she can have access to enough information and minimise biases associated with the individual's reporting style (Bifulco et al., 1997).

Most CECA scales are coded in terms of their severity as 1 (marked), 2 (moderate), 3 (some) or 4 (little/none). All the scorings are entered into a rating schedule where demographic information and experiences of care and abuse are registered. Early adversity scales are also classified in terms of age of occurrence with all the abuse/neglect scales being coded for *early* abuse/neglect (0-11 years of age) and *late* abuse/neglect (12-18 years of age).

9.3 Results

Combined scores for early and late abuse/neglect were calculated for all the CECA scales used. Hence, for example *early antipathy* was collapsed with *late antipathy* to originate a single score for that scale – *overall antipathy* (ranging from 2 to 8). The seven CECA scales used - *antipathy*, *psychological neglect*, *physical neglect*, *discord*, *physical abuse*, *sexual abuse*, and *psychological abuse* - were all significantly inter-correlated (correlation coefficients ranging from .25 to .65), with the exception of the scale *sexual abuse* which correlated significantly only with the scale *psychological neglect* (the correlation matrix of the CECA scales used can be found in Appendix G).

Early adversity and demographic variables

Initial analyses were conducted to explore differences in terms of childhood adversity scores across demographic groups. As expected, women had suffered significantly more overall sexual abuse when compared to men ($U = 352.0$, $p = .0005$). No other CECA scales differed between male and female participants.

Also significant correlations were found between reported abuse and educational level. Higher levels of education were associated with lower levels of reported childhood adversity in all CECA scales, except for *sexual abuse* (*antipathy*: tau-b = .36, p = .001; *psychological neglect*: tau-b = .37, p = .001; *physical neglect*: tau-b = .39, p = .0004; *discord*: tau-b = .35, p = .001; *physical abuse*: tau-b = .59, p = .0001; *psychological abuse*: tau-b = .50, p = .0001). No differences in terms of CECA scales were found across age, racial, or marital status groups.

Early adversity prevalence rates

Prevalence rates for combined scores of abuse and neglect were calculated for the present sample as can be seen in table 9.1. Individuals with severe personality disorder seemed to report higher levels of childhood adversity when compared to Axis I patients and normal controls. In fact, different types of moderate and/or marked levels of early adversity were reported by 30-59% of the patients with severe personality disorder, whereas reported adversity levels of any severity were reported by 56-89%. As seen above, prevalence rates of *sexual abuse* differed significantly across gender. Moderate and/or marked levels of *sexual abuse* were reported by 80% of the female personality disordered patients and at least "some" form of *sexual abuse* by 90% (for males, prevalence rates were 24 and 35% respectively).

Table 9.1: Prevalence rates of reported early adversity for patients with severe personality disorder (N = 27), Axis I disorders (N = 29), and healthy controls (N = 14)

	Moderate or marked severity N (%)			Any severity (including some, moderate, and marked) N (%)		
	PD	Axis I	Controls	PD	Axis I	Controls
Antipathy	12 (44)	7 (24)	3 (21)	21 (81)	12 (41)	4 (29)
Psychological Neglect	15 (58)	10 (35)	1 (7)	23 (89)	12 (41)	3 (21)
Physical Neglect	12 (44)	9 (31)	0 (0)	20 (74)	13 (45)	2 (14)
Discord	16 (59)	15 (52)	2 (14)	21 (78)	19 (66)	5 (36)
Physical Abuse	12 (44)	5 (17)	1 (7)	21 (78)	14 (48)	3 (21)
Sexual Abuse	12 (44)	5 (17)	0 (0)	15 (56)	9 (31)	1 (7)
Psychological Abuse	8 (30)	4 (14)	1 (7)	15 (56)	7 (24)	2 (14)

Early adversity and psychopathology

In order to investigate differences in levels of childhood adversity across the three groups included in the sample - a) patients with severe personality disorder, b) patients with Axis I disorders, and c) healthy controls - a number of initial analyses were carried out. A priori differences for all CECA scales were observed across the three groups when a Kruskal-Wallis test was used. Significant differences were found among the three groups for the scores on *antipathy*, *psychological neglect*, *physical neglect*, *discord*, *physical abuse*, *sexual abuse*, and *psychological abuse*, as can be observed in table 9.2.

Patients with severe personality disorder reported significantly higher levels of *antipathy*, *psychological neglect*, *physical neglect*, *discord*, *physical abuse*, *sexual abuse*, and *psychological abuse* when compared to healthy controls and higher levels of *antipathy*, *psychological neglect*, *physical abuse*, and *sexual abuse* when compared to Axis I patients (see table 9.3).

Table 9.2: Kruskal-Wallis test comparing patients with severe personality disorder (N = 27), Axis I disorders (N = 29), and healthy controls (N = 14) for levels of early adversity

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Antipathy	27.0	38.5	42.7	7.94 (2)	.02
Psychological neglect	25.4	37.7	47.4	13.16 (2)	.001
Physical neglect	27.5	36.2	49.4	12.48 (2)	.002
Discord	30.3	34.6	47.4	6.98 (2)	.03
Physical abuse	25.7	38.9	47.4	13.31 (2)	.001
Sexual abuse	27.5	37.9	46.1	11.49 (2)	.003
Psychological abuse	28.6	38.7	42.3	7.48 (2)	.03

* Please note that lower mean ranks indicate higher adversity due to the CECA scoring system as mentioned in the procedure in section 9.2

Table 9.3: Mann-Whitney tests comparing patients with severe personality disorder vs. healthy controls and patients with severe personality disorder vs. Axis I patients for levels of early adversity

	PD vs. controls		PD vs. Axis I	
	Mann-U	sig.	Mann-U	sig.
Antipathy	98.0	.01	252.5	.03
Psychological neglect	55.0	.0002	253.5	.03
Physical neglect	63.5	.0002	301.5	.12
Discord	96.0	.008	344.5	.43
Physical abuse	77.5	.001	238.5	.009
Sexual abuse	91.5	.002	272.0	.03
Psychological abuse	114.0	.02	280.5	.04

Early adversity and Reflective Function

When investigating associations between childhood adversity and levels of Reflective Function, correlations were found between RF scores and the scales *antipathy* (tau-b = .26, p = .009), *physical abuse* (tau-b = .22, p = .03), and *psychological abuse* (tau-b = .26, p = .009), with individuals who reported higher levels of childhood adversity obtaining lower RF scores. No correlations were found for *neglect*, *discord*, or *sexual abuse*.

Problematic object representations and early adversity

Non-parametric correlations (Kendall's tau-b) were calculated between the scores obtained in the PORS and combined early/late CECA scores. Significant correlations were found between CECA scales and five of the PORS: *inconsistency*, *inappropriate elaboration*, *inappropriate affective valence*, *distorted attributions,* and *disturbance of thinking,* as can be observed in table 9.4. Higher levels on the scale *inconsistency* were found to be associated with higher levels of reported *physical neglect* and *physical abuse*. The same happened in relation to the scale *inappropriate elaboration,* which was also associated with levels of *psychological neglect*. Higher scores on the scale *inappropriate affective valence* appeared to be associated with higher levels of perceived *antipathy*, *neglect* (*psychological* and *physical*), *discord,* and *psychological abuse*. *Distorted attributions*, in their turn, appeared to be associated with levels of *antipathy, psychological neglect* and *abuse* (*sexual* and *psychological*), whereas *disturbance of thinking* was found to be associated with levels of *neglect* (*physical* and *psychological*) and *abuse* (*physical* and *psychological).*

Table 9.4: Correlation coefficients (Kendall's tau-b) between the PORS and combined early/late CECA scores (N = 70)

Overall scores	I	IE	IAV	DA	DT
Antipathy	-.18	-.16	-.34**	-.26*	-.11
Psychological Neglect	-.18	-.30**	-.36**	-.24*	-.20*
Physical Neglect	-.23*	-.32**	-.26*	-.12	-.21*
Discord	-.17	-.16	-.22*	-.09	-.18
Physical abuse	-.22*	-.22*	-.18	-.19	-.36**
Sexual abuse	-.05	-.14	.01	-.27**	.009
Psychological abuse	-.18	-.15	-.22*	-.25*	-.28**

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

I – Inconsistency; IE- Inappropriate elaboration; IAV - Inappropriate affective valence; DA - Distorted attributions; DT - Disturbance of thinking

Controlling for the effects of educational level/gender, psychopathology, and Reflective Function

In order to investigate whether the relationship between levels of reported childhood adversity and the PORS remained significant when the effect of demographic variables, psychopathology, and Reflective Function were taken into account, a series of Bootstrap Regression analyses were conducted.

Hence, it was observed that none of the early adversity scales which were found to be associated with levels of *inconsistency* - *physical neglect* and *physical abuse* - appeared to be a significant predictor of levels of *inconsistency* when the effects of years of education, psychopathology, and Reflective Function were taken into account (see table 9.5). The same happened in relation to the scale *inappropriate elaboration,* as can be seen in table 9.6.

Table 9.5: Bootstrap Regression analysis of levels of *inconsistency* (N = 56)

	B	Boot p
Years of education	-.36	.18
PD versus Axis I	-1.98	.12
PD versus Controls	-3.62	.02
RF	-.52	.11
Physical Neglect	.08	.85
Physical Abuse	-.14	.75

Table 9.6: Bootstrap Regression analysis of levels of *inappropriate elaboration* (N = 56)

	B	Boot p
Years of education	-.24	.09
PD versus Axis I	-.77	.22
PD versus Controls	-1.20	.11
RF	-.02	.90
Psychological Neglect	-.03	.90
Physical Neglect	-.36	.25
Physical Abuse	.27	.25

For the scale *inappropriate affective valence*, the effect of *antipathy* approached significance over and above the effects of educational level, psychopathology, and Reflective Function.

For example, one the patients who reported severe levels of *antipathy* in childhood produced an extremely *malevolent* description of his relationship with his father, despite the fact that no diagnosis of personality disorder or absence of RF were assigned to this individual:

"(...) there are many times when I wish he was dead. And now I'm separated from my wife after 18 years of marriage. I'm probably at the lowest point in my life, and I wouldn't be here if it wasn't {sic} for my father (...)".

The dimensions *psychological neglect*, *physical neglect*, *discord*, and *psychological abuse* were no longer significant predictors of levels of *inappropriate affective valence* (see table 9.7).

Table 9.7: Bootstrap Regression analysis of levels of *inappropriate affective valence* (N = 56)

	B	Boot p
Years of education	.13	.53
PD versus Axis I	-1.48	.15
PD versus Controls	-2.40	.05
RF	-.47	.09
Antipathy	-.75	.05*
Psychological Neglect	-.24	.63
Physical Neglect	-.21	.69
Discord	.20	.54
Psychological Abuse	.24	.64

Moreover, none of the adversity scales found to be associated with levels of *distorted attributions* - *antipathy*, *psychological neglect*, *sexual abuse*, and

psychological abuse - remained significant predictors when the effect of number of years of education, gender, psychopathology, and Reflective Function were taken into account (see table 9.8).

Table 9.8: Bootstrap Regression analysis of levels of *distorted attributions* (N = 56)

	B	Boot p
Years of education	-.06	.58
Gender	.17	.73
PD versus Axis I	.19	.70
PD versus Controls	-.05	.93
RF	-.006	.97
Antipathy	-.09	.62
Psychological Neglect	-.18	.28
Sexual Abuse	-.27	.21
Psychological Abuse	-.02	.94

Finally, it was observed that the effect of *physical abuse* approached significance in predicting levels of *disturbance of thinking*, when the effects of educational level, psychopathology, and Reflective Function were taken into account.

For example, one of the healthy controls, who reported very high levels of *physical abuse* in childhood, showed difficulties in organising her thoughts when responding to the question about the effect of overall experiences with parents in adult personality:

"I'm sorry. My mom says I'm a witch, but that's not what she says. Because of what they did to me I'm very, how to say, paranoid, very protective, I don't trust anybody".

The effects of *psychological abuse*, *physical neglect*, and *psychological neglect* were no longer significant predictors of levels of *disturbance of thinking* (see table 9.9).

Table 9.9: Bootstrap Regression analysis of levels of *disturbance of thinking* (N = 56)

	B	Boot p
Years of education	-.03	.90
PD versus Axis I	-1.38	.15
PD versus Controls	-2.98	.02
RF	-.52	.04
Physical Abuse	-.91	.05*
Psychological Abuse	-.01	.97
Physical Neglect	.60	.20
Psychological Neglect	.04	.87

Relationship between early adversity and severe personality disorder in "low" and "high" RF groups

In order to investigate the relationship between early adversity and severe personality disorder diagnosis in individuals with different levels of Reflective Function, participants were divided into two groups: "low RF" (-1 to 4) and "high RF" (5 or higher). In the group of individuals classified as having high RF, differences were observed between the three groups – severe personality disorder, Axis I disorders, and healthy controls – for the scales *antipathy* and *psychological neglect* (see table 9.10). Patients with severe personality disorder reported significantly higher levels on these scales when compared to patients with Axis I disorders (*antipathy*: U = 6.5, p = .006; *psychological neglect*: U = 10.5, p = .03) and healthy controls (*antipathy*: U = .0001, p = .03; *psychological neglect*: U = .0001, p = .03).

Table 9.10: Kruskal-Wallis test comparing patients with severe personality disorder, Axis I disorders, and healthy controls with "high RF" for levels of early adversity

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Antipathy	4.6	11.7	13.5	9.55 (2)	.008
Psychological neglect	5.3	11.3	13.5	7.29 (2)	.03
Physical neglect	7.0	10.5	12.0	3.38 (2)	.18
Discord	6.1	10.6	14.5	5.12 (2)	.08
Physical abuse	7.9	9.9	12.5	1.72 (2)	.42
Sexual abuse	9.5	8.9	12.5	1.09 (2)	.58
Psychological abuse	8.2	10.0	11.0	1.47 (2)	.48

Among individuals with low RF levels, differences were found between the three groups for the scales *psychological neglect*, *physical neglect*, *physical abuse*, *sexual abuse*, and *psychological abuse*, as can be seen in table 9.11. Individuals with severe personality disorder reported significantly higher levels of *psychological neglect*, *physical neglect*, *physical abuse*, *sexual abuse,* and *psychological abuse* when compared to healthy controls and higher levels of *physical abuse* and *sexual abuse* when compared to patients with Axis I disorders (see table 9.12).

Table 9.11: Kruskal-Wallis test comparing patients with severe personality disorder, Axis I disorders, and healthy controls with "low RF" for levels of early adversity

	Mean Rank				
	PD	Axis I	Controls	$\chi 2$ (df)	sig.
Antipathy	22.1	25.6	31.1	3.15 (2)	.21
Psychological neglect	20.1	25.1	35.2	8.73 (2)	.01
Physical neglect	21.4	23.5	37.8	11.24 (2)	.004
Discord	24.4	22.6	34.0	4.90 (2)	.09
Physical abuse	18.5	28.4	35.6	11.83 (2)	.003
Sexual abuse	18.8	29.4	33.5	12.28 (2)	.002
Psychological abuse	20.3	28.9	31.5	7.01 (2)	.03

Table 9.12: Mann-Whitney tests comparing patients with severe personality disorder vs. healthy controls and patients with severe personality disorder vs. Axis I patients with "low RF" for levels of early adversity

	PD vs. controls		PD vs. Axis I	
	Mann-U	sig.	Mann-U	sig.
Antipathy	75.5	.07	156.0	.47
Psychological neglect	41.5	.002	150.5	.38
Physical neglect	34.5	.0001	183.5	.87
Discord	75.5	.05	173.0	.64
Physical abuse	45.0	.002	111.5	.03
Sexual abuse	53.0	.002	110.5	.01
Psychological abuse	71.5	.03	124.5	.05

Predictors of severe personality disorder

As we have seen in chapter 7, three of the PORS - *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* - seemed to be able to distinguish individuals with severe personality disorder both from individuals with Axis I disorders and healthy controls. Hence, three Binomial Bootstrap Regression analyses were conducted in order to explore whether each of these scales remained a significant predictor of severe personality disorder diagnosis (versus no personality disorder diagnosis, i.e., Axis I pathology or healthy controls) when educational level, gender, Reflective Function, and early adversity variables were entered into the analysis.

For the regression considering the scale *inconsistency*, it was observed that this scale (B = .49, Boot p = .01) remained a significant predictor of severe personality disorder together with *physical abuse* (B = -1.24, Boot p = .05) and *sexual abuse* (B = -2.36, Boot p = .02), over and above the effect of demographic

variables, Reflective Function, and other CECA domains. The effects of educational level, gender, Reflective Function, and of all CECA scales were no longer significant over and above the effect of those three variables. When the scale *inappropriate affective valence* was considered, it also remained a significant predictor of severe personality disorder (B = .31, Boot p = .05) over and above the effects of educational level, gender, Reflective Function, and remaining CECA scales. The effect of *sexual abuse* (B = -1.95, Boot p = .004) remained also a significant predictor of severe personality disorder diagnosis. Finally, when the scale *disturbance of thinking* was considered it also retained its predictive value (B = .56, Boot p = .04) over and above the effects of educational level, gender, Reflective Function, and early adversity scales. Once more, *sexual abuse* (B = -2.06, Boot p = .004) remained a significant predictor of severe personality disorder.

Finally, when the three scales - *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* - were entered into the same regression analysis, the following effects remained significant: *sexual abuse* (B=-2.69, Boot p = .02), *inconsistency* (B= .43, Boot p= .04), and *physical abuse* (B= -1.44, Boot p = .05).

9.4 Discussion

It was hypothesised that individuals who reported higher frequency of early adversity would exhibit higher levels on the PORS when compared to individuals who reported lower levels of adversity in childhood. This prediction seems to have been confirmed for some of the scales although the relationship between problematic object representations and early adversity did not seem to be independent, for most of the PORS, from the effect of other variables such as psychopathology in adulthood. Also, *inappropriate affective valence* did not seem to be associated with higher levels of reported *physical* and *sexual abuse*, as was hypothesised, but only with other adverse childhood experiences such as *antipathy*. The relationship between early abuse and psychopathology, in its turn, seemed to be 'moderated' by levels of Reflective Function, with a stronger association between early adversity and severe personality disorder found among individuals with low reflectiveness. Finally, the scales *inconsistency, inappropriate affective valence,* and *disturbance of thinking* seemed to predict

severe personality disorder independently from early adversity levels. *Physical* and *sexual* abuse appeared also to be independently associated with the presence of severe personality pathology.

Initial analyses exploring differences in terms of childhood adversity across demographic groups revealed, as expected, significant differences in terms of reported *sexual abuse* between men and women. In fact, women have been found to report greater prevalence and severity of sexual abuse both in community (e.g., Ullman, & Filipas, 2005) and psychiatric samples (e.g., Shack et al., 2004). Attempts at explaining these differences have been made, including the emphasis on socialising factors that encourage women to be more compliant and submissive when compared to men (e.g., Wellman, 1993). Also, significant correlations were found between CECA scores and educational level with less educated individuals reporting higher levels of abuse. Causal relationships cannot be inferred from correlation analyses but the temporal order of events suggests that it was the experience of early abuse that increased the likelihood of lower academic achievement. Given the strong association also found between higher levels of reported abuse and personality pathology, it is possible that the presence of interpersonal pathology and its relatively early onset might have been one possible way through which early adversity affected lower levels of academic achievement. In fact, as we have seen throughout this work, severe personality disorder appears systematically associated with lower educational level.

When prevalence rates of early adversity were investigated across diagnostic groups it was observed that patients with severe personality disorder reported the highest levels of early adversity in all CECA abuse and neglect scales, consistent with previous research. For example, in relation to *physical abuse*, the prevalence rates found in the current study for individuals with severe personality disorder (44-78%) were within the range of those previously reported for patients with borderline disorder: e.g., 48% (Nigg et al., 1991), 59% (Zanarini et al., 1997), and 71% (Herman et al., 1989). In relation to *sexual abuse*, however, the prevalence rates found here among severe personality disordered patients (44-56%) seemed to be generally lower than those reported previously (e.g., 62%-Zanarini et al, 1997; 72% - Nigg et al., 1991; 57% - Ogata et al., 1990). Although

rates of reported *sexual abuse* were significantly higher when only women were considered, the fact that mixed gender analyses were conducted might have reduced the likelihood of detecting significant associations. This appeared in fact to put some constraints on the interpretation of associations between for instance levels of PORS and *sexual abuse*, as will be addressed below.

Finally, and although prevalence rates for other types of early adversity have been less studied, some similar findings were observed between for example levels of reported *discord* by patients with severe personality disorder participating in this study (59-78%) and a similar (although perhaps more severe) type of childhood adversity - *domestic violence* (62%) - reported by Herman and colleagues (1989). Zanarini and colleagues offered also prevalence figures for levels of *physical neglect* (26%) and *psychological neglect* (55%) reported by borderline patients, which seem to be lower than those found in the current study. Conversely, levels of *psychological abuse* found here among severe personality disordered patients (30-56%) are lower than those found by the same authors for levels of *psychological abuse* (75%). Hence, once more, the low prevalence of reported *psychological abuse* in the current sample might have reduced the ability to detect significant associations involving this scale.

Significant correlations were found between some of the PORS and early adversity scales as measured by the CECA. Higher levels of *inconsistency* appeared associated with higher levels of reported *physical neglect* and *physical abuse* although this association did not seem to remain significant when the effects of variables such as educational level, psychopathology, and Reflective Function were taken into account. It appears that reported early adversity is not independently associated with the presence of contradictions or oscillations in the description of attachment figures and that levels of *inconsistency* are accounted for by the combined effects of early adversity and other personality variables such as severe personality disorder diagnosis. Similar results were obtained for the scale *inappropriate elaboration.* This scale appeared to be significantly correlated with *neglect* (*physical* and *psychological*) and *physical abuse*, with individuals obtaining higher levels of *inappropriate elaboration* reporting higher levels of abuse/neglect. Once again, this association was not independent of the effect of other variables such as presence of severe personality disorder.

As to the scale *inappropriate affective valence*, higher scores in this scale appeared to be significantly associated with higher levels of reported *antipathy*, *neglect* (*psychological* and *physical*), *discord,* and *psychological abuse*. Moreover, the scale *antipathy* seemed to independently predict levels of *inappropriate affective valence* over and above the effects of educational level, psychopathology, and Reflective Function. *Antipathy,* as measured by the CECA, deals with issues such as criticism, coldness, rejection, and hostility expressed by the parent towards the child, which have a great potential of undermining the trust that the child has in his/her caregiver. A malevolent and negative perspective of the social world is therefore likely to arise when caregivers are unreliable, fail to protect the child, or ultimately put the child at risk (Ornduff et al., 1994).

In fact, on a review of studies about the effects of childhood maltreatment on object relations later in life, Ornduff (2000) found consistent support for the relationship between childhood adversity and a "malevolent object world". He examined a range of studies, which despite using different methodologies and measurement techniques, came to the same conclusion that malevolent representations are a defining feature stemming from the experience of childhood maltreatment. He concludes that malevolence is a prominent feature that differentiates between abused and non-abused individuals, and that "*malevolent mental schemata are presumably generated by gross failures and perversions of the care giving relationship*" (p. 1000).

However, in the present study, *inappropriate affect valence* did not seem to be associated with early *physical* or *sexual* abuse as reported in previous studies (e.g., Westen et al., 1990c; Ornduff et al., 1994; Freendenfeld et al., 1995). In the current study, *physical abuse* and *sexual abuse* seemed to be significantly associated with the presence of personality disorder, and personality disordered individuals were found to exhibit significantly higher levels of *inappropriate affective valence* when compared to Axis I patients and normal controls. However, no significant direct association was found between *physical* or *sexual abuse* and affect tone of object representations. Indeed, correlation coefficients between *inappropriate affective valence* levels and *physical abuse* did not reach significance ($p = .07$), despite the trend in the expected direction. In relation to *sexual abuse,* it is possible that any association with *inappropriate affective*

valence might have been masked by having men and women included in the same sample, given that the great majority of individuals reporting sexual abuse were women (76%) and women obtained lower levels of *inappropriate affective valence* than men. In fact, most of the studies on sexual abuse reported above (e.g., Westen et al., 1990b; Elliot, 1994; Twomey et al., 2000; Morrel et al., 2001) have used single sex samples to avoid the gender confound. These studies typically include larger samples (of either male or female participants) with good enough power to detect significant associations. It is also possible that the relationship between *sexual abuse* and *inappropriate affective valence* might have been stronger if a larger sample composed exclusively of individuals with personality disorder had been used.

The scale *distorted attributions* also appeared to correlate in the expected direction with reported *antipathy*, *psychological neglect*, *sexual abuse,* and *psychological abuse*, although these associations did not seem to remain significant over and above the effects of demographic variables, psychopathology, and Reflective Function. In relation to *sexual abuse,* for instance, the results seem consistent with studies such as the one conducted by Ornduff and colleagues (1994) where it was found that female children with history of sexual abuse had, among other deficits, difficulties in making adequate causal attributions. In the same way, history of *neglect* has been also linked to a higher frequency of illogical attributions as assessed by the *Social Cognition and Object Relations Scale* (e.g., Westen, 1991a).

Finally, higher levels of *disturbance of thinking* seemed to be associated with higher frequency of reported *physical neglect, psychological neglect, physical abuse,* and *psychological abuse*. Moreover, the effect of *physical abuse* remained a significant predictor of levels of *disturbance of thinking* when educational level, psychopathology, and Reflective Function were considered. *Disturbance of thinking* refers to a momentarily loss of ability to monitor one's thought processes which affects the patterns of thinking and discourse. It corresponds in fact to sudden breaks in the narrative where the topic under discussion is lost or the train of thought is rendered incomprehensible due to the use of gross paradoxes, meaningless sentences, and so on. Hence, *disturbance of thinking* as assessed by the PORS may be associated with mild to moderate

dissociative states, which frequently involve loss of train of thought or sudden loss of affect leading to confused speech. In fact, for example Watson and colleagues (2006) found that borderline individuals classified as having high levels of dissociative symptoms tended to report significantly higher levels of *physical neglect, emotional neglect, physical abuse,* and *emotional abuse* when compared to those with lower levels of dissociative symptoms. Also, Mulder and colleagues (1998), in a study examining the relationship between childhood *sexual abuse*, childhood *physical abuse*, current psychiatric illness, and measures of dissociation, found that *physical abuse* was directly associated with a higher prevalence of dissociative symptoms.

