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RESEARCH REPORT

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PERSONALITY PATHOLOGY IN SOUTH AFRICAN ADOLESCENTS – AN EXPLORATORY STUDY

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DECLARATION

I declare that this research is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university.

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Date: _____

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ABSTRACT

Internationally published literature evidences a move in support of diagnosing personality disorders in adolescent populations. However the prevalence of personality pathology diagnoses in South African adolescents is unknown. This study investigated whether international trends of diagnosing DSM-IV-TR personality disorders in adolescent populations are reflected in the South African context; what personality disorders are most commonly being diagnosed and what key factors are associated with the rendering of such diagnoses. Using a suitable questionnaire, data was obtained from each adolescent patient file and/or discharge summary that qualified for inclusion in this study (n = 464) at three hospitals which treat adolescents on an in- and/or out-patient basis. Data was analysed using frequency counts, cross-tabulations and Chi-squared tests of association. The prevalence of diagnosed personality pathology in the South African clinical adolescent population was 15.95%, with Borderline personality pathology being the most common type of diagnosis. The type of personality disorder diagnosis was consistent across institutions, with personality disorder traits, as opposed to the full disorder, being predominantly noted. The prevalence with which adolescents were diagnosed with personality pathology across institutions was not consistent. Further, twice as many female adolescents were diagnosed with personality pathology and White and Coloured adolescents were diagnosed in proportions far greater than Black adolescents. Attachment difficulty, history of familial psychiatric history and certain Axis I disorders were significantly associated with the presence of personality pathology; and a significant proportion of adolescents diagnosed were living in children's homes.

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CHAPTER 1

Introduction

An analysis of recent literature on personality pathology in children and adolescents reveals a move in support of diagnosing personality disorders ("PDs") during the years of childhood and adolescence (Bleiberg, 2000; 2001; Bondurant, Greenfield & Tse, 2004; Crawford, Shaver, Cohen, Pilkonis, Gillath & Kasen, 2006; Guile & Greenfield, 2004). Studies of personality disorders in adolescence have found that whether measured in adolescence or adulthood, stability coefficients for PD symptoms are highly comparable across diagnostic clusters and developmental stages. Moreover, correlational stability in PD symptoms across adolescence is comparable to stability observed in adults (Cohen, Crawford, Johnson & Kasen, 2005). A prevalence study, which was conducted in the United States, found that 14.4% of non-clinical adolescents included in that study had been diagnosed with having a personality disorder (Johnson, Cohen, Skodol, Oldham, Kasen & Brook, 1999), with another study finding the prevalence of personality pathology in clinical adolescents (where PD traits present in a patient were sufficient for inclusion in their study) to be 28.4% (Westen, Shedler, Durrett, Glass & Martens, 2003).

These studies support the view of Kernberg, Weiner and Bardernstein (2000) and Bleiberg (2001) that personality traits and patterns are apparent by the end of preschool and that they can be enduring even from this young age. If such patterns become inflexible, maladaptive and chronic, cause significant functional impairment and produce severe subjective distress, Kernberg et al. (2000) believe that a personality disorder diagnosis can be made regardless of the person's age.

Researchers supporting the existence of personality disorders in child and adolescent patients argue that the traditional position of only diagnosing PDs in adulthood prevents timely and appropriate treatment and potentially increases morbidity of the PD (Guile & Greenfield, 2004; Westen & Chang, 2000). Kernberg et al. (2000) emphasise that recognition of a Diagnostic and Statistical Manual of Mental Disorders ("DSM-IV-TR"), Axis II PD in a child or adolescent allows the clinician to formulate a more comprehensive treatment plan and a PD diagnosis may possibly enable the child or adolescent to have access to longer-term and more intensive psychotherapy (Kernberg et al., 2000).

In addition to this growing field of research supporting the diagnosis of personality pathology in child and adolescent populations, the publication of research examining factors associated with the emergence of personality pathology in these populations is also increasing. For example, patterns of attachment are being studied in terms of how they relate to different PD diagnoses in adolescents (Holmes, 2004; Nakash-Eisikowits, Dutra & Westen, 2002; Westen & Chang, 2000).

However, many clinicians are against making a PD diagnosis in children and adolescents. Kernberg et al. (2000) suggest two main reasons for this. The first is that many professionals who deal with children and adolescents have reservations about labelling them with a diagnosis that, by its very nature, implies severity and nonmalleability. A PD label, they argue, may adversely affect the patient's (or his family's) self-concept or prejudice his future by appearing somewhere in his records. The second reason suggested by Kernberg et al. (2000) is that many clinicians believe that personality has not yet crystallised in children or adolescents, and as such, the very existence of a PD would not make sense. They also point out that some clinicians' support PD diagnoses being made in an adolescent population and only question whether a PD can be diagnosed in a pre-adolescent population (Kernberg et al, 2000). A possible third reason why clinicians may be opposed to making PD diagnoses, (a reason that is not referred to by Kernberg et al., 2000) is that some clinical psychologists are disinterested in viewing human intra- and interpersonal difficulties from a nosological perspective and thus make no use of DSM classifications (Sosnovik & Gericke, 2007).

There is also debate regarding whether DSM-IV-TR adult standardised criteria pertaining to the diagnosis, and categorisation, of personality pathology, can be applicable to a paediatric and adolescent population (Durrett & Westen, 2005).

Within the South African context, research conducted by Sosnovik and Gericke (2007) regarding South African psychologists' and psychiatrists' opinions on diagnosing PDs in child and adolescent populations, found that within the South African context, there are a number of varying views regarding the validity and utility of diagnosing PDs in these populations. On the whole, South African practitioners present as being particularly cautious about making such diagnoses and question the overall utility of such diagnosis for the child or adolescent. There is an overall

acknowledgement in both disciplines that personality difficulties (or personality pathology) can be evident from the years of early childhood, but this does not translate into strong support for the validity and utility of DSM-IV-TR personality disorder diagnoses being made in child and adolescent populations. This appears to be as a result of no clear benefit having been established for the rendering of such diagnosis over-and-above the formulation of treatment regimes that acknowledge the type and severity of the personality difficulties experienced by a child or adolescent patient. However, the study by Sosnovik and Gericke (2007) also revealed that, on the whole, clinicians are more amenable to noting the presence of personality pathology in the files of adolescent patients, but they will not include any references to the possibility of the presence of personality pathology in the files of child patients.

Whilst a recently published research report found that 6.8% of the non-clinical South African population suffers from a DSM-IV PD (Suliman, Stein, Williams & Seedat, 2008), no published research appears to exist on if (or how) the presence of personality pathology is being noted in child or adolescent patient files in South Africa (in this respect, Academic Search Premier, Proquest Psychology Journals and PsychiatryOnline "search engines" were employed in looking for relevant South African data). Also, it seems as though no South African research has, to date, explored whether there is an association between attachment and personality pathology within the South African diagnostic milieu; nor has there been research which attempts to identify associated factors with personality pathology in these populations which may be of specific relevance to the South African diagnostic context – and how these may compare to associated factors internationally.

Thus, the researcher and supervisor decided that it would be important to conduct a study in this under-researched area within the South African diagnostic milieu. Due to the fact that the study conducted by Sosnovik and Gericke (2007) revealed that clinicians are more amenable to noting the presence of personality pathology in the files of adolescent patients, this current study only analysed the files of adolescent patients, as the possibility of obtaining more meaningful data (for the purposes of this research) was more likely.

Research Aims:

The first aim of this research was to explore whether recent international trends of diagnosing DSM-IV-TR personality disorders in adolescent populations were reflected in the South African diagnostic context.

The second aim of this research was to assess what personality disorders / emerging personality disorders / personality disorder traits were most commonly being diagnosed in South African adolescents.

The third aim of this research was to identify key factors associated with the rendering of such diagnoses within the South African context.

CHAPTER 2

Literature Review

The literature review will start by providing the definition of a personality disorder ("PD") as is included in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision ("DSM-IV-TR"). Thereafter, it will discuss how there is no universal definition of adolescence or uniformity as to what ages are thought to fall within the period of adolescence. Literature where the DSM-IV-TR nomenclature is used to describe and diagnose personality pathology in child and adolescent patients will then be referred to, with specific focus being drawn to prevalence of PD diagnoses in adolescent populations, comorbid Axis I diagnoses and the diagnostic stability of PDs in adolescence as compared to adulthood. As a means of comparison, information regarding the prevalence of PDs in the general (adult) population will also be provided. Thereafter, an in-depth synopsis of literature which deals with the manifestation of specific PDs in the adolescent population will be discussed, with particular discussion being reserved for Borderline PD and Narcissistic PD, as the presence of these two PDs in adolescence has received more attention in internationally published literature.

With literature focussing on actual diagnosis of PDs in adolescents having been outlined, the review will then deal with issues regarding the validity and utility of diagnosing PDs in the years of adolescence, including references to the debate as to whether DSM-IV-TR adult standardised criteria can be applied to non-adult populations. Thereafter, to further contextualise this study, the literature review will outline the opinions of South African psychologists and psychiatrists on diagnosing PDs in child and adolescent populations.

The final section of the review will examine factors associated with personality pathology and its developmental precursors - with specific focus being drawn to how attachment patterns, family history of psychopathology, child abuse, suicidal behaviour, and sociocultural factors are associated with personality pathology in adolescents and the population in general.

2.1 Definitions

2.1.1 Personality Disorder

The DSM-IV-TR is a categorical classification, compiled by the American Psychiatric Association ("APA"), that divides mental disorders into types based on criteria sets with defining features (APA, 2000). The other major nosological classification of mental disorders used in the world today is that contained in the International Classification of Diseases, Tenth Edition ("ICD-10") (APA, 2000; Mundt & Backenstrass, 2005; WHO, 1992), which is published by the World Health Organisation (the directing and coordinating authority for health within the United Nations system). Within the South African context, students studying psychology and psychiatry are primarily trained in psychopathology in terms of DSM-IV-TR classification and not that of the ICD-10. Further to this, and perhaps as a result of this, practicing psychologists and psychiatrists in South Africa utilise the classifications of the DSM-IV-TR in their work with the diagnosis and reporting of personality disorders and not the classification system contained in the ICD-10 (although ICD-10 codes are utilised in communication with medical aid companies).

The DSM-IV-TR defines a PD as: "an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment" (APA, 2000, p.685). There are 10 specific PDs listed in the DSM-IV-TR, with the added option of the diagnosis of PD "not otherwise specified" (APA, 2000, p.685) and these 10 PDs are grouped into three clusters, based on descriptive similarities. The DSM-IV-TR states that Cluster A includes the Paranoid, Schizoid and Schizotypal PDs. The editors explain that those with these PDs often appear odd or eccentric. Cluster B includes that Antisocial, Borderline, Histrionic, and Narcissistic PDs and those with these PDs often appear dramatic, emotional or erratic. Cluster C includes the Avoidant, Dependent and Obsessive-Compulsive PDs and individuals with these PDs often appear anxious and/or fearful (APA, 2000).

DSM-IV-TR specifies that PD categories may be applied to children or adolescents in those "relatively unusual instances" (APA, 2000, p. 685) where the individual's particular maladaptive personality traits appear to be pervasive, persistent, and

unlikely to be limited to a particular developmental stage or an episode of an Axis I disorder (APA, 2000). The American Psychiatric Association cautions that PD traits presenting in children will often not persist unchanged into adult life and that to diagnose a PD in a person who is below the age of 18, the features must have been present for at least one year (APA, 2000).

The DSM-IV-TR cautions that a PD must be distinguished from personality traits that do not reach the threshold for a PD. Thus personality traits are diagnosed as a PD only when they are inflexible, maladaptive, and persisting and cause significant functional impairment or subjective distress (APA, 2000).

Thus, and for the sake of clarification, the general criteria for a PD (as per DSM-IV-TR) are as follows:

"A. An enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two (or more) of the following areas:

(1) Cognition (i.e., ways of perceiving and interpreting self, other people, and events)

(2) Affectivity (i.e., the range, intensity, lability, and appropriateness of emotional response)

(3) Interpersonal functioning

(4) Impulse control

B. The enduring pattern is inflexible and pervasive across a broad range of personal and social situations.

C. The enduring pattern leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The pattern is stable and of long duration, and its onset can be traced back at least to adolescence or early adulthood.

E. The enduring pattern is not better accounted for as a manifestation or

consequence of another mental disorder.

F. The enduring pattern is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., head trauma).” (APA, 2000, p. 689).

2.1.2 Adolescence

No universal definition for “adolescent” or “adolescence” is in existence (APA, 2002) – and this is of particular relevance when determining exactly what age range is considered to fall within the developmental period known as adolescence. Adolescence can also be defined in numerous ways, for example, in terms of physical, social and cognitive development, as opposed to only chronological age. However, discussion on these other ways of defining and describing adolescence is beyond the scope of this study.

The American Psychological Association (APA, 2002) regards the years of adolescence as falling between the ages of 10 to 18 years of age. However, it acknowledges that some aspects of adolescent development often continue beyond the age of 18. The World Health Organisation, on the other hand, clearly defines adolescence as the period of life between the ages of 10 and 19 years of age (Bond & World Health Organisation, 2004). Sadock and Sadock (2007) divide adolescence into three subcategories – namely: early adolescence, which describes the years 12 to 14 years of age; middle adolescence, which describes the years 14 to 16 years of age; and late adolescence, describing the years 17 to 19 years of age. No document stating the age range considered by the South African Department of Health as falling within the developmental period of adolescence, could be sourced.

For the purposes of this research project, the researcher and supervisor felt that a sufficient age range in which to assess the potential presence of reported personality pathology in adolescents would be from the age of 12, up to (but not including) 19 years of age. It is important to note that this use of age range is not meant to conflict with or replace those used by the American Psychological Association or the World Health Organisation.