Levels of early adversity were also investigated across patients with severe personality disorder, patients with Axis I disorders, and healthy controls. It was found that for all the CECA dimensions - *antipathy*, *neglect* (*physical* and *psychological*), *discord*, and *abuse* (*physical*, *sexual*, and *psychological*) - patients with severe personality disorder seemed to report higher levels of early adversity when compared to the other groups. Consistent with previous studies (e.g., Ogata et al., 1990; Zanarini et al., 1997), it was observed that the majority of patients with severe personality disorder (67%) reported childhood abuse (physical, sexual, or psychological). Moreover, when investigating the proportion of abused individuals who had a diagnosis of severe personality disorder, it was found that the majority of people who reported abuse history received such a diagnosis (64%). Hence, it seems that these findings support the idea that early adversity, in particular physical, sexual, and psychological abuse are important factors associated with the development of severe personality disorder.

Additional analyses were carried out in order to test the hypothesis that levels of Reflective Function 'moderate' the relationship between early adversity and psychiatric diagnosis (severe personality disorder vs. Axis I disorders vs. healthy controls). Among individuals with high reflectiveness, differences between the three groups were found only for the scales *antipathy* and *psychological neglect.* However, when only individuals with low reflectiveness were considered, differences across the three groups were found for all the neglect and abuse scales. Hence, individuals with severe personality disorder reported higher levels of *physical neglect*, *psychological neglect*, *physical abuse, sexual abuse*, and

psychological abuse when compared to healthy controls and higher levels of *physical abuse* and *sexual abuse* when compared to individuals with Axis I disorders.

These findings seem to corroborate Fonagy et al.'s (1996) study where it was found that the likelihood of reported abuse being associated with severe (borderline) personality disorder was greater among individuals with low Reflective Function than among those with high Reflective Function. They concluded that Reflective Function does not independently predict borderline pathology but it has highly predictive value of severe personality pathology when history of abuse is present (Fonagy et al., 1996). This differential impact of abuse is seen as related to the availability of a significant attachment figure who can help the child to make sense of adverse experiences. As Fonagy and colleagues (1995a) claim "*if children are maltreated but have access to a meaningful attachment relationship that provides the intersubjective basis for the development of mentalizing capacity, they will be able to resolve (work through) their experience, and its outcome will not be one of severe personality disorder*" (p. 261).

Exploratory analyses considering this time the presence of severe personality disorder as the predicted variable, enabled the investigation of the independent contributions of each of the PORS in predicting severe personality disorder diagnosis when educational level, gender, perceived early adversity, and Reflective Function were taken into account. The scale *inconsistency* appeared to be a significant predictor of presence of severe personality disorder over and above the effect of those other variables. The same happened in relation to the scales *inappropriate affective valence* and *disturbance of thinking*. Moreover, *inconsistency* levels seemed to be able to predict severe personality disorder diagnosis not only independently from early adversity variables and Reflective Function but also independently from the levels obtained in the scales *inappropriate affective valence* and *disturbance of thinking*. It was also found that the effect of *sexual abuse* and *physical abuse* remained strong predictors of severe personality disorder. In fact, the finding that abuse rather than neglect seemed to independently predict presence of severe personality pathology is consistent with the literature, where levels of early abuse, especially sexual

abuse, have been linked to the development of personality pathology (Westen et al., 1990b; Ogata et al., 1990). It also concurs with studies that have found that different forms of physical and psychological neglect are prevalent but not necessarily distinguishing features of the childhood histories of personality disordered patients (e.g., Zanarini et al., 1989).

A final note should be made in relation to the use of a retrospective measure of childhood adversity such as the CECA, given the controversy surrounding the validity and reliability of instruments based on the individuals' ability to recall events that happened many years in the past. Several authors have commented on the limitations of retrospective reports and concerns regarding this type of measure have been expressed in terms of its implications for research and clinical practice.

Aspects that have been pointed out as leading to inaccuracy of retrospective reports of abuse include: a) fallible nature of memory systems which would make it more difficult to recall events happening many years in the past; b) difficulty in recalling events from infancy ("infantile amnesia"); b) difficulties in adequately encoding memories due to the highly stressful nature of the abuse experience; c) difficulties in retrieving memories due to protective mechanisms of unconscious denial (repression); d) presence of psychopathology which can affect recall both directly through cognitive impairments or indirectly through a desire to explain symptoms by distorting the past to coincide with current feelings; e) mood variations which would lead to selective recall of mood-congruent events; f) social desirability involving embarrassment or feelings of inadequacy when revealing abuse experiences, among others (e.g., Brewin et al., 1993; Maughan & Rutter, 1997; Widom & Shepard, 1996).

In an attempt to clarify the validity issue involving retrospective reports of abuse, Widom & Shepard (1996), for instance, conducted a study looking at the accuracy of recall from childhood victims of physical abuse. A follow-up sample of individuals who had been abused 20 years before was used and the authors concluded that retrospective reports seemed to be accurate and have good discriminant validity. In fact, individuals who were physically abused according to official records reported the highest rates of physical abuse retrospectively when

compared to controls and to other individuals who had experienced sexual abuse or neglect. In a subsequent study using the same sample, Widom & Morris (1997) focused on the experience of sexual abuse and found that a higher number of women with documented history of sexual abuse recalled the abuse in young adulthood when compared to women who had been physically abused, neglected, or to non-abused/non-neglected controls.

In fact, some of the claims regarding the limitations of retrospective reports have not received empirical support, especially with regards to the issue of over-reporting of adverse experiences by psychologically disturbed individuals (Hardt & Rutter, 2004). It has been claimed that since memory distortions are often used to avoid recall or disclosure, positive reports of early abuse are less likely to be inaccurate (Brewin et al., 1993). Also, in relation to the effect of mood on recall, it has been shown that reports of adversity are likely to present some stability even in the presence of changes in the clinical picture affecting mood states (Maughan & Rutter, 1997). Brewin and colleagues (1993), for example, have offered an extensive review of studies using retrospective methodologies and concluded that the limitations concerning retrospective measures are often exaggerated and that there seems to be little evidence for: 1) the inaccuracy of early memories, although in certain circumstances biases can also occur; 2) short or long-term memory deficits associated with psychopathology; and 3) systematic biases in recalling events as a function of mood (Brewin et al., 1993).

It is acknowledged that retrospective reports are affected by forgetting which applies to more or less any kind of report of past events and is therefore inevitable in any research or clinical context where information from the past is discussed in the present. Moreover, limitations in recalling events occurring at a very young age and possible under-reporting due to forgetting, denial, or unwillingness to reveal are recognised (Widom & Morris, 1997). However, despite their limitations, retrospective reports can constitute reliable methods of assessing childhood abuse and neglect. In fact, these types of measures are not an homogeneous category and some methods are better than others in terms of optimizing recall (Maughan & Rutter, 1997). As Widom and Morris (1997) claim "*at this point, we believe the focus of future research should not be on whether reports of childhood abuse are valid or not but on the best way to ask questions*

to make answers more valid" (p.44). Hardt & Rutter (2004), in a recent review on the validity of adult retrospective reports of adverse experience, concur by saying that retrospective reports, despite their problems (mainly associated with high rates of false negatives) are useful research tools and that problems are mainly associated with measures that rely on subjective judgement and inference.

Several criteria have been used to determine the reliability and validity of retrospective methods. The stability of reports over a certain time frame (test-retest reliability) and independent corroboration (by family members or court/health care reports) (e.g., Maughan & Rutter, 1997) have been used. Indeed, it has been suggested that certain characteristics of retrospective methods can contribute to overcome or at least substantially reduce the limitations associated with this method. Brewin and colleagues (1993), for example, despite refuting the idea of a general memory bias associated with retrospective recall, recognise that the method used to study autobiographical memories can greatly influence the quality of the material gathered. They offer a series of recommendations to improve the accuracy of these methods such as obtaining corroboration from other informants such as family members. Siblings, in particular, are regarded as a better source of corroboration than other family members especially similar age, same sex siblings.

They also recommend a semi-structured interview based method, which is more likely to provide a context in which events are better recalled. According to Brewin and colleagues (1993), it is an advantage to use a instrument which asks about specific events rather than asking subjects to provide a global appraisal of their experiences with parents: "*retrieving specific memories, as well as providing evidence for the validity or otherwise of global evaluations, is likely to generate contextual details that can in turn function as recognition cues for accessing additional memories*" (p. 93). They also claim that: "*encouragement to report events in detail is also likely to help subjects to distinguish between memories or real or imagined experiences*" (p.92).

The CECA seems to follow these two recommendations. Firstly, memories of childhood abuse and neglect as assessed by the CECA have been shown to be reliable as corroborated by independent assessments of sisters accounts on what

happened to the other sister during her childhood. This study, conducted by Bifulco and colleagues (1997), enabled to give further support to the reliability of the CECA and to its optimal performance as a measure of past experiences of abuse and neglect. Corroboration was satisfactory for dimensions such as *neglect*, *physical abuse*, and *sexual abuse* (mean correlations of .60). Also, the most commonly identified problem of retrospective methods involving under-reporting of adverse experiences seemed relatively uncommon when using the CECA as it was rare for only one of the sisters to report on a women's experience of abuse if this woman did not claim to have experienced such abuse.

Secondly, the CECA is a semi-structured interview which includes a number of very specific probes which require virtually no subjective interpretation and judgement on the part of the individual. In fact, the investigator-based approach which does not rely on individuals' judgments as to what constitutes for example *physical abuse* or *neglectful behaviour* by the parents avoids the use of different definitions of abuse, thus minimising reporting biases and attitudes associated with the abuse experience (Maughan & Rutter, 1997).

Moreover, it has been claimed that it is more appropriate to ask very specific questions, e.g. whether the individual has ever been hit with an implement such as a strap, than asking general questions such as whether the subject was 'abused' (Hardt & Rutter, 2004). In fact, interviews like the CECA which provide an extensive amount of referents, instead of asking the subject to make a judgement based on a large number of memories, offer the most appropriate way of assessing specific adversity events in childhood. Maughan and Rutter (1997) also emphasise the importance of recognition cues in facilitating recall and the advantages of probing for experiences that are relatively 'objective': "*not infrequently negative responses to initial relatively global questions are followed by positive endorsements of particular types of abuse when more specific probes were given*" (p. 21). The CECA format follows indeed this type of approach including numerous specific questions which are followed up with detailed probes intended to ascertain the validity of the individual's account. The interviewer can therefore decide about the level of abuse suffered by the individual instead of attempting to gather general and vague information about the subjective experience of having been abused or neglected.

Hence, it appears that levels of problematic object representations as measured by the PORS are associated with certain types of childhood abuse and neglect as assessed by a measure of childhood adversity which appears to optimize the quality of recall. In particular, levels of *antipathy* seem to significantly predict levels of *inappropriate affective valence* whereas *physical abuse* seems to be a significant predictor of levels of *disturbance of thinking* over and above the effects of other variables (e.g., psychopathology, Reflective Function). Moreover, severe personality disordered patients seem to report higher levels of early adversity when compared to both Axis I patients and healthy controls and the relationship between personality disorder and early abuse seems to be particularly strong among individuals with low levels of Reflective Function. Finally, higher levels of *inconsistency, inappropriate affective valence*, and *disturbance of thinking* seem to be significant predictors of severe personality disorder over and above the effect of early adversity variables.

CHAPTER 10

PROBLEMATIC OBJECT REPRESENTATIONS AND INTERPERSONAL FUNCTIONING

10.1 Introduction

Object-relations theories of personality as well as theories based on socio-cognitive models of personality and its disorders have emphasised the crucial importance of representations of interpersonal relationships throughout the individual's development (Blatt et al., 1990). In general terms, the psychoanalytic designation "object-relations" refers precisely to "*interpersonal behaviour and to the cognitive and affective processes mediating the capacity for relatedness to others*" (Westen et al., 1991, p. 400). It has been claimed that the nature and quality of object representations have a fundamental impact on psychosocial functioning, namely in the way the individual feels and behaves in intimate relationships (e.g., Leigh, et al., 1992; Huprich & Greenberg, 2003).

Object-relations research has typically used projective methods to study cognitive and affective aspects of object relations, assuming that object interactions as depicted in projective tests are a reflection of modes of psychosocial functioning (Blatt et al., 1990). Despite the fact the most studies on quality of object relations have focused on representations of interpersonal relationships, a few studies have looked at the association between object relations and actual psychosocial functioning in real life relationships. Some of these studies have used Rorschach-based measures of object relations such as the *Mutuality of Autonomy Scale* (MOA, Urist 1977). This measure uses the classification of content of interactions on the Rorschach including codings for human and non-human interactions (e.g., animals, inanimate objects) in seven levels from *mutual, empathic relatedness* (1) to *malevolent engulfment and destruction* (7). A few studies using the MOA have generally found an association between lower level of representations in the Rorschach and difficulties in psychosocial adjustment.

The MOA has been in fact reported to yield significant correlations namely with measures of interpersonal functioning in a range of different populations. For example, Ryan and colleagues (1985) used the MOA to study object relations of a group of school children and asked their teachers to provide ratings for each child in terms of interpersonal functioning in the classroom. They found that children perceived as having higher levels of interpersonal functioning (e.g., who were more socially adjusted, worked better with others) exhibited higher level of object representations. The authors concluded that object representations are associated with modes of social functioning in school children as assessed by teachers' perceptions of social and classroom interactions.

However, associations between object representations and interpersonal interactions have been mainly studied among psychiatric samples. For example, Urist (1977) found that in a sample of psychologically disturbed individuals, the MOA was significantly correlated with independent ratings of interpersonal functioning by members of health care staff and with autobiographical descriptions of interpersonal relationships. They found also that the ability to give at least one response at higher level of integration on the MOA was significantly associated with adjusted interactions with other people in the ward. Conversely, the existence of at least one highly distorted answer was associated with the presence of dysfunctional relationships in the patients' autobiographical records. In a subsequent study, Urist and Shill (1982) again used the MOA to study the relationship between object relations and interpersonal relationships of adolescent inpatients. Significant associations were found between MOA scores on the Rorschach and impairment in psychosocial functioning as assessed by clinical ratings including, among others, developmental and family history.

Also Blatt et al. (1990) conducted a study where levels of representations of interpersonal relationships as measured by the MOA were analysed in relation to assessments of quality of interpersonal relationships and clinical symptoms in a group of adolescent and young adult in-patients. It was found that the average quality of the responses given to the Rorschach was not related to the quality of interpersonal relationships (e.g., inappropriate interpersonal behaviour) as assessed by health care professionals. However, it was found that the absence

of at least one higher level interaction response was associated with impaired capacity for interpersonal functioning.

More indirect associations between quality of object relations and psychosocial functioning have also been found for example by Tuber (1983) who studied a sample of adults who had been at a residential treatment centre as children. It was found that poorer MOA scores appeared to be associated with higher incidence of later re-hospitalization, which was seen as resulting from, among other factors, an extreme failure of the social and family network to provide support and prevent the breakdown of the individual's emotional resources.

In a study about couple relationships Cogan and Porcerelli (1996) used the *Social Cognition and Object Relations Scale* (SCORS, Westen, 1991a) to compare object relations between abusive and non-abusive partner relationships. It was found that the level of object relations was lower for both men and women in physically abusive relationships when compared to those in non-abusive relationships. Individuals involved in violent relationships appeared to exhibit lower levels of differentiation, integration, and complexity in their object relations as well as more malevolent representations.

Interpersonal functioning and its relationship to impaired object relations has been studied also in relation to individuals with personality disorder. There seems to be agreement that these patients suffer persistent and pervasive difficulties in interpersonal relations. The DSM-IV (1994) definition of personality disorder states precisely that individuals with personality disorder are characterised by impairment on psychosocial functioning which is considered one of the classification criteria. In fact, personality disorder is regarded as a pervasive malfunction in a range of interpersonal domains (Stein et al., 2003) and several studies have documented the role of interpersonal impairments as one of the most important features of personality pathology.

In fact, it has been shown that psychosocial impairment among patients with personality disorder is more prevalent than among patients with other disorders. Socio-demographic variables such as education, employment, and marital status have been taken as indices of psychosocial functioning (Skodol et al., 2002). It

was for example found that men with personality disorder have more impairments in social and occupational functioning as measured by variables such as absence of a partner, few friends, less satisfaction at work etc. (e.g., Drake & Vaillant, 1985; Modestin & Villiger, 1989). Other authors have found that patients with severe personality disorder are more likely to be less educated when compared to depressive patients, and have more difficulties in interpersonal interactions with friends and family (e.g., Skodol et al., 2002).

Skodol and colleagues (2005) tried to ascertain the stability of impairment of different aspects of personality disorder. They found that psychosocial impairment (e.g., occupational, social, leisure, and global functioning domains) tends to be a more stable characteristic of personality pathology when compared to the psychopathological symptoms of the disorder (e.g., impulsivity) and that social impairment is more related to the course of the personality pathology when severe personality disorder is considered.

Efforts have been made to devise effective methods to study representations of interpersonal interactions and psychosocial functioning. However, not many studies have so far focused on the study of the relationship between psychopathological symptoms and different levels of impaired social functioning (Bolton et al., 2004). Most studies on the relationship between object representations and interpersonal functioning have focused on representations or expectations associated with interpersonal relationships and not on the assessment of actual daily life functioning in real relationships. In a review of studies on object relations assessment, Huprich and Greenberg (2003) have claimed that despite the increasing support of the importance of assessing object relations and of their predictive value in terms of psychopathology diagnosis and therapy outcomes, little is known in terms of the way these mental representations translate into the establishment and management of relationships in the real world. It is not clear if, for example, the less developed or more malevolent representations found among personality disordered patients are consciously expressed and systematically enacted in actual interpersonal relationships. In the same way, it is claimed that some of the studies focused on showing how object-relations change as the result of therapeutic interventions, namely targeted at personality disordered patients, lack "ecological validity" in

that behavioural changes in actual relationships are often under evaluated (Huprich & Greenberg, 2003).

Hence, the aim of the study conducted in this chapter is to investigate the relationship between level of object relations as assessed by the Problematic Object Representations Scales (PORS) and quality of interpersonal functioning in several daily life domains such as occupational, intimate relationships, and other social contacts. Levels of interpersonal functioning will be assessed by using a measure designed to tap personality functioning which takes into account long term patterns of interpersonal relations and not only social functioning circumscribed to the present time (Hill, et al., 1989). Individuals with more disturbed object representations are expected to have more difficulties in interpersonal relationships when compared to individuals with higher level of object representations. Moreover, individuals considered to have a personality disorder diagnosis (according to the DSM-IV) are expected to show greater impairments in psychosocial functioning when compared to healthy individuals and patients with Axis I disorders. It is predicted that the relationship between problematic object representations and impaired interpersonal functioning will be at least partially accounted for by the presence of personality disorder.

10.2 Method

Participants

A sub-sample of 67 participants provided by the Menninger research projects was used to study the relationship between the PORS and interpersonal functioning. The sub-sample included 38 men and 29 women aged between 19 and 52 (M = 27.8) the majority of whom were Caucasian (85.1%). About 48% of the participants were single whereas 45% were married or lived with a partner. Data on educational level was also available for most of the participants included in the sample (N = 57). Number of years of education ranged between 10 and 20 (M = 13.8). About 47% of the participants had been in school for 14 years or more. The sub-sample included patients with personality disorder (N = 27, 20 of which with severe personality disorder, i.e., Cluster A and/or B), patients with Axis I disorders (N = 26) and healthy controls (N = 14).

Materials

The Adult Attachment Interview (George, Kaplan, & Main, 1996) was administered to all participants.

The revised version of the Adult Personality Functioning Assessment (RAPFA, Hill & Stein, 2000) was also used. The Revised-APFA is an interview that assesses levels of interpersonal functioning in six domains: occupational, love relationships, friendships, unspecific social contacts, negotiations, and daily life coping. The RAPFA is considered to be an 'objective' measure of personality functioning since it is *investigator-based*, i.e., the interviewer is the one who decides how functional the individual is in different interpersonal domains. The RAPFA differs from most available measures of social functioning, which are based on the individual's subjective judgment of and satisfaction with his level of interpersonal relationships.

The measure is aimed at both healthy and psychiatric samples and interpersonal dysfunction can be identified in the aforementioned specific domains or as a global index of psychosocial functioning (Hill et al., 1989). For the purpose of the current study the domains work, love relationships, non-specific social contacts, and negotiations were used (see interview protocol for these sections in Appendix H); the domain coping was not included since it is not considered to focus primarily on interpersonal functioning (Stein et al., 2003).

These RAPFA domains include distinctive features that should be taken into account when deciding about the individual's level of functioning (Hill et al., 2002). The *work* domain is defined by a contractual agreement between employer and employee where the tasks to be performed, working hours etc. are subjected to an initial agreement. This domain involves abilities to perform the tasks that are demanded but also interpersonal skills namely in the interaction with peers and hierarchical relationships with superiors and subordinates. Interpersonal relationships at work are expected to be somewhat significant and intense but are distinctive from other more intimate relationships such as friendships and romantic relationships.

Love relationships, either heterosexual or homosexual, are defined by their exclusivity and by the existence of strong emotional and sexual feelings. These relationships are clearly defined in terms of their beginning and end and involve a high level of intimacy and emotional closeness. They are generally marked by an intense initial stage where strong emotions arise and as they progress there is a tendency to negotiate a balance between intimacy/confiding and autonomy/ independence.

Friendships are mutual non-exclusive relationships, which are characterised by involvement in common activities, sharing of interests, providing practical help or confiding in each other. They tend to develop gradually often in the context of shared social environments but extend beyond those shared circumstances, that is, friends make arrangements to see each other and maintain the relationship. Friendships can be at times very intense but do not typically become sexual.

Non-specific social contacts refers to interaction with people who are not friends or family but with whom the individual comes into contact due to common circumstances or geographical proximity such as for example neighbours or people at a party. These kinds of contacts involve the capacity to actively engage in conversation, which despite not being emotionally intense, requires the use of diverse social skills.

Negotiations refer to situations where the individual is required to demand or actively pursue an identified outcome for which a certain kind of assertive interaction is required. Negotiations include individuals' efforts to have their needs met or rights satisfied such as in complaining about a service or applying for a job. Negotiations range from simple requests that not meet any resistance to situations where persistence is needed to face expected opposition.

Procedure

The participants were interviewed with the RAPFA by the group of researchers involved in the Menninger Clinic Project, who were trained and certified as reliable coders in this system. The interviews were coded according to the procedures described in the APFA/RAPFA manual (Hill & Stein, 2002).

Demographic data were also collected regarding participants' age, gender, marital status, and number of years of education. The AAI transcripts were subsequently coded by the author, blind to RAPFA ratings, by using the Problematic Object Representation Scales (PORS).

The RAPFA includes specific screening questions for each domain and also specific follow-up questions but the interviewers are encouraged to adapt or add more probes according to the individual's life circumstances. It is also important that questions are asked in such a manner as to provide a detailed description of the individual's role in the relationships being discussed and that enough information is provided in terms of the persistence and pervasiveness of difficulties in each domain. Ratings are made according to specified periods of time, generally concentrating on the last five years ("current period") of the individual's life; baseline ratings can also be made which take into account usually the period between 21 and 30 years (Hill et al., 2002). For the purpose of the current study, functioning during the "current period" was considered.

The RAPFA provides the same ratings included in the original APFA (Hill et al., 1989) and also extra sets of ratings, which enables a finer distinction among levels within the dysfunction scores. Hence, coders are instructed to start by first assigning the domain to one of the 6 APFA levels and only then assign a RAPFA score on a 9-point scale. Ratings 1-3 are used when there is no significant dysfunction in a given domain (from clearly positive to mostly satisfactory); a score of 4 is given when a confined dysfunction is present and a score of 5 when there is a considerable but not major dysfunction (they both correspond to a 4 on the APFA); a rating of 6 is assigned in the presence of predominant but not severe dysfunction, whereas a score of 7 is assigned when dysfunction is more severe (ratings 6-7 correspond to a rating of 5 on the APFA); a rating of 8 is given when besides being severe the dysfunction is also long-lasting and a score of 9 is given to acute, enduring, and pervasive difficulties (ratings 8-9 correspond to a 6 on the APFA) (Hill & Stein, 2002).

The scoring procedure involves taking into account different aspects of the individual's functioning in one specific domain and it results from a compromise between *successful role performance* and *role failure*. This involves obtaining

from the individuals a detailed description in terms of their behaviour and relationship roles so enough information about role performance can be gathered (Hill et al., 1989). The first stage of coding involves deciding about the presence or absence of dysfunction in each domain and the degree of its severity. It is also possible to rate the type of dysfunction in each domain, according to the predominant mode of interaction (e.g., discord, avoidance, inequality) and also a "further type" reflecting a less predominant type of dysfunction which occurs in the same period of time as the "main type" (Hill et al., 2002). In the current study, only ratings in terms of level of dysfunction were considered.

The assessment of social and role performance takes mainly into account periods of time where the individual is free from psychiatric and physical illness. In other words, interviewers are instructed to look for periods of "normal functioning" which are free from illness, restricted opportunities, and adverse circumstances. However, if most part of the rating period is accompanied for example by illness, functioning is coded as "accompanied by illness" and no assumptions are made as to whether this affected functioning or not (Hill et al., 2002). Also, special social and environmental adverse circumstances (e.g., living in an area with high rate of unemployment and its impact on the *work domain* functioning) are treated separately making sure that the coding reflects the individual's responsibility for his mode of psychosocial functioning (Hill et al., 1995).

10.3 Results

RAPFA inter-domain correlations

The five RAPFA levels - *work, love relationships, friendships, non-specific social contacts, and negotiations* - were all significantly inter-correlated (correlation coefficients ranging from .31 to .51) with the exception of the domain *work* with the domain *love relationships*, which did not seem to be significantly associated (see correlation matrix in Appendix I).

RAPFA levels and demographic variables

No significant gender or race differences in terms of RAPFA scores were found. Also, no significant correlation was found between age and RAPFA levels. However, levels on the RAPFA *love relationships* domain obviously differed across marital status groups, F (3, 66) = 4.84, p =.004, with married individuals showing fewer problems in this domain when compared to single individuals. Also, as expected, educational level appeared to be significantly correlated with RAPFA levels of dysfunction for the domain *work* (R = -.38, p = .01) but it also correlated significantly with functioning on *love relationships* (R = -.27, p = .04), *non-specific social contacts* (R = -.34, p = .03), and *negotiations* (tau b = -.24, p = .03). Less educated individuals tended to exhibit higher dysfunction scores in these domains.

RAPFA prevalence rates

Prevalence rates for levels of dysfunction in the RAFA were also calculated. It was observed that the domain where dysfunction was more prevalent was the one involving *love relationships* where above 64% of the participants, regardless of their diagnostic group, presented some degree of dysfunction (RAPFA level higher than 3). Also, for the domains *work* and *friendships* it was found that levels of dysfunction were also quite high (50-83%). For the domains *non-specific social contacts* and *negotiations*, it was found that the majority of patients with personality disorder had some degree of dysfunction in this domain. However, the majority of Axis I patients and healthy controls did not present any significant difficulties in these domains of interpersonal functioning (see table 10.1).

When different levels of dysfunction were considered, it was observed that a higher prevalence of patients with personality disorder reported severe, long-lasting, and pervasive (8-9) levels of dysfunction when compared to Axis I patients and healthy controls. Moreover, whereas dysfunction in domains such as *work* and *love relationships* were often of marked severity (higher than 5), regardless of diagnostic group, extreme severity levels for the domains *non-specific social contacts* and *negotiations* were less frequent and mostly present among patients with personality disorder (see table 10.2).

Table 10.1: Prevalence rates for presence of interpersonal dysfunction (level 3 or higher) in patients with personality disorder (N = 27), Axis I disorders (N = 26), and healthy controls (14)

	RAPFA levels N (%)		
	PD	Axis I	Controls
Work domain	18 (78.2)	11 (52.4)	4 (50.0)
Love relationships	25 (92.5)	18 (69.2)	9 (64.3)
Friendships	20 (83.4)	13 (61.8)	5 (62.5)
Non-specific social contacts	13 (54.2)	5 (25.0)	3 (37.5)
Negotiations	19 (70.3)	6 (24.0)	2 (14.2)

Table 10.2: Prevalence rates of different levels of dysfunction on the RAPFA for patients with severe personality disorder (N = 27), Axis I disorders (N = 26), and healthy controls (14)

	Confined or minor dysfunction (4-5) N (%)			Predominant or severe dysfunction (6-7) N (%)			Severe, long-lasting and pervasive dysfunction (8-9) N (%)		
	PD	Axis I	Cont.	PD	Axis I	Cont.	PD	Axis I	Cont.
Work domain	5 (21.7)	1 (4.8)	1 (12.5)	9 (39.1)	8 (38.1)	3 (37.5)	4 (17.4)	2 (9.5)	0 (0)
Love relationships	1 (3.7)	5 (19.2)	2 (14.3)	12 (44.4)	6 (23.1)	1 (7.1)	12 (44.4)	7 (26.9)	6 (42.9)
Friendships	6 (25.0)	7 (33.3)	1 (12.5)	10 (41.7)	4 (19.0)	2 (25.0)	4 (16.7)	2 (9.5)	2 (25.0)
Non-specific contacts	3 (12.5)	1 (5.0)	1 (12.5)	4 (16.7)	4 (20.0)	2 (25.0)	6 (25.0)	0 (0)	0 (0)
Negotiations	11 (40.7)	2 (8.0)	0 (0)	7 (25.9)	2 (8.0)	1 (7.1)	1 (3.7)	2 (8.0)	1 (7.1)

RAPFA levels and psychopathology

Further analyses were carried out to investigate differences in levels of RAPFA levels across the three groups. When considering all personality-disordered individuals, differences were found among the three groups for the domains *love relationships*, $F(2, 66) = 3.31$, $p = .04$, *non-specific social contacts*, $F(2, 51) = 3.37$, $p = .04$, and *negotiations*, $\chi 2=11.9$, $df = 2$, $p= .003$, with patients with personality disorder showing more problems in these domains than patients with Axis I disorders and healthy controls. The same analyses were conducted by including only patients with severe personality disorder, Axis I disorders, and normal controls. Differences were found between the groups for the domains *non-specific social contacts*, $F(2, 44) = 5.08$, $p = .01$, and *negotiations*, $\chi 2 =$

11.47, df = 2, p = .003, with patients with severe personality disorder showing once again more problems in these areas, when compared with patients with Axis I disorders and healthy controls.

Problematic object representations and RAPFA levels

Non-parametric correlation analyses were calculated between the scores obtained in the PORS and RAPFA levels in the five domains used. Significant correlations were found for the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* and the domains *love relationships*, *friendships*, *non-specific social contacts*, and *negotiations*.

For example, one of the participants exhibiting severe and pervasive levels of interpersonal dysfunction offered a description which illustrates simultaneously the presence of those three scales (*inconsistency, inappropriate affective valence, and disturbance of thinking*), when attempting to justify the word "caring" previously chosen to describe the relationship with his mother:

"But like when my mom's at work, I can call and ask her for stuff and I get it, but, when she's at home and I ask my dad, she convinces my dad to say 'no'. Just like this truck ... it took almost six months to get that truck and finally the doctor said I couldn't drive it no more ... she was all mad, stupid things!!!!"

No significant correlations were found between any of the PORS and the domain *work* (see table 10.3). The scales *extreme evaluations*, *inappropriate elaboration*, *lack of differentiation*, and *distorted attributions* did not appear to be significantly associated with any of the RAPFA domains.

Table 10.3: Correlation coefficients (Kendall's tau-b) between the PORS and RAPFA domains

	Inconsistency	Inappropriate affective valence	Disturbance of thinking
Work (N= 52)	.15	.17	.10
Love relationships (N= 67)	.24*	.10	.24*
Friendships (N = 53)	.20*	.09	.15
Non-specific contacts (N = 52)	.24*	.31**	.17
Negotiations (N = 66)	.22*	.28**	.27**

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

Controlling for the effect of marital status, educational level, and psychopathology

Further analyses were conducted in order to investigate whether the relationship between functioning in *love relationships* and the scales *inconsistency* and *disturbance of thinking* remained significant when the effect of educational level, marital status, and personality disorder were taken into account. Despite the fact that functioning in *love relationships* is highly associated with marital status and that this variable has been taken as an indicator of psychosocial functioning (e.g., see Modestin & Villiger, 1989), the relationship between level of functioning in love relationships and marital status is not straightforward. For example, it is possible that a married individual is in a relationship marked by high levels of dysfunction. Therefore, the effect of the variable marital status was controlled for.

Hence, the following predictors were entered in the first analysis: a) functioning in *love relationships*, b) *educational level*, c) *marital status*, d) *personality disorder versus healthy controls*, and e) *personality disorder versus Axis I disorders.* It was observed that the effect of levels of dysfunction in *love relationships* was no longer a significant predictor of *inconsistency* levels (B = .24, Boot p > .05) over and above the effects of demographic variables and personality disorder diagnosis. The same happened in relation to the second regression analysis where *disturbance of thinking* was considered (B = .16, Boot p > .05).

In relation to the domain *non-specific social contacts*, it was also found that it did not predict levels of *inconsistency* and *inappropriate affective valence* independently from the effects of educational level and psychopathology. Hence, when the variables a) functioning in *non-specific social contacts domain*, b) *educational level*; c) *personality disorder vs. healthy controls*; d) *personality disorder vs. Axis I disorders* were entered into the analysis, it was found that the effect of levels of dysfunction in *non-specific social contacts* was no longer a significant predictor of *inconsistency* levels (B = .32, Boot p > .05). The same happened when *inappropriate affective valence* was entered as the predicted variable (B = .30, Boot p > .05).

In the same way, it was found that the effect of levels of dysfunction in the domain *negotiations* was no longer a significant predictor of levels of

inconsistency (B = .41, Boot p > .05), *inappropriate affective valence* (B = .39, Boot p > .05), and *disturbance of thinking* (B = .35, Boot p > .05), over and above the effects of educational level and psychopathology.

10.4 Discussion

It was hypothesised that levels of object representations as measured by the PORS would be associated with greater dysfunction in interpersonal functioning as assessed by the Revised APFA. This hypothesis was partially confirmed as only the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* appeared to be associated with levels of functioning in interpersonal interactions. Moreover, not all the Revised APFA dimensions included in the study appeared correlated with the PORS. Performance in the *work* domain did not seem to be associated with any of the problematic object representation scales.

Initial analysis revealed that scores on the RAPFA domain *love relationships* differed across marital status groups. As expected, individuals who were married seemed to have a lower level of dysfunction in this domain when compared to single individuals. However, marital status was only considered to be a rough indicator of functionality in *love relationships* as married individuals may sometimes be involved in dysfunctional relationships. Moreover, the "current period" of assessment used to assign RAPFA scores includes the past five years and therefore the current marital status may not reflect the prevalent functioning throughout that period of time. For these reasons, marital status and functioning in love relationships were treated as separate variables.

Also, it was found that educational level was significantly associated with levels of performance in the *work* domain. In the same way as marital status is associated with functioning in *love relationships*, it can be said that number of years of education is in itself some kind of indicator of functional performance in the occupational domain. However, adequate functioning in the work domain does not depend on job status but on how well the individuals perform their tasks and interact with colleagues and supervisors (Hill & Stein, 2000). Hence, individuals holding lower status jobs have the same likelihood of attaining a good level on

the *work domain* as individuals in high status occupations. Nevertheless, it seems that, in the current sample, having a better education predicted a better overall functioning in the *work* domain. It is possible that being more educated might have contributed to finding a job that is more satisfying and that satisfaction at work positively impacted on both task performance and interpersonal interactions with colleagues and supervisors.

Also, a significant association was found between educational level and the domains *love relationships*, *non-specific social contacts,* and *negotiations*, possibly due to the lower educational level found among individuals with personality disorder when compared to other patients and normal controls. In fact, personality disordered individuals were found to perform significantly worse than patients with Axis I disorders and healthy controls for those three RAPFA domains. These pervasive difficulties in interpersonal relationships are consistent with previous studies documenting high levels of dysfunction in several spheres of interpersonal interaction among individuals with personality pathology (e.g., Skodol et al., 2005; Drake & Vaillant, 1985; Stein et al., 2003). Moreover, when the effect of psychopathology is taken into account, the effect of educational level on functioning in *love relationships*, *non-specific social contacts,* and *negotiations* is no longer significant, whereas the effect of personality disorder remains a significant predictor.

On the other hand, when patients with severe personality disorder, Axis I patients, and healthy controls were considered, significant differences among the groups were found only for the domains *non-specific social contacts* and *negotiations*. No differences were found for the domains *work*, *friendships*, or *love relationships*. The fact that no significant differences between the groups were found for these domains does not mean that patients with severe personality disorder did not exhibit high levels of dysfunction in these domains. It is possible that these areas of interpersonal functioning can be less specific to severe personality disorder and therefore present also in other disorders or among healthy individuals. For example, Hill et al (1989) have found that problems in love relationships occur frequently as an isolated problem (especially in women) and that although patients with pervasive interpersonal problems tend to exhibit also problems in this domain, this is not a highly specific characteristic

of personality disorder. In fact, it was observed that most participants (75%), regardless of their psychopathology group, had substantial dysfunction in the domain *love relationships* (score 5 or higher). In fact, the domain *love relationships* was the one which attained the highest level of dysfunction compared to all other domains regardless of diagnostic category. Also, for the domains *friendships* and *work,* most participants (60% and 58%, respectively) seemed to present substantial dysfunction. Conversely, for the *negotiations* and *non-specific social contacts* domains there seemed to be fewer problems in particular for the domain *negotiations* where only about 26% of the participants showed substantial dysfunction. Therefore, these domains appeared to be more specific to individuals classified as having personality pathology.

Correlation analyses between scores obtained in the RAPFA domains and levels of PORS were carried out. Significant associations were found between the domain *love relationships* and the scales *inconsistency* and *disturbance of thinking.* It appeared that higher levels on these object representation scales were linked to a higher level of dysfunction in *love relationships.* This result seems to be in line with for example Cogan and Porcerelli's (1996) studies where it was found that high levels of marital dysfunction (abuse) were associated with more problems in object-relations dimensions as measured by the SCORS, although they found also differences in terms of dimensions such *lack of differentiation* and *affect tone* of object representations. Moreover, the effect of dysfunction in *love relationships* on levels of *inconsistency* and *disturbance of thinking* did not seem to be independent from the effect of personality disorder diagnosis.

Significant associations were also found between the domain *non-specific social contacts* and the scales *inconsistency* and *inappropriate affective valence,* although once again this association was no longer significant when the effect of psychopathology was taken into account. The same happened in relation to the domain *negotiations.* This domain correlated significantly with scores obtained in the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* but the effect of this RAPFA domain was not significant over and above the effect of presence of personality disorder.

In fact, partialling out the effect of personality disorder diagnosis can be considered a somewhat artificial procedure, as it can be claimed that difficulties in interpersonal relationships are integral to the diagnosis of personality disorder. In other words, one of the criteria of the DSM for personality disorder is precisely "intense and unstable relationships" which are considered a diagnostic feature (Agrawal et al., 2004). It is possible that difficulties in relationships contribute to exacerbate the severity of personality disorder symptoms and, on the other hand, personality disorder symptoms may make interpersonal interactions more difficult. In fact, several authors have pointed out the circularity of the relationship between personality pathology and interpersonal functioning, in that the latter is not only a potential cause but also a consequence of personality pathology (e.g., Stein et al., 2003).

As Drake and Vaillant (1985) point out "*in real life, it is impossible to completely separate personality traits from psychosocial dysfunction*" (p. 558) and Hill and colleagues (1989) go farther as to claim that there is the "*question of whether general social dysfunction should be regarded as synonymous with the concept of personality disorder*" (p. 33). In fact the APFA/RAPFA is proposed as an alternative way of assessing personality dysfunction directly rather than assuming that certain symptoms associated with personality dysfunction are the criteria for personality disorder diagnosis. This measure addresses directly the issue of pervasive and persistent impairment as "*functioning in each domain is assessed independently, over specific periods of time, permitting a comparison of pervasive and situational dysfunction, and of persistence and change over time*" (Hill et al., 2002, p.2).

Hence, in the present study, the effect of difficulties in interpersonal functioning (as measured by the RAPFA) on levels of PORS could not be disentangled from the effect of personality disorder diagnosis as assessed by the DSM. In other words, difficulties in interpersonal interactions did not seem to predict levels of *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* over and above the effect of presence of personality disorder diagnosis. It was also found that patients with severe personality disorder presented significantly more difficulties in contacts with people outside the circle of friends and family and in daily life negotiations when compared to patients with Axis I disorders and normal

controls. Moreover, although the majority of patients with severe personality disorder did have significant problems in close relationships (friendships and love relationships) and work domain, these difficulties did not seem to be specific to this diagnostic group as patients with other disorders and healthy individuals presented also a relatively high degree of dysfunction in these domains.

CHAPTER 11

FINAL DISCUSSION

11.1 Introduction

The negative impact of personality disorders on interpersonal functioning is well established and problematic representations of interpersonal relationships are thought to have an enduring impact on the way the individual deals with himself and others (Blatt et al., 1990). Object-relations theories, in particular, have emphasised the importance of stable patterns of dysfunction in personality disorder and have proposed theoretical models to analyse the interpersonal, affective, and cognitive processes involved in those patterns. Research efforts have been made in this area with especial interest in trying to distinguish personality-disordered patients from other diagnostic groups based on their level of object representations. One line of research in object relations has typically employed measures applied to projective techniques (e.g. Rorschach, TAT) assuming that object interactions depicted in projective tests are a reflection of modes of psychosocial functioning (e.g., Segal, et al., 1992; Westen et al., 1990a). More recently, cognitive theorists have tried to employ methods drawn from cognitive science such as the use of questionnaire measures and standardised vignettes of social interactions (e.g., Veen & Arntz, 2000; Beck et al., 2001) to study interpersonal beliefs and maladaptive schemas associated with personality pathology.

A consensual finding emerging from these studies is that patients with personality disorder tend to produce representations of others that are charged with negative affect (malevolence), more so than healthy individuals and patients with others disorders such as major depression. However, there seems to be less agreement regarding the ability that personality disorder patients have to produce representations of others, which are complex, differentiated, and include appropriate causal reasoning. In fact, several authors (e.g., Huprich & Greenberg, 2003; Westen, 1990) have emphasised the need to expand object

relations measurement in clinical samples in order to obtain a better understanding of how personality disordered patients' object relations seem to differ from other patients' and to clarify which dimensions are indeed most impaired.

On the other hand, another issue that has been raised in the study of object representations in personality disorder is the difficulty in devising assessment methods that are able to translate theoretical assumptions into operational concepts that can be reliably measured. This difficulty results in a divergence of opinions as to what are the most important dimensions of object relations to be assessed. Research appears to be polarised with psychoanalytic theorists emphasising the importance of unconscious and affective aspects of object representations (which are better grasped with projective techniques) and cognitive theorists emphasising the importance of assessing the content and structure of object representations particularly consciously expressed ones (better assessed by direct methods such as questionnaire measures) (Smith, 1993). This methodological split is accompanied by contrasting limitations in terms of the psychometric properties of the measures employed. Hence, when attempting to measure unconscious dimensions of object relations, reliability problems are more likely to arise, as the dimensions assessed tend to be more abstract and involve more inference. On the other hand, when using for example self-report measures, reliability is easier to achieve but often comes at the cost of construct validity, as most theoretical models have emphasised the importance of unconscious and motivational aspects in object representations.

Hence, the main aims of the study were twofold: 1) to clarify which dimensions of problematic object representations characterise personality disorder functioning by comparing personality-disordered patients with patients with other disorders and normal controls, as well as expand the study of object representations to other dimensions less explored (e.g., *inconsistent representations*, *extreme evaluations*); 2) to devise an alternative method of assessing object representations which was able to combine psychoanalytic and cognitive approaches by attending to both conscious and unconscious dimensions of object relations, and which being a 'cognitive' task involved also affective and motivational components; in other words, a measure which grasped the

complexity of the theoretical formulations of object representations and was able to translate these concepts into discrete dimensions that could be reliably measured.

Further aims of the study included exploring the relationship between problematic object representations and additional variables theoretically and empirically linked to object relations and regarded as playing an important role in developmental models of personality disorder. These include adverse experiences with caregivers such as abuse and neglect and also dimensions regarded as having a protective effect such as the development of reflective capacity. Finally, it was also considered relevant to study how problematic object representations relate to interpersonal functioning in daily life interactions and whether this relationship is partially or totally accounted for by the presence of personality disorder diagnosis.

11.2 Summary of findings

A number of indicators of pathological object representations were developed which were designed to tap specific cognitive-affective processes characterising personality-disordered functioning expressed in the context of an attachment related narrative. The Problematic Object Representation Scales (PORS) resulted indeed from an integration of object-relations and attachment research with formulations borrowed also from socio-cognitive theories as to offer more systematic, operational dimensions of object relations that could be reliably assessed through the AAI. Initial reliability studies on all the scales included in the final version of the PORS - *inconsistency*, *extreme evaluations*, *inappropriate elaboration*, *inappropriate affective valence*, *distorted attributions*, and *disturbance of thinking* – revealed that the scales attain good reliability with coefficients ranging from .65 to .98. The application of these scales to the AAI seemed therefore to be a reliable way to assess certain pathological indicators of object representations theoretically and empirically linked to personality pathology.

The final version of the PORS was used in preliminary analyses carried out in order to explore the relationship between levels of problematic object

representations and attachment style categories. It was found that the scales *inappropriate elaboration* and *inappropriate affective valence* appeared to consistently differ among attachment category groups, regardless of the coding system used to derive attachment group. Hence, individuals classified as dismissing exhibited higher levels of *inappropriate elaboration* when compared to secure individuals whereas *preoccupied* individuals consistently exhibited higher levels of *inappropriate affective valence* when compared to both *secure* and *dismissing* individuals. Moreover, these initial analyses revealed that a higher number of patients with personality disorder than would be expected by chance were assigned to the *preoccupied* category, consistently with previous research establishing the link between personality disorder and *preoccupied* attachment status (e.g., Fonagy et al., 1996).

Individuals with personality disorder were subsequently compared with patients with Axis I disorders only and with healthy controls in terms of their level of problematic object representations. It was found that three of the PORS - *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* - seemed able to differentiate patients with severe personality disorder from both Axis I patients and healthy controls, over and above the effect of confounding demographic variables. Moreover, despite the fact that no differences were found between the groups in terms of overall *distorted attributions*, patients with severe personality disorder appeared to produce more often *biased attributions* (e.g., egocentric) when compared to both Axis I patients and normal controls. The results obtained for the scale *inappropriate affective valence* replicated previous findings where individuals with severe personality disorder have been systematically found to hold more malevolent representations of interpersonal relationships when compared to both healthy individuals and patients with other disorders (e.g., Segal et al., 1992, Tramantano et al., 2003). In relation to the scales *inconsistency* and *disturbance of thinking* (and also to the subscale *biased attributions*), results seem to challenge previous studies where, generally, dimensions of a more cognitive nature have not been able to differentiate patients with severe personality disorder from other diagnostic groups (e.g., Segal et al., 1992; Westen et al., 1990a).

Associations between levels of Reflective Function and problematic object representations were also explored. Significant negative correlations were found between RF scores and levels of *inappropriate affective valence*. Individuals with lower reflective capacity seemed to be more likely to produce descriptions of attachment figures and relationships infused with more negative feelings (malevolence), even when the effect of severe personality disorder diagnosis was partialled out. Moreover, levels on the subscale *incoherence* (e.g., meaningless sentences) appeared to be independently associated with lower reflective capacity despite the fact that no significant associations in terms of overall *disturbance of thinking* were found. Lower Reflective Function capacity appeared also associated with higher levels of *inconsistency* and *inappropriate elaboration* when describing attachment figures but the effect of Reflective Function on these scales did not seem independent from the effect of personality disorder.

Associations between early adversity experiences such as abuse and neglect and levels of problematic object representations were also investigated. Some of the problematic object representation scales - *inconsistency*, *inappropriate elaboration*, *inappropriate affective valence*, *distorted attributions*, and *disturbance of thinking* - were found to be associated with early adversity as measured by a retrospective interview. However, most of these associations did not seem to be independent from the effect of presence of severe personality disorder. Only reported level of *antipathy* and *physical abuse* seemed to independently predict levels of *inappropriate affective valence* and *disturbance of thinking*, respectively. It was also found that individuals with severe personality disorder reported higher levels of abuse and neglect when compared to Axis I patients and healthy controls and that this relationship seemed to be stronger among individuals with low reflective capacity. Lastly, the scales *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking* seemed to predict presence of severe personality disorder over and above the effect of early adversity. *Physical abuse* and *sexual abuse* were also found to be significant predictors of severe personality pathology independently from levels of PORS or presence of other early adversity experiences.

Finally, the relationship between levels of problematic object representations and interpersonal functioning was investigated. Once again, higher levels of

inconsistency, *inappropriate affective valence*, and *disturbance of thinking* appeared associated with greater dysfunction in interpersonal relationships. However, it was found that the effect of difficulties in interpersonal functioning on levels of PORS could not be disentangled from the effect of personality disorder diagnosis as assessed by the DSM. Also, it was found that patients with severe personality disorder seemed to have significantly more problems than normal individuals and Axis I patients in dealing with interpersonal interactions outside the circle of family, friends, and colleagues (*non-specific social contacts*) and in asserting their rights or having their needs met by other people (*negotiations*). Dysfunction in *love relationships*, *friendships*, and interaction at the *work* place appeared less specific to personality disorder and was also prevalent among patients with Axis I disorders and healthy individuals.

11.3 Limitations of the study

The study conducted here represented a preliminary attempt of using the AAI to assess problematic representations of object relations in personality disorder. Many of the analyses conducted were exploratory and some of the findings subjected to cautious interpretation. Although results show promise of contributing to better understand object relations in personality disorder, there are also several limitations that should be pointed out.

One of these limitations is related to the fact that a convenience sample was used where the groups were not perfectly matched in terms of variables such as gender and number of years of education. In fact, patients with severe personality disorder were more likely to be male and less educated than patients in the other two groups. Although these variables were systematically controlled for in follow-up analyses, this procedure generally made the interpretation of findings more difficult especially when the effects of the main variables and confounding variables could not be disentangled. Moreover, reliance on correlation analyses does not enable to infer causal relationships and therefore only associations between variables could be inferred. Also, data on educational level was not available for all participants. Therefore, analyses where this variable was controlled for inevitably included a slight different sample where cases with missing values for education level were left out.

However, it should be noted that lower educational level among patients with personality disorder, when compared to patients with Axis I disorders and healthy controls, was to be expected and could be considered to be necessarily associated with the diagnosis of personality disorder. In fact, the differences in terms of educational background found in the sample probably reflected group differences inherent in the population, as the relatively early onset of personality pathology is likely to have a negative impact on academic performance. However, and despite the likelihood of a real difference in terms of academic achievement between patients with personality disorder and other individuals, the fact that approximately 33% of the participants in the control group were recruited at university level (University College London campus) might have contributed to increase the average level of education among individuals assigned to the control group. In fact, an additional number of controls were recruited in London as to increase the number of participants in the healthy group but constraints associated with sample homogeneity requirements in terms of country of origin (USA) limited the availability of potential participants. The results obtained here refer therefore to a fairly homogeneous sample of American participants, in their majority Caucasian and with a relatively high level of education and generalisations to other populations cannot be assumed.

Another limitation of the study could be thought to be the use of DSM-IV Personality Disorder Clusters A and B as the diagnostic criteria for "severe" personality disorder. In fact, the literature on object relations uses a different conceptualisation of severe personality disorder, normally designated "borderline", which is characterised by aspects such as capacity to integrate the concept of self and significant others, defensive operations, and capacity for reality testing (see e.g., Kernberg, 1996). According to object-relations theories, borderline personality organisation is therefore a broader definition than Borderline Personality Disorder as characterised in the DSM, including also other Cluster A and Cluster B personality disorders. Hence, similarly to what has been done in previous studies (e.g., Westen, et al., 1990a) an attempt was made to establish a correspondence with the object-relations concept of "severe personality disorder" (borderline) by including in this category patients with Cluster A and/or B personality pathology. The fact that the results obtained with patients with severe personality disorder were considerably different from those

obtained with all patients with personality disorder, was considered to lend support to this conceptualisation of 'severe personality disorder'. In other words, when only patients with Cluster A and/or B were considered, higher levels of problematic object representations were found. However, comparisons between findings obtained with the PORS and results obtained in studies using a psychoanalytic categorisation of personality disorder should be interpreted with caution. Moreover, the narrow range of severe personality disorder types included, which were mostly Cluster B (*Borderline* and *Anti-Social*), limit the generalisation of findings to Cluster A personality pathology subtypes, such as the *Schizoid* or *Schizotypal*.