With the criteria of what constitutes a PD in terms of the DSM-IV-TR having been outlined, as well as an explanation that there is no universal agreement on what ages specifically fall within the period of adolescence having been provided, it is now possible to refer to literature in which DSM-IV-TR PD criteria are being used to describe and diagnose PDs in child and adolescent populations.

2.2 DSM-IV-TR personality pathology in child and adolescent populations

Kernberg et al. (2000) and Bleiberg (2001), amongst others, believe that children and adolescents present with clear traits and patterns of perceiving, relating, and thinking about the environment and themselves. These traits include (just to name a few) impulsivity, introversion, extroversion, egocentricity, novelty seeking, inhibition, sociability, aggressivity and inflexible coping methods. Kernberg et al. (2000) assert that such personality patterns and traits can be apparent by the end of preschool, as well as enduring. If such patterns become inflexible, maladaptive and chronic, cause significant functional impairment and produce severe subjective distress (Bleiberg, 2001); then a diagnosis of PD can be made in a child or adolescent regardless of his/her age. Kernberg et al. (2000) emphasise that the DSM-IV-TR diagnostic criteria for PD can be applied to the assessment of PDs in children and adolescents, but with the one modification, namely, that onset must be traced at least to the early school years – this being in line with the definition of PDs as enduring maladaptive patterns of thinking, feeling, and behaviour that are relatively stable over time (as well as distinguishing such patterns from those that are limited to a particular developmental stage).

2.2.1 Prevalence and diagnostic stability in adolescent populations

An increasing body of published research suggests that the presence of the defining features of PDs in child and adolescent populations is not as rare or unusual as is suggested by the American Psychiatric Association and such research shows a clear move in support of diagnosing PDs during the years of childhood and adolescence (Bondurant et al., 2004; Crawford et al., 2006; Guile & Greenfield, 2004). However, it should be noted that most of this literature focuses on diagnosis of PDs in adolescent populations as opposed to child populations (Durrett & Westen, 2005, Westen, Shedler, Durrett, Glass & Martens, 2003).

Before providing a synopsis of published prevalence estimates of PDs in the adolescent population, it is important to point out that PD prevalence rates (both in adult and non-adult populations) differ depending on the diagnostic procedures and instruments used, study design and range of PDs assessed in different studies (Johnson, First, Cohen, Skodol, Kasen & Brook, 2005). Prevalence rates also vary depending on sample characteristics (Sharp & Romero, 2007) – such as whether the sample is a clinical or non-clinical one, or whether only in-patients or out-patients are being measured. Johnson et al. (2005) explain that there is little consensus regarding whether, for example, interviews or self-report methods produce superior data, when patients should be evaluated, or whether subject or informant data is more accurate. In this regard, Zimmerman, Rothchild and Chelminski (2005) note that PD prevalence rates are lower in studies using an unstructured clinical evaluation than in studies using semi-structured diagnostic interviews. Further discussion on these measurement problems (in particular test-retest reliability of measures used) (Coid, 2003) is beyond the scope of this literature review and it is not of specific relevance to the present study, as no measures were used to diagnose any patients in this study – rather archival file data was reviewed to find references that had already been made in patient files by clinicians regarding the presence of personality pathology in their adolescent patients. Keeping these concerns in mind though, the following prevalence rates can be provided.

A longitudinal study by Johnson, Cohen, Skodol, Oldham, Kasen and Brook (1999), applied DSM criteria to non-clinical participants (N=717) of a study in 1983 and again in 1985-6, when the participants were adolescents, and in 1991-1993, when they were young adults. PD diagnoses were assigned to the adolescent participants only if the diagnostic thresholds specified in DSM-IV were met or exceeded in both 1983 and 1985-6 or if they met the DSM-IV diagnostic criteria on one occasion and were within one diagnostic criterion of the diagnosis on the other occasion. 14.4% of their (non-clinical) sample was diagnosed with PDs during adolescence. 5.9% had Cluster A PDs, 7.1% had Cluster B PDs and 4.9% had Cluster C PDs. 68% had diagnoses in one PD cluster and 32% had diagnoses in two or more PD clusters. Importantly, PD symptoms were shown to be moderately stable during the two separate administrations of the psychiatric interviews *($r = 0.69, p<.001$)* (Johnson et al., 1999).

Another American study looked at prevalence rates of PDs in the clinical adolescent population. In this study, Westen et al. (2003) included features or traits of the PD (as opposed to only the diagnosis of a full PD) in computing prevalence rates. It found that 28.4% of their clinical sample received an Axis II diagnosis and Borderline PD was also found to be the most common PD diagnosis in adolescents, followed by a diagnosis of Borderline features.

A study by Levy, Phil, Becker, Grilo, Mattanah, Garnet, Quinlan, Edell and McGlashan (1999) revealed that 61% of adolescent inpatients in their study were diagnosed with at least one personality disorder, with Borderline PD being the most frequent diagnosis (50% of diagnoses). It is not clear whether the criteria for the diagnosis of a full PD or merely PD traits present was sufficient for the rendering of a PD diagnosis for that study.

Slightly older research (from 1998) found that adolescents aged 12 – 17 met criteria for PDs at the same rates and in roughly the same proportions as young adults aged 18 – 37 (Grilo, McGlashan, Quinlan, Walker, Greenfield & Edell, 1998). The overall frequency of the presence of PDs in each group was not provided, rather, comparative frequencies were provided for each PD. The Grilo et al. (1998) study found that Cluster A and B PDs were diagnosed at similar frequencies in adolescent and young adult inpatients and they suggested that what one sees in adolescents (regarding personality difficulties/pathology) are valid forms of most of the adult PDs that do not go through some intermediate form before adulthood.

Finally, a study conducted in 1993 (Bernstein, Cohen, Velez, Schwab-Stone, Siever & Shinsato, 1993) applied DSM III criteria to a randomly selected sample of children and adolescents ranging from 9 to 19 years of age (mean age of 16.3 years) and 31.2% met the criteria for a moderate PD, whilst 17.2% met the criteria at a severe level (moderate disorders were defined as identified cases in which Axis II symptoms were more than one standard deviation above the mean on algorithms developed on continuous versions of Axis II scales, while severe disorders were those with symptoms more than two standard deviations above the mean) (Bernstein et al., 1993).

Most of the other international research concerning PDs in adolescent populations primarily focuses on the manifestations of particular PDs (such as Borderline PD, for

example) in adolescent populations and such research will be discussed further on in this literature review. However, in summarising the above prevalence studies of personality pathology in adolescents, one is able to notice that these studies have been conducted in the United States, with no prevalence rates of personality pathology in adolescent populations in countries other than the USA having been found. The prevalence of personality pathology in the non-clinical adolescent population in the United States seems to range from 14.4% when the full criteria for a PD diagnosis are met (Johnson et al., 1999) to 31.2% when PD traits are present (or a moderate PD diagnosis is made (Bernstein et al., 1993)). In the clinical adolescent population in the United States, 28.4% of adolescents were diagnosed with an Axis II PD (a rate which includes both traits and the full PD) (Westen et al., 2003) – and the rate jumps to 61% when measured only in adolescent in-patients (Levy et al., 1999).

Within the South African context, there appear to be no published studies which examine the prevalence of PDs in child or adolescent populations. Psychiatric diagnostic trends in adolescents have been reported on (Szabo, 1996), but with no reference to any personality pathology or PD diagnoses being made.

Prevalence studies of PDs in adolescent populations have also established that adolescents with PDs are more than twice as likely as those without PDs to have anxiety, mood, and substance use disorders during early adulthood. In this regard, the cross-sectional findings from the Johnson et al. (1999) study suggest that Cluster A PDs in adolescence may be uniquely associated with increased risk for anxiety disorders in early adulthood; Cluster B PDs in adolescence may be uniquely associated with increased risk for substance use disorders in early adulthood; and Cluster C PDs in adolescence may be associated with elevated risk for suicidal ideation or behaviour in early adulthood. In addition to the Johnson et al. (1999) findings, a study by Cohen et al. (2005) determined that 35% of adolescents with Cluster A disorders had disruptive behaviour disorders, 25% had anxiety disorders and 20% had depressive disorders. As regards Cluster B, 47% of adolescents with Cluster B disorders had a comorbid disruptive behaviour disorder, 28% had an anxiety disorder and 28% had a depressive Disorder. Lastly, as regards Cluster C, 34% of adolescents with Cluster C disorders also had a comorbid disruptive behaviour disorder and 23% had comorbid depressive disorders.

Regarding the structure and stability of adolescent PDs, Durrett and Westen (2005) report that the structure of personality pathology as assessed by Axis II criteria in adolescents resembles that outlined in DSM-IV Axis II for adults, suggesting that PDs can be assessed in adolescents as in adults. Their report points to a strong resemblance between the structure of adult and adolescent personality pathology as assessed using DSM-IV criteria. This suggests that Axis II provides the same kind of information for adolescents as it does for adults. Durrett and Westen (2005) caution though that whether this is an optimal way of diagnosing personality pathology in adolescence requires further investigation and that this was not able to be determined from their data.

Cohen et al. (2005) found that whether measured in adolescence or adulthood, stability coefficients for PD symptoms are highly comparable across diagnostic clusters and developmental stages. Moreover, correlational stability in PD symptoms across adolescence is comparable to stability observed in adults. Cohen et al. (2005) summarised their findings by diagnostic clusters. Firstly, regarding Cluster A PDs in adolescents, they emphasise that much of the existing information on the Cluster A PDs has come from studies that followed relatives of people with schizophrenia, as individuals with Cluster A disorders rarely present for treatment and may be a-typical when they do (in this regard, Sadock and Sadock (2007) note that Cluster A PDs are more common in biological relatives of patients with schizophrenia than in control groups). Findings suggest that overall, adolescent paranoid symptoms are more stable than other Cluster A symptoms. Regarding Cluster B PDs, Cohen et al. (2005) note that their research focussed on Borderline, Histrionic and Narcissistic PDs. Antisocial PD was not included as the DSM does not recognise this disorder until the age of 18. They emphasise though, that it is increasingly their view that stable childhood Conduct Disorder is best viewed as a disorder of personality. Stability of adolescent Cluster B symptoms was .65 from mean age 14 to 16 and dropped to .50 across the longer interval from age 16 to 22. Stability coefficients for Narcissistic PD stood out and had an elevated stability from mean age 14 to 16 ($r = .57$). Regarding Cluster C PDs, Cohen et al. (2005) noted that their research focussed less on Cluster C disorders, but they do not provide a reason for this. They point out that very few studies exist that have investigated the developmental course of Cluster C disorders. They were able to determine that Avoidant and Dependent PD symptoms

decline from adolescence to middle adulthood and that they show comparable stability over time. In contrast, Obsessive-Compulsive PD symptoms do not decline and stability levels are lower than other Cluster C disorders (Cohen et al., 2005).

2.3 Prevalence of PDs in the general population

With literature on the prevalence of adolescent PDs, and the structure and stability of PDs from adolescence to adulthood having been discussed, it is useful to outline epidemiological reports on PDs in the overall population. Estimates of the prevalence of PDs in various international community studies are not consistent – with rates ranging from 4.4% (in Britain) to between 9% and 15% within the United States (Suliman et al., 2008; Coid, Yang, Tyrer, Roberts & Ullrich, 2006). Sadock and Sadock (2007) note that the prevalence of PDs in the United States general population is between 10% and 20% and that 50% of all psychiatric patients have PDs, which are frequently comorbid with Axis I conditions. A study by Grant, Hasin, Stinson, Dawson, Chou, Ruan and Pickering (2004) determined that 14.79% of adult Americans have at least one PD. The Grant et al. (2004) study revealed that the most prevalent PD in the United States general population is Obsessive Compulsive PD (7.88%), followed by Paranoid PD (4.41%), Antisocial PD (3.63%), Schizoid PD (3.13%), Avoidant PD (2.36%), Histrionic PD (1.84%), and Dependent PD (0.49%) (Grant et al., 2004). Grant et al's (2004) findings strangely do not report on Borderline PD as being prevalent within the US general population. This observation is in stark contrast to the prevalence statistics provided by the APA (2000), as the DSM-IV-TR (APA, 2000) provides that the prevalence of Borderline PD is estimated to be about 2% of the general population, about 10% among individuals seen in outpatient mental health clinics, and about 20% among psychiatric inpatients. Findings more in line with the prevalence of Borderline PD as suggested by the APA (2000) in US out-patient populations were made by Zimmerman et al. (2005) – where a 9.3% prevalence rate was found. In addition, they found that Borderline PD was significantly associated with six of the other nine personality disorders (all except for Schizoid, Histrionic and Obsessive-Compulsive PD).

Within the South African context, a study of the profiles of admissions (by gender and psychiatric diagnosis) to mental hospitals in the Western Cape (Strebel, Stacey & Msomi, 1999) reported that 12% of females and 2% of males had been diagnosed

with Histrionic, Avoidant and Dependent PDs (not specifying the frequencies of each); 6% of females and 2% of males had been diagnosed with Borderline PD; and 1% of females and 10% of males had been diagnosed with Anti-social PD. The median age of their sample was 36.54 years. No other PD diagnoses were discussed in their report, and no overall prevalence statistics of PD rates of the sample were provided. Further, the racial demographics of patients who presented with personality pathology were also not discussed. A recent study published by Suliman et al. (2008) revealed that 6.8% of South Africans suffer from a DSM-IV PD. Participants in that study ranged from 20 years of age and older and were all from a *non-clinical* population. All participants were screened for PDs and Axis I disorders with the World Health Organisation Composite International Diagnostic Interview by trained interviewers who went to houses and hostels in areas with probabilities proportionate to the South African sociodemographic population, and conducted interviews with the adult inhabitants of those dwellings (Suliman et al., 2008). Suliman et al. (2008) note that the rate of 6.8% is lower than that found in most studies in the developed world and suggest that this difference in prevalence might be explained by the different research methodologies used. The Suliman et al. (2008) study also revealed that within the non-clinical population in South Africa, Cluster A PDs were found to be most prevalent (3.4%), followed by Cluster C (2.5%) and then Cluster B (1.5%).