Another issue that should be noted is the fact that the group of Axis I disorder patients, so named for convenience, is more adequately designated as the group of "patients with Axis I disorders only" since most of the patients classified as having personality disorder presented also a diagnosis of Axis I disorder. In fact, there is a well-documented co-morbidity of Axis I disorders, such as depression, among personality disorder patients (see e.g., Shea et al., 1987) and isolated personality disorder symptoms appear to be less prevalent. It would have been in fact relevant to compare patients with severe personality disorder with and without concomitant Axis I disorder in terms of their levels of problematic object representations. Westen and colleagues (1990a), for instance, found that borderlines with major depression did not differ from non-depressed borderlines in any of the dimensions of object relations used in their measure (SCORS). Instead, borderlines differed from major depressives and so did depressed borderlines. They concluded that "*borderlines with major depression looked like borderlines not like major depressives*" (p. 362). It would have been interesting to test those differences by using the PORS but this was not possible due to the very small number of severe personality-disordered patients without concomitant Axis I disorders (N=3) in the current sample. However, when looking at the transcripts produced by these few patients with severe personality disorder diagnosis only, they seemed in fact to produce similar responses to those obtained by the other severe personality disordered patients with similarly high levels of problematic object representations. For example, one of the patients with severe personality disorder only, who obtained high levels of *inappropriate affective valence*, produced the following account about his mother "*My mother*

would take me out there maybe once in a month (...) and I usually spend {sic} the weekend out there...alone with my grandmother (...) I was happy with it because it was getting me away from the bitch [mother]". Also, another constraint associated with sample composition concerns the heterogeneity of the Axis I group, which included not only patients with depression but also with anxiety disorders and alcohol abuse, among others. Once again, most of the studies using a contrasting diagnostic group tend to include a uniform group composed of only patients with major depression.

Another aspect that could be pointed out as a limitation of the study is the fact that self-representations as such were not directly assessed by the PORS. Self and object representations are regarded as intimately related (see e.g., Huprich & Greenberg, 2003) and the term object-relations refers precisely to mental representations of self and others (e.g., Westen, 1991a; Kernberg, 1996). In fact, most measures of object-relations assess representations of self and object and the interaction between them. In the same way, the PORS are focused on the attachment figure and relationship with him or her and therefore include necessarily an interaction between self and object representations. However, other dimensions associated with more circumscribed aspects of self-representations (e.g., over-valuation) were not directly assessed. These aspects of self-representation were included in the pilot study upon which the development of the PORS was based (see p. 56). However, isolated self-descriptions, presented out of the context of a specific attachment relationship, proved to be more difficult to assess through the original probes included in the AAI. In fact, other instruments of object relations have been submitted to modifications to enable them to assess self-representations since original scoring procedures have been regarded as less sensitive to self-descriptions especially in seriously disturbed populations (e.g., Bers et al., 1993).

Finally, the relationship between attachment style and problematic object representations and the role played by severe personality disorder in this relationship were not thoroughly elucidated due to the fact that only a small number of participants assigned to an attachment group had a known psychopathology diagnosis (see p. 108). In fact, although it was found that a higher number of individuals with personality disorder were assigned to the

preoccupied category than would be expected by chance, it was not entirely clear to what extent personality disorder diagnosis influenced the relationship between attachment style and problematic object representations. For example, it could not be determined if the significant differences in levels of *inappropriate affective valence* found between *preoccupied* individuals and both *secure* and *dismissing* individuals was maintained when the effect of personality disorder was taken into account. It is likely that the diagnosis of severe personality disorder has played an important role in the association between attachment style and problematic object representations as patients with personality disorder tended to exhibit higher levels of *inappropriate affective valence* when compared to both Axis I patients and healthy controls. Nevertheless, several studies have found associations between attachment style and object representations in non-psychiatric populations (e.g., Levy et al., 1998) and it is therefore possible that a relationship between *inappropriate affective valence* and *preoccupied* status exists independently from personality pathology. However, whether the effect of attachment style on levels of PORS remains significant or not over and above the effect of personality disorder remains unclear and warrants further investigation.

11.4 Theoretical implications and directions for future research

The field of attachment theory and research has given special emphasis to the role of early relationships with caregivers in shaping modes of interpersonal functioning later in life. Interactions with caregivers are gradually replaced by mental representations of attachment figures (attachment *working models*) and influence the way new interpersonal relationships are dealt with (Main et al., 1985). Adaptive and maladaptive representations of interpersonal relationships are given particular relevance by attachment theory, which highlights the importance of early relationships with caregivers in personality development and pathology. In fact, most personality-disordered patients exhibit impairments in intimate relationships, which are maintained throughout their development (Nigg et al., 1992). Moreover, given the well-established link between insecure attachment and psychopathology and the theoretical link between object-relations and attachment theories, efforts were made to integrate object-relations and attachment research in studying object representations in personality disorder.

Using the AAI to study object representations is regarded as having several advantages over methods employed so far. The measure is considered to be a more adequate approach than self-report measures since certain cognitive-affective structures relevant to personality disorder may be inaccessible through direct questioning. In fact, most methods used to assess object relations take into account that these include unconscious mental representations (e.g., Blatt et al., 1979; Westen, 1991a). In the same way as the projective tests typically used in object-relations research, the AAI goes beyond assessing conscious representations of object relations. It focuses on "internal working models" of object representations by including questions that indirectly challenge the validity of consciously expressed descriptions, namely the probes asking for specific episodic memories to support a given set of adjectives used to describe significant others. In fact, the measure has been described as a task that "surprises the unconscious" (George et al., 1996) going beyond consciously accessible information.

However, unlike projective tests, the task involved in the AAI involves the processing of social-related information including actual relationships with caregivers upon whom individuals are asked to provide detailed descriptions as well as illustrations to support them. This is regarded as an advantage over using ambiguous material removed from real representations of people (see e.g., Leigh et al., 1992; Westen, 1991c). By using the AAI, internal object representations appear anchored to specific attachment figures in the external world, making it easier to assess both the degree of severity and quality of problematic representations by validating them against the reported behaviour of the caregiver.

On the other hand, this method circumscribes the assessment of object representations to a range of significant figures whose description has been considered particularly relevant in the assessment of object representations. In fact, according to both object-relations and attachment theories, early experiences with caregivers are crucial in the development of mental representations of significant others. Moreover, early memories are seen as a good way of accessing interpersonal models that characterise the person's relatively stable perspective on others (Tramantano et al., 2003). Hence, this

format seems to be able to cover some of the most important cognitive-affective aspects associated with the representation of attachment figures.

The proposed scales have also the advantage of capitalizing on the use of the AAI, which is often employed in the clinical context and for research purposes with clinical populations (e.g. outcome studies with difficult inpatient populations such as patients with borderline personality disorder). Using this interview to examine specific aspects of object representations is convenient and represents an economy in terms of time and resources needed to evaluate important aspects of object relations. The interview asks for descriptions of significant people and for early memories involving those figures thus offering a great deal of information about biographical, developmental, and clinical data, with the advantage of tapping past and present aspects of object relations. The use of object representation scales could thus complement the information obtained through using the original AAI scoring system and contribute to make the most of the valuable information obtained when administering the interview protocol.

The AAI protocol appeared in fact to be a suitable way of measuring object relations and the dimensions included in the PORS also attained satisfactory reliability levels. There are however some issues regarding the validity of the PORS which should be further addressed. The operational definitions of the dimensions included in the PORS seemed to tap important dimensions that match the conceptual definition of object-relations, and some of these dimensions have been in fact previously used in other measures (content validity). Moreover, most of the PORS seem to be able to detect differences among individuals with severe personality disorder and individuals without personality disorder (predictive validity) and the scales do not seem to merely reflect associated constructs such as attachment style or reflective capacity (discriminant validity). However, no formal test of concurrent validity was carried out. Indeed, it is unclear at this stage how the scales relate to additional measures of similar dimensions of object relations. If the PORS could be shown to relate to other measures and the common variance could not be exclusively attributed to other variables (e.g., personality disorder) evidence could be gathered to further support the validity of the scales (Hibbard et al., 1995).

When the three groups of individuals included in the study were compared in terms of levels of PORS, significant differences were observed between individuals with severe personality disorder, Axis I disorder patients, and normal controls for all the scales except *extreme evaluations*. Hence, severe personality disordered patients seemed to produce representations which were marked by higher levels of *inconsistency, inappropriate elaboration, lack of differentiation, inappropriate affective valence, distorted attributions, and disturbance of thinking.*

The most robust findings however were obtained for three of the PORS: *inconsistency*, *inappropriate affective valence*, and *disturbance of thinking*. These scales seemed to be able to differentiate individuals with personality disorder from both Axis I patients and healthy controls and to predict presence of severe personality disorder independently from other variables. *Inappropriate affective valence*, in particular, seemed to be one of the most relevant dimensions of object relations in distinguishing patients with severe personality disorder from other diagnostic groups, in accordance with research conducted so far (e.g., Segal et al., 1992; Nigg et al., 1992; Tramantano et al., 2003). Representations of significant others which are negatively charged and include a range of negative feelings such as anger, disappointment, and lack of trust seem therefore to be able to differentiate patients with severe personality disorder from other patients. Accounts such as the one offered by one of the patients with severe personality pathology, "*my grandfather was a drunk (...) all the uncles all the aunts I have, there is nine of them. And I hate every last one of them {sic} ...*", are indeed often found among these patients. The current study has therefore replicated the finding that affective dimensions of object representations are a distinguishing feature of personality pathology.

Depicting attachment figures and relationships in a negative tone appeared also linked to low levels of Reflective Function and also to higher levels of early adversity in childhood, namely criticism, coldness, and rejection by caregivers. These findings seem in accordance with Fonagy and colleagues' (1996) study where it was found that borderline patients could be differentiated from other patients and normal controls by higher levels of reported abuse and neglect and significantly lower ratings for Reflective Function. According to Fonagy et al. (1995a), poor reflective capacity is at the root of personality disorder

development in the context of a dysfunctional attachment relationship, namely in situations of abuse and neglect. The individual chooses not to think about the intentions behind the caregiver's harmful behaviour and reflective capacity is thus inhibited. This makes the individual more vulnerable to failures in making sense of people's feelings and behaviours in subsequent interpersonal interactions (Fonagy & Target, 1991). In fact, low reflective ability entails decreased capacity to entertain different perspectives and to seek alternative explanations for people's behaviours and intentions. Simplified, inflexible, and distorted object representations often arise, such as the tendency to see malevolent intentions behind other people's behaviour. The study conducted here seemed therefore to lend further support to this developmental model of personality disorder as malevolent representations of significant others, early adversity, and low reflective capacity appeared significantly associated and seemed to be important predictors of severe personality disorder.

In relation to the scales *inconsistency* and *disturbance of thinking* findings seemed to challenge the view that cognitive dimensions of object relations are less implicated in personality pathology, a view which has been named as the 'object-relations-affect link' (e.g., see e.g., Huprich & Greenberg, 2003). In fact, several authors have found evidence that object-relations measures such as Westen's SCORS are associated with affective, but not cognitive, aspects of object-relations (e.g., Porcerelli et al., 1998; Hibbard et al., 1995). In the current study, it was found that levels of *inconsistency* (e.g., contradictions) and *disturbance of thinking* (e.g., *incoherence*) in object representations are able to distinguish patients with severe personality disorder from both healthy individuals and Axis I patients. However, there are two issues that should be taken into account. On the one hand, studies conducted so far looking at 'cognitive dimensions' of object relations have not looked precisely at the same indicators expressed by those two scales. Secondly, *inconsistency* and *disturbance of thinking*, although constituting fundamentally structural (cognitive) dimensions of object relations, can sometimes be the result of difficulties in coping with intense affect, which might lead to a defensive breakdown of cognitive-affective processes. These can impair the capacity to monitor one's speech and create discontinuities in the narrative and momentarily lapses. Nevertheless, affect states underlying both inconsistent descriptions of attachment figures and

discontinuities in the narrative are not always easily identified and the *cognitive* failure in monitoring speech and thought processes comes across as the most striking failure.

It should also be noted that aspects assessed by the scales *inconsistency* and *disturbance of thinking* are associated with dimensions tapped by the original scoring system devised for the AAI. In fact, *inconsistencies* are closely related to the indicators assessed through the "maxim of quality" and indicators of *disturbance of thinking* are somewhat similar to some of the aspects characterising the discourse of the *unresolved status in relation to trauma or loss* (e.g., confused statements; loss of train of thought). In relation to the scale *inconsistency*, however, differences were not found for this scale among attachment groups and, as mentioned before (see p.124), contradictory accounts of attachment figures are taken into account when assigning attachment status but are not directly translated into a particular attachment style. Hence, it seems that the scale *inconsistency* seems able to differentiate individuals with severe personality disorder from both Axis I patients and healthy controls regardless of attachment status. For instance, one of the participants with severe personality disorder, who was classified as *dismissing* (and not *preoccupied*) in relation to attachment, exhibited high levels of *inconsistency* as expressed for example when trying to illustrate the word 'giving' used to describe her relationship with her father: "*After he would molest me, he would buy me something*".

Levels of *inconsistency* when describing attachment figures seem therefore to constitute an important aspect that should perhaps be considered when studying object relations in personality pathology. However, given that *preoccupied* individuals seem to have attained higher levels on the scale *inconsistency* (although not significantly higher) than *secure* and *dismissing* individuals, it would be interesting to ascertain the extent of the contribution of *preoccupied* status in the relationship between levels of *inconsistency* and severe personality pathology. This would be possible, once again, with a larger sample of cases with available information for both attachment style category and psychopathology.

In relation to the scale *disturbance of thinking*, it was found that individuals classified as *unresolved* showed higher levels on that scale when the original

attachment scoring system was used, which could suggest that *disturbance of thinking* overlaps with indicators of *lack of resolution for trauma* and has therefore little additional value. However, this not appears to be the case. When individuals with known diagnosis of personality disorder were also included in the sample, no differences in terms of *disturbance of thinking* were found between *resolved* and *unresolved* individuals. It is possible therefore that among less disturbed individuals instances of *disturbance of thinking* appear circumscribed to the discussion of loss or trauma, whereas among personality disorder individuals *disturbance of thinking* instances are more pervasive and therefore not reflecting solely higher levels of *lack of resolution.*

For example, one of the participants with Axis I disorder exhibited lapses in monitoring her discourse pattern in response to the question asking about the impact of an attachment figure's death on the participant's approach to her own child. She claimed "*yeah because I'm so close to person 1 [deceased] and you know yeah, it has got person 2 and they are real close, but he [the child] was really missing somebody special. I don't know, I kind of took it upon myself to make all the kids in the family that didn't know her, know her*". However, another patient with severe personality disorder produces the following account when simply asked to illustrate her relationship with her mother: "*I remember her yelling at me to go to hell. Or, no I think that was my father, that occasion was my mother, but I'm thinking of something else about sitting at the dinner table and making me eat my I food but I think that's my dad. That was one occasion when she {sic} was unaffectionate*".

Some authors seem in fact to support the view that instances of cognitive failures associated with object representations are not reduced to situations involving overwhelming affect. Westen (1990) for example, although recognising that cognitive distortions result at times from a defense against overwhelming negative affect, claims that those deficits are also attributable to structural social-cognitive difficulties characterising patients with personality disorder: "*...many schizoid and borderline patients ... 'read' people poorly and illogically even when their affects are relatively quiescent and they have minimal need to distort*" (p. 678).

However, it should be said that analyses including patients with a known diagnosis of personality disorder were based on a different attachment scoring system (Crittenden's *Dynamic Maturation Approach*) and that the *unresolved* category measured by that system might not tap exactly the same dimensions as assessed by the original scoring system. Also, it is possible that the small number of cases (N = 31) might not have enabled to detect significant differences between resolved and *unresolved* individuals in terms of levels of *disturbance of thinking*. Therefore, the issue as to whether *disturbance of thinking* predicts personality disorder over and above *unresolved status* awaits further support.

Just by looking at the sample of transcripts, however, it was observed that some patients with severe personality disorder, despite not being classified as *unresolved* for trauma, still exhibited high levels of *disturbance of thinking*. For example, one of these patients, when talking about the perceived effect of childhood experiences on her adult personality, said: *"(...) I learned from them that expressing anger, sadness was a lot of times not allowed (...) some of the stuff that I experienced became rules (...) like I am not supposed to talk, people will like you better if you're quiet. You won't get in trouble had become some of the rules of the different, for the different parts inside, and the, the person who showed, who has, whose main function is the angry person, sort of, so to speak, is often the rule, like they're supposed to stay inside. They are not allowed out. (...) you know something ba....somebody's gonna disappear, there's gonna be consequence, there's gonna something bad is gonna happen, that it's not okay"*.

As far as the remaining PORS are concerned (*extreme evaluations, inappropriate elaboration, lack of differentiation, and distorted attributions*) and although patients with severe personality disorder were found to exhibit higher levels on these scales when compared to both Axis I patients and healthy controls, these differences were only significant between the group of patients with severe personality disorder and healthy controls (with the exception of *extreme evaluations*). In fact, patients with severe personality disorder did not seem to be able to be differentiated from Axis I patients on the basis of levels obtained in those scales.

In relation to the scale *distorted attributions* as a whole, results seem to corroborate previous studies where overall levels of difficulties in understanding social causality were not found to differ between patients with borderline disorder and other disorders such as depression. In fact, studies looking at this dimension of object relations seem to diverge but borderlines have been sometimes reported to be able to produce elaborated attributions (e.g., Westen et al., 1990a; Stuart et al., 1990). Westen and colleagues (1990a) found in fact that a good percentage of borderlines were able to produce complex attributions of other people's behaviours but found also these patients produced more often illogical attributions when compared to other patients. In the current study, no differences in terms of level of illogical attributions were found between patients with severe personality disorder and other disorders.

One possible explanation for the divergent results might be related to the type of material used to assess object relations. The study conducted by Westen and colleagues used the SCORS applied to TAT cards where subjects deal with projective material and are required to produce stories about hypothetical characters. It is possible that the AAI, by dealing with real people and probing for specific episodes to illustrate interactions with these people, contributes by offering a contextual frame in which otherwise illogical attributions seem more understandable and less irrational. For example, in cases of extreme abuse and adverse childhood experiences, less complex attributions are understandable in the light of reported traumatic episodes during the narrative. One of the patients, for instance, when asked to provide an explanation for her caregivers' extreme abusive behaviour provided a response that although simplistic or apparently illogical, makes some sense in the context of the interview: "*I don't know. I, crazy, I guess, I don't know*".

However, instead of differences in terms of illogical attributions, significant differences were found in the current study between patients with severe personality disorder and Axis I patients for levels of *biased attributions* (e.g., egocentric, self-serving). This is consistent with Westen et al.'s (1990a) study where it was found that borderlines appeared to produce extremely egocentric representations when compared to other patients. It seems therefore that although patients with personality disorder do not appear to be distinguished from

other patients in terms of overall level of causal reasoning, a particular way of producing *biased attributions* (e.g., egocentric) seems to be unique to personality pathology. Although *biased attributions* included in the PORS do not refer only to egocentric or self-serving attributions, these findings seem to support the concept of "borderline attributional style" as being fundamentally egocentric, as proposed by Westen (1991b).

Hence, patients with severe personality disorder do not seem to present generalised difficulties in terms of their causal reasoning but to exhibit an overall adequate causal reasoning interspersed with specific attributional errors, which have been found to be illogical or, as in the current study, markedly biased. Attributional errors among personality-disordered individuals may in fact be selective and be only present in specific circumstances or in relation to certain figures. As Westen (1991b) has claimed "*borderline attributional style is unstable (and difficult to measure) because it is so affect centered and variable (...) borderlines' attributional processes tend to be polarised by affect, with attribution of 'good' motives to 'good' people and 'bad' motives to 'bad' people*" (p. 218). Also, Stuart et al. (1990) found that borderlines were able to produce cognitively advanced attributions but only for malevolent figures. It would therefore be relevant to try to further examine in what circumstances these patients' causal reasoning is more likely to be affected as well as to investigate the role of negative affect in the emergence of attributional errors. It is for example possible that the level of causal reasoning varies according to the attachment figure being described and the affects associated with that figure. Comparisons between attributions made in response to the AAI (which generally involves affectively-charged figures) and attributions produced in relation to neutral figures would perhaps constitute a possible avenue in trying to clarify the relationship between affect tone and distortions in causal reasoning among these patients.

The scales *inappropriate elaboration* and *lack of differentiation* appeared to be able to distinguish patients with severe personality disorder from healthy individuals but were not able to differentiate patients with severe personality disorder from Axis I patients. This seems again in accordance with previous studies (e.g., Westen et al., 1990a; Lerner & St. Peter, 1984) where borderlines were found to be capable of producing complex representations of object

relations when compared to other patients. For example, some of the patients with severe personality disorder were able to produce somewhat elaborated descriptions of their relationship with caregivers as the one provided by one of the patients: "*My relationship with my mother...I don't remember ever being real close. I always kind of felt left out or most of the attention from her went to my second oldest sister, Person 1 (...) I don't feel she was a real big influence in me growing up, support-wise, or anything".* Another patient said: *"(...) But I know me and my mom were always close. Um, my dad, I don't know, I was pretty much used as a pawn there because his hate for my mom and vice-versa and I was the tool of hurt for both of them, to each other. Me and my brother were put in the middle, not a good experience".*

It is therefore possible that depressive patients are not always more able than personality disordered individuals to produce descriptions of others that are differentiated and relatively complex and elaborated. It is likely that the general "cognitive constriction" characteristic of Axis I disorders such as depression (Westen, 1991a) affects also their capacity (or motivation) to produce complex, differentiated representations. Nevertheless, as suggested above, future research should focus on trying to ascertain the conditions under which borderline individuals seem to present more problems in the complexity of their object representations (Westen et al., 1990a) and investigate the role of affective aspects underlying these difficulties.

Finally, the results obtained for the scale *extreme evaluations* seem in accordance with several studies (e.g., Veen & Arntz, 2000; Baker et al, 1992) which did not find evidence to support that borderline patients tend to produce more often split representations when compared to other individuals. In fact, no differences were found here between personality disorder patients, Axis I patients, and normal controls in relation to this scale. In the study conducted by Veen and Arnz (2000), it was found that borderline individuals were able to provide representations of others that, although extreme, were both "good" and "bad" (bidimensional evaluations) and that splitting (all "good" versus all "bad" representations) occurred only in relation to (perceived) perpetrators. However, in the current sample, some of the patients with severe personality disorder who reported the highest levels of abuse in childhood did not seem to produce a

significant number of *extreme evaluations*. For instance, one of these patients, who suffered serious physical, sexual, and psychological abuse offered quite a balanced description of the relationship with her parents in the present: "*Just, I feel like I can't talk to them about everything. I mean, you know, my mother, our conversations, you know, are limited to things like child development and nutrition. My father I just talk about general news type things (...) I don't talk about ever (..) the time you beat me so badly I spent two days in hospital. I don't tell, I don't bring up things like that*".

However, it would perhaps be relevant for future research to further investigate evaluations of perceived perpetrators by using a larger sample consisting exclusively of abused individuals. This might provide the means to ascertain whether patients with severe personality disorder could be distinguished from healthy controls or other patients in terms of *extreme evaluations,* such as *splitting*, used to characterise perpetrators of abuse. It is also possible that the dimension *extreme evaluations* as assessed by the PORS does not constitute a relevant dimension in distinguishing patients with personality pathology from other individuals or that the AAI is not an adequate way of assessing this dimension. Over 60% of the patients with severe personality disorder did not exhibit any instance of this object representation scale and, therefore, the little variability observed might indicate that *extreme evaluation*s is not a useful dimension as currently operationalised.

This is in fact another issue relevant for the construct validity of the scales since it is possible that some of the dimensions included in the PORS are less relevant for personality pathology. Hence, considerations regarding the advantages in retaining some of the PORS should be studied further in the future. At this stage, the PORS included dimensions of object representations theoretically and empirically linked to personality pathology and the aim of the study was to investigate whether these dimensions were indeed relevant to personality pathology and able to distinguish these patients from Axis I patients and normal controls. The results seemed, in general, to corroborate previous studies with approximately the same dimensions of object representations distinguishing patients with severe personality disorder from Axis I patients and healthy controls. However, the PORS as a whole are not at this stage able to point to

dimensions that should be incorporated in the diagnosis of severe personality disorder; in other words, some of the scales seem to have limited applicability at least in successfully discriminating among different diagnostic groups.

For the time being, four main conclusions can be drawn: 1) the PORS seem to be a reliable way of assessing object representations through the AAI and the results obtained with the PORS seem to corroborate previous research; 2) further support for the importance of higher levels of *inappropriate affective valence*, particularly malevolence, as unique to personality pathology was found; 3) more 'cognitive' aspects such as *inconsistency* and *disturbance of thinking* might constitute additional useful dimensions in distinguishing patients with severe personality disorders from patients with other disorders; 4) further research is warranted to investigate the validity of the remaining dimensions and refine the ability of the scales to distinguish among diagnostic groups.

Finally, the study conducted here has also the potential to offer further support to previously proposed developmental models of severe personality pathology as well as contribute to expand their scope in terms of the study of other variables such as *problematic object representations* and *interpersonal functioning* which have appeared less integrated in developmental studies of personality pathology. In fact, despite the fact that the main emphasis of the different studies conducted throughout this work was to investigate the validity of the PORS both in terms of its unique focus (discriminant validity) and its ability to relate to associated variables in the expected way (predictive validity), the breath of measures used and the findings supporting the connection between the variables assessed by those measures enable to put forward some suggestions of a potential causal model of severe personality disorder.

As seen before, authors such as Fonagy and colleagues (1996) have maintained that personality pathology is a disorder of attachment stemming from a relationship which did not give the child the opportunity to learn about other people's minds (reflective capacity). According to this model, severe personality disorder arises from a dysfunctional or abusive attachment relationship and deficits in reflective capacity are a pre-requisite for the development of personality pathology. In fact, early adversity such as abuse and neglect are seen

as a perversion of a functional attachment relationship which leads to poor reflective capacity, insecure attachment, and ultimately to an increased vulnerability to personality pathology.