Suliman et al. (2008) note that these findings are unusual in light of the fact that Cluster A PDs are the least frequently seen in clinical populations (owing to the ego-syntonic nature of such PDs, with less treatment-seeking behaviour in this subtype), with Cluster B PDs typically being the most frequently seen in clinical populations in South Africa and they emphasise that more work needs to be done to understand what features may explain their data. Further, 36.2% of individuals with a PD also met the criteria for an Axis I disorder. The only significant sociodemographic predictor of PD in their study was gender (with age, education, income and marital status not showing significant associations). The male gender was found to predict Cluster A PDs and Suliman et al. (2008) note that this is in line with studies which have found that PDs are generally more prevalent in men. In this regard, a British study found that 13.3% of males in their sample had at least one PD, compared to 8.7% of females (Coid, Yang, Tyrer, Roberts & Ullrich, 2006). A limitation of the

Suliman et al. (2008) study, which may explain their lower prevalence rates, is that people with psychiatric disorders have been shown to be less likely than others to participate in mental health surveys (Stein, Seedat, Herman, Moomal, Heeringa, Kessler & Williams, 2008).

2.4 Specific PDs manifesting in adolescence

As was mentioned above, internationally published literature has focussed more on the manifestation of specific types of PDs in adolescents than on more generalised prevalence studies. Two PDs have received particular attention in the literature – namely Borderline PD and Narcissistic PD - and these will now be discussed.

2.4.1 Borderline PD in adolescents

The marked prevalence of Borderline PD within clinical populations as reported in the DSM-IV-TR (10% of psychiatric out-patients and 20% of in-patients) (APA, 2000) could perhaps explain the numerous studies and articles focussing on Borderline PD within adolescent populations. Becker, Grilo, Edell and McGlashan (2002) found that in hospitalised patients, Borderline PD and its symptoms appear to be as frequent for adolescents as for adults. Zelkowitz, Guzder, Paris, Feldman, Roy and Schiavetto (2004) suggest that children with Borderline PD can be reliably identified via chart review, and that they exhibit a pattern of risk factors similar to that of adults with Borderline PD. 41 % of their sample (an out-patient sample with a mean age of 10 years) were found to have Borderline pathology – a label Zelkowitz et al. (2004) used to describe the clinical picture resembling Borderline PD in adults. The Zelkowitz et al. (2004) finding is inline with views expressed by Sharp and Romero (2007), who suggest that prevalence rates for Borderline PD are higher in adolescent populations than reported for adults. Further to this, the DSM-IV-TR (APA, 2000) states that Borderline PD is diagnosed predominantly (75%) in females. However, Sharp and Romero (2007) note that this marked representation of Borderline PD in female adults does not seem to be reflected in non-adult populations, but in this regard they cite only one study – that of Bernstein et al. (1993), in which 15% of adolescent males and 17.2% of adolescent females met criteria for Borderline PD. Becker (2000) suggests that more females are diagnosed with Borderline PD because of the existence of a sex bias in the clinical diagnosis. However, Zlotnick, Rothschild and Zimmerman (2002) suggest that there is insufficient empirical evidence to confirm

the existence of such biases on the part of diagnosing clinicians and they suggest that gender prevalence rates (pertaining to Borderline PD) may be influenced by the fact that sexual trauma is significantly associated with Borderline pathology and that this could be one reason why more females are found to suffer from this PD. Zlotnick et al. (2002) also suggest that externalising symptoms of Borderline patients are possibly expressed differently by the two genders as well as possibly at different times and that future studies should assess whether gender differences in Borderline patients persist over time.

Bondurant, Greenfield and Tse (2004) found in their study on adolescent Borderline PD that the construct validity of adolescent BPD is supported by internal consistency (comparable to that of adults), group differences (i.e. that the adolescent diagnosis segregates BPD from non-BPD adolescents), convergent validity (i.e. multiple measures of this disorder measure the same pathology) and concurrent validity, whereby these youth manifest functional impairment and distress. Criterion overlap (i.e. the extent to which criteria of different personality disorders overlap) was then assessed. In this regard, Bondurant et al. (2004) found that in adolescents and adults, the borderline criteria were found to be consistently more related to one another than to other PD criteria. However, Bondurant et al. (2004) warn that adolescent BPD criteria manifest less construct validity than the adult diagnosis as its criteria did not uniformly predict the overall diagnosis, and showed more criterion overlap with other PDs and a broader pattern of Axis II co-morbidity. In addition to this, their research revealed that adolescent BPD was not a single entity and that there was little diagnostic stability through adolescence into adulthood. Becker et al.'s (2002) study also suggests that despite the similarities between adult and adolescent BPD symptom patterns, several differences were found at the level of the diagnostic efficiency for individual borderline criteria. In contrast to this study, (but with the possible limitation that the research looked at PD risks in children and adolescents in general, and not specifically at BPD) Cohen et al. (2005) note that whether measured in adolescence or adulthood, stability coefficients for PD symptoms are highly comparable across diagnostic structures and developmental stages. They further note that correlational stability in PD symptoms across adolescence is comparable to stability observed in adults.

Sharp and Romero (2007) emphasise that patients with Borderline PD are very likely to have a dual Axis I diagnosis. In this regard, Major Depressive Disorder and Substance Abuse were noted – with Conduct Disorder being significantly more prevalent in adolescents with Borderline PD than in adolescents without Borderline PD.

2.4.2 Narcissistic PD in adolescents

The diagnosis of narcissistic pathology in adolescence has also received focussed attention in recently published literature (Bleiberg, 2001; Kernberg, 1998). Guile, Sayegh, Bergeron, Fortier, Goldberg and Gunderson (2004) note that the construct of narcissistic pathology in children and adolescents remains a controversial topic, as these developmental periods have inherent aspects of narcissistic functioning as part and parcel of normal development (Guile et al., 2004; Kernberg et al., 2000). However, Guile et al. (2004), Kernberg (1998), and Kernberg et al. (2000) believe that the distinction between pathological and normal narcissism can be evident from the years of childhood. Guile et al. (2004) applied a diagnostic interview developed by one of the researchers (which had been adapted for pre-adolescents) to assess pathological narcissism in pre-adolescents. They put forward that in using this diagnostic interview, all diagnostic criteria for Narcissistic PD in the DSM-IV-TR had been included, and thus, the DSM diagnosis would be applicable to these (and by implication, to adolescent) population groups. Johnson, Cohen, Smailes, Kasen, Oldham, Skodol and Brook (2000) found the prevalence of Narcissistic PD in the non-clinical adolescent population to be 3.1%. No prevalence rates could be found regarding the adolescent clinical population – with research focussing more on the construct validity of such a diagnosis in the non-adult population.

It is interesting to note that Kernberg (1998) regards Antisocial PD as the most severe form of narcissistic character pathology – a view shared by Bleiberg (2001). Kernberg (1998) explains that antisocial pathology may be defined as a narcissistic personality disorder with extreme absence of superego functions. The DSM-IV-TR does not permit the diagnosis of Antisocial PD being made in a patient who is younger than 18 years of age, rather diagnosing children and adolescents who have conduct difficulties (or antisocial tendencies) as having Conduct Disorder (diagnosed on Axis I) (APA, 2000). Kernberg (1998) views this artificial separation of diagnoses

by age to be absurd from a psychopathological and clinical perspective – a view also held by Cohen et al. (2005) which was mentioned above. Indeed, research by Myers, Stewart and Brown (1998) found a high rate of progression from conduct disorder to Antisocial PD in the research they conducted.

2.4.3 Cluster A and C PDs in adolescents

A review of available literature of PDs in adolescent populations shows a paucity of discussion on the individual PDs that make up Cluster A and Cluster C PDs as defined by the DSM-IV-TR. Westen and Chang (2000) suggest that it makes more sense to view PDs in adolescence as being part of these clusters (and thus to speak of clusters) due to the substantial overlap of diagnostic criteria between the PDs that fall into them. However, aside from citing the frequency with which Cluster A and C PD groupings are diagnosed in adolescent populations (which was set out above), the literature seems to focus far more on the presence of the individual Cluster B PDs in adolescents. The literature does not provide reasons as to why this may be so.

With literature having been reviewed in which the DSM-IV-TR has been utilised to describe and diagnose personality pathology in adolescents, it is now possible to turn to more theoretical aspects which warrant discussion. In this regard, issues regarding the utility and validity of diagnosing PDs in child and adolescent populations are important to include in this literature review, as it is submitted that a diagnosing clinician's views in this regard will impact on his/her proclivity to diagnose personality pathology in adolescent populations.

2.5 Utility of diagnosing PDs in child and adolescent populations

For clinicians who work within a nosological milieu, and must communicate with other clinicians, such as psychiatrists and other mental health professionals in a multi-disciplinary team (as opposed to, for example, a psychodynamic psychotherapist who may view inter- and intra personal functioning and character difficulties from a perspective which does not support or utilise DSM classifications), the utility of the rendering of a PD diagnosis in adolescent populations is of major importance (Bleiberg, 2001; Kernberg et al., 2000; Westen & Chang, 2000; Westen et al., 2003). Sosnovik and Gericke (2007) found that some clinicians favour the use

of a common language when talking to other clinicians about an adolescent's psychopathology. Guile and Greenfield (2004) note that the traditional position of only diagnosing PDs in adulthood prevents timely and appropriate treatment and potentially increases morbidity of the PD. Zimmerman et al. (2005) further note that evaluation of the potential presence of a PD in an adolescent patient is important for consideration of the course and treatment of the Axis I disorder that patients often identify as their chief complaint. The recognition of an Axis II PD in a child or adolescent allows the clinician to formulate a more comprehensive treatment plan and to better evaluate responses to psychopharmacological agents, as the presence of a PD worsens the overall prognosis and complicates the response to medication (Kernberg et al., 2000). Further, the interpersonal features of a PD often necessitate intensive psychotherapy, which is less likely to be supported by third-party payers who emphasise less expensive and briefer treatment (Kernberg et al., 2000). Thus, if PDs are diagnosed in children and adolescents, there is room to argue that third-party payers (such as medical aid schemes) would be obliged to increase the cover applicable to that child or adolescent for necessary – and more extensive – treatment, than would otherwise be the case if that child had not been diagnosed with a PD. Interestingly, Gabbard (2005) highlights a contradictory position regarding the assertion that diagnosis of PDs may result in increased medical aid cover. He suggests that insurance and medical aid companies may incorrectly assert that PDs are not treatable and, therefore, that treatment for such patients is not reimbursable.

2.6 Distinguishing between validity and utility

There are mental health professionals who will not make a PD diagnosis, despite agreeing with the position above – namely that it is valid to make a diagnosis of PD in a child and adolescent population. Kernberg et al. (2000) suggest that the reason for this is that all professionals who deal with children have reservations about labelling them with a diagnosis that implies severity and nonmalleability. There is a concern that a PD label will adversely affect the child's (or his family's) self-concept or prejudice his future by appearing somewhere in his personal record (Kernberg et al., 2000).

In this respect, research has shown that labelling and stigma impair the social and psychological functioning of people officially labelled as mentally ill (Link, Mirotznik &

Cullen, 1991). These authors also assert that stigmatisation affects patients when they seek to obtain jobs and develop social support networks. It can be argued that the effects on a child or adolescent who has been diagnosed with having a PD can be even more significant – especially because children and adolescents face all kinds of peer pressures and ostracisation. Corrigan and Watson (2002) note an interesting paradox which emerged from their research. They found that published narratives by persons with serious mental illness describe the harmful effects of stigma on self-esteem and self-efficacy. However, other persons suffering from mental illness were energised by the prejudice. Added to this, Corrigan and Watson (2002) discuss perceptions of legitimacy provided by the label and the person's identification with a larger group of individuals with mental illness. However, no direction was given in their research regarding the effect that patient's self-perceptions (due to their stigma and or the diagnostic labelling) had on the therapeutic outcome of their illness.

It is important to keep in mind that there are clinicians who do not believe that it is valid to diagnose DSM-IV-TR PDs in child and adolescent patients, and these views will now be outlined.

2.7 Literature cautioning against the applicability of DSM-IV-TR adult standardised diagnostic criteria to child and adolescent populations

Guile and Greenfield (2004) report that many clinicians are reluctant to diagnose PDs during youth, viewing personality deviations as reflective of given developmental stages. In this respect, Kernberg et al. (2000) suggest that many clinicians believe that personality has not yet crystallised in children and adolescents, and for these clinicians, the very existence of a PD being present in a child or adolescent would not make sense. Kernberg et al. (2000) continue that there are some clinicians who agree that PD diagnoses can be made in adolescence but they do not believe it is valid to make a PD diagnosis in a pre-adolescent patient.