The development of problematic object representations can be therefore seen as another sequelae of a dysfunctional and abusive early relationship which leaves the individual more prone to hold distorted representations of his or her significant figures (e.g., *malevolence*, *lack of differentiation*). Hence, problematic object representations although associated with insecure attachment and poor reflective capacity, add a new dimension to the model since by focusing on the content and structure of mental representations of attachment relationships the PORS offer a more discrete and specific unit of analysis. The PORS offer also a distinct developmental link between early abuse and the development of personality pathology. In fact, although insecure attachment and low reflective function are also found among healthy individuals, high levels of problematic object representations such as *malevolence* seem to be unique to personality pathology. The PORS reflect indeed aspects such as expectations of negative interactions which are likely to stem from an internalisation of early malevolent interactions with caregivers (e.g., abuse).

Hence, early abusive relationships appear likely to pave the way for a range of personality deficits (insecure attachment, low reflective capacity, problematic object representations) which lead to increased vulnerability to the development of severe personality pathology. Moreover, the development of severe personality disorder symptoms such as impulsivity or mood swings appear, as we have seen throughout, accompanied by a range of interpersonal difficulties in the way the individual deals with himself and with others. In fact, the current work enabled to give further support to the centrality of interpersonal symptoms in personality pathology and showed that these patients seem to have pervasive difficulties that translate, in fact, into real life relationships. Hence, another variable to be added to the hypothetical model is the presence of interpersonal difficulties, which despite being also present in people without personality disorder and being influenced by other deficits such as insecure attachment, appear strongly associated with presence of a personality disorder diagnosis (see diagram of hypothetical model in figure 11.1).

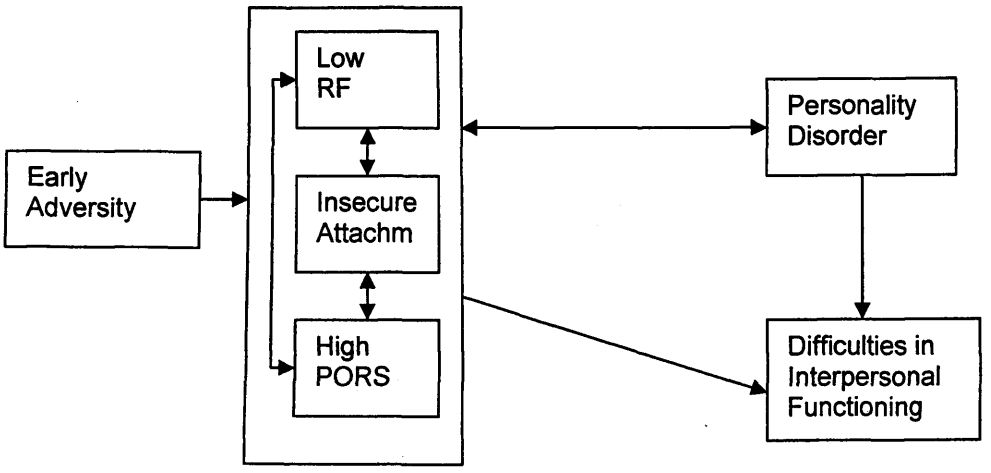

Fig. 11.1: An hypothetical causal model of early adversity leading to low RF, insecure attachment, problematic object representations, and ultimately to personality disorder and difficulties in interpersonal functioning

There are other issues that were not addressed in the current study and which are considered relevant for future research. One of them relates to the role of probable experiences in a similar way as they are assessed by the original AAI scoring system. The AAI probable experiences section includes a number of scales assessing factual information for several dimensions of the relationship with the caregiver (e.g., *involving/role-reversing*), which are considered relevant to offer an idea of the individual's real experiences, against which his or her account can be compared. In the same way, it would be useful to ascertain the extent to which personality disordered patients' experiences with caregivers match the way they are described by these patients. As we have seen throughout, patients with personality disorder were found to hold more negative representations of caregivers when compared to Axis I patients and healthy controls. They also seemed to have suffered higher levels of abuse and neglect, which gives already some idea that their negative view of caregivers might at least be partly justified.

This issue of increased likelihood of history of abuse and neglect among patients with personality disorder has been raised by several authors (e.g., Westen, 1990; Fonagy et al., 1995a). The significant association between levels of reported abuse and severe personality disorder diagnosis have led to claims that there might be biases in reporting early abuse associated with deficits characteristic of personality pathology. It has been claimed that malevolent parental representations may represent a self-serving bias; psychopathology would leave individuals more prone to look for external attributions of their feelings and symptoms and having negative representations of their parents would help them to protect their self-concept (Bornstein & O'Neill, 1992). It has also been argued that it is possible that personality disorder patients' malevolent representations lead them to see their past in more negative terms. As Westen (1990) puts it "*one may wonder about the veracity of patients reporting (sexual) abuse in an interview, and hence whether patients with a more malevolent object world were simply more likely to have fantasies of abuse*" (p. 684). However, he concludes that despite the exacerbation of malevolent representations caused by a number of defensive mechanisms characteristic of personality disorder, "*there is clearly a causal connexion between actual abuse and a particular way of experience social reality*" (Westen, 1990, p. 684). Also Fonagy and colleagues (1995a) have claimed that longitudinal psychopathology research has demonstrated that individuals with severe personality disorder are in fact likely to have histories of chronic childhood abuse as well as occasional occurrences of trauma.

In fact, the findings of the current study support this view since high levels of abuse were reported by using a reliable measure of history of abuse. In fact, as we have seen before (p.197-200), despite the debate regarding the validity and reliability of retrospective methodologies the CECA has been found to be a reliable means of estimating abuse in childhood. Its emphasis on factual information increases the level of accuracy of the measure and reduces the potential for memory biases (e.g., Bifulco et al., 1997). Therefore, an alternative explanation, that higher levels of negative representations among personality disordered patients are simply the result of biased or fantasised reports of early adversity, seems less likely.

Hence, it seems generally agreed that although patients with severe personality disorder tend to exaggerate the impact of negative experiences and have more easy access to malevolent schemas of object relations (Nigg et al., 1992), their reports of experience of abuse and neglect are mostly veridical and therefore their negative view of the caregivers is at least partially justified. It is important to note however that *inappropriate affective valence* such as *malevolence* does not refer to mere negative descriptions of attachment figures, but rather to excessive (or exaggerated) negative representations. *Inappropriate affective valence* is in fact an index that takes already into account the probable experience which is part of the definition of the scale: "*negative feelings...which are either unjustified or justified but remain too intense*" or "*can be understandable but the individual is still emotionally aroused more than would be expected*".

Nevertheless, and taking into account that most patients with severe personality disorder would present a certain degree of *malevolence* in their representations, there are probably those instances which appear to involve more "unjustified" or disproportionate *malevolence* than others. For example, two of the patients with severe personality disorder provided, at a certain point in their narratives, accounts with obvious contrasting degree of severity: "*I guarantee that. I've already told my mom (...) if I ever find person 1, who left us when I was a kid, I will kill him*", as opposed to, "*(...) his clothes are sloppy and half of the time he hasn't taken a shower and he kind of smells (...) and I have mostly avoided him the last few years*".

In fact, because the PORS are at this stage essentially dichotomous, different levels of a certain indicator cannot be determined. This occurs also in relation to other scales as well, such as *disturbance of thinking*. Failure to monitor discourse patterns and maintain intelligible speech might be more or less severe depending on the context and topic being discussed. In fact, systems such as the Reflective Function for the AAI developed by Fonagy and colleagues (1998) already take into account the probable experience being discussed. For example, when discussing extremely sensitive topics such sexual abuse, the threshold for Reflective Function is lowered, that is, mild reflection in relation to highly traumatic episodes is considered as evidence of good reflective capacity. Therefore, it would advantageous to have a broader range in terms of the scoring

for individual instances on the PORS as to enable the differentiation between different degrees of problematic object representations and take into account the role of probable experiences.

Other issues that could be further addressed include aspects such as the comparison of problematic object representations between mother and father figure. Bornstein and O'Neill (1992), in their study about parental perceptions and psychopathology, conducted separate analysis for mother and father and did not find significant differences. The authors claim that their equivalent findings for mother and father figure do not support the psychoanalytic view that maternal representations would have a greater impact in the risk for psychopathology when compared to paternal representations. However, they see their findings as supporting an object-relations theory conception of internalisation of representations as cognitive schemas, which process and organise information regarding mother, father, and other figures. This is also in line with the notion of working models of attachment, which are drawn from different relationship experiences. In fact, "*working models enable reflection and communication about past and future attachment situations and relationships*" (Bretherton & Munholland, 1999, p.90).

Therefore, in the same way, the PORS would be expected to reflect general failures in providing a balanced representation of attachment figures and relationships and significant differences between different figures would not be expected. In fact, when looking for example at one transcript that had one of the highest levels of problematic object representations in all the PORS, no differences were found between mother and father figure in terms of number of indicators of pathological representations. For instance, in relation to *inappropriate affective valence*, this patient offered malevolent representations of both mother and father: "*I guess he takes two people to hug (...) but that process was, you know, this is horrible, stupid, I don't want to do this, I hate him, you know*"; "*'My parents were fighting all throughout the house, 'why don't you get a divorce' (...) I am just mad at them because they couldn't hit on their shit*". Although beyond the scope of the present study, an extensive qualitative analysis of the interview transcripts could contribute to confirm this hypothesis and

perhaps illuminate this issue of differences in terms of problematic object representations between different attachment figures.

More general directions for future research which are in line with suggestions given to expand the field of object relations research (e.g., Huprich & Greenberg, 2003) include the (a) study of issues related to the stability of the dimensions measured by the PORS over time, especially related to changes in concomitant Axis I disorders; (b) investigating finer distinctions among different types of personality disorder (e.g., Cluster A/Cluster C) which could contribute to arrive at PORS profiles across personality disorder subtypes (e.g., Borderline Personality Disorder could be found to be characterised by higher levels of *inappropriate affective valence* than *disturbance of thinking,* whereas Paranoid Personality Disorder could be shown to have the opposite pattern) (b) investigating how the PORS relate to other personality variables, namely those stemming from psychobiological models of personality, such as temperament and attentional control mechanisms (e.g., Posner et al., 2003; Fonagy & Target, 2003).

11.5 Conclusion

The study presented here described the development and reliability analysis of the Problematic Object Representation Scales (PORS) to be applied to the AAI protocol. The PORS are a reliable way of assessing problematic object representations and they enabled to replicate some of the findings obtained with other measures of object relations associated with personality pathology. Moreover, scales such as *inconsistency*, *inappropriate affective valence,* and *disturbance of thinking* were able to differentiate patients with severe personality disorder from both Axis I patients and healthy controls and to predict presence of severe personality disorder over and above the effect of other variables such as childhood adversity.

The AAI protocol was successfully used to measure object representations in personality-disordered individuals. By combining attachment and personality disorder research, the PORS have contributed to the identification of a new avenue in the study of object representations. The PORS have the potential to become a useful tool in research and clinical contexts and they show promise of leading to a better understanding of object relations in personality pathology.

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APPENDICES

APPENDIX A

GENERAL SCORING INSTRUCTIONS

The coder should read the whole interview transcript bearing in mind the indicators included in the PORS and focus on the passages where the subject seems to be having a faulty or pathological functioning in terms of object representations. Often, those passages immediately strike the coder as being particular odd, unusual, or difficult to understand, although sometimes there are more subtle indicators that require a closer examination. Reading the transcript while trying to look for a particular indicator at a time is not only time-consuming but also inappropriate since it is very likely that the same passage qualifies for more than one indicator. The coder is advised to read the critical passages to check whether each of the indicators is present or not. It is also acceptable to go back and revise the coding at any time. This could happen as the result of new facts that are revealed later in the interview and that can help to have a clearer picture of a certain relationship or attachment figure. For example, for the scale *A: inconsistency*, when the coder comes across with a statement that seems to contradict a previous account, he should often go back to make sure that there is in fact a *contradiction* or *mismatch* (note however that if, for example, line 3 of the interview transcript is contradicted in line 32, only one contradiction should be coded and it should be signalled in line 32).

Please note that in the beginning of the interview, the interviewer tries to ascertain who are the main parental figures in the individual's childhood. A mother figure and a father figure are generally identified at this stage and questions 2 and 3 of the AAI protocol are asked in relation to those two figures. Hence, if for example the individual considers that he was brought up by his grandmother and father, these will be the figures that will be considered in the relationship description; it is acceptable that, in this case, the individual treats his grandmother as if she were his natural parent.

It is also important to keep in mind that the interview is being rated in relation to attachment figures and not to other figures or to the participants themselves. The term attachment figure refers here to all significant relationships, such as parents/caregivers, partners, own children, or friends. Interviewees may sound very disturbed or disorganised in relation to certain aspects but these aspects should only be taken into account if they appear in the context of object relations (e.g., an individual who constantly praises himself, saying for example that he is the cleverest person he has ever met, obviously presents difficulties in his self representation, but these are not covered by the present system). Moreover, it is important to note that there will be aspects of pathological functioning found in the transcripts concerning the individual's relationship with his attachment figures, that will not be covered by the present system. The dimensions presented here represent therefore only a selection of all the pathological aspects that can be found in the way the individual thinks in terms of his social interactions in the context of object relations.

Inconsistency, Extreme Evaluations, Inappropriate Elaboration, Lack of Differentiation, and Inappropriate Affective Valence (scales A-E)

The scoring for the scales A-E is to be done in relation to a specific attachment figure, that is, if the subject expresses, for example, an extreme unidimensional evaluation (splitting) in relation to mother figure and right after expresses exactly the same evaluation for father figure, this should count as two different ratings (unless the subject does not distinguish both figures). In other words, coders should be able to keep in mind the attachment figure in relation to whom the passage is being rated.

Moreover, the indicators included in this section are to be coded in relation to attachment figures and not to descriptions of self or to life events in general. Although instances of problematic object representations included in the scales A-E can be found across the whole transcript, there are specific questions in the protocol that are more likely to elicit from the individual a description in terms of his representation of relationships with attachment figures. The coder should focus his

attention on those passages since they are considered as particularly relevant for the assessment of the indicators contained in this section:

*2. I would like you to describe **your relationship with your parents** as a young child, sort of as far back as you can remember.*

*3. Now I'd like you to choose five adjectives or words that reflect your **relationship with your mother** starting from as far back as you can remember in early childhood – as early as you can go, but say, age 5 to 12 is fine. I know this may take a bit of time, so go ahead and think for a minute...then I'd like to ask you why you chose them. I'll write each one down as you give them to me.*

*4. I'm going to ask you to do the same thing for your father now. I'd like to ask you to choose five adjectives or words that reflect your childhood **relationship with your father**, again starting from as far back as you can remember in early childhood.*

*5. Now, I wonder if you could tell me to **which parent** did you feel the closest to, and why? Why isn't there this feeling with the other parent?*

*15. Now, I'd like to ask you a few more questions about your **relationship with your parents.** Were there many changes in your relationship with your parents after childhood?*

*16. What is the **relationship with your parents** like for you now as an adult? Here I am asking about your current relationship.*

[Note that question numbers are not always the same in all interview transcripts and that sometimes some of the questions are replaced, skipped, or reformulated]

Despite the fact that these are probably the questions where most indicators will be found, it is important to note that indicators found in other parts of the interview should also be taken into account.

Individual instances are coded as either "maybe present" (1) or "definitely present" (2). Overall scores are computed by adding up the scores obtained for individual examples.

Distorted Attributions (F)

Difficulties in understanding social causality are present in passages where the patient is trying to explain a particular behaviour or characteristic of the attachment figure. There are specific questions in the protocol that are more likely to elicit from the subject a cause-effect type or reasoning, that is, the individual is prompted to include in his account attributions of people's characteristics or behaviour. The coder should focus his attention on those passages since they are considered as particularly relevant for the assessment of the indicators contained in this section. The protocol questions that are especially relevant are the following:

*5. Now, I wonder if you could tell me to which parent did you feel the closest to, and **why? Why** isn't there this feeling with the other parent?*

[*8. "rejection"*]
*8c. **Why do you think** your parent did those things, do you think he/she realised he/she was rejecting you?*

*11. **Why** do you think your parents behaved as they did during your childhood?*

Any other probes where the interviewer asks the subject why someone behaved as they did etc.

Usually, attributions include certain expressions or words such as "the reason why", "due to", "because" to convey a cause-effect type of reasoning (e.g., "*I think she behaved like that **because** I was not planned and she didn't want any more children*"). In fact, there is often an explicit or implicit cause/effect type of reasoning except in cases where the attribution is so illogical or inaccurate that the only way of making sure that the individual is attempting to understand social causality is by looking at the question being asked (e.g., Q - "*Why do you think your parents behaved as they did?*" A – "*It's obvious that I never knew my parents wanted me to be a pianist*"). Moreover, only attributions in the context of a relationship with an attachment figure should be considered for this indicator rather than explanations in relation to general issues or different interpersonal contexts (e.g., the subject tries to explain why he chose a certain occupation).

Disturbance of Thinking (G)

There are no specific questions where instances of "disturbance of thinking" are more likely to be found. The coder should consider the transcript as a whole particularly those questions included in the sections described above. Coders are advised to look for instances where the individual is unable to stick to a reasonable line of reasoning, which affects the comprehension of the passage.

The scoring process for the scales F and G follows the same procedure described above, with individual instances being coded as either "maybe present" (1) or "definitely present" (2). Overall scores are computed by adding up the scores obtained for individual examples.

SCORING EXAMPLES

A. Inconsistency
A1: Contradiction/oscillation
A2: Mismatch between semantic and episodic memory

B. Extreme evaluations
B1: Unidimensional evaluations (splitting)
B2: Bidimensional evaluations

C. Inappropriate elaboration
C1: Over-simplified/superficial descriptions
C2: Pseudo-elaborated descriptions

D. Lack of differentiation
D1: Lack of differentiation between attachment figures
D2: Lack of differentiation between the self and attachment figures

E. Inappropriate affective valence
E1: Malevolence
E2: Unjustified Benevolence

F. Distorted attributions
F1: Grossly illogical or inaccurate
F2: Implausible or idiosyncratic
F3: Biased attributions
F4: Vague/shallow
F5: Over-detailed/confusing

G. Disturbance of Thinking
G1: Incoherence
G2: Thematic intrusions

A. Inconsistency

A1: Contradiction/oscillation

"(...) i made him sound domineering, tyrant, but he wasn't it wasn't... it was very subtle, he would just let you know with glaring, staring looks how bitterly we had disappointed him"

"(...) well, I said warm but cut out warm, because it is too conditional, she would never be warm to us when my father was around"

" (...) we really had a very, nice, warm, healthy, reciprocally loving relationship and everything changed (...) everything changed, it just wasn't a happy home any more"

" (...) i mean, if we move on into later years, it went from happy to distinctly unhappy, to distinctly unhappy and, and to overwhelmingly unsatisfactory, and from unsatisfactory to almost non-existent, and then, of course, once my father died, it's come back full circle, and is a really nice relationship"

A2: Mismatch between semantic and episodic memory

" I said my mother was loving because sometimes she would walk me to school (...) she had enough love for me and would not leave me abandoned"

"I said the relationship with my mum was happy (...) generally you know we always get on very well (...) we argue like mad"

[You'd described your relationship with your father as warm. Any memories or incidents that come to your mind?] "*I've seen him cry more than her. She'd laugh at him and I'd, so I see him as a, how can I, vulnerable, vulnerable. Vulnerable*"

B. Extreme evaluations

B1: Unidimensional evaluations

"(...) I had an immensely loving relationship with my mum, when I was very young, I was really, really fond of her (...) I had a very strong inkling that I was her blue-eyed boy (...) we really had a very nice, warm, healthy, reciprocally loving relationship"

"(...) and since my father died, my mother's relationship with my kids is absolutely extraordinary"

B2: Bidimensional evaluations

" (...) because for every black picture I can paint of my father, I can paint a white picture...he had some wonderful good points, this was not one of them...he definitely had a major lack of self-esteem (...) "

"(...) it was just a general feeling with her, as perceived by me of being totally torn between her children, whom, she loved very much and her husband, whom either she loved very much, or feared very much, or both or neither"

C. Inappropriate elaboration

C1: Over-simplified descriptions

[I would like you to choose five adjectives to describe your relationship with your father]
"*er...non-existent...that's five*"

[so what's your relationship with your mother like now?]
"she's taught my son how to play poker, and for that I'm eternally grateful"

C2: Pseudo-elaborated descriptions

"...now I can rationalise the whole thing now, and I understand why he [father] was like this, I didn't understand it then (...) a guy who was very lacking in personal charisma (...) he had definitely a major lack of self-esteem (...) I think my father was looking for a way where he could have ...another status...and it dawned on him that through religion he could have status (...) if you become orthodox like that overnight, you can metaphorically speaking buy yourself major status in the community, you can suddenly be on the board of management..."

D. Lack of differentiation

D1: Lack of differentiation between attachment figures

[you said your mum would not be understanding?]
"...I think my parents never understood how I felt"

"(...) my mother was not emotionally repressed, within herself, but she was by my father (...) they couldn't handle seeing any emotion shown (...)"

D2: Lack of differentiation between the self and attachment figures

"(...) it didn't just affect the three of us, it affected my mother as well, and all four of us were rebelling in all different kinds of ways (...) the family has become a very unhappy family, very disjointed, very disunited, we all became a combination of rebellious and deceitful and underhand, at an unhealthy early age..."

"I always hold my hand, um I remember once we fell over"

E. Inappropriate affective valence

E1: Malevolence

"...if I asked a question which involved the word why – the stock answer was because I said so, which is the clarian call of the idiot who doesn't know the answer..."

"...I prided myself in my early, middle thirties, on making him (father) reduced to tears"

"my mother ...has only ever maintained that the sun shines out of his arse, but I mean that's just a defense mechanism, because she knows she is stuck with a guy that she shouldn't have (...) so there was really virtually from that point no relationship with either of them"

E2: Unjustified Benevolence

" my parents did not wilfully rejected me, both very basically good decent people, who did things wrong...they did mistakes, there was no harm, no malice intended"

"yes, she did slap us often, but I mean, like all parents do"

F. Distorted attributions

F1: Grossly illogical or inaccurate

"They were mean to me because I was the youngest"

F2: Implausible or idiosyncratic

"I think my mother behaved like that because she was born on a Friday 13th"

F3: Biased attributions

"...I think she couldn't express her love to me when I was a kid because she was too young..."

"well I think my mum behaved like that because she had so many problems (...) she's been married three times and it's never worked"

F4: Vague/shallow attributions

"...I think I felt closer to my mum because she is my mum"

[why do you think your parents behaved as they did?]
"I don't know...because they had problems"

F5: Over-detailed/confusing attributions

"I can rationalise the whole thing now and I can understand why, I understand why he was like this, I didn't understand it then, I didn't even understand it when I was going through a lot of talking treatment (...) a guy who was very lacking in personal charisma (...) he had definitely a

major lack of self-esteem which I would say playing the amateur psychologist here, was a result of a great deal of dominance from his father (...) I think my father was looking for a way where he could have ...another status...and it dawned on him that through religion he could have status (...) if you become orthodox like that overnight, you can metaphorically speaking buy yourself major status in the community, you can suddenly be on the board of management..."

G. Disturbance of Thinking

G1: Incoherence

"I don't know, I remember that incident of the party, I was very worried and I don't know , it's all very confused in my mind, the skirt the dog...couldn't tell"

G2: Thematic intrusions

"Well my relationship with my parents...let me tell you about what I was gonna tell you before...a fortnight or so ago I got a letter from UCL ...I just had this random thought in my mind..."

APPENDIX B

PROTOCOL QUESTIONS

Inconsistency, extreme evaluations, inappropriate elaboration, lack of differentiation, and inappropriate affect valence (A-E)

- *I would like you to describe your **relationship with your parents** as a young child, sort of as far back as you can remember.*
- *Now I'd like you to choose five adjectives or words that reflect your **relationship with your mother** starting from as far back as you can remember in early childhood – as early as you can go, but say, age 5 to 12 is fine. I know this may take a bit of time, so go ahead and think for a minute...then I'd like to ask you why you chose them. I'll write each one down as you give them to me.*
- *I'm going to ask you to do the same thing for your father now. I'd like to ask you to choose five adjectives or words that reflect your childhood **relationship with your father**, again starting from as far back as you can remember in early childhood.*
- *Now, I wonder if you could tell me to **which parent** did you feel the closest to, and why? Why isn't there this feeling with the other parent?*
- *Now, I'd like to ask you a few more questions about your **relationship with your parents**. Were there many changes in your relationship with your parents after childhood?*
- *What is the **relationship with your parents** like for you now as an adult? Here I am asking about your current relationship.*

Distorted attributions (F)

- *Now, I wonder if you could tell me to which parent did you feel the closest to, and **why**? Why isn't there this feeling with the other parent?*
- ***Why** do you think your parent did those things do you think he/she realised he/she was rejecting you?*
- ***Why** do you think your parents behaved as they did during your childhood?*

(Any other probes where the interviewer asks the subject why someone behaved as they did etc.)

APPENDIX C

PRELIMINARY VERSION OF THE PORS

A. Inconsistency

A1: Contradiction/oscillation
A2: Mismatch between semantic and episodic memory

B. Lack of complexity

B1: Unidimensional evaluations (splitting)
B2: Bidimensional evaluations
B3: Over-simplified/superficial descriptions
B4: Pseudo-elaborated descriptions
B5: Lack of differentiation between attachment figures

C. Inappropriate affective valence

C1: Malevolence
C2: Unjustified Benevolence

D. Distorted attributions

D1: Grossly illogical or inaccurate
D2: Implausible or idiosyncratic
D3: Biased
D4: Vague/shallow
D5: Over-detailed/confusing

E. Disturbance of Thinking

E1: Incoherence
E2: Thematic intrusions
E3: Discontinuities in the narrative

APPENDIX D

I'm going to be interviewing you about your childhood experiences, and how those experiences may have affected your adult personality. So, I'd like to ask about your early relationships with your family, and what you think about the way it might have affected you. We'll focus mainly on your childhood, but later we'll get on to your adolescence and then to what's going on right now. This interview often takes about an hour, but it could be anywhere between 45 minutes and an hour and a half.

1. Could you start by helping me get oriented to your family situation, and where you lived and so on? If you could tell me where you were born, whether you moved around much, what your family did at various times for a living?

Who would you say raised you?
Did you see much of your grandparents when you were little?
Did you have brothers and sisters living in the house, or anybody besides your parents?
Are they living nearby or do they live elsewhere?

2. I would like you to describe your relationship with your parents as a young child, sort of from as far back as you remember?

3. Now I'd like you to choose five adjectives or words that reflect your relationship with your mother starting from as far back as you can remember in early childhood – as early as you can go, but say, age 5 to 12 is fine. I know this may take a bit of time, so go ahead and think for a minute...then I'd like to ask you why you chose them. I'll write each one down as you give them to me.

3.1 Ok, now let me go through some more questions about your description of your childhood relationship with your mother. You say your relationship with her was _____. Are there any memories or incidents that come to mind with respect to _____?

You described your relationship with your mother as _____. Can you think of a memory or incident that would illustrate why you chose ____ to describe the relationship?
[same question asked for each adjective]

4. I'm going to ask you to do the same thing for your father now. I'd like to ask you to choose five adjectives or words that reflect your childhood relationship with your father, again starting from as far back as you can remember in early childhood.
[same probes as above]

5. Now, I wonder if you could tell me to which parent did you feel the closest to, and why? Why isn't there this feeling with the other parent?

6. When you were upset as a child what would you do?

When you were upset emotionally when you're little, what would you do?
Can you think of a specific time that happened?
Can you remember what would happen when you were hurt physically?
Do any specific incidents come to mind?
Were you ever ill when you were little? Do you remember what would happen?
I was just wondering, do you remember being held by either of your parents at any of these times, I mean, when you were upset, or hurt, or ill?

7. Do you remember being separated from your parents?

How did you respond? Do you remember how your parents responded?
Are there any other separations that stand out in your mind?

8. Do you remember ever feeling rejected as a young child? Of course, looking back on it now, you may feel that it wasn't really rejection, but what I'm trying to ask about here is whether you remember ever having felt rejected in childhood.

How old were you when you first felt this way, and what did you do?
Why do you think your parent did those things – do you think he/she realised he/she was rejecting you?

8a. Were you ever frightened or worried as a child?

9. Were your parents ever threatening to you in any way maybe for discipline or even jokingly?

Some people have told us for example that their parents would threaten to leave or send them away from home, did this ever happen with your parents?
Some people have told us that their parents would use the silent treatment, did this ever happen with your parents?
Some people have memories of threats or some kind of behaviour that was abusive.
Did anything like this ever happen to you, or in you family?
How old were you at that time? Did it happen frequently?
Do you feel this experience affects you now as an adult?
Does it influence your approach to your own child?
Did you have any such experiences involving people outside your family?

10. In general, how do you think your overall experience with your parents has affected your adult personality?

Are there any aspects to your early experiences that you feel were a set-back in your development?

11. Why do you think your parents behaved as they did during your childhood?

12. Were there any other adults with whom you were close, like parents, as a child?

13. Did you ever experienced the loss of a parent or other close loved one while you were a young child – for example a sibling, or close family member?

Could you tell me about the circumstances, and how old were you at the time?
How did you respond at the time?
Was his death sudden or was it expected?
Can you recall your feelings at the time?
Have your feelings regarding this death changed much over time?
[if not said earlier] Did you attend the funeral, and what was it like for you?
[if loss of a parent or sibling] What would you say was the effect on your (other parent) and on your household, and how did this change over the years?
Would you say this loss has had an effect on your adult personality?
[when relevant] How does it affect your approach to your own child?

13a. Did you lose any other important persons during your childhood?
[same probes]

14. Other than any difficult experiences you've already described, have you had any other experiences which you would regard as potentially traumatic?

15. Now, I'd like to ask you a few more questions about your relationship with your parents. Were there many changes in your relationship with your parents after childhood?

We'll get to the present in a moment, but right now, I mean changes occurring roughly between your childhood and your adulthood?

16. What is the relationship with your parents like for you now as an adult? Here I am asking about your current relationship.

Do you have much contact with your parents at present?
What would you say the relationship with your parents is like currently?
Could you tell me about any (or any other) sources of dissatisfaction in your current relationship with your parents? Any special (or any other) sources of dissatisfaction?

17. I'd like to move now to a different sort of question –it's not about your relationship with your parents, instead, it's about an aspect of your current relationship with your children. How do you respond now, in terms of feelings, when you separate from your child/children?

[for individuals without children]
I'd like you to imagine that you have a one-year-old child, and I wonder how you think you might respond, in terms of feelings, if you had to separate from this child?
Do you think you'd ever feel worried about this child?

18. If you had three wishes for your child twenty years from now, what would they be? I'm thinking partly of the kind of future you would like to see for your child. I'll give you a minute or two to think about this one.
[change the question for imagined child]

19. Is there any particular thing which you feel you learned above all from your own childhood experiences? I'm thinking here of something you feel you might have gained from the kind of childhood you had.

20. We've been focusing a lot on the past in this interview, but I'd like to end up looking into the future. We've just talked about what you think you may have learned from your childhood experiences. I'd like to end by asking you what would you hope your child (or your imagined child) might have learned from his/her experiences of being parented by you.

APPENDIX E

Part I - Orientation to the speaker's childhood family

Before we begin, could you orient me to your childhood family? For example, where you were born, who was in your family, where you lived, what your parents did for a living, and whether you moved around much - things like that. I just want to know something about your family before we start.

Did you know your grandparents when you were a child?

a. Ask a bit about the relationship with each and frequency of contact. Assess specifically whether any were attachment figures for the speaker (and should, therefore, be included in the questions about 5 descriptive words and corresponding episodes.).
b. If they were not known personally, ask what the parents said about their parents.

Were there any other people to whom you were close when you were young?
(Explore whether there were any other attachment figures - about whom the five descriptive words and corresponding episodes should be obtained.)

What is the earliest memory that you have as a child? Tell me as much as you can remember about it.
Follow-up with questions about:

a. the sensory aspects of the memory;
b. whether anything "happens", i.e., whether it is an image or an episode;
c. how old the speaker was at the time;
d. why the speaker thinks he/she has this memory.

Part II: The relationships with attachment figures

I'd like you to describe your relationship with your mother (or attachment figure #1), as far back as you can remember.

Now, I'd like you to choose five words or phrases to describe your relationship with your mother when you were young. This may take a bit of time, so go ahead and think for a moment. I'll write them down as you're talking.
If adolescence or the present is the speaker's frame of reference, encourage them to think about early childhood. Assure them that adolescence and the present will be discussed later.

Okay, let me check, I wrote down [list the words or phrases], is that correct?

For each word or descriptive phrase, in the exact order in which they were given, the interviewer asks:

You said that relationship with your mother was _____. Can you tell me about a specific occasion when your relationship was _____? Try to think back as far as you can.
If the speaker does not provide an *episode*, clarify and ask again. If they do not conclude the episode, especially if protection or comfort were needed, ask how it ended (without specific reference to protection or comfort). If they have drifted from the topic, take them back to the moment when the story broke off and ask what happened after that.

Could you now describe your relationship with your father (or attachment figure #2), going as far back as you can remember.

Now, I'd like you to choose five words or phrases that describe your relationship with your father when you were young.

You said that relationship with your father was _____. Can you give me a memory of a specific occasion when your relationship was _____? Try to think back as far as you can.
If the speaker does not provide an *episode*, clarify and ask again. If they do not conclude the episode, especially if protection or comfort were needed, ask how it ended (without specific reference to protection or comfort). If they have drifted from the topic, take them back to the moment when the story broke off and ask what happened after that.

To which parent did you feel closest as a child?
Ask these as separate questions.
Why do you think you felt closer to _____?
Why isn't there this feeling with _____ (the other parent)?

Part III: Direct probes of normative events in which children often feel unsafe

The next set of questions is about some common experiences that children have.
For these questions, be sure that the examples include both parents, but it is not necessary to have an example for each parent for each answer. So if one parent is consistently omitted, e.g., the father, ask specifically about him two or three times.

Always ask the general (semantic) question first and then the episodic question. Ask about the speaker's age at the time, but only after the episode is complete and only if it is unclear.

What happened when you went to *bed* as a child?
Can you remember any specific time when you were in bed?
Be sure to explore any memories of fear, nightmares, sleeping with parents, etc. that the speaker introduces.

When you were *distressed* as a child, what did you do?
This question is semantic only. The subsequent questions elicit episodes.

For example, what happened when you were *ill* as a child?
Can you remember a specific instance?

What about when you were *hurt physically*, what would you do?
Can you remember a specific instance?

When you were *upset emotionally*, what would you do?
Can you remember a specific instance?

If you needed *comfort*, what would you do?
Can you remember an instance?

When you were distressed, would your parents hold you?
Can you remember a specific time and how that felt?
Probe for specific images of tactile, physical comfort.

Can you tell me about the first time you remember being *separated* from your parents?
Some speakers ask what constitutes a separation. Tell them that it is whenever they felt separated.
How did you respond? Probe if the response does not include both feelings and actions.
How do you think your parents felt? Ask what they did as well.

When you were young, did you ever feel *rejected* by your parents - even though they might not have meant it or have been aware of it?
Can you remember an instance? Be sure to get the age.
Why do you think your parents did this (or these things)?
Do you think they realized that you felt rejected?

Can you think of a time when your parents were *angry with you*? What happened?
Seek both temporal order (initiating events and consequences) and also feelings.

Can you think of a time when you were *angry with your parents*? What happened?
Seek both temporal order (initiating events and consequences) and also feelings.

Part IV: Direct probes of potentially dangerous experiences

Did your parents ever threaten you, for example, for discipline or even jokingly?
Be certain to include actions and not mere threats that resulted in no action.

For example, did they ever threaten to leave you?
Ask these questions one at a time.
For each, ask:
Tell me what happened.
If it is not mentioned spontaneously, probe for temporal order, imaged context, and the speaker's feelings during the event.

Or do you have any memories of frightening punishment or abuse?

Did you ever feel very frightened or not sure that you were safe?

The following questions refer only to threats that could be considered very serious or traumatic. If they are used, they should be handled cautiously such that an unwilling speaker is not pushed too far or a too-willing speaker is not encouraged to lose emotional control.

Omit these questions if there were no substantial threats.

Do you worry about something like this occurring again? Under what sort of conditions?
Explore whether the speaker thinks this could happen again:
a. following certain events
b. in certain contexts (places, images, feeling states)
c. is limited to anniversaries.

How likely do you think it is that this could happen again?
What would you do to try to recover if it happened again?

Has this event changed your relationships with other family members?
Ask these questions one at a time.
In what way?

Why do you think this has happened?

Can you think of anything good that has come from this experience?

Part V: Loss

When you were young, did you experience the loss of someone close to you?
All deaths of immediate family members should be addressed, beginning with the earliest. Although the intent of this question is to address death of family members, some speakers mention divorce or other separations and some mention the death of animals. For critical separations, the interviewer should adapt the questions below to fit the actual circumstances.
Ask the questions one at a time, in the clusters below.

a. **Can you tell me the circumstances and how old you were?**
   If the person was present at the death or funeral, ask for a description of what happened and how they felt.
   Were you present during the death? What happened? Did you go to the funeral? What was that like for you?
b. **How did you respond at the time?**
c. **Did you have any warning the death would occur?**
   If yes, ask for details.
d. **How did you feel at that time? Have your feelings regarding this death changed much over time?** If yes, ask how.
e. **How did it affect other members of your family?**
f. **How do you think this loss has affected your approach to your own child?**

Do you worry about people dying? Under what sort of conditions?

Has this event changed your relationships with other family members?
In what way?

Why do you think it has turned out that way?

Have you lost any close people as an adult?
Be sure to include the speaker's parents, siblings, spouse, and children if they are deceased.
Repeat the questions above, but only for significant losses.

Part VI: Integrative questions regarding childhood in general

These integrative questions are very important. Be sure to probe if the answers are very narrow or superficial.

Looking back on it now, do you think your parents loved you? Can you tell me how you know this?

Taken as a whole, how do you think your childhood experiences have affected your adult personality?

Are there any aspects of your childhood that you think were a setback or hindered your development?

Why do you think that your parents acted as they did, during your childhood?

Has your relationship with your parents changed since you have gotten older? In what way?

Was it any different in adolescence?
This question is especially important for some mixed and compulsive or obsessive classifications.
Can you give me an example?

How is your relationship with your parents now?

How do you think your childhood relationship with your parents or your other early experiences prepared you, as an adolescent and adult, for love relationships? For example, did they affect whether you chose to marry, how you chose your wife (husband/partner), or how you manage your adult love relationships?
Be prepared to break this question into smaller components.

Thinking about your life now, do you have a partner? Children? If this information is already known, modify the question accordingly. If there is a spouse or child, ask the following questions:

How do you feel when you separate from your children? Your partner?

Part VII: Closing integrative questions

Thinking over all that you have told me, what do you think you have learned from your experience as a child?

Now that you are an adult, are there any things that you wish to do with your children that are similar to what your parents did? Ask for details.
Are there any things you would like to do differently? Ask for details.

I've been asking about your relationships with your parents, as a child and up to now. Is there something more that you wish to add that is important to understand the adult you have become?

Sometimes, after this sort of interview, you might find that you continue to think about these issues after the interview. If you find yourself feeling uncomfortable or thinking about them too much, please don't hesitate to contact me. In any case, thank you very much.

APPENDIX F

CECA Interview

Household Arrangements (HHA) and Institutional Care Arrangements (ICA)

Interviewer should use information about parental loss, alternative caregivers, and other relevant information gained through the AAI, demographics interview, and the CECA calendar (total #) household arrangements and institutional stays. Remember to question for changes that may occur during and after a change in HHA(s). Institutional stays (those lasting several years of one or both time frames) should be questioned and graded (A, B, C, etc.) for neglect and antipathy. If there are multiple long term ICA ask about the worst (grade F/D) and the best (grade A/B) to access severity of neglect and antipathy from a staff member or peer (if applicable).

Separation/Loss

Key Rating Points

Determine # of HHA/s lasting at least 12 months (include single parents, adoptions, foster homes, blended, etc.)

Definition of Alternative Caregiver (AC)

1) Adult who has responsibilities for raising the child and lives within the home (i.e., grandmother, nanny, etc.)
2) Adult living outside the home, with whom S spends at least 1/3 of their time and has caregiving responsibilities (i.e., babysitter who looks after S every day after school)
3) Natural parent with whom child spends most weekends and a fair portion of the holidays.

**See overview in manual for more detail.*

Institutional Care Arrangements

Note to Interviewer

On the Institutional Care Arrangement (ICA) calendar record all institutional stays. If there are multiple long term ICAs ask about the worst (grade F/D) and the best (grade A/B) to access severity of neglect and antipathy from a staff member or peer. For each long term (several plus years) ICA, know how often or if parents, sibs, friends, and other support figures visited and record on the ICA calendar.

Were you ever separated from either parent for any length of time before age 18 *[at least 12 months]*?

YES: Which parent?
When was that? How old were you?
For how long?
What was the reason for the separation? Did you see them much?

Can you tell more about what happened?
Who brought you up for most of your childhood?
Was it mainly your parents?
Did anyone else look after you for more than 12 months?
How many times did that happen?

Were you ever in an institutional placement?

If Yes:

What type (medical hospital, orphanage, group home, shelter, juvenile detention, etc.)?
For how long ?
Were your siblings with you? How often would you see them? (daily, weekly, etc.)
How often did your parents & siblings (steps, biological, foster) visit or phone? (daily, weekly, etc.)
How about friends or relatives (support figures), did they visit or phone? How often? (daily, weekly, etc)

During any of your (*list name/s of ICA*), was there a 'key staff' member (or peer) who spent time with you and become involved with you in either a positive or negative way?

If Yes: Adapt the following antipathy questions to query for possible antipathy from a staff member or peer if one is identified when S has spent several years in one or more ICAs.

Section 1: Antipathy

[Relationship with step(s)/surrogate(s) parent(s) or alternative caregiver(s)]

This section requires ratings for each time frame ages 0-11 and ages 12-18. Question various parental figures for antipathy by moving chronologically through the two time frames. Spend more time on longer arrangements (HHA or ICA) and/or on short ones that have vastly different parental figure/s. Remember these are objective ratings made by the interviewer; not subjective ones based on what the S feels or think to be true. Ask questions until you have enough information in order to make an objective rating (get examples with ages and frequency).

Relationship with Mother Figure [step(s)/surrogate(s) and alternative caregiver(s)]

Key Probes
How often?
How old?
How long?
Who was involved?
What happened?
What was the worst?
What was the typical?

Note to Interviewer
To rate antipathy incidents must be directed and focused at subject.

Key Rating Points
-Affection (mother kisses, hugs, etc)
-Hostile dislike (hot or cold)
-Rejection
-Ignored
-Scapegoating
-Favoritism (siblings)
-Arguments
-Threats
-Criticism
-Humiliation
-Negative Interactions

Note to Interviewer
S may give examples of psychological abuse here as well. Interviewer must make a judgement on whether and how much to question/probe at this point. Interviewer may decide to wait until later in the interview.

Were you close to your (step/surrogate) mother during childhood?

Was your s/mother affectionate towards you?
- How did she show it?
- How often did it happen?
- Would she kiss or hug you? Hold you?
- Did you ever wish she were more affectionate?

Did you ever feel that your s/mother didn't like you?
Do you remember any of those times?
- Why do you think that was?
- How would she show it?
- What would she say to you?

Did she ever say anything that made you feel you weren't accepted by her?
- What was that?
- In what types of situations would she say this?

Did you ever feel that she just didn't want you around?
- What would she say or do? (ex.)
- How often would this happen?

Was she ever cold or distant?
- Can you give me an example?

Did she ever push you away and make you feel you were a nuisance?
- What would she say or do? (ex.)
- How often would it happen?
- How long did this go on?

Did she ever threaten to leave or send you away?
- What would she say? How often?
- Did she ever actually leave you? How often?

Was your s/mother very hard to please?
- Was she very critical of you?
- Could you give me an example?
  - (e.g. appearance, school work, etc.)

Did she have any *favorites*?
- Who was that?
- In what way did she show it?

Did you ever feel *rejected* by your s/mother?
- Can you think of an example?

If probed, make sure to get all information required to make a rating (turn to psychological abuse, section 7, for key . rating points).

Note to Interviewer
S may give you information about discord/tension/violence within the HHA. Again, interviewer must make a judgement on whether or how much to probe at this point (if probed, turn to discord/tension interview section for key rating points).

***Important Note to Interviewer**
Make sure you have questioned S about changes in behaviors so that you can reflect it in the antipathy rating for all parent figure/s.

***Important Note to Interviewer**
Repeat Section 2 (antipathy) for all parent figures for any HHA lasting at least 12 months or longer.
Institutional antipathy should only be questioned if S has identified a 'key staff' person. Question for across institutional care arrangement with a focus on the longer (1 yr. plus) stays. For example, a particularly mean staff person during a 3 week institutional stay will contribute little to an overall rating for an entire rating period.

Relationship with Father [step(s)/surrogate(s) and alternative caregiver(s)]

Note to Interviewer
Build on examples from AAI and demographics interview to question about father figure's (possible) antipathy.

Key Probes
How often?
How old?
How long?
Who was involved?
What happened?

How often did that happen?

Did your s/mother ever do anything that was deliberately mean or cruel?
Can you give me an example?
How often did that happen?

Did she pick on you more than the others?
Can you give an example?

Was there anyone else she would pick on more?
Who was that?

Did you argue much with your s/mother?
What about? How often?
What were the arguments like?
When did that start? How old were you?

***Do you think your relationship changed very much with your s/mother?**
What about between the ages of 0-11?
How about between the ages of 12-18, in junior high and high school, your teen years?
If yes:
How did it change?(e.g. closeness, antipathy, etc.)
How old were you when it changed?

***How well did you get along with..... (step/surrogate/mother or alternative caregiver)?**
Was it a very different relationship from your natural mother or other parent figures?
If yes:
In what way was it different?

Again, thinking back to your early years...

Was your relationship with your s/father very different from that with you mother? Were you close to your s/father?
Can you tell me more about that?

Was your s/father affectionate towards you?
How did he show it?
Would he kiss and hug you? Hold you?
Did you ever wish he were more affectionate?

Was he ever critical of you?
Can you give me an example?

Did you ever feel that your s/father didn't like you or did not want you (rejecting)?
Can you think of an example of this?

Note to Interviewer
To rate antipathy incidents must be directed and focused on subject.

Key Rating Points
-Affection (father kisses, hugs, etc.)
-Extreme dislike (hot or cold)
-Rejection
-Ignored
-Scapegoating
-Favoritism (with siblings)
-Arguments
-Threats
-Criticism
-Humiliation
-Negative Interactions

Note to Interviewer
S may give examples of psychological abuse here. Interviewer must make a judgement on whether to probe for this now, or to wait and reference it at a later point in the interview. If probed, make sure to get all information required to make a rating (turn to psychological abuse, section 7, for key rating points).

Note to Interviewer
S may give you information about discord within the household. Again, interviewer must make a judgement on whether or how much to question/probe at this point (if questioned, turn to section on discord/tension in order to get key rating points).

Did he ever say anything that made you feel he didn't accept you?
What was that?

Was your father very hard to please?
Was he very critical of you?
Can you think of an example of when he would be critical? (e.g. appearance, school work, etc.)

Did you ever feel rejected by your father?
Can you think of an example?
Did that sort of thing happen often?

Did you feel that he just didn't want you around?
Do you think he ever wanted to avoid your company?
What would he say or do?

Did he have favorites?
Who was that? Can you give me an example?

Did he pick on you more than the others?
Can you give me an example?

Was there anyone else who was picked on by your s/father?
Who was that?
In what way?

Did your s/father ever do anything that was deliberately mean or cruel?
Can you give me an example?
Did it happen often?

Did he ever push you away and make you feel you were a nuisance?
What would he say or do?
How often would that happen?

Did he ever threaten to send you away or leave you?
What would he say?
How often? When?
Did he ever actually leave you?

Did you argue much with your s/father?
What were the arguments about?
What would happen typically?
When did that start?
How old were you?
How frequent were they?

***Important Note to Interviewer**
Make sure you have questioned S about changes in behaviors so that you can reflect these in the rating for antipathy father/father figure.

***Important note to Interviewer**
Repeat Section 2 (antipathy father figure) for all step(s)/surrogate(s) and alternative caregivers for any HHA lasting 12 months or longer during ages 0-11 and 12-18.

***Do you think your relationship changed very much with your s/father?**

What about between the ages of 0-11?
How about between the ages of 12-18, in junior high and high school, your teen years?

If yes:
How did it change?(e.g. closeness, antipathy, etc.)
How old were you when it changed?

***How well did you get along with..... (step(s)/surrogate(s) father or alternative caregiver)?**

Was it a very different relationship from your natural father?

If yes:
In what way?

Section 2: Neglect (Psychological and Physical)

Make sure you have a clear understanding of both psychological and physical neglect from both/all parent figures during the time frames of ages 0-11 and 12-18. Also, question for any changes in behaviors with different parent figures and long ICA stays. If there are multiple long term ICA ask about the worst (grade F/D) and the best (grade A/B) to access severity of neglect.

Psychological Neglect

Note to Interviewer:
If S was in an institutional setting for a year or longer you will need to question about possible neglect that occurred there. If there are multiple ICAs have S grade (A/B = good, C/D = average, and D/F = terrible) the ICAs. Ask neglect questions of the 'good' and 'terrible' institutions but try to focus on longest stays (1 yr. plus). Use the ICA calendar for reference during the interview if needed.

Key Rating Points
Look at degree parent figures were unconcerned about the following areas of S's life:

-Mood States/Feelings (attunement)
-School Attendance/Homework
-School Performance (report cards)
-Achievements (sports, music, etc.)
-Career/Future plans
-S's Friends/Socializing
-Spending Time w/S/Companionship
-S's Birthday/Special Occasions
-Making S Feel Special/Loved

Note to Interviewer
Remember to get objective information for each parent figure/s (specific examples) to make a rating.

Now, I would like to ask you a bit more about your relationship with your parents starting with ages 0-11, when you lived with (use calendar to point to)...

Do you think your parent(s) always had time for you and took an interest in you?
Could you go to them if you were upset or unhappy? Would they be helpful?
When you were especially excited about something how did they respond?
What sort of things would you do together?
Any special games or activities?

Would they help you feel safe and protected?
Can you give me an example?

Was that the same for your mother and father?
If Not: Which one took more interest?
In what way?

Were they interested in who your friends were?
Would they know who they were?
Would they let you invite them back home or go to their house?

Would they help you to feel that you were important or special in any way?
Can you give me an example?

Would they remember your birthday?
What was that like? Were they both there?
Would you be allowed to have parties?

Would your parent(s) help celebrate special occasions or have other special activities or time with you?
Can you give me an example?

Did your parent(s) take much interest in your school work and other achievements?
Were mother and father the same?
Did they read report cards?
Did they encourage you to do well?
Were they satisfied with your achievements?

Psychological Neglect (continued)

Would they go and see the teachers for open house or parent /teacher conferences?
Did they know what subjects you were good at, what ones you liked?
Did they ever come see you in school performances (concerts, plays, sports, etc.)?
Was that both parents?

Did they take an interest in your career or future plans?
Was either a role model for you?
Did they encourage you to pursue your interests or talents?

Did either/any of them "go to bat" or "stand up" for you during a difficult situation?
Can you give me an example?
What about the other parent?

Was there a time your parents let you down in a difficult situation?
Can you give me an example?

When you were older, in your teen years (ages 12-18), did your parents/parent figure change at all in the amount of interest they took in your emotional needs, the types of things we just discussed?
If Yes:
In what way? (more or less)
How old were you? How long did it last?
Why do you think it changed?

Important Interviewer Note
Make sure to rate for changes in psychological neglect throughout childhood based on ages 0-11 and ages 12-18 by all caregivers in HHAs and in some cases longer ICA.

Physical Neglect

Thinking back to your early childhood memories say ages 6 or 11. Can you describe to me what a typical weekday would be like when you were in grade school? Just run through the daily routine from the time you woke up until bedtime.