Conceptualisation of personality crystallisation can be informed by an examination of neurobiology, in that the prefrontal lobes of the brain continue to develop throughout the first two decades of life (Solms & Turnbull, 2002). Solms and Turnbull (2002) explain that, from a neuroscientific perspective, the essence of free will appears to be the capacity for inhibition – the capacity to choose not to do something. Such

inhibitory mechanisms, which have their physical locus in the prefrontal lobes, enable humans to suppress primitive compulsions that are encoded in our inherited and emotional memory systems. The prefrontal lobes offer the potential to delay or inhibit decisions in the interests of thinking – i.e. of executive functioning. Such potential also allows for the regulation of affect (Solms & Turnbull, 2002).The development of executive functioning, due to the fact that the prefrontal lobes continue to develop throughout the first two decades of life, is thus only complete when an individual reaches his/her early to mid twenties (Solms & Turnbull, 2002). Pally (2002) notes that a converging body of scientific evidence indicates that patients with Borderline Personality Disorder suffer from impairments in the brain systems that regulate impulsivity, aggression and affect. Thus, by implication, it can be argued that one cannot talk of personality crystallisation until brain maturation is complete. In this regard, Ceballos, Houston, Hesselbrock and Bauer (2006) emphasise that measuring the course of brain maturation may be informative for explaining why specific disorders differ in their age of onset. Further to this, Solms and Turnbull (2002) note that it is most likely the regulation of our affective systems, sculpted by cortical structures in the course of development, that determines whether (and which) disorders develop.

An issue which Kernberg et al. (2000) do not discuss is that the fact that there are clinical psychologists who are disinterested in viewing human intra- and interpersonal difficulties from a nosological or classification perspective and thus have no use for DSM diagnoses, as well as being sceptical about the validity of DSM diagnostic constructs (regardless of the age of their patient). In this respect, Mundt and Backenstrass (2005) note that much controversy exists on whether nosological classifications such as DSM and ICD are suitable and sufficient to define objectives for psychotherapy and the specific pathogenic pathways that are accessible by psychotherapeutic techniques (Mundt & Backenstrass, 2005).

Marcia (2006) explains that DSM PD categories are based on clinicians' observations of clusters of behaviours, usually without regard to etiology or developmental course and that this diagnostic approach is thus a-theoretical. Marcia (2006) continues that the purpose of DSM PD categories is to diagnose patients for dispositional, medico-legal and therapeutic purposes. The central scientific concern

is the reliability of categorisation and less attention is paid to the construct validity of the labels.

Bleiberg (2000) notes that the DSM-IV-TR's approach to Borderline Personality Disorder raises several questions about the applicability of this diagnosis in childhood and adolescent populations. He asserts that even if PDs could be diagnosed before adulthood, he wonders if the term 'borderline' refers to a primitive level of personality development or whether it is instead a specific disorder, as advocated by the DSM. However, Bleiberg (2000) confirms that children on the path to developing a borderline personality are those who early on in their lives respond to parental misattunement or abuse with a splitting of mentalisation across domains of interpersonal interaction. Bleiberg (2000) explains mentalisation as being the universal capacity discernable even in very young children to discriminate human behaviour and interpret it in terms of putative mental states.

Bleiberg's (2000) views must be understood in conjunction with the work of Lubbe (2000). For Lubbe (2000), the borderline child is not a step-child of the borderline adult and he asserts that the borderline psychotic child must not be understood by extrapolations backwards from adulthood. Anderson (2000) explains that Lubbe (2000) looks at difficulties with personality from a psychoanalytic perspective. Lubbe (2000) believes that many commentators today only address the manifest behaviour of children and they shape their diagnostic thinking accordingly, without considering what lies beneath, by way of mechanisms and structures.

Lubbe (2000) understands the work of those such as Kernberg (1998) and Kernberg et al. (2000) as placing the debate regarding personality disorders in children and adolescents within adult psychopathology. He notes that opponents to such a view have called into question whether the forging of a diagnostic category for children by analogy to an adult disorder has been an unqualified success.

With all these theoretical views in mind, it worthwhile to outline research that evidences South African clinicians' opinions on diagnosing PDs in child and adolescent patients – and these opinions will be dealt with now.

2.8 South African psychologists' and psychiatrists' opinions on diagnosing PDs in child and adolescent populations

To date, it seems that the only literature available on the opinions on South African psychologists and psychiatrists regarding the rendering of a PD diagnosis in adolescent populations, is study conducted by the researcher and his supervisor in 2007. This is as no other research seems to have been conducted in this regard. Sosnovik and Gericke (2007) interviewed prominent practicing clinical psychologists and practicing psychiatrists in the greater Johannesburg area (whose practice involved working with children and adolescents) on their opinions of diagnosing PDs in child and adolescent populations. The research revealed that South African psychologists' opinions regarding the validity of diagnosing PDs in child and adolescent populations very much depended on their theoretical approach towards psychotherapy. The more strictly psychodynamic a psychologist's approach to psychotherapy was, the less likely s/he was to regard as valid the notion of diagnosing PDs in child and adolescent populations. The results of this research showed that strictly psychodynamic psychologists are disinterested in viewing human intra- and interpersonal difficulties from a noslogical or classification perspective and thus have little use for DSM diagnoses, as well as being sceptical about the validity of DSM diagnostic constructs (regardless of the age of their patient) – this despite their clear acknowledgement that personality difficulty (i.e. personality pathology) has its origin in early childhood (Sosnovik and Gericke, 2007). The more eclectic the approach of a psychologist is, the more likely it is that the psychologist will utilise DSM-IV-TR classifications in his/her everyday practice, and there is an increased likelihood that such practitioners will more easily accept the validity of diagnosing PDs in child and adolescent populations (Sosnovik and Gericke, 2007).

Turning now to the views of psychiatrists regarding the validity of diagnosing PDs in child and adolescent populations, what emerged from the results of the research conducted by Sosnovik and Gericke (2007) is that the psychiatrists interviewed accepted that personality pathology is evident from early on in childhood. However, this fact did not translate to them confirming the validity of diagnosing PDs in child and adolescent populations. This is mainly due to the fact that they regard

personality in children especially, but also in adolescents, as still being fluid and malleable.

The participants in the study evidenced a very cautious approach regarding the diagnosing of PDs in child and adolescent populations, and they stated that at most, they will note in a patient's file that an emerging PD is evident. In this regard, concerns regarding the applicability of DSM-IV-TR Axis II (PD) diagnostic criteria to child and adolescent populations were reflected in the views expressed by the majority of the participants – and in particular by the psychiatrists interviewed, whose daily practise involves particularly close reference to diagnostic tools such as the DSM-IV-TR. The general view expressed is that PD diagnostic criteria have some use and applicability but that these criteria need to be refined, normed against, and made more applicable to, child and adolescent populations.

The participants who took part in the Sosnovik and Gericke (2007) study suggested that future versions of the DSM must take into account developmentally appropriate criterion for children as well as for adolescents – a view emphasised by Kernberg et al. (2000) and Lubbe (2000). However, the view was expressed that reliance is still placed on DSM-IV-TR (PD) diagnostic criteria and that they provide useful information (and are descriptive categories) regarding what are seen as personality constellations.

With the theoretical review on issues pertaining to the utility and validity of diagnosing PDs in child and adolescent populations having been outlined – as well as opinions of South African clinicians in this regard also having been discussed – the literature review will now detail factors which are associated with personality pathology and its developmental precursors.

2.9 Factors associated with personality pathology and its developmental precursors

There are a host of factors that allow children to develop and adapt successfully in circumstances often associated with maladjustment and dysfunction (Bleiberg, 2001). These protective factors include individual qualities such as high intelligence and an easy temperament, but importantly, they also include features in the child's environment and developmental context. Bleiberg (2001) emphasises the following

environmental factors as being important: caregivers' emotional responsiveness and competence; perceived social support in childhood; and positive educational experience. In addition, factors which arise in the interactions of children and the caregiving environment – particularly attachment security and the maternal reflective function – are regarded as being of particular importance. These protective factors are jeopardised by environmental failures including (but not limited to) a history of lengthy separations (for the infant) from the primary caregiver, abuse in the home (Gunderson & Hoffman, 2005); familial history of psychopathology (Goldman, D'Angelo & DeMaso, 1993) and disorganised/unresolved attachment patterns (Bleiberg, 2001; Kernberg, 1998), and have been shown to be associated with personality pathology in adolescents. These will now be discussed in further detail.

2.9.1 Attachment

Bowlby's theory of attachment (Bowlby, 1973) is of fundamental importance for thinking about continuity across developmental periods, as patterns of attachment continue to determine characteristics of interpersonal relations and the individual's mental representation of others. In this regard, Bleiberg (2000) notes that longitudinal research has demonstrated the relative stability of attachment patterns across the lifespan. This view is also supported by Waters, Merrick, Treboux, Crowell and Albersheim (2000). Nakash-Eisikowits, Dutra and Westen (2002) note that there is a marked association between unresolved attachment and more severe psychopathology in adolescents and Crawford et al. (2006) state that attachment scales predict DSM-IV PDs in theoretically coherent and clinically meaningful ways. Attachment theory concerns early caregiving relationships and the way that these relationships support the individual's subsequent development (Senior, 2004). Senior (2004) explains that the nature of the parent-child relationship is believed to be one of the central causal factors in personality development and interpersonal functioning, as well as having implications for psychopathology. Bowlby (1973) suggests that a person's internal working models – the aggregate of experiences with caretakers organised by the infant into representational systems (Bleiberg, 2000) – once formed in early childhood, tend to persist and serve as a template for his/her subsequent close relationships. Such internal working models become a central aspect of personality and come to operate largely at an unconscious level. Senior (2004) explains that internal working models tend to become self-fulfilling in

that new relationships may be created in the light of expectations developed in earlier relationships. Also, internal working models are often resistant to change, thus limiting a person's ability to learn from interpersonal interactions. Securely attached children grow to become more resilient, self-reliant, socially orientated and more deeply connected with others. By contrast, if the attachment relationship is not secure, whether it be resistant, avoidant or disorganised (Senior, 2004), such children are (inter alia) unable to respond flexibly and adaptively to the symbolic, meaningful qualities of other people's behaviour, and they find themselves trapped in fixed, concrete patterns of interpretation and response that are not amenable to reflection or modulation (Bleiberg, 2000). It is proposed that such fixed, concrete patterns of interpretation and response (not being amendable to reflection or modulation) are at the core of the DSM-IV-TR definition of PD.

Following this developmental perspective of psychopathology, Sroufe (2005) studied the link between attachment patterns and personality disorders. Sroufe (2005) suggests that Borderline Personality Disorder is the legacy of disorganised attachment, at times in conjunction with avoidant attachment. This view is also held by Nakash-Eisikovits et al. (2002), who state that disorganised/unresolved attachment is positively correlated with every PD, except for Antisocial and Histrionic PD. Further to this, Sroufe (2005) believes that personality disorders are not particularly related to anxious/resistant attachment patterns. Barone (2003) and Holmes (2004) also suggest that disorganised attachment organisation is a potential risk factor for the development of Borderline Personality Disorder. The views of Bennett (2006) differ slightly from those of Sroufe (2005), in that she suggests that anxious attachment patterns are linked to many of the Axis II PDs, although, unfortunately, she does not specify which PDs, in particular, are associated with this pattern of attachment. Bennett (2006), however, does specify that dismissing avoidant attachment (the adult counterpart of childhood insecure avoidant attachment) is related to the disorders of narcissistic, antisocial, and paranoid personality.

Interestingly, there is no significant association reported between attachment status and family history of psychopathology, but the presence of family history of psychopathology is significantly associated with the presence of personality pathology (Nakash-Eisikovits et al., 2002).

2.9.2 Family history of psychopathology

Nakash-Eisikovits et al.'s (2002) assertion that family history of psychopathology is significantly associated with the presence of personality pathology is corroborated by other studies such as that of Goldman, D'Angelo and DeMaso (1993) – who found that a history of significant family psychopathology is associated with Borderline PD in adolescent populations. In a study examining the effect of parental alcohol and drug disorders on adolescent personality, Elkins, McGue, Malone and Iacono (2004) found that in both male and female offspring, parental history of alcohol dependence was associated with greater negative emotionality, aggression, stress reaction and alienation; and that parental history of drug disorders was associated with lower constraint, control and harm avoidance. This is alarming when considering the ramifications for adolescent mental health (in terms of both Axis I and II disorders) in the South African context, where in comparison with data from other countries, South Africa has a particularly high prevalence of substance use disorders (Stein, Seedat, Herman, Moomal, Heeringa, Kessler & Williams, 2008).

2.9.3 Child abuse

Physical and sexual abuse, as well as neglect, is an assault on the protective factors which Bleiberg (2001) suggests aids adaptive development, adjustment and functioning. In this regard, Flisher, Kramer, Hoven, Greenwald, Alegria, Bird, Canino, Connell and Moore (1997) found significant associations between physical abuse and psychopathology and Gunderson and Hoffman (2005) note that child abuse is a strong risk factor for the development of Borderline PD. In many cases, children who are victims of physical and sexual abuse, and neglect, are removed from their homes by social services (D'Ambrosio, 2008; Vanderploeg, Connell, Caron & Saunders, 2007). However, no research was found on the possible effect that removal of the child from his/her home has on the development of personality pathology, or if there are any associations between children or adolescents who have been removed from their homes and the diagnosis of personality pathology in such children/adolescents (factors which were found to be significantly associated in the findings of this current study).

2.9.4 Suicidal behaviour

Whilst collecting data for this study, many adolescent files had references to parasuicidal behaviour. The manifestation of personality pathology – especially with regard to Cluster B PDs – is associated with acting out behaviour, including suicide and parasuicide (Cavanagh, Carson, Sharpe & Lawrie, 2003). Schneider, Schnabel, Wetterling, Bartusch, Weber and Georgi (2008) confirm the role of PDs and their comorbidity with other diagnoses as risk factors for suicidal ideation, attempted and completed suicide, and they suggest that treatment of PDs is essential for suicide prevention. Indeed, this would add weight to Kernberg et al.'s (2000) call for the early diagnosis of PDs in adolescent populations and its important implications regarding treatment. It is beyond the scope of this paper to discuss the associations between suicidal behaviour and personality pathology in any further detail.