Who would make your **breakfast?**
How would you **get to school?** Was it far from home?
Did you have **lunch at school?**
Would anyone **pick you up from school?**
When would your **mother/father get home from work?**
Did you spend **time together** with your parents before bedtime?
Would anyone give you a **bath?**
Who would **put you to bed?**
Was there any **routine?** (brush teeth, bath, etc)

Key Rating Points
Look at degree parent figures were unconcerned about the following areas of S's life:

-Material Needs (food, clothes, cleanliness)
-Typical Day Concerns/Routines
-Supervision/Safety Issues (left alone, crossing streets, etc.)
-Routine Medical/Dental care
-Health/Illness (what would happen?)
-Caregivers/Nannies/Babysitters
-Protecting from Harm/Bad Influences (drugs/alcohol, bullies, abuse, etc.)

Physical Neglect (continued)

Interviewer Note
S may give examples of psychological abuse here. Interviewer must decide if they want to question this here or wait until further into the interview. If probed, please turn to psychological abuse section in order to get all key rating information.

Did your parents take good care of your material needs?
Did you have clean clothes to wear?
School clothes and supplies?
Which parent was mostly responsible?

Did they make sure you were neat and clean?
(clean hair, fingernails, daily baths, teeth, etc.)
Did you always have enough to eat?
Did you ever go hungry?
If Yes: Why was that?

If you were spending time out of the house (playing, riding bike) would your parents know where you were?

Did they care about your physical safety (like giving you instructions about crossing busy streets, or riding your bike in the street, etc)?
Can you remember what they would say or do?
Were both your parents concerned about this?

When your parent(s) couldn't be home with you who would take care of you?
Were you safe with (*named person*)?
At what age were you left home without supervision?
Would they ever leave you at home alone when you were really young?
Would they leave you with brothers/sisters?

Interviewer Note
Remember to get objective information for making physical neglect ratings for all parent/s or alternative caregiver/s (living in or out of the HHA).

Did your parent(s) always keep a close eye on you when you were growing up?

If you were sick/ill and had to take time off school, who would take care of you?
Were your parents especially caring if you were sick/ill?
Was that both of them?
Would you get any special treatment?
Was there ever a time you were taken to the hospital or the doctor because you were sick
Did your parent(s) take you for regular dental and medical check-ups?

Did your parent(s) ever give you drugs or alcohol? or
Did they ever put you in other situations where your life might be in danger? (guns/weapons easily accessible, bad neighborhood, etc.)

Interviewer Note
Incidents of abuse may come up here. Make a mental note and wait to question later in the interview, or question for the appropriate abuse (physical, sexual, psychological). Make sure to cover all key rating points (turn to abuse section).

***Again, did your parents/parent figures change at all in the amount of interest they took in your physical well-being when you became a teenager?**
If Yes: In what way?
How old were you?
How long did it go on that way?
Why do you think it changed?

***Important Interviewer Note**
Make sure to rate for changes in physical neglect throughout childhood (early and late). Make sure you can determine a rating for each HHA. Keep in mind expectable changes that would be developmentally expected of a teenager versus a young child (e.g. staying home alone, chores, etc).

Section 3: Discord/Tension, Non-Personal and Interpersonal Violence

Include to what extent any child(ren), excluding subject, and/or other HHA members became involved with the discord/tension and violence. If there is both tension and discord, give priority to discord; however tension can be rated as a part of the discord, or on its own. Question chronologically, to get all necessary information for rating each age frame, early (ages 0-11) and late (12-18).

Discord/Tension

Interviewer Note

Discord/tension, non-personal and interpersonal violence includes all HHA members in the rating. Do not include the S as an initiator of discord in this rating. Also, be able to indicate 'persons involved' involved in the discord/tension, non-personal and interpersonal violence:

-Parents only
-Parents and children
-Parents and other HHA members (grandmother, nanny, uncle, etc.)
-Children only

Key Rating Points

Rate the following points in terms of frequency/severity (get worst incident and typical day-to-day incidents), who was involved (persons within the HHA only), and at what age(s) it happened

-Arguments/raised voices
-Tensions/periods of silences
-Objects thrown
-Types of objects thrown
-Objects thrown at person
-Types of objects thrown at person
- Severity/Threatfulness of violence
-Types of injuries sustained
-Hospital treatment required
-Official contact (police, social worker, teacher, etc)

Violence

Key Probes

How often?
How old? (started/stopped)
Who was involved?
What happened?
Any changes?
If so, when and in what way?

***Important Note to Interviewer**

Make sure to get changes in rating information for discord/tension, inter-personal, and non-personal violence for all HHAs. If there are changes make sure to get age change took place and when it started/stopped.

How well did your parent(s) get along?
- Do you think they were close? How so?
- Did you ever see them show affection to each other?

Did your parents (any parent figures) argue much?

If Yes:
- How often was that?
- What was it like at its worst?
- What about typically?
- Would there be raised voices?
- Were the arguments in front of you?
- Would other household members get involved?
- How about your brothers and sisters?
- Was anyone hurt? Were the police or paramedics/ambulance service ever called?

Was there a lot of tension in your home (periods of not talking to one another) between your parent(s)? Anyone else living in the home ?
- Were there any other sources of tension in the home (money problems, job stress, etc.)?
- How were they handled?
- Who was involved usually?

Did your parents/parent figures ever throw or break things when they were angry? Anyone else?

If Yes:
- Was the object thrown just to express anger?
- Were objects thrown at people?

Were there any threats of violence or any physical violence in your home between your parents/parent figures? How about anyone else? (exclude subject as perpetrator)

If Yes:
- How often did it happen?
- What would happen? (worst, typical)
- How old were you?
- How long did that go on for?
- Were there any injuries as a result?
- Any hospital treatment?
- Any official contact with police, social worker, teacher, etc.?

***Were there any changes in regard to what we just discussed during your teenage years (or other household arrangements)?**

If Yes: In what way?
- How old were you?
- How long did it go on that way?

Section 4: Physical Abuse

This section covers physical abuse that occurs at any point and by any perpetrator in childhood. Interviewer should remember to ask about severity, frequency, number of perpetrators (if more than one), and disclosure to parents or support figures by getting examples/specific incidents and age at which the incident occurred.

Discipline (warm-up questions)

Note to Interviewer
Extreme lack of discipline could be rated as physical neglect, just as extreme discipline itself could be rated as physical abuse.

At this point physical abuse may have already came up. Interviewer must use judgement on how to question the abuse at this point. Focus on ratable information. The precise sequence or wording of the question is not crucial for making a rating.

Key Probes
What happened?
How often?
What age started/stopped?
What was the worst incident?
What was the typical incident?
Was the perpetrator out of control?

Interviewer Note
Degree of violence looks at whether *S's life was endangered, severe injury was likely, and if an implement was used.* Severity/Threatfulness looks at the *overall context* of the abuse (i.e., abuse from outside the HHA may be less threatful than if it came from a HHA member) and the *degree to which the perpetrator was out of control and/or aggressive.*

Were your parents the same in terms of discipline?
If No: How were they different?

Were your parents fair with their discipline do you think?

How would your parents impose discipline and control?
If you had done something wrong how would you be punished?

(e.g. would they send you to your room, take away your allowance, reason/explain to you why you shouldn't do this or that, shout, get angry, hit/smack you, make you feel stupid or humiliated, tell that your behaviors made them physically ill, or make you feel guilty)

If physical punishment/abuse, ask:

What was the worst incident of being hit (kicked, slapped, beaten) that you remember?
How old were you then?
What was the typical day to day hitting/beating like?

How often did it happen like that?
Was it once...every 3 months or more... or every week?

Was... (*perpetrator*) out of control during this time?
Can you give me an example?

Was there a set pattern to the punishments/beatings?
Did they happen in a very similar way each time?
Were you ever beaten up? Kicked? Hit?
Were you ever hospitalized/injured?

Key Rating Points

-Degree of violence
-Degree of Threatfulness/Severity
-Frequency
-Disclosure* (If yes: to whom, outcome, and when)
-Number of perpetrators
-Accompanied by

*Please note the disclosure rating is only made on physical abuse incidents that have a severity/treat rating of 1or 2.

Note to Interviewer

If during the course of the narrative of physical abuse, it becomes clear that physical abuse was '*accompanied by*' other forms of abuse then rate as complex abuse. If more than one perpetrator be sure to establish number for any incident (one or more than one).Make sure to note changes in severity/threatfulness of abuse and/or when abuse stopped.

What sort of state would...(*name of perpetrator*) be in?
Would he/she say anything at the same time?
Was he/she out of control?

*Did you tell anyone about the abuse?

If Yes, ask:
Whom did you tell (support figure/parent)?
What happened after you told (outcome)? When did you tell (mastery/helplessness)?

Were there any other incidents like the ones you just described or did anyone else ever hurt you physically as a child?

If Yes: How old were you?
Can you tell me a little bit more?
What would happen? How often?
What was the worst incident?

Use any appropriate probes above.

Section 5: Sexual Abuse

This section covers sexual abuse in childhood, by any perpetrator. In order to make a complete rating one most know severity/threatfulness, frequency, whether S was coerced (type(s) of coercion), whether there was more than one perpetrator, and if the sexual abuse was accompanied by any other abuse (physical or psychological). If the severity rating is a 1 or 2, then also question whether S told anyone (disclosure).

Sexual History (warm-up questions)

Note to Interviewer
Sexual abuse may have already come up in this interview or in an AAI. The interviewer must use his/her best judgement on how/when to question about sexual abuse. Do acknowledge to the S that this has been touched on before, but note that you may need to ask more questions. Focus on obtaining ratable information. The precise sequence or wording of the questions is not important.

Sexual Abuse

Key Rating Points
The following points are needed to complete the launching form:

-Date/age of first significant relationship (mm/yy) and whether it was a sexual, cohabiting, or eventual marriage relationship
-Degree of sexual intimacy of first significant relationship
-Relationship to and date of (mm/yy) first sexual intercourse partner
-Use of contraception at first sexual intercourse
-Did first sexual intercourse result in pregnancy

Ask the following for any first pregnancy (female and male):
-Age at first pregnancy (mm/yy)
-Was S's/partner's pregnancy in a cohabiting relationship?
-Was S's/partner's first pregnancy planned?
-Did the first pregnancy come to term (i.e. miscarriage, termination, etc.)?

With whom was your **first** serious relationship?
How old were you then? (mm/yy)
How long did you go out with him/her?
Did you live together and/or get married?
Was this the first person you had intercourse with?

How old were you when you **first** had sexual intercourse (of your own free will)? (mm/yy)
What was your relationship to the other person? (one night stand, casual friend, or long term)

Did you know about contraception at the time of your **first** intercourse? Did you use it/any?
If not clear: Did it result in a pregnancy?

At what age was your **first** pregnancy (or how old were you when your partner became pregnant?) (mm/yy)
If a first pregnancy & not known, ask:
Were you in a cohabiting relationship at the time?
Was it planned?
Did you or your partner keep the baby?
(i.e., miscarriage, termination, adoption)

When you were a child or a teenager did you ever have an unwanted sexual experience?

If Yes: ***Go to abuse questions*

If No:
Has anyone ever tried or succeeded in having sexual intercourse with you against you wishes?
When was that?
(Questions for males):
Did you ever have a sexual experience with an older worman/girl where you felt pressured into having sex?
(Ask only if appropriate)
Did anyone ever put you in a situation where you felt you had to have sex?
Were you ever pressured by other boys to become sexually involved with them?

Sexual Abuse (continued)

Key Probes
What happened?
How often?
What age started/stopped?
What was the worst incident?
Did you tell anyone?
Were you threatened (injuries)?

Important Note to Interviewer
If there is clearly sexual abuse, make sure to ask S all the questions on the next page. The interviewer should be able to make a rating on all incidents of sexual abuse.

.

Key Rating Points
-Severity (relationship to perpetrator and degree of contact)
-Frequency
-Disclosure (If yes ask: when, to whom, and the outcome)*
-Coercion (game, threats, bribe, force, etc.)
-Number of perpetrators
-Accompanied by (complex abuse)

*Please note that these ratings are made only on sexual abuse incidents that have a severity rating of 1 or 2.

Note to Interviewer
Look at verbal and non-verbal solicitations, i.e., S was exposed to or made to read pornographic materials, perpetrator used explicit sex talk in front of S, etc. (These would rate a 3 on the M-CECA).

Can you think of any upsetting sexual experiences you had before you were 18?
...Or anything like that with a relative?
...Or any unwanted sexual experience with someone in authority, like a teacher or doctor?

What about a situation where you were nearly involved in an unwanted sexual incident but avoided it?
If Yes, who was involved? (how many)
Was... (perpetrator) living in the same house as you when that happened?
Can you tell me exactly what happened?

Did it involve touching or not?
If yes, continue on. * **If no**, go to "no touching or physical contact" section at the bottom.

If Yes to touching or physical contact:
Where did s/he touch you?
*[*Ask what is appropriate to S's incident]*
Was it your breasts or between the legs?
Were your clothes on or off?
Did it involve penetration? With what?
Did you have to touch her/him?
*[*Ask what is appropriate to S's incident]*
Was that his penis?
Was it her breasts or between her legs?
Did it involve masturbation?
Was that to her/him or to you?
If Appropriate:
Did it involve anything else, like assault with an implement?
Did you experience it as sexual at the time it occurred?
Did you have sexual intercourse with him/her?
If clearly sexual abuse, then ask the relevant questions for each incident.

***If No to touching or physical contact:**
At what point did you realize what it was?
Did s/he ask you to have sex with him/her?
What did s/he say?
Was s/he very persistent?
How did you avoid her/him touching you?
Did you get away?

If there is clearly no sexual abuse go to section 6, psychological abuse

Sexual Abuse (continued)

Note to Interviewer
Ask all questions (or know the answers) on this page if S had any unwanted sexual contact during childhood.
If S brings up a gang/group rape ask them to identify if any one person stood out. If one does, then focus questions on that person. If not, then ask about gang/group as a whole.

Note to Interviewer
If force was used, make sure that it isn't better accounted for under physical abuse. If you can rate physical abuse according to M-CECA standards then the interviewer/rater should not rate force under coercion. If physical abuse is ratable, then one would rate sexual abuse *accompanied by* physical abuse (this is complex abuse; possible psychological abuse could also be rated as *accompanied by*).

Key Rating Points
-Severity (relationship to perpetrator and degree of contact)
-Frequency
-Disclosure*(If yes ask: when, to whom, and the outcome)
-Coercion (game, threats, bribe, force, etc.)
-Number of perpetrators
-Accompanied by (complex abuse)

*Please note that the disclosure rating is made only on sexual abuse incidents that have a severity rating of 1 or 2.

***Note to Interviewer**
Make sure to get all information needed for rating on each incident. Repeat this section for each perpetrator of sexual abuse.

*How old were you when the abuse happened first?
How long did it go on for?
Did it happen the same way each time?

How many times did it happen? *(1x, every 3m or more, weekly)*
When did it stop?

Did s/he make any threats or use violence?
Did s/he ever use physical force on you?
Did s/he ever threaten to hurt anyone else?

Did s/he do anything deliberately mean or cruel?

Did s/he offer you a bribe or promise you anything?
Did s/he ever offer you candy or money?

Did s/he ever put pressure on you to continue with the ... [*sexual acts, or use S's words*]?
e.g. in order to protect someone or to keep the family together (blackmail)?

Did s/he try to persuade you it was normal? Or make it into a game?

Were you able to tell you parents (if applicable) or anyone else (support figure)? *
Whom did you tell?
When did you tell them? (mastery/helplessness)
What did they do?

If Applicable: When did it end?
What were the circumstances?

***Have there been any other time when you were sexually approached against your wishes?**

Section 6: Psychological Abuse

This section covers several types of psychological abuse that occurred at any point during childhood by one or more perpetrators. In order to rate psychological abuse there are 3 points to keep in mind: 1) abuse must be intentional (perpetrator intended to make S suffer), 2) abuse must be a deliberate act on the part of the perpetrator, 3) abuse must be directly aimed at the S. Again, severity/threatfulness, frequency, number of perpetrators, and whether the psychological abuse was accompanied by another form of abuse (physical or sexual) are essential to rating psychological abuse. If the severity/threat rating is a 1 or a 2, then the interviewer must question about disclosure.

Psychological Abuse

Note to Interviewer
Use best judgement on questions used in this section. If there is clearly no psychological abuse do not ask all the questions in this section. Choose only the ones that best suit the S's likely experience. Reference what you already know at this point to get any further information you need. Often, psychological abuse (if rated) will be *accompanied by* physical or sexual abuse, or vise versa (complex abuse).

Key Probes
What happened exactly?
Do you think it was intentional?
Was it always aimed at you?
How often would it happen like that?
What age did it start/stop?
What was the worst incident?
Did you tell anyone?

Key Rating Points
-Severity (degree which abuse was deliberate, intentional, and aimed at S)
-Frequency
-Disclosure* (if yes ask: when, to whom, and the outcome)
-Number of perpetrators
-Accompanied by

*Please note that the disclosure is only rated on psychological abuse incidents that have a severity/threat rating of 1 or 2.

Besides anything you've already mentioned, did anyone do anything particularly mean and cruel to you when you were a child?

Anyone else?

Did anyone torment you?

Did anyone ever frighten or hurt you just for the fun of it?

Did anyone ever threaten to hurt you to get you to do what they wanted?

Did anyone ever threaten to hurt someone else if you didn't do what they wanted?

Did anyone ever take away or destroy something that you especially valued like a toy or a pet?

Did anyone ever deprive you of basic needs, for example; eating, drinking, sleeping, bathing, or using the bathroom or anything like that?

Do you ever remember being deliberately frightened, humiliated, or terrorized?

Did anyone ever try to confuse you, mix you up, brainwash you, or "mess with your mind"?

Did anyone ever force you to do something you thought was wrong or degrading (e.g. stealing, or taking drugs)?

Did anyone try to control or dominate you? In what way?

If Yes to any of the above, ask the following:

Psychological Abuse (continued)

Key Rating Points
-Severity (degree which abuse was deliberate, intentional, and aimed at S)
-Frequency
-Disclosure* (tell anyone?)*
-Number of perpetrators
-Accompanied by

Note to Interviewer
If force was used, make sure that it isn't better accounted for under physical abuse. If physical abuse is ratable by MCECA standards, then rate psychological abuse *accompanied by* physical abuse (this is complex abuse; possible sexual abuse could also be rated as *accompanied by*).

***Note to Interviewer**
Make sure to question each perpetrator in order to have complete ratings. Remember that the questions are not as important as eliciting enough information in order to make a complete rating.

Who was it?

What did they do exactly?

If Applicable:
Were threats used by…*perpetrator*?

Was just one person involved? How many?

How often would that happen?
Was that once? Every 3 months? Or every week?

When did it start? How old were you?
When did it end? How old?

Did you tell your parents (if applicable) or anyone else about what was going on?*
When and whom did you tell?
What happened after you told?

***Was there anyone else who treated you like that too during your childhood?**

If Yes,: Repeat section above.

APPENDIX G

CECA inter-scale correlations (Kendall's tau-b)

	Antipathy	Psychological Neglect	Physical Neglect	Discord	Physical Abuse	Sexual Abuse
Antipathy	-	-	-	-		
Psychological Neglect	.55**	-	-	-		
Physical Neglect	.36**	.65**	-	-		
Discord	.47**	.45**	.46**	-		
Physical Abuse	.38**	.46**	.43**	.49**		
Sexual Abuse	.08	.25*	.22	.22	.18	
Psychological Abuse	.49**	.45**	.39**	.43**	.60**	.24

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

APPENDIX H

RAPFA INTERVIEW

****Before beginning , make sure you have read the manual so you understand the layout of the interview.****

I. EDUCATION/WORK

Note:
You should know from the demographics questionnaire if S has been in high school, college, a training program, and/or working during last five years. Ask questions from appropriate sections (A for high school; B for college, grad school, or vocational training; C for full-time employment). Always include questions about college/grad school/training when subject reports returning to school/training, or attending an educational program in addition to working at a job.

A. HIGH SCHOOL
(FOR LAST **FIVE** YEARS)

Defining Characteristics for A, B, & C:
- Contractual responsibilities & tasks
- Standard/quality expectations
- Time constraints

Processes
- Reliability
- Skills
- Peer and authority relationships
- Problem solving
- Autonomy/collegiality

Type-(discordant/avoidant/asymmetry)

NOTE: *Work in high school can include working for parents, whether or not it is in order to receive financial compensation. Volunteer jobs can be included.*

What was high school like for you?
How did you do in your classes?
What kind of grades did you get?
How did your work compare with the work of most of the other kids?

How did you get along with your teachers and classmates?

What kinds of activities were you involved in at school?
Probe for *artistic areas (music, art), clubs, and sports*

Did you have any difficulty keeping up with both activities and grades?

Did you ever have any problems with teachers or other students?
YES: What happened?
How often did that happen?
How were they resolved?
Did these problems ever result in suspension or Expulsion?

Did you ever skip school or come to school late?
YES: How often?
How late?
Did this cause problems?

Did you graduate with a diploma?
NO: What happened?
Did you get a GED? When? How?
How did the GED program go for you?

Did you have any jobs while you were in high school?
YES: How did you get the job?
What did you do?
How often did you work (hours/week)?

What responsibilities did you have?
What was a typical work shift/day/evening on your job like?
Did you earn "promotions" or more responsibilities

/higher wages?

Type-(discordant/avoidant/asymmetry)
Failure to have talents recognized
Failure of others to live up to standards
Tension from remarks/actions experienced as threatening or neglectful
Contrast in relationships

Did you ever have problems doing this job?
With co-workers or your boss?
What happened?
How severe was the problem?
How was it resolved?

How long did the job last?
Why did it end?
Was it a sudden decision or had you been thinking
About it?
Did you have another job to go to?

Type –(rapid turnover)

B. COLLEGE, GRADUATE SCHOOL, or TRAINING:
(FOR LAST **FIVE** YEARS)

Did you go to college, grad school or some kind of training during the past five years?
YES: Did you have a major/degree plan already selected?
Did you know what you wanted to get a degree in?
Did this ever change while you were in college?
Tell me about it.

Type- (rapid turnover)

How did the courses go?

Probe for *a sense of how the subject performed in various kinds of college courses and demands– labs, lecture classes, seminars, independent study, exams, papers – by asking them to tell you about the kinds of courses they took and how they functioned – attendance, getting assignments done in a timely manner, contributing in class...)*

Type-(avoidant/discordant/asymmetry)

Failure to have talents recognized
Failure of others to live up to standards Avoidance motivated by stress
High level of investment w/ personal sacrifice in work
Contrast in relationships
Tension from remarks/actions experienced as threatening or neglectful

How did you get along with fellow students, roommates, and your college professors/teachers?
Did problems arise with any of these people?
How were they resolved?

Did you feel that your abilities were recognized by your teachers? Or fellow students?
NO: Did you say anything?
Did that lead to disagreements/tension?

Did you graduate? What degree did you get?
NO: What happened?
Did you ever go back to try to finish your degree?
What happened when you went back?

Did you ever go back for graduate training or training in another area?

YES*: Ask all questions for college section for each significant return to school during the past five years (pursuing a degree or attending for more than one semester, etc.).*

C. WORKING
(DURING SOME PART OF THE LAST **FIVE** YEARS)

In the last five years, how many jobs have you had In total?

Type-rapid turnover

Did you change jobs during this period?
Can you tell me about them?
How did the longest job last?

NOTE: *If the subject has had **a few** jobs in this phase, obtain an account of reasons for changes. **If many**, establish the pattern. Start asking about the longest job first.*

How did you happen to get your job?
What was your job title?
What did you do on a daily basis?

Did you have any responsibilities for other workers (supervisory role)?

What were they?

Type- (discordant/avoidant/asymmetry)

YES: What was that like for you?
How did you get along with those under you?
Did you or the workers under you ever have any
Problems with that arrangement?

Failure of others to live up to standards
Tension from remarks/actions experienced as threatening or neglectful
Contrast in relationships

Do/did you ever feel that people working with you, Or for you are/were not up to standard?

YES: In what ways?
Did/do you say anything about that?
What happened?
How often?

What was it like working for your boss (if applicable)

Failure to have talents recognized

Do/did you feel that he/she recognized your abilities? Or how hard you worked?

Did he/she say anything?
Did you?
Can you give me an example?
How often did that happen?

High level of investment w/ personal sacrifice in work

Did you put in hours in addition to your expected scheduled work time? Or take work home? Or put yourself out in other ways?

What did you do? Why was that? Were you rewarded?

Was that because of any particular relationship with anyone else at work?

For instance because you wanted to help them in particular?

Type-(avoidant)

Have you ever taken days off from work (apart from holidays or vacation time) when you should have been there?

YES: Why was that?
How often did that happen?

IF ILL: What was the problem?
Did you see your doctor?
Did you get a sick note or a written excuse?

Were you ever late for work?
How often? Why?

Probe for: *Frequency of lateness, whether this caused job performance evaluation problems, legitimacy of reasons for being late vs. general apathy, laziness, inability to prevent or solve problems that prevented on-time performance*

Avoidance motivated by stress

Have there been any jobs that you found particularly stressful

YES: Why was that?
Did you take time off because of that?

Did/have you ever not gone to work for a period
Because you thought it would be too stressful?

Type-(rapid turnover)

What was the reason you left that job?

Did you have another one lined up?
Did you think it likely you would be able to get another one? What did you base that on?

How did you get your next job?

You had several jobs around (year), why was that?

IF REASONS FOR CHANGES OF JOB ARE NOT CLEAR:

Did you leave a job without knowing what you would do next?

Did you leave your job/s because of difficulties with the boss, or other people at work?
What happened? How often?

Type-(discordant/avoidant)
Failure to have talents recognized
Failure of others to live up to standards
Tension from remarks/actions experienced as threatening or neglectful

Have you ever been fired?
YES: When was that?
Why were you fired?
How long had you worked at this job before you were fired?

Were there any other times when you were fired?

Type-(discordant)

Were you unemployed at all during this phase?
Did you look for a job when you were out of work?
What did you do?

How often did you, e.g., go to the unemployment office, send resumes, write letters?

Did you get interviews? What happened at them?

What was the reason you didn't get that job (those jobs)?

Probe for: *Number of times and duration of each time of employment*

Type-(avoidant)

IF NOT LOOKING FOR WORK:
NOTE: *Where relevant, check the prevailing level of employment in the area, in jobs of the kind for which the subject is trained/suitable.*

What was the reason you were out of work?
Did anything prevent you from looking for a job?
Did you want to work?