2.9.5 Sociocultural factors

Paris (1998) notes that PDs demonstrate a large degree of cultural relativity. He explains that psychopathology lies on a spectrum with normal personality and when specific traits are more common in a given culture, the disorders based on these dimensions may also become more prevalent. Further, when personality profiles correspond to social expectations, certain traits may not be considered pathological unless they seriously interfere with functioning (Paris, 1998). The important findings of Paris' (1998) research are that: sociocultural factors, consisting of a lack of social structure, normlessness, and a lack of available social roles, are risks for the development of PDs; these sociocultural factors are more common in modern societies, and should therefore affect the prevalence rates of PDs; and these effects should have particular impact on disorders associated with impulsivity. Lastly, Paris (1998) suggests that studies of risks for PDs should include measures of sociocultural factors.

Sociocultural factors not only affect biological and psychological risks within the patient, but they may also have an impact on cross-cultural clinical judgement bias in PD diagnosis by clinicians (Mikton & Grounds, 2007). In England and Wales, Black patients constitute over 20% of admissions to psychiatric units. However, Black patients in these units have lower rates of PD, but higher rates of psychotic mental illness (Coid, Kahtan, Gault & Jarman, 2000). Mikton and Grounds (2007) note that

many clinicians in the United Kingdom believe that that Black men in forensic settings are under- rather than over-diagnosed with PDs. The view that the diagnosis of PD is prone to cross-cultural bias is explained in terms of the following factors: First, the DSM-IV and ICD-10 define personality pathology in explicitly culturally relative terms, as a deviation from cultural expectations. Secondly, many theories hold that both PD constructs and the process of PD diagnosis are significantly influenced by culture. Thirdly, intracultural and crosscultural diagnoses of PD require more clinical judgement than that of most other mental disorders (Mikton & Grounds, 2007). In conducting their research, Mikton and Grounds (2007) made the following interesting findings: White clinicians are generally more familiar with White culture than African/Caribbean culture; that in the course of training, non-White clinicians internalise White standards prevalent in the medical professions and diagnose much like White clinicians – sometimes showing the same biases towards non-White populations; and that crosscultural bias did not seem to be evident in the diagnosis of Borderline PD, but was evident in the diagnosis of Antisocial PD.

South Africa's political history – where race formed the basis of prejudice and exclusion - makes the inclusion of race as a variable in psychological and psychiatric research a sensitive issue. However, Szabo (1995) emphasises that within the South African milieu, race can be included in research when the information derived could have a profound (and positive) impact on patient care – and by implication – when such information is not used for purposes that are prejudicial or exclusionary. Thus, the potential presence of bias in the rendering of crosscultural PD diagnoses is a factor that may be of major relevance within the South African context, yet it has not been explored in research or literature.

2.10 Conclusion to literature review

The literature review set out the definition of PD as is included in the DSM-IV-TR and it also discussed how there is no universal agreement on what ages are thought to fall within the period of adolescence. International prevalence rates of PD diagnoses in adolescent populations were provided, including discussion on the comorbidity of adolescent personality pathology with Axis I disorders and the diagnostic stability of PDs in adolescence. Prevalence rates of PDs in the general population were set out and literature in support of the validity and utility of making PD diagnoses in

adolescent populations was analysed and reported on. Thereafter, views cautioning against the applicability of the DSM-IV-TR adult standardised diagnostic criteria to child and adolescent populations were laid out and opinions of South African psychologists and psychiatrists regarding the rendering of PD diagnoses in child and adolescent patients were also discussed. Lastly, relevant factors associated with personality pathology and its developmental precursors were provided – which included attachment patterns, family history of psychopathology, child abuse, suicidal behaviour, as well as sociocultural factors.

The rationale for this study, which was included in the introduction to this research project, as well as the literature and research that was reviewed, informed the research questions which were formulated for this project and these questions will now be presented.

2.11 Research Questions:

1. **Prevalence**
    a. What proportion of South African adolescents is being diagnosed with having personality pathology?
    b. What proportion of these is being diagnosed with “traits present”, “emerging PD”, “query full PD” or “full PD present”?
    c. What proportion of these diagnoses was evidenced in the multiaxial assessment of the patient as opposed to references of personality pathology being mentioned in the filenotes of the patient?
    d. What kinds of personality pathology are being diagnosed in South African adolescents?

2. **Comparisons**
    a. Is there a significant difference in diagnostic patterns across the three sites included in the study?

3. **Associated factors**
    a. Is there mention of familial psychiatric history in PD positive files?
    b. Is there mention of attachment difficulties in PD positive files?

The reason these two associated factors were privileged over any others is because the researcher planned to assess whether there was a higher propensity of a PD diagnosis being made in an adolescent if there was a history of psychiatric illness in the family of the adolescent; and topical research exists regarding the link between attachment and PDs. Thus the researcher planned to assess whether there was a link between considerations of attachment patterns and the consideration of PD diagnoses.

c. What types of Axis I disorders are most commonly occurring in patients with personality pathology being diagnosed as opposed to patients with no personality pathology being diagnosed?

During the course of data collection, the following factors that seemed to be associated with the rendering of a PD positive diagnosis became evident. The researcher thus recorded them to test whether any significant associations could be found. These raised the following questions:

d. Is there an association between a PD positive diagnosis and an adolescent living in a childrens' home?
e. Is there an association between a PD positive diagnosis and a parasuicidal patient?

CHAPTER 3

METHODS

3.1 Research Design

The research design for this study was exploratory and quantitative in nature. Exploratory studies are useful to conduct when researching issues about which very little research has actually been done (Kreuger & Neuman, 2006) and in this regard, hardly any research has been done within the South African context regarding the diagnosis of PDs in child and/or adolescent populations.

The research design was also non-experimental as no manipulation of variables occurred (Whitley, 2002). There was no random selection or random assignment of participants in the study, and there was no control group. It was an ex-post facto study in that the data was pre-existing (in the form of information contained in patient files and discharge summaries) and the data had to be extracted from these files. The ex-post facto nature of the study meant that no causal conclusions could be drawn about the relationships between variables, and at best, the study could identify patterns of relationships – some of which might have plausible causal explanations.

Lastly, even though this study was quantitative in design, the data – and issues around data collection - were also interpreted from a qualitative angle, in order to discuss patterns that were identified whilst the data was being collected, as well as to discuss patterns that emerged from the results of the statistical tests that were run on the data collected.

3.2 Sample

The sample for this study was a non-probability, purposive one. Purposive sampling is appropriate when a researcher intends to select particular types of cases for in-depth investigation (Kreuger & Neuman, 2006). In this regard, files and discharge summaries of adolescent patients from three academic hospitals falling under the jurisdiction of the University of the Witwatersrand (who were assessed by psychologists, psychiatrists, psychology interns or psychiatry registrars respectively)

at these hospitals' child and adolescent psychiatric in- and out-patient wards were included in this study. To qualify for inclusion in this study, the patient had to have been between the ages of 12 years of age up to (but not including) 19 years of age (i.e.18 years and 11 months of age) when his/her file was opened in the particular hospital's child and adolescent psychiatric ward. Dates during which files had to have been opened in order to be included in this study were as follows:

- 1 January – 31 March 2004;
- 1 July – 30 September 2005;
- 1 April – 30 June 2006; and
- 1 October – 31 December 2007.

Each of the four three month periods was randomly assigned to a year that the researcher, in consultation with the supervisor, decided to include in the study. This was done by pulling a year out of a hat and matching it to the first and then consecutive three month periods. Examining files opened over a three month period for each year was regarded by the researcher and supervisor as sufficient to obtain meaningful data to analyse for this study. The researcher wished to examine files opened from around the time that literature on diagnosing PDs in child and adolescent patients became more prolific, in order to see if any trends in diagnosis of personality pathology could be evident over time. This would have meant looking at files opened over the last 10 years. When the researcher met with heads of the child and adolescent psychiatric units at the three hospitals targeted, it became evident that at two of these hospitals, it would not be viable to gather data from files prior to 2004, as their file-keeping and archiving prior to this was not well organised at that stage. Thus, it was decided to look at data from 2004 up to and including 2007.

It was only possible to include files of in-patients at one of the hospitals included in this study (Hospital A), as the out-patient facility at this particular hospital did not arrange its files by date of opening of that file – rather, this out-patient facility ordered its files alphabetically, by surname. There was also no list kept to indicate the date on which the files in this out-patient ward were opened. Thus, it was not possible to determine which files to draw from the hospital's archives or the ward's filing room. Because only in-patient files were included in this study, the criteria for inclusion of files from this hospital were widened, so that a sufficient number of files could be

reviewed. So, for this particular hospital, files for the whole of 2004, 2005, 2006 and 2007, were included in this study. Finding these files in Hospital A's archives proved particularly difficult, but the psychiatric inpatient ward kept detailed files of patients' discharge summaries. So for Hospital A, data was obtained from these discharge summaries, and all in-patient discharge summaries were reviewed from 1 January 2004 to 31 December 2007. For hospital B and C, all patient files for the periods set out above, were reviewed. For the purposes of this report, the term "files" will also mean the patient's discharge summary from Hospital A.

It was decided to include three hospitals (as opposed to one) in this study in order to get as representative as possible a sample (within the time constraints of completing and submitting this research report) of what is occurring in the South African diagnostic milieu, as a diagnostic culture that may exist in a particular hospital could skew research results and reduce the validity of this study if only that one hospital were included in the study. Obtaining a sample from as wide a geographical and socio-economic spread of the population as possible also informed choosing more than one hospital, and hospitals targeted for inclusion came from different socio-economic locations that the academic hospitals are found in. With these requirements in mind, the researcher and supervisor chose three hospitals to approach for inclusion in this study. Due to ethical obligations of confidentiality and anonymity, the three hospitals selected for inclusion in this study cannot be mentioned by name or geographical location.

From reviewing all the files opened in the applicable periods, 464 files qualified for inclusion in this study (i.e. n = 464). The demographic information about this sample is as follows:

Table 3 .1: Frequency table – Gender:

Gender	Frequency	Percent
Male	242	52.16%
Female	220	47.41%
Not stated	2	0.43%
Total	464	100%

Table 3.2: Frequency table – Race:

Race	Frequency	Percent
Asian	1	0.22%
Black	314	67.67%
Coloured	30	6.47%
Indian	17	3.66%
White	62	13.36%
Unspecified	40	8.62%
TOTAL	464	100%

Table 3.3: Frequency table - Files qualifying for inclusion in study per hospital:

Hospital	Frequency	Percentage
Hospital A	65	14.01%
Hospital B	130	28.02%
Hospital C	269	57.97%
TOTAL	464	100%

Table 3.4: Frequency table – Patient per age group:

Age of patient	*Frequency*	*Percentage*
12	*86*	*18.53%*
13	79	17.03%
14	88	18.97%
15	56	12.07%
16	72	15.52%
17	60	12.93%
18	23	4.96%
TOTAL	464	100%

3.3 Procedure and Instruments

The researcher met with the supervisor in order to discuss which hospitals falling under the auspices of the University of the Witwatersrand academic circuit to include in this study, as well as to discuss the applicable parameters for gathering the sample through the ex-post facto review of files (which was detailed in the section above).

Once the three hospitals had been targeted for inclusion in this study, the researcher telephoned the person in charge of each of the applicable in- and out-patient adolescent psychiatric wards at the three hospitals. During the telephone conversations, he introduced himself and his proposed study, and asked whether each unit head would be amenable to grant permission to access their patient files for the purposes of this study (subject to ethical clearance being granted by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand ("HREC (Medical")). Each unit head of the three hospitals contacted was supportive of the researcher having access to their patient files for the purposes of this study – subject to ethical clearance being granted by the HREC (Medical).

The researcher then sent a formal letter of invitation to each unit head contacted at the three different hospitals (a copy of which is attached hereto marked Annexure A), setting out the aims of this study; formally requesting permission to have access to patient files; setting out ethical requirements and obligations – emphasising that participation was voluntary and that permission could be withdrawn by them at any time; explaining which files would be targeted for inclusion in this study; and how the data would be collected. The researcher also requested that each of the heads from the three different hospitals provide him with their written consent (subject to HREC (Medical) clearance) for him to conduct the study in their wards, as these would be required to accompany the application to the HREC (Medical) for ethical clearance to conduct this study. Once the researcher was in possession of these letters of consent, he then had to seek written permission from the CEO / superintendent of each of the three hospitals to conduct this study in their hospitals. Once the researcher obtained consent from the CEO / superintendent of each hospital, he was able to submit his application for ethical clearance to the HREC (Medical). Other than providing a copy of the HREC (Medical) clearance certificate (a copy of which s

attached hereto marked Annexure B), the researcher cannot attach copies of the letters of consent from the unit heads or superintendents/CEO's of the hospitals included in this study, as inclusion thereof would inform the reader of the names of such institutions, and the researcher would thus be breaking his ethical obligations of not revealing the names of these institutions to any persons other than his supervisor. These letters of consent accompanied the researcher's application for ethical clearance from the HREC (Medical) and the research supervisor has also viewed them.

Ethical clearance was granted by the HREC (Medical) to the researcher on 23 June 2008 (as is evidenced in Annexure B hereto). Data collection could then begin, and the researcher telephoned the unit heads to arrange dates that would be convenient for him to come to the wards to review the files.

The researcher had compiled a questionnaire that would be filled out by him for each applicable file. This questionnaire (attached hereto marked Annexure C) reflects amendments that the HREC (Medical) required be made before ethical clearance would be granted by them.

In terms of the actual data collection, data was first collected from Hospital A, thereafter Hospital B, and lastly, from Hospital C. At Hospital A, detailed discharge summaries of in-patients are kept in dedicated files by the ward's administrative clerk. Retrieving applicable files from Hospital A's archives was difficult due to poor file-keeping, so the researcher gathered his information from these discharge summaries. All discharge summaries opened within the applicable period were reviewed in order to ascertain which patients fell within the applicable age group for this study. If the patient did fall within the applicable age group, then the summary was perused in detail, and the questionnaire was completed by the researcher, recording the required information that was noted in the discharge summary. In this regard, the multiaxial diagnosis was examined, as well as the notes made by the applicable clinician about the patient.

At Hospital B and C, files are kept in the ward's filing room in meticulous order – filed by date on which the file was opened. Both Hospitals B and C had a filing register, which clearly set out the file numbers of the files to review for the relevant periods. At these two institutions, the researcher retrieved these files from the ward's filing room.

He then checked each file to see whether the patient fell within the applicable age group to be included in this study. If the patient did fall within the applicable age group, then the file was read through in detail. Firstly, the case summary sheet (which is a pre-printed form attached to the inside of the front or back cover of the file) was perused. This form has a blank pre-printed multiaxial diagnosis table which is completed by the relevant clinician treating that particular patient. If this sheet was completed, the multiaxial diagnostic information was noted by the researcher on the questionnaire sheet he completed for each file. In many instances, clinicians had omitted to fill in this sheet, but multiaxial diagnoses were included in their hand-written notes. All filenotes were read and references to personality pathology (if not included in the multiaxial diagnosis) were looked for. All assessment reports, forms completed of the patient's history and family psychiatric history, letters, and any other documents that were in a patient's file (whose age qualified them for inclusion in this study) were perused in detail, and a questionnaire was completed by the researcher for each qualifying file by answering the questions on the questionnaire with the information found in qualifying file.

It should be noted that after having started the process of data collection at the first hospital (Hospital A), the researcher noticed that references to parasuicide seemed prominent in patient files where personality pathology had been diagnosed. The researcher also noticed that many patients with personality pathology seemed to have been removed from their families and were residing in childrens' homes. He thus decided to restart reviewing the data, and on each questionnaire completed for this study (at Hospital A, B and C), he made a note if parasuicide and/or the adolescent residing in a childrens' home had been mentioned in the file.

The primary data gathering tool was thus the researcher, who completed a questionnaire for each applicable file. These questionnaires formed the basis of the data which was analysed by the researcher.

3.4 Ethical Considerations and Requirements

No data collection could take place until written permission had been obtained by the head of each applicable ward and the CEO / superintendent of each of the three hospitals. In addition, ethical clearance had to be granted by the Wits HREC (Medical). As stated above, the researcher cannot attach copies of the letters of consent from the unit heads or superintendents/CEO's of the hospitals included in this study, as inclusion thereof would inform the reader of the names of such institutions, and the researcher would thus be breaking his ethical obligations of not revealing the names of these institutions to any persons other than his supervisor. Ethical clearance was granted by the Wits HREC (Medical) on 6 June 2008. The protocol number is M080420, and a copy of the clearance certificate is attached (please refer to Annexure B).

The researcher also offered to draft and to sign a confidentiality agreement with each hospital outlining and confirming his adherence to his ethical obligations regarding (inter alia) confidentiality and anonymity of data to third parties. None of the hospitals included in this study requested or required that the researcher comply with his offer to draft and sign such an agreement. Should this at any time be required of the researcher in the future, then he will gladly oblige such request.

In accordance with ethical research practise, no name or file number was recorded, ensuring the ethical requirement of confidentiality in terms of any names seen was met, and anonymity (in terms of identifying information of the patient) as pertains to third parties has been built into this study. Further to this, only the supervisor has had visual access to the completed questionnaires. Once this report has been marked, all completed questionnaires – which are currently being stored in a locked cupboard at the residence of the researcher – will be destroyed.

3.5 Analysis of the Data

The researcher assigned codes to the data that was contained in the questionnaires. Some of these codes require brief explanation:

Firstly, the age of the patient was determined by subtracting his/her date of birth from the month and year in which his/her file was opened. For some of the statistical analyses run, it was necessary to group patients by age into three age groups. This

was done to test if more significant associations could be found when age was a variable in the particular test. Where the age of the patient has been placed into these three groups, the reader's attention will be drawn to this. The three groups are as follows:

Group 1: Ages 12 and 13;

Group 2: Ages 14 and 15

Group 3: Ages 16, 17 and 18.

The coding of "personality pathology present" or the term "PD positive file" means a file in which there was a reference to the presence of personality pathology, whether it be in the form of traits of a PD; or the term "emerging" PD; or the querying of a full PD, or diagnosis of the full PD. The term "PD negative file" means a file in which no references were made to the presence of personality pathology.

References to personality pathology in patient files were made by clinicians in the following ways: "traits" and/or "features" and/or "emerging traits/features" of a particular PD being present; an "emerging" PD being present; a querying as to the presence of a full PD ("query full PD"); and a "full PD" being diagnosed. The researcher decided to categorise these (and code them) under the heading of "Severity". In coding the severity of the personality pathology, the comments included in the files regarding the presence of personality pathology, were coded into a hierarchy (from least to most severe). If reference to the presence of personality pathology in the patient's file was ambiguous (in terms of this hierarchy) – for example, the inclusion in a file of the sentence "Emerging traits present", then such term was coded by the least severe reference (which here would be "traits" present, as opposed to "emerging" - which in terms of this hierarchy and clinician's use of these terms - would be indicative of more severe pathology). Thus the coding of severity was as follows:

- Traits present (which included "traits", "features of" and "emerging traits/features")
- "Emerging PD";
- "Query full PD"; and

- “Full PD” present.

It is not clear whether the “Query full PD” code could be equated with “emerging” PD (where a clinician may only diagnose a full PD over the age of 18); or whether the clinician was querying the presence of the PD and was waiting for future consultations in which to more definitively decide on the presence of the PD. Thus, “query PD” was not conflated with other codes, and was coded separately in the severity list.

In assessing what kinds of personality pathology were being diagnosed in South African adolescents, codes were provided for each type of personality pathology corresponding to DSM-IV Axis II disorders. For example “Borderline Traits present” would be coded as falling under the type “Borderline pathology”. In situations where the cluster and specific traits of a disorder were mentioned, (such as “emerging Cluster B – Borderline Traits”, the most specific reference to type was coded (here being Borderline pathology). Where the possibility of the presence of two different PDs was included, both were coded. Where the diagnosis of traits belonging to a cluster were given (for example “Cluster B traits present”), the type of personality pathology was coded as “Cluster B – unspecified”. In the files of four patients, the presence of personality pathology was mentioned, but the type was not specified. For these four cases, the code assigned to the personality pathology present was “personality pathology present – type not specified”.

Axis I disorders were all given a numbered code. 93 different codes ended up being assigned to Axis I disorders. In certain instances, DSM-IV-TR Axis I diagnostic codes (or terminology) were not accurately included in patient files (for example, some files had the term “depression” on Axis I) and in these instances, the researcher did not attempt to code this as Major Depressive Disorder, or Dysthymic Disorder – rather, a separate code was created for the “diagnosis” of “depression”. A further example of this pertained to attachment disorders. In some files, “attachment problems” were noted on Axis I and a separate code was assigned to such clinical observation instead of it being coded as Reactive Attachment Disorder. Further, the querying of the presence of an Axis I disorder was coded separately to the presence of the disorder. Due to the fact that 93 different codes were assigned to different Axis I

disorders, the statistical tests ran looked at the top 5 Axis I diagnoses for both PD positive and PD negative files.

Lastly, when testing for an association between attachment disorders and a PD positive file, the codes which had been given (when coding Axis I disorders) to the different references made to attachment difficulties were conflated into one code and this conflated code (called “attachment difficulty”) was tested for any associations to the presence of personality pathology.

The data (in coded form) was then entered into Microsoft Office Excel, and once this was completed, the spreadsheet was exported to the statistical analysis program called SAS® (SAS® Version 9.1.3 – {2002-2003}). Because the variables were nominal, analysis procedures analogous to categorical data were used.

In order to describe the prevalence of personality pathology, and associated variables, frequency counts were constructed. To describe the association of PD positive diagnoses with other relevant variables in the study, (as well as to assess the consistency of diagnostic patterns across the three institutions), cross tabulations were generated. Chi-squared tests of association were used to determine if these relationships were significant or not.

CHAPTER 4

RESULTS

Field Notes

It was not the intention of the researcher to conduct any interviews with clinicians working in the wards where the data was collected on their opinions regarding the rendering of PD diagnoses in adolescent populations. This is due to the fact that that the researcher and his supervisor had conducted research assessing South African psychologists and psychiatrists opinions on diagnosing PDs in child and adolescent patients in 2007 (Sosnovik & Gericke, 2007). However, some interesting observations were noted by the researcher in casual conversation with the heads of the units/wards included in this study, which may provide further context to the results.

Firstly, a senior psychiatrist who consults at these wards mentioned that training psychiatric interns will be very hesitant to include any reference to personality pathology in Axis II of the multiaxial formulation, as they are aware that their formulations of their patients are assessed for examination purposes, and they are thus reluctant to render any unorthodox diagnoses. This would be the case even if they felt that personality pathology was evident in a particular patient. This psychiatrist did not provide her opinion on whether those student psychiatrists would include any references to the presence of personality pathology in the filenotes of the patient (as opposed to the multiaxial diagnosis). Secondly, a senior clinician at one of the institutions included in this study expressed the view that the researcher would not find references to personality pathology in the files of adolescents at that particular ward. The clinician explained that personality pathology is recognised as being present in adolescent patients, but it is discussed amongst members of the treatment team, and that it is not the practice of the ward to include such references in the patient file, as patients and/or their parents have a legal right to have access to their files. Thirdly, one clinician at the inpatient ward included in this study was surprised at the amount of adolescents who had actually been admitted to that ward since 2004 – a psychiatric inpatient ward which is predominantly for adults. S/he felt that this revelation (which s/he made when looking at information about patient age)

would have important consequences for motivating for more funding and beds for adolescent inpatients at that ward.

A further observation that may provide context to the results pertains the researcher's decision to test to see whether references to an adolescent patient's parasuicide behaviour had any association with the presence of personality pathology in that patient. As was mentioned in Chapter 3, the researcher decided to include parasuicide as a variable in his study, as when he commenced data collection, an associated trend seemed to be evident between the presence of a remark of parasuicide in a file and the presence of personality pathology. However, when collecting data from another hospital, what emerged was that for many patients, a file had been opened for them as they had been admitted for parasuicidal behaviour, but they were seemingly discharged before a psychiatric evaluation could be conducted, and they did not return for treatment. Thus no DSM-IV-TR diagnoses were included in these files. This possible explanation for no psychiatric assessment being present in those files was obtained from discussion with the clinicians at that hospital when the researcher enquired why there were no filenotes or multiaxial formulation in many of the files where the discharge summary only stated "parasuicide". The researcher realised that this may affect the results of tests designed to assess the association between parasuicide and personality pathology.

1. **Prevalence**
    a. **What proportion of adolescents is being diagnosed with having personality pathology in the three sites?**

Table 4.1: Frequency table setting out the proportion of adolescents diagnosed with having personality pathology in the three sites

Hospital	Percentage of patients with personality pathology	Percentage of patients with NO personality pathology
Hospital A	35.38%	64.62%
	23	42
Hospital B	18.46%	81.54%
	24	106
Hospital C	10.04%	89.96%
	27	242
TOTAL	*15.95%*	*84.05%*
	74	*390*

Thus 15.95% of adolescents included in this study were diagnosed with having personality pathology present.

Table 4.2: Frequency table of age by PD positive file:

Age group:	Percentage of patients in the age group with presence of personality pathology noted in their file
12	5.81% (5)
13	10.13% (8)
14	12.50% (11)
15	14.29% (8)
16	22.22% (16)
17	33.33% (20)
18	26.09% (6)

The Chi-squared test of association run on the cross tabulation of age and presence of personality pathology noted in file showed a very significant association (X^2_6 = 26.8889; p = 0.0002) between age of patient and the noting of personality pathology in the patient file, with personality pathology being noted much more in older adolescents than in younger ones.

Table 4.3: Frequency table of gender by PD positive file

Gender	**PD positive file**
Male	11.16% (27)
Female	21.36% (47)
Total	15.95% (74)

The Chi-squared test of association run on the cross tabulation of gender and PD positive file showed a very significant association (X^2_1 = 8.9244; p = 0.0028) between gender and the diagnosis of the presence of personality pathology, with adolescent females being twice as likely to have references to personality pathology being included in their files.

Table 4.4: Frequency table of race by PD positive file

Race	**PD positive file**
Asian	0% (0)
Black	9.55% (30)
Coloured	23.33% (7)
Indian	5.88% (1)
White	35.48% (22)
Unspecified	35.00% (14)
TOTAL	15.95% (74)

The Chi-squared test of association run on the cross tabulation of race and PD positive file showed a very significant association (X^2_5 = 40.7550; p<.0001) between race and the rendering of a PD positive diagnosis, with 35.48% of White adolescents in the sample being diagnosed with having personality pathology present and only 9.55% of Black adolescents in the sample being diagnosed with having personality pathology present. Thus White adolescents are being diagnosed at more than twice the rate as Black adolescents.

Table 4.5: Frequency table of overall in-patient by PD positive file

In-patient	PD Positive File
Yes (i.e. in-patient)	25.36% (35)
No (i.e. out-patient)	11.96% (39)
TOTAL	15.95% (74)

The Chi-squared test of association run on the cross tabulation of the overall in-patient and PD positive file showed a very significant association (X^2_1 = 12.985; p=.0003) between whether or not an adolescent patient was admitted and the presence of personality pathology (with 25.36% of all in-patients having a PD diagnosis, as opposed to 11.96% of all out-patients having a PD diagnosis). However, it makes more sense to look specifically at Hospital C to test for the association between in-/out-patient status and the a PD diagnosis being made, as this was the only hospital in this study that saw both in- and out-patients. This frequency table will be included below (as table 4.6).