Did you know other people of your age in your line of work?
Were they able to find jobs?

Note:

To make a level rating, did you get the following:

- How well does S perform duties of the job?
- Does S fulfill the contract (do what is required)?
- Is S reliable and dependable?
- What are S's relationships with colleagues/peers like?
- With bosses/teachers/supervisors?
- How well does S solve problems that arise?
- Does S take on the role of student/worker?

To make a type rating, did you get the following:

- Is S's contact with others primarily conflictual/discordant?
- Has there been avoidance of school/job demands and others?
- Does S take a persistently subservient role with superiors or a controlling role with peers?
- Does S change jobs/schools very frequently?

SECTION II. ROMANTIC RELATIONSHIPS

Note:

1. **You should already know from Demographic Form and/or Adulthood Calendar if S has cohabited or is married, and you should have a general idea of important relationships in the last 5 years.**
2. **Begin with the most important or significant relationship during the past five years. Repeat questions for each important relationship starting with A Establishing Important Relationships and going on to B Features of Established Relationships. Gauge your timing, trying to spend more time on the most important and long-term relationships that the subject has had and then ask questions about less significant relationships. If the relationship began previous to the current five year period, begin with section B Features of Established Relationships.**
3. **If there are more than four relationships in the period, establish a pattern with one or two, then inquire whether others had the same features, keeping in mind the overall scales that are to be rated.**
4. **If there are no significant or enduring relationships of four weeks or more, skip directly to C. Less Significant Relationships. To gauge the quality of those brief relationships, you may also need to include some questions under B. Features of Established Relationships**

A. ESTABLISHING IMPORTANT RELATIONSHIP(S)

IF YOU DO NOT KNOW RELATIONSHIP HISTORY:

You mentioned in an earlier interview that you were/are (not) married/living together with someone. I'd like to ask you more about that. But first I'd like to get an outline of your relationships over the last five years. [Get list of all cohabiting relationships and non-cohabiting relationships that lasted 4 weeks or more].

Defining Characteristics
- Emotional and sexual passion
- Exclusivity (hence possibilities of infidelity, jealousy, possessiveness)
- Clear beginnings and endings
- Named (boy friend, girl friend, partner etc)

*Thinking about your current relationship (most recent relationship)...

How did that start?

How old were you then? How old was s/he?

How did you meet?

Establishment of Relationships – Processes
- Increasing intimacy
- Tempo
- Monitoring e.g. compatibility, problems
- Accurate assessment of self & partner
- Verbal review by partners

Had you known each other before you started dating/going out?

What did you do together at the beginning? (Thinking of the first days and weeks).

How often did you get together? How much time did you spend together?

How did you feel at the beginning? And him/her?
How could you tell?

How much did you talk about yourself? Your life? Your feelings? Were there things you didn't talk about?

And him/her? Can you tell me about that?

How soon did it become a sexual relationship?

Was that something you wanted? And him/her?
Were there any sexual difficulties at the beginning?

Rapid Tempo

Did you get to the point where you or he/she gave up some independence for the other, in order to be together?

I mean for example by moving into the other's house?
Or finding a place together?
Or relying on the other for money?
What happened?
How long had you been together then?

IF S HAS NOT EXPLAINED THE TRANSITION TO COHABITIING:

How long had you been going out with him/her before you started living together/got married?

How old were you then?
And your partner?
How did you make the decision?

Probe for: *mutual decision, external circumstances e.g. financial, pregnancy*
One puts pressure on the other

Power inequalities

During the first days and weeks were there any other kinds of difficulties?

For example, that one of you was possessive or jealous?
Or that one of you had strong views about the way the Other should behave?

Or about your or his/her friends?

Or that one of you put conditions on the relationship?

Or that one of you still had other relationships? (Or were married).
Did s/he have children?

Type-(discordant)

Or that there were arguments? Or any violence?
YES: Did that make any difference to the relationship?
In what ways?

Increased intimacy in spite of problems

Before that relationship did you have problems in previous relationships?
In what ways?
What about arguments, jealousy, or any of the Problems I already mentioned?

Type-(discordant/avoidant)

YES: Did that past experience make any difference to the beginning of this relationship?

And what about him/her? Did he/she have problems before beginning the relationship with you?
For instance –Problems in previous relationships?
With his/her family?
.....with drugs or alcohol?
.....or other psychiatric problems?
.....or with being aggressive?
.....or trouble with the police?

Did you know about them at the beginning of your relationship?

Did anyone else warn you or tell you about his/her problems?
YES: Did that make a difference at the beginning of your relationship?
For instance did you think of not continuing?
Did you try to do anything to stop going further?

B. FEATURES OF ESTABLISHED RELATIONSHIPS

Established Relationships – Processes
- Sharing
- Confiding
- Supporting
- Decision Making
- Negotiating
- Commitment
- Mutuality, Equality, Reciprocity
- Progression over time
- Monitoring: accurate/inaccurate views of self, partner, & relationship

*Thinking about your relationship as a whole, how would you describe your relationship?

Are (were) there things you enjoy(ed) doing together?
Do/did you have things in common?
What kind of things?
(Such as going to the movies, to bars, to friends)

How much of the time did/do you do things you were/are interested in?
What were they?

Inequalities- focus on interests or activities of one partner)

And him/her?

Probe for: *spending time on only one person's interests*

IF NOT CLEAR:

Did/do you talk things over?
What kind of things?
Can you give me an example?
(e.g. each others' families, health, children)
What about psychological problems, such as depression?
Or physical problems?

What about worries?

Or other personal things?
How personal? For instance things you or he/she felt/feel insecure about?
How often?

When you talk(ed) about these issues how did/does he/she react?
Is/was that helpful?
How does his/her reactions or thoughts about your Situation affect you?

Relationship formed in spite of different values

What about your values?
What I mean here, is whether you noticed whether you and your partner have different ideas about right and wrong, or about what is important and what isn't.
Is this something that you talked/talk about?
How do these differences get worked out between you?

Inequalities - one person does not communicate
Inequalities - one person confides at length

And him/her? Does/did he/she confide in you?
Are (were) there things you don't (didn't) talk about?
What are/were they?
And him/her?

Do/did you tell other people about personal things that he/she told you?
For instance friends?

Did/does he/she ever tell other people about the things you confided in him/her?

Have you ever regretted telling him/her something?
Why?
What was that?
When did you feel that?

Have there been times when he/she has given you support?
In what ways?

Inequalities – one person dedicates self to the other

What do you do when you need support?
Are there things that you do that get support from him/her?
What kind of things?

And have you given him/her support?
At what times?
What doe she/she do when he/she needs support?

Have either of you had any significant illnesses?

Inequalities - Relationships based on symptoms

Or mental health problems? How long for?
Or problems with your/his/her family?
.....with drugs or alcohol?
.....or with being aggressive?
.....or trouble with the police?

Active Maintenance in spite of clear problems

IF SUBJECT HAS HAD SERIOUS PROBLEMS LISTED ABOVE:

NOTE:
MAKE SURE YOU KNOW ABOUT:
a) mutual support
b) support other than for mental health

Have there been ways that he/she has been supportive or taken care of you?
Can you describe what happened?
How long did this go on?
Did it change or did he/she continue being supportive?

Inequalities – one partner dedicates self to the other

IF PARTNER:
Have there been ways in which he/she has needed to be taken care of?

Or needed support?
Can you describe what happened?
How long did this go on?
Did it change or did he/she continue being supportive?

Power inequalities

IF COHABITING:
How do/did you make decisions about the household?
Do/did you talk things over, (or do they just happen?)

How have you divided up your responsibilities?
e.g. For money?
For organizing the household?
For the children?

IF NOT COHABITING:
Find out how comparable responsibilities are handled in the relationship

NOTE:*if significant inequalities exist find out how they are maintained*

How did you decide that you would do .....(tasks), and he/she would do .....(tasks)?

Did/does one of you make the decisions or did/do both of you decide?

Was/is there any discussion?
What would happen if you didn't go along with What he/she wanted?

Are there things that you did/do to make sure things are the way you want them

Has he/she ever threatened you, for instance with leaving or violence to get things to go his/her way?

Power inequalities maintained by threats

Have you had to threaten, by saying such things as you would leave or hit him/her, to get things to be your way?

Would you say you have certain expectations of any partner/boy/girl friend?
How well do you feel (name of partner) lives/ed up to them?

In what ways?

Did/do you say anything?
For instance comment on what you appreciate?

...Or point out his/her shortcomings/failings?
Can you give me an example?

Criticism arising from perceived failure to live up to expectations

And what about his/her expectations of you?

Do you think you met/meet them?
How can you tell?
Does he/she comment on what he/she appreciates?
Or criticize you? In what ways?

Did/do you feel that he/she cares about you enough?
In what ways?

Did/do you say anything? For instance comment on what you appreciate?

Or point out his/her shortcomings/failings?

Can you give me an example?

Criticism arising from perceived Failure to care enough

Do you have the impression that he/she feels that you care enough?
How can you tell?

Does he/she comment on what he/she appreciates? Or criticize you?
In what ways?

Do you feel that he/she recognizes your abilities/contributions? Or admires you?
In what ways?
Does (did) he/she say anything?

Criticism arising from perceived failure to recognize / admire

IF NO:

How can (could) you tell?
What do you think he/she would have said if he/she did?

Have you said anything about that? For instance said that he/should give you more recognition?

How often? Can you give me an example?

Do you have the impression that he/she feels that you recognize his/her abilities /contributions?

Or admire him/her enough?
How can you tell?
Has he/she said anything?
Has he/she complained that you have not
Recognized/admired him/her enough?

Was/is your partner reliable?

Did/does s/he come and go at a regular times so that you knew/know when to expect him/her?

Did/does he/she ever come in early/late?
How did you feel about this?

Did/does he/she ever go out on his/her own without you?
In the evening or on the weekend?
IF YES:
Did you know where he/she went?
Did you mind?

Tension arising from remarks / actions experienced as hurtful or rejecting

Have there been things that he/she has said or done that you have found very hurtful? Or rejecting? Or threatening?

Can you give me an example?
How did you respond?
Did you get upset or angry?
How often has something like that happened?

And have there been things that you have said or done that he/she has found very hurtful? Or rejecting? Or threatening?

Can you give me an example?
How did he/she respond?
Did he/she get upset or angry?
How often has something like happened?

Shift from intensity to distance within relationships

Thinking of the way things have been throughout your relationship, how would you compare the first weeks and months with more recent times (the time towards the end)? Have there been any big changes?

For instance because he/she has changed?

Or have you changed?

Idealization w/ or without denigration
Active Maintenance

Or have your feelings toward him/her changed?

Were/are there aspects of him/her that you did not see at the beginning that became more obvious?

What kind of things? Can you give me an example?

Oscillations within the relationship (2 week or greater periods)

How much overall (day to day, or week to week) did/does your relationship change?

Are there some times that are very different from others?
(For instance because sometimes you are close, and at other times not close.)

Can you tell me a bit more about that?

Power inequalities

Does/did your partner ever pressure you to have sex with him/her when you didn't want to?

What did/does s/he say/do?
How often did/does that happen?

How did/do you handle birth control?

How did you arrive at that decision?

Is/was there anything about your sexual relationship that made/makes you feel uncomfortable?

Does/did your partner ever complain about your sexual relationship?

Was s/he ever unhappy with it?

Type-(discordant)

Most couples argue from time to time. How often do/did you argue?

Did/do you often get irritable with each other?
When did that start?
What happens? (What used to happen?)

Active maintenance in spite of clear problems

Did you ever call each other names, or criticize each other's families, or yell?

What sort of things would you argue about?

Have/did you ever slept/sleep separately, or leave after an argument?
Or not talk to each other? For how long?

Does/did your partner ever threaten you with violence?
IF YES: Can you give me an example?
How often?
When was the first time?

Inequalities maintained by threats

Has there ever been/was there ever any hitting or physical fighting?
IF YES: Can you give me an example?
How often?
When was the first time?
Were either of you ever injured? How often?

IF NOT CLEAR:
Have you ever hit her/him?
Has he/she ever hit you?

Or been violent in any other ways?
IF ARGUMENTS OR VIOLENCE:

Harmony replaces discord without reference to what has happened
Active maintenance in spite of problems

What is/was your relationship like after an argument/violence?

Did you talk about what happened?
Or did you both act as if nothing had happened?

Did you ever think of ending the relationship?

Did you try to? What happened?
What do you think is the reason that
You stayed together?

IF NO, (AND RELATIONSHIP IS PROBLEMATIC):
What helped you to stay together when things were bad?

C. SHORT/FEW RELATIONSHIPS (GENERALLY 4 WEEKS OR LESS, AND LOW INTIMACY):

Go back to Establishing Relationships for each cohabiting partner or relationship of 4 weeks or more. *

Type-(rapid turnover/avoidant)

Did you want to have more girl/boyfriends?

Did you meet girls/boys (women/men) and go out with them?

Steps taken to reduce risk or increase opportunity

Did you ever go out with a girl/boy hoping it would develop into a serious relationship?
What seemed to go wrong?

Did you ever meet someone who might be a romantic interest in a group setting, while you were with your friends?
How often did this happen?
Was this comfortable for you?
How long (on average) did you go out with someone you met this way?

IF YES:How many were there?
Can you tell me about them?
Did you become close to (any of) your boy/girlfriend(s)?

NOTE:
Try to establish if these problems were present before the relationship began, if they existed during the relationship, or both.

Type-
(avoidant/discordant/asymmetry)

NOTE:
If there are many very brief relationships, there is no need to ask about each one, but ask questions about them in general

Which one was the longest relationship?
How long did that last?

[Begin with longest one; review all lasting longer than 1 month; for those lasting less than one month, try to get a general idea of them].

Did they have any problems with...
possibilities include: family,
drugs or alcohol,
police,
emotional or psychiatric problems,
fighting or violence.

How often did you see each other?
Where would you get together?
Who made the arrangements
What sorts of things did you do together?
Did you like the same kinds of things?
How much did you find out about each other?
What did you talk about?
How much did you have in common?
What happened?
***Go back to Features of Established Relationship questions and ask the ones that are appropriate.**

:

To make a level rating, did you get the following:
- Mutual pleasure and shared interests?
- Can they count on each other? Support?
- Mutual confiding?
- Reciprocity, equality, complementarity vs power or role inequalities?
- Sharing of responsibility?
- How mutual is their sexual relationship?
- Discord, violence?

RATING PERIOD, EXAMPLES, FREQUENCIES.

To make a type rating, did you get the following:
- Does tension/discord/violence contribute significantly to the level rating?
- Does lack of involvement (avoidance) contribute significantly to the level rating?
- Does inequality/asymmetry contribute significantly to the level rating?
- Does S change partners very frequently?

III. FRIENDS

Note:
1. For subjects over 25, omit section A and go on to section B.
2. Ask about at least three friends. Always talk about them by name and one by one. START WITH THOSE KNOWN FOR 2 YEARS OR MORE.
3. Remember there may be important friends who are seen infrequently, about whom you need to inquire in section B even if they did not start during the past five years.

A. FOR 16-20 YEAR OLDS OR THOSE WHO SAW FEW FRIENDS:

I'd like to ask you about your friends and acquaintances during the last five years.

Were there people you got together with regularly? (Or others who were friends but whom you saw less often?)

Did you ever hang out with a group of friends whom you would call close, even though you really didn't have one or two friends you could call really close? How many people were in it? Who?

IF SO: How often did you hang out together?
What kinds of things did you do
Together?

Did you get into trouble?
What kind (fighting, stealing, drugs…)?
How were you involved?

How did you make your plans as a group?
Were you able to share things with this group of friends
that were personal or very important to you?

Was this mutual?

Probe for: *one individual who did all the planning vs mutual interest & plan*

Unevenness of relationships
Inequalities
Lack of development

Was there anyone who you could really open up to about your most private feelings without having to hold back?

Are you still involved with them?

IF NO: Why did you stop seeing them?

Lack of development

Did you have any particular or best friends – either in the group or outside?
How long have/had you known X?

B. SIGNIFICANT FRIENDS

How did you meet? What was her/his age at the time?

Defining Characteristics
- Specificity without Exclusivity
- Range of activities
- Not dependent on Circumstance
- Active Maintenance
- Resource/support

How long did it take for you to get to know each other?

**How often do/did you see X?

What kinds of things did/do you do when you got/get together?

(visit each other at home, go out to movies, restaurants, parties, play sports…)

Establishment of Friendships Processes
- Equality/Reciprocity/Mutuality
- Boundary Regulation
- Active Maintenance over time/geography
- Relative Stability

How often?

How long after you got to know each other did you start to get together this often?

Lack of development
Omitted negotiation
Rapid Tempo
Friendships embedded in other domains
Inequalities

Did you make plans or arrangements to get together?

Probe to: *find out who usually makes plans. Is/was it mutual or one sided? Do/did they work around difficult schedules in order to see each other or is/was it a friendship of convenience? How is friendship maintained? (email WRITING,PHONE CALLS) HAS IT ENDED? HOW DID IT END?*

Do/did you ever turn to X for help with practical things?
i.e. Helping with car problems, moving etc.

Can you tell me about the sort of things you talk about together?

NOTE: In a patient sample find out whether conversation goes beyond focus on illness or treatment.
Inequalities

Do/did you talk about important or personal things together?
Like…(your friendship?
Relationships with other friends?
Relationship with your family?
Relationships with partners?
Sex?
Future plans?)

Lack of development

Note: Importance of the relationship is not at the moment a rated aspect of friendships but we need to find out about relationships that appear to be close friendships but that are not seen as such.

Tension from remarks or actions Experienced as threatening

Type-(discordant/avoidant)

Type-(discord)
Tension arising from

Shift from intensity to distances

IF NOT CLEAR:

IF NO FRIENDS OF 2 YEARS DURATION:
Steps taken

C. TRANSIENT RELATIONSHIPS

IF NOT CLEAR:
Type-(rapid turn over)
Rapid tempo
Lack of development

WHERE INDIVIDUALS HAVE **LARGE NUMBERS OF**

Is/was the relationship important to you?
IF YES How long after you got to know each other
Did you start to talk about these kinds of things

Probe to: *find out mutuality of sharing and confiding; is/was it mutual or one sided? Does/did that lead to any problems between them? Were they resolved, or did friendship change?*

Has/does .... Say any things that have been very upsetting?
For instance insensitive to your feelings? Or rejecting?
Can you give me an example?
What happened? How often?

What happens when there is a difference of opinion between you?
Do you say anything?
Does it make a difference in the relationship?
In what way?

Do/did you argue with.....?
How often do/did you argue?

For instance, do/did you call each other names?
Or get into physical fights?
Can you give me an example?

Did that ever lead to you not talking to each other
For a while?

Did you ever stop speaking to each other?
What happened?
How long did it go on?

**AT THIS POINT, GO BACK UP TO *"HOW OFTEN DID YOU SEE X?" AND REPEAT FOR EACH SIGNIFICANT FRIEND.

Have you had any friends where things have started out well, and then gone badly wrong?
Can you tell me about that?

Has anything prevented you from getting to know people during the last five years?

Aside from the people we talked about just now, do you find that you have relationships where you get along well to start with, and things don't work out, or people let you down?

I mean where you see a lot of someone, but it only lasts
For a short time.

IF NO: GO TO NEXT SECTION

IF YES: How often has that happened over last five years?

In general, how did you get along with these friends?

What kinds of things did you do while

TRANSIENT RELATIONSHIPS, IT IS NOT NECESSARY TO ESTABLISH EXACT NUMBERS, THE DURATION, OR THE QUALITIES OF EACH ONE. **LOOK FOR COMMON PATTERNS.**

Rapid Tempo
Unevenness
Inequalities
Type-(discordant/avoidant)

you were friends?

How much did you see of each other?

Who usually initiated contact?

How did you make plans to do things? Was it mostly you, mostly the other person, *or mutual?*

Did you talk about personal things with the other person? What about him/her talking to you about his/her personal problems?

Did you ask each other for help with practical things? Give me an example.

Have there been any with whom you argued a lot or even had fights?

Can you give me an example?

How do these relationships usually end?

Note:

To make a level rating, did you get the following:

- Does S make an effort to maintain the relationship actively over time and distance?
- Does S have a serious commitment to the relationship? Does either friend demand exclusively or behave in a possessive or jealous manner?
- Is the relationship one of convenience? That is, does it depend on a particular set of circumstances (e.g., friendships only established in the context of work or school, and limited to that setting)?
- To what degree is there reciprocity, equality, complementarity?
- Do they engage in a range of activities together or are their common interests limited to one or two activities?
- Can they count on each other for support? Do they confide in each other?
- How are boundaries kept and limits set?
- Do S and his/her friends keep track of problems in an accurate manner and discuss them together?
- Is there reasonable progression and change over time?
- To what degree is there mutual pleasure and shared interests?
- Can each see the other's point of view?

To make a type rating, did you get:

- Are S's relationships with friends primarily conflictual/discordant?
- Does S take an avoidant stance toward the friends?
- Does S take a persistently subservient or controlling role with friends?
- Does S change friends very frequently or are friendships sustained?

IV. NON-SPECIFIC SOCIAL CONTACTS

NOTE: Ask these questions to obtain some examples of recent interactions with acquaintances. After, you can ask if this kind of functioning has been typical of the subject throughout the last five years.

NOTE: Allow subject to expand

Defining Characteristics:
- Relates to a variety of people outside of friendships/work/ family roles
- Superficial
- Dependent on circumstance

Processes
- Converses about a variety of topics and builds on contribution of the other
- Shows interests in others
- Regulates boundaries
- Reads social cues correctly

Apart from the people we have just been talking about (family, close friends, partners), how do you get along with people in general?

How do you do in social gatherings such as parties?
How often do you go to events like that?
Would you talk to people you haven't met before?
What would you talk about?

What about with neighbors?
How many do you know to talk to?
How do you get to know them?
What do you discuss with them?
Do you do other things with them?
Do you ever have any difficulties with the neighbors?

Do you meet people in group settings, for instance bars or health clubs? Or classes? Church?

What did/do you do there? How often?
How many people do you know there?
Do you get into conversations? What about?

Are you active in any organizations?
(Such as sports activities, church, PTO, union or political activities?)
What do you do? How often?
How many people do you know there?
Do you talk to them about things other than _____?

IF RELEVANT: Do you talk to other parents at your children's school? Or in your neighborhood?

Would you like to get together with more people than you do?
Or more often?
Or talk about different things? Or share other activities?
Or get more involved in conversations / activities?
Does anything make it difficult for you to do that?

Are the examples you've given me fairly typical of how you get along with people you have met casually over the last five years, or have things changed any?

Type-(discord) Do you ever have disagreements or arguments with people you have met like this?

I mean ones that ended with abuse or threats?

IF YES: How often has that happened?

Probe for circumstances, frequency, and severity of arguments

Have you been in any fights in the last five years?

IF YES: How often?

Probe to establish number, dates, severity of fights including legal action

IF NO TO FIGHTS:

Have you ever been involved in any incidents where violence was used?

Probe to *establish number, dates, severity, etc.*

Note:

To make a level rating did you get the following:

- Does S' relate to a variety of people?
- How does S relate to others outside of family/work/friend roles?
- Does S show interest in others?
- Does S relate in a superficial manner appropriate to the situation?
- Does S converse about a variety of topics?
- Does S regulate boundaries and read social cues correctly?

To make a type rating, did you get:

- Are S's casual relationships primarily conflictual/discordant?
- Does S take an avoidant stance toward the casual relationships?
- Does S take a persistently subservient or controlling role with casual relationships?

V. NEGOTIATIONS WITH PEOPLE

Defining Characteristics

- Interpersonal (but not work/ family/friendship role)
- To achieve a Specific Outcome via:
  1) a simple request,
  2) acerting of rights, or
  3) negotiating where opposition is expected

Processes

- Clarifying /Information Gathering
- Assertion of wishes
- Incremental progression
- Considers the perspective of others in planning/carrying out negotiations
- Negotiation, not Coercion
- Monitoring the process

Type-(discordant)

IF SUBJECT HANDLES FEW OR ZERO NEGOTIATIONS:

Most of us have to deal with people we don't get to know as friends, such as salesclerks, your kids' school teachers, SRS workers, mechanics, doctors or plumbers.

What sort of contact with people like this have you had recently?

What about...

Talking to your child's teachers
Arranging appointments (doctors, hairdressers)
Going to talk to your landlord/SRS/ [CHOOSE WHAT IS APPROPRIATE]

What happened when you... [OBTAIN A RECENT EXAMPLE]?

What do you do if repairs aren't done properly or the product you buy doesn't work properly, or if you are shortchanged?

When did that happen last?
What did you do?

Have you had trouble with people in these situations?
Has anyone tried to cheat you or treat you unfairly?
Has that resulted in arguments?
Has there been any abuse? Threats? Fighting?

Does anyone else in the family handle these things? Or outside the family?

What does he/she do?

Type-(avoidant)	Would you like to deal with more things yourself? Does anything prevent you from [GIVE AN EXAMPLE]?
IF SPOUSE HANDLES MOST NEGOTIATIONS:	Was that agreed upon between you? What about when [spouse/cohabitee] is ill or not there? What did you do before you were married/living together?
IF FAMILY OF ORIGIN OR OTHER AGENCY:	How long has...helped out in this way? How did you manage before then? Are the examples you've given me fairly typical of how you negotiate with others over the last five years, or have things changed any?

Note:

To make a level rating did you get:

- Examples in a range of situations (possibilities can include applying for jobs as well as others noted above)
- Does S participate in a range of negotiations beginning with calling for appointments and extending to advocating for self in the face of expected opposition without becoming overly aggressive?
- Examples of confrontation, aggression, persistence, impulse control.

To make a type rating, did you get:

- Are S's negotiations primarily conflictual/discordant?
- Does S take an avoidant stance toward the negotiations?
- Does S take a persistently subservient or controlling role towards negotiations?

APPENDIX I

RAPFA inter-scale correlations (Pearson Correlations)

	Work domain	Love relationships	Friendships
Work domain	-	-	-
Love relationships	.21	-	-
Friendships	.31*	.44**	-
Non-specific social contacts	.51**	.32*	.51**

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

RAPFA inter-scale correlations (Kendall's tau-b)

	Negotiations
Work domain	.38**
Love relationships	.34**
Friendships	.44**
Non-specific social contacts	.47**

** $p < .01$