Table 4.6: Frequency table of Hospital C in-patient by PD positive file

In-patient at Hospital C	PD Positive File
Yes (i.e. in-patient)	16.44% (12)
No (i.e. out-patient)	7.65% (15)
TOTAL	10.04% (27)

The Chi-squared test of association run on the cross tabulation of the overall in-patient and PD positive file showed a significant association (X^2_1 = 4.546; p=.0033)

between whether or not an adolescent patient was admitted at Hospital C and presence of personality pathology (with 16.44% of all in-patients at Hospital C having a PD diagnosis, as opposed to 7.65% of all out-patients at Hospital C having a PD diagnosis). Thus, personality pathology is at least twice as prevalent in in-patient adolescent populations than in adolescent out-patient populations.

Table 4.7: Frequency table of year by prevalence of PD positive file

Year	PD Positive file
2004	17.70% (20)
2005	8.90% (13)
2006	19.09% (21)
2007	21.05% (20)
TOTAL	15.95% (74)

The Chi-squared test of association run on the cross tabulation of year and prevalence of PD positive file showed a significant association ($X^2_3 = 8.3198$; $p=0.0398$) between the year and the prevalence of personality pathology diagnoses in adolescent patients – with a very slight increase over the four year period measured (with the exception of 2005).

b. What proportion of these is being diagnosed with "traits present", "emerging", "query full PD" or "full PD"?

Table 4.8: Frequency table of hospital by severity of PD diagnosis

Hospital	"Traits present"	"Emerging PD"	"Query full PD"	"Full PD"
Hospital A	52.17%	13.04%	4.35%	30.43%
	12	3	1	7
Hospital B	58.33%	29.17%	4.17%	8.33%
	14	7	1	2
Hospital C	66.67%	18.52%	11.11%	3.70%
	18	5	3	1
TOTAL	59.46%	20.27%	6.76%	13.51%
	44	15	5	10

Thus within the South African context in this specific sample, in nearly 60 % of cases personality pathology in adolescent patients was noted in its least severe form – namely that "traits of the disorder are present". Only 13.51% of PD positive files (which equals to 2.16% of the total sample of PD positive and PD negative files) were diagnosed with having a full PD.

Table 4.9: Frequency table of age group by severity/degree of PD diagnosis

Age group	"Traits present"	"Emerging PD"	"Query full PD"	"Full PD"
Group 1 (12-13)	53.85%	38.46%	7.69%	0%
Group 2 (14-15)	73.68%	21.05%	5.26%	0%
Group 3 (16-18)	54.76%	14.29%	7.14%	23.81%
Total:	59.46%	20.27%	6.76%	13.51%

No significant association between age and severity was found (X^2_6= 11.44; p = 0.075). However, this table does reveal that the rendering of a "Full PD" diagnosis is not being considered in adolescents younger than the age of 16.

c. What proportion of these diagnoses was evidenced in the multiaxial assessment of the patient as opposed to references of personality pathology being mentioned in the filenotes of the patient?

Table 4.10: Frequency table of hospital by file location of diagnosis

Hospital	Multi-axial	Only in Filenotes	Both M.A. & Filenote*
Hospital A	95.65%	0%	4.35%
	22	0	1
Hospital B	50.0%	33.33%	16.67%
	12	8	4
Hospital C	18.52%	14.81%	66.67%
	5	4	18
TOTAL	**52.70%**	**16.22%**	**31.08%**
	39	12	23

*FIlenote here also means the notes included in the patient's discharge summary at Hospital A.

Thus 52.7% of PD diagnoses were contained only in the multiaxial formulation; 16.22% of PD diagnoses were mentioned only in the filenotes and not included in the multiaxial formulation and 31.08% were mentioned in both the filenotes and the multiaxial formulation.

d. What kinds of personality pathology are being diagnosed in South African adolescents?

Table 4.11: Frequency table of type of personality pathology diagnosis by hospital

PD type	Hospital A	Hospital B	Hospital C	Total
Cluster A	0% (0)	0% (0)	0% (0)	0% (0)
				Total Cluster A: 0%
Cluster B				
Cluster B (unspecified)	30.43% (7)	12.5% (3)	37.04% (10)	27.03% (20)
Antisocial pathology	21.74% (5)	20.83% (5)	18.52% (5)	20.27% (15)
Borderline pathology	34.78% (8)	45.83% (11)	37.04% (10)	39.19% (29)
Narcissistic pathology	4.35% (1)	4.17% (1)	0% (0)	2.70% (2)
				Total Cluster B: 89.2% (66)
Cluster C				
Cluster C (unspecified)	4.35% (1)	0% (0)	0% (0)	1.35% (1)
Dependent pathology	4.35% (1)	0% (0)	3.70% (1)	2.70% (2)
Obsessive-compulsive pathology	0% (0)	4.17% (1)	0% (0)	1.35% (1)
				Total Cluster C: 5.4% (4)
PD (type and cluster type) not specified	0% (0)	12.5% (3)	3.70% (1)	5.41% (4)
				Total PD unspecified (type and cluster not specified): 5.4% (4)
				Total PD positive: 100% (74)

The frequency table of hospital by type of personality pathology diagnosis revealed that the most frequent PD type being diagnosed in adolescents was Borderline PD or its traits (39.19% of adolescent files with personality pathology noted); followed by the diagnosis of "Cluster B" (27.03%) and then Antisocial PD or its traits (20.27%). No PDs falling within Cluster A were diagnosed in any of the adolescents in this sample – and extremely few adolescents (5.4%) were diagnosed with PDs included in Cluster C. Cluster B PDs were diagnosed in 89.19% of adolescent patients with personality pathology present.

In relation to the total sample (i.e. of PD positive and PD negative files) the prevalence of the three clusters was as follows: Cluster A (0%); Cluster B (13.79%) and Cluster C (0.86%).

Table 4.12: Frequency table of gender by type of personality pathology diagnosis

Gender	Borderline pathology	Cluster B	Antisocial pathology	All other PD diagnoses
Male	18.52%	18.52%	44.44%	18.52%
	5	5	12	5
Female	51.06%	31.91%	6.38%	10.64%
	24	15	3	5
TOTAL	39.19%	27.03%	20.27%	13.51%
	29	20	15	10

The Chi-squared test of association run on the cross tabulation of gender and type of PD diagnosis showed a significant association (X^2_3 =18.8174; p=0.0003) between the gender and type of PD diagnosis in adolescent patients – with female adolescents more likely to have been diagnosed with (or have) Borderline PD or its traits and to a lesser extent, the more generic “Cluster B” diagnosis; and male adolescents more likely to have been diagnosed with (or have) Antisocial PD or its traits and to a lesser extent with the “Cluster B” diagnosis.

2. Comparisons

a. Is there a significant difference in the diagnostic patterns across the three sites included in this study?

Proclivity of the different hospitals to diagnose personality pathology in adolescent patients

The Chi-squared test of association run on the cross tabulation (table 4.1 above) of hospital and proportion of PD positive files showed a significant difference (X^2_2= 25.94; p< .0001) in the proportion of PD positive files in each hospital. Thus, the proclivity to diagnose personality pathology in adolescent patients differed significantly between the three hospitals.

Association between hospital and severity of PD diagnosis

The Chi-squared test of association run on the cross tabulation (table 4.8 above) of hospital and severity of PD diagnosis did not reveal any association between hospital and severity of PD diagnosis (X^2_6= 10.48; p = .1057). Thus, there is no evidence to suggest different patterns with regard to labelling of severity over the three hospitals.

Association between type of personality pathology diagnosis and hospital

The Chi-squared test of association run on the cross tabulation (table 4.11) between type of personality pathology diagnosis and hospital revealed no significant association (X^2_6= 5.1594; p = 0.5235) between hospital and diagnosis type, which suggests that no hospital was favouring a particular diagnosis.

Association between hospital and where personality pathology is being noted in patient files (i.e. in multi-axial formulation or in filenotes)

The Chi-squared test of association run on the cross tabulation (table 4.10) between hospital and where personality pathology is being noted in patient files revealed a significant association (X^2_4= 40.06; p<.0001) between the hospital and where each hospital will note the personality pathology of an adolescent patient.

3. Associated factors

a. Is there mention of familial psychiatric history in PD positive files?

Table 4.13: Frequency table of familial psychiatric history by PD positive file

PD Positive File	Fam psych history present	No fam psych history	Fam psych history not provided in file
No	5.64%	83.59%	10.77%
	22	326	42
Yes	31.51%	38.36%	30.14%
	23	28	22
TOTAL	9.72%	76.46%	13.82%
	45	354	64

The Chi-squared test of association run on the cross-tabulation of familial psychiatric history and PD positive file revealed a significant association (X^2_2= 75.47; p<.0001) between familial psychiatric history and adolescent personality pathology. Thus, the presence of familial psychiatric history was strongly related to a PD positive diagnosis in adolescent patients (with 31.51% of adolescent patients with a PD positive diagnosis having familial psychiatric history mentioned in their file as opposed to 5.64% of adolescent patients with no PD positive diagnosis having familial psychiatric history mentioned in their file). In other words, the results evidenced more than five times the likelihood that an adolescent patient with personality pathology would have familial psychiatric history noted in his/her file when compared to an adolescent with no personality pathology diagnosed.

b. Is there mention of attachment difficulties in PD positive files?

Table 4.14: Frequency table of diagnosis of attachment difficulty by PD positive file*

*(*Attachment difficulty here means all references made in Axis I to attachment difficulty – such as "Attachment Disorder" or "Attachment Difficulties" - and not only Reactive Attachment Disorder)*

PD Positive file	Attachment difficulty YES	Attachment difficulty NO
No	8.97%	91.03%
	35	355
Yes	17.57%	82.43%
	13	61
TOTAL	10.34%	89.66%
	48	416

The Chi-squared test of association run on the cross-tabulation of attachment difficulty and PD positive file revealed a significant association ($X^2_1 = 4.95$; $p = 0.026$) between the presence of attachment difficulty and a PD positive file. Thus, a patient with personality pathology was twice as likely to have attachment difficulties having been diagnosed as a patient with no personality pathology present (i.e. only 8.97% of patients with no PD positive diagnosis had attachment difficulties diagnosed, as opposed to 17.57% of patients with a PD positive diagnosis).

c. What types of Axis I disorders are most commonly occurring in patients with personality pathology being diagnosed as opposed to patients with no personality pathology being diagnosed?

Table 4.15: Frequency table of type of Axis I diagnosis by PD positive file

Axis I diagnosis	Proportion with diagnosis (PD positive file)	Proportion with diagnosis (PD negative file)	Total with the diagnosis	X^2_1	P value
V code: Parent-child relational problem	22.97% (17)	14.62% (57)	15.95% (74)	3.24	0.0718
Major Depressive Disorder	18.92% (14)	9.49% (37)	10.99% (51)	5.66	0.017*
Substance Abuse	14.86% (11)	4.10% (16)	5.82% (27)	13.16	0.0003*
Conduct Disorder	14.86% (11)	4.87% (19)	6.47% (30)	10.27	0.0014*
Reactive Attachment Disorder	10.81% (8)	5.90% (23)	6.68% (31)	2.41	0.121
ADHD (unspecified type)	8.11% (6)	10.00% (39)	9.70% (45)	0.25	0.614
Generalised Anxiety Disorder	2.70% (2)	6.92% (27)	6.25% (29)	1.89	0.169

As this table shows, the five most common Axis I disorders in patients with personality pathology diagnosed were: V code (parent-child relational problems) (22.97%), followed by Major Depressive Disorder (18.92%), Substance Abuse (14.86%), Conduct Disorder (14.86%) and Reactive Attachment Disorder (10.81%). In addition to these being the 5 most common diagnoses in PD positive files, the results showed a significant association between the presence of personality pathology in adolescents and the following Axis I disorders: Major Depressive Disorder; Substance Abuse and Conduct Disorder. Reactive Attachment Disorder on its own (without other references to attachment difficulty) did not yield a significant association with a PD positive file (which when conflated, proved to be significant – as was shown in table 4.14 above).

The five most common Axis I diagnoses in adolescent patients with no personality pathology noted were: V code (parent-child relational problems) (14.62%), followed

by ADHD (unspecified type) (10%), Major Depressive Disorder (9.49%), Generalised Anxiety Disorder (6.92%) and Reactive Attachment Disorder (5.9%).

d. Is there an association between a PD positive diagnosis and an adolescent living in a childrens' home?

Table 4.16: Frequency table of PD positive file by residence in childrens' home

PD positive file	NOT living in a childrens' home	Patient living in a childrens' home
No	97.69%	2.31%
	381	9
Yes	85.14%	14.86%
	63	11
TOTAL	95.69%	4.31%
	444	20

The Chi-squared test of association run on the cross tabulation between PD positive file and residence in a childrens' home revealed a very significant association (X^2_1= 23.78; p <.0001) between personality pathology being noted in the file and an adolescent being resident in a childrens' home (i.e. 14.86% of patients with a PD positive diagnosis lived in a children's home, as compared with only 2.31% of patients in this sample with no PD positive diagnosis living in a children's home).

e. Is there an association between a PD positive diagnosis and a parasuicide attempt?

Table 4.17: Frequency table of PD positive file by parasuicide attempt

PD positive file	NO parasuicide	YES parasuicide
NO	92.82%	7.18%
	362	28
Yes	90.54%	9.64%
	67	7
TOTAL	92.46%	7.54%
	429	35

The Chi-squared test of association run on the cross tabulation between PD positive file and parasuicide attempt revealed no significant association (X^2_1= 0.463; p = 0.496) between a PD positive diagnosis and a parasuicide attempt.

CHAPTER 5

Discussion

This research project had three aims. The first was to explore whether recent international trends of diagnosing DSM-IV-TR PDs in adolescent populations were reflected in the South African diagnostic context. The second aim (should such diagnoses have been made) was to assess what personality disorders / emerging personality disorders / personality disorder traits were most commonly being diagnosed in South African adolescents. The third aim was to identify key factors associated with the rendering of such diagnoses within the South African context.

The results showed that the prevalence of personality pathology in the South African clinical adolescent population was 15.95%. This rate is lower than North American studies where the prevalence of personality pathology - when measured both in terms of traits and full PD being present (Westen et al., 2003) – was determined to be 28.4%. When the adolescent PD prevalence rates were measured only in terms all criteria of a particular PD being present (i.e. the full PD) the South African prevalence rate of 2.6% was found to be much lower than the rate reported in international studies (14.4%) (Johnson et al., 1999).

Thus the trend evident in internationally published literature to diagnose personality pathology in adolescents is evident within the South African context, but the local prevalence rates are lower than are evidenced internationally. This may be explained by taking into account that proponents of diagnosing personality pathology in adolescents seem to mainly be based in the United States – which could result in more debate amongst North American clinicians, and possibly a higher proclivity to diagnose PDs, in that adolescent population. However, the lower prevalence rate of personality pathology in South African adolescents may also point to an under-diagnosis of personality pathology in adolescents in the South African context. This can perhaps be understood in terms of the comments made by diagnosing clinicians in Sosnovik and Gericke's (2007) study – namely, that there is a hesitancy to include references to personality pathology in non-adult patients even if such pathology is seen to exist. However, this hesitancy does not translate into a blanket refusal to diagnose personality pathology (as is evidenced by the prevalence rate of personality pathology diagnoses being 15.95%). This finding does also not explain

clinicians' comments in the Sosnovik and Gericke's (2007) study, or informal comments made by clinicians to the researcher (referred to in the field notes section of the results of this research), which suggested that clinicians were not including references to personality pathology in adolescent patient files because (inter alia) they questioned the utility of PD diagnoses in adolescents; they were concerned about the labelling effect that PD diagnoses could have on the patient and family; and they were concerned with the patient / family / or third parties having access to the adolescent's file in the future. It is submitted that providing the less severe diagnosis of "traits present" (which occurred in nearly 60% of cases where personality pathology was noted) does not necessarily do away with such concerns.

Thus it seems that diagnostic policies described by senior clinicians are not being adhered to by all staff members within a diagnostic team, and that perhaps there is disagreement between members of the diagnostic team regarding the rendering of a PD diagnosis in adolescent patients, but that such disagreement is not being openly communicated and discussed. This points to a need for discussion at a departmental level, as well as between diagnostic clinicians, in order to formulate more explicit and uniform policy with regard to the diagnosis of PDs in adolescents.

A further point to discuss is that references to personality pathology were included in the multiaxial diagnostic formulation of 83.78% of PD positive patients – with mention of the personality pathology being excluded from the multiaxial formulation and explicitly only being included in filenotes/discharge summaries of the patient in 16.22% of cases. This finding also brings into question how the views expressed by clinicians in the Sosnovik and Gericke (2007) study – regarding lack of support for the utility of making PD diagnoses in adolescents – can be explained when personality pathology is being included in the adolescent patient's multiaxial diagnosis.

The finding that personality pathology is being noted more frequently the older the adolescent is, supports the findings of Sosnovik and Gericke (2007), as well as international trends noted by Kernberg et al. (2000). So too is the finding that personality pathology is more prevalent in in-patient populations (Levy et al., 1999). However, the in-patient personality pathology prevalence rate in South Africa (25.36%) is far lower than the in-patient prevalence rate reported in the United

States (61%) (Levy et al., 1999) – again, pointing to a need for further research to determine exactly why this is so.

The current study's finding that nearly twice the amount of female adolescents had been diagnosed with personality pathology as compared to male adolescents is one which does not concur with both international and local studies regarding gender and prevalence of PDs in the general adult population – where PDs are generally found to be more prevalent in men (Suliman et al., 2008; Coid et al., 2006). Perhaps it could be argued that adolescent males could be falling through the cracks with regard to formal acknowledgement of the potential presence of personality pathology, as Cluster B-like symptoms may end up being coded as a disruptive behavioural disorder (namely, Conduct Disorder) on Axis I and that it is only after the age of 18 that the higher prevalence of PDs in females shifts to a higher prevalence in males. However, the results did not reveal any sudden increase in diagnosis of personality pathology in patients aged 18 years to 18 years and 11 months, and further, Antisocial personality pathology was indeed noted in adolescents in this study in large proportions (20.27% of patients with personality pathology present). Thus further research needs to be conducted to determine why (within South Africa) female adolescents were being diagnosed with personality pathology in proportions so significantly higher than male adolescents; whether there is sex bias in clinical diagnosis of PDs (Becker, 2000) in the South African context and whether the questionable separation (Kernberg, 1998) between Conduct Disorder and Antisocial PD by age of patient is in fact impacting on gender prevalence and overall prevalence rates in adolescent PDs.

An important result of this research concerns the finding that only 9.55% of personality pathology diagnoses were made in the biggest racial demographic of this study (Black adolescents – who made up 67.67% of the sample). 35.48% of personality pathology diagnoses were made in White patients (who made up 13.36% of the sample); and 23.33% of personality pathology diagnoses were made in Coloured patients (who made up 6.47% of the sample). This finding could corroborate research conducted by Mikton and Grounds (2007) in the United Kingdom, where Black patients constituted over 20% of admissions to psychiatric units in England and Wales, but were being diagnosed with comparatively lower rates of PD when compared to other patient groups. Mikton and Grounds (2007)

found this to be as a result of cross-cultural clinical judgement bias in PD diagnosis by clinicians, and they explained that the DSM-IV defines personality in culturally relative terms as a deviation from cultural expectations; that PD constructs and PD diagnosis are significantly influenced by culture; and that intracultural and crosscultural diagnosis of PD require more clinical judgement than that of most other disorders. The findings of the current study may point to intracultural and crosscultural clinical judgement bias in South African clinicians regarding the rendering of a PD diagnosis.

Regarding the second aim of this study – which was to determine what personality disorders / emerging personality disorders / personality disorder traits were most commonly being diagnosed in South African adolescents - the results revealed that Borderline PD (or its traits) was the most prolific of all PD diagnoses (39.19% of adolescent patients with personality pathology noted). This was followed by 27.03% of PD positive patients being diagnosed with the unspecified “Cluster B” diagnosis, 20.27% with an Antisocial PD diagnosis or its traits, 2.7% with a Narcissistic PD diagnosis or its traits, 2.7% with a Dependent PD diagnosis or its traits, 1.35% with an Obsessive-Compulsive PD or its traits, and 1.35% of PD positive patients being diagnosed with the unspecified “Cluster C” diagnosis. Out of the total number of patients with personality pathology noted, the overwhelming majority had diagnoses that (overall) fell within the Cluster B grouping of PDs as defined by the DSM-IV-TR (89.19% of adolescents with personality pathology having been mentioned in their files). The finding that Borderline PD or it traits is the predominant PD diagnosis in South African adolescent clinical patients concurs with international studies such as Levy et al. (1999) and Westen et al. (2003) in which Borderline PD was found to be the most prevalent PD in clinical adolescent populations in these studies. However, the overall prevalence of Cluster B PDs in this study is much higher when compared to US non-clinical adolescent populations, where only 7.1% of a non-clinical sample (Johnson et al., 1999) were diagnosed with Cluster B PDs (as opposed to 13.79% of this study’s total sample – i.e. all the files reviewed). In the Johnson et al. (1999) study, 5.9% of adolescents were diagnosed with a Cluster A PD and 4.9% with a cluster C PD. The results of the present study revealed that within the South African context, adolescents were not being diagnosed with Cluster A PDs at all, and that the prevalence of PDs that fall within the Cluster C grouping (0.86% of the total

sample) was extremely low when compared to international studies. The results in this study also differ from the Cluster prevalence rates in the adult non-clinical population in South Africa, where Cluster A was found to be most prevalent (3.4% of the total sample), followed by Cluster C (2.5%) and then Cluster B (1.5%) (Suliman et al., 2008). However, Suliman et al. (2008) mention that their finding of Cluster A PDs being more prevalent than Cluster B PDs (in the non-clinical population) is unusual, as Cluster B PDs are the most frequently diagnosed PDs in clinical populations in South Africa (with far less Cluster A type patients being seen and/or diagnosed in clinical settings). The findings of the current study thus corroborate Suliman et al.'s (2008) remarks about the type of PDs seen in clinical populations in South Africa, suggesting that the type of personality pathology seen in South African clinics is stable between adolescent and adult populations.

A further interesting point to note is that the results reveal that Narcissistic PD (or its traits) was only noted in 2.7% of cases in which personality pathology was present. Thus it seems evident that the views of Kernberg et al. (2000) and Bleiberg (2001) – that pathological narcissism can be evident from the years of childhood – do not seem to greatly inform clinical diagnostic practice in South Africa. Indeed, this lends credence to Guile et al.'s (2004) assertion that the construct of narcissistic personality pathology in children and adolescents remains a controversial topic (due to inherent aspects of narcissistic functioning being present as part of normal development).

It is interesting to discuss the comparisons between the three hospitals included in this study as pertains to PD diagnoses being made in adolescents. There is a significant difference in the proportion of adolescents who were diagnosed with having personality pathology in the three sites and such difference can most likely be explained in terms of the type of patient seen at the three hospitals – where Hospital A's patients were only in-patients; Hospital B's patients were only out-patients; and Hospital C's patients were both in- and out-patients. In this regard, the results showed that personality pathology was at least twice as prevalent in adolescent in-patient populations than it was in adolescent out-patient populations. Thus the difference in the proportion of adolescents diagnosed with personality pathology in the three hospitals may simply be a result of whether a particular institution caters for in- or out-patients. However, no definitive explanation can be offered in this regard,

and further studies between a greater number of South African clinics could yield more definitive data regarding comparative diagnostic trends (as pertains to PD diagnoses being made in South African adolescents) across different South African clinical institutions. The difference in proportion of adolescents who were diagnosed with having personality pathology in the three sites does raise some important questions beyond merely explaining that the difference is due to whether the institution caters for in- or out-patients. Perhaps these differences may also be as a result of the hospital's geographical location – whereby different sociocultural groups are being catered for in terms of hospital locational jurisdiction. Taking this consideration into account – with race having been found to be a factor significantly associated with the rendering of a PD diagnosis in an adolescent – then possibly the different proportions of PD diagnoses in these three institutions could be explained in terms of geographical location and racial demographics. It is also interesting to consider whether the difference in prevalence of adolescent PD diagnosis in these three institutions may also point to different working methods and diagnostic policy within each institution. This would be of interest because of the fact that the hospitals included in this study, all fall under the same training institution and this perhaps points to the need for further research and/or discussion at a departmental level regarding diagnostic policy and emerging opinions in the field. This finding is supported further by the fact that Hospital A and B include personality pathology in the multiaxial diagnosis far more readily than Hospital C. However, it must be emphasised that diagnostic training (as distinguished from policy issues of whether or not to include diagnoses in patient files) of South African clinicians in these three institutions seems to be uniform as the results found no significant differences between the three hospitals regarding the type of PDs that are being diagnosed, nor were there any significant differences in the severity of the diagnoses being made (in terms of traits present/emerging PD/ or full PD). Once further research has been conducted at tertiary hospitals falling under different training institutions, as well as at private hospitals, it would be worthwhile to extend discussion regarding such findings to a national level.

The third aim of this research was to identify key factors associated with the rendering of PD diagnoses in adolescents within the South African context. As has already been discussed, the results showed that race may be a significant

sociodemographic factor influencing the rendering of a PD diagnosis in adolescent populations. The results of this research also revealed that there was a significant association between attachment difficulties and personality pathology in South African adolescents – with a patient having personality pathology being twice as likely to have a dual diagnosis of an Attachment Disorder as a patient with no personality pathology present. This finding is in line with internationally published literature, such as the studies by Nakash-Eisikowits et al. (2002) and Sroufe (2005), who have found marked associations between attachment problems and personality disorders in adolescents. It is interesting to note Nakash-Eisikowits et al.'s (2002) finding that there is no significant association between attachment status and family history of psychopathology, but that the presence of family history of psychopathology is significantly associated with the presence of personality pathology in a patient. The results in the present study also found a significant association between the presence of familial psychiatric history and the presence of personality pathology in adolescents. This is of particular relevance to child and adolescent mental health in the South African context, where psychiatric disorders pertaining to substance abuse have a particularly high prevalence (Stein et al., 2008) – and such prevalence may negatively influence the emergence of personality pathology in South Africa's youth.

Further findings of this study, regarding significant Axis I dual diagnoses with Cluster B personality pathology in adolescents – namely Major Depressive Disorder, Substance Abuse and Conduct Disorder – corroborates findings of international studies regarding the co-morbidity of these Axis I disorders with PD diagnoses in adolescents (Johnson et al., 1999; Sharp & Romero, 2007). In addition, the finding that the V code of "parent-child relational problems" was the most common Axis I diagnosis in patients both with and without personality pathology is one which requires further study.

The finding in this study that there was no significant association between parasuicidal behaviour and the presence of personality pathology in adolescents, does differ from results of other studies in this regard – where personality pathology has been found to be a significant risk factor for suicidal ideation, attempted and completed suicide (Schneider et al., 2008). It is likely that this result was skewed by the number of adolescent parasuicide patients in this study on whom no psychiatric

evaluation was conducted, which means that this particular result should not be regarded as definitive.

A factor significantly associated with a personality pathology diagnosis in an adolescent patient in South Africa was the adolescent living in a childrens' home (which includes a place of safety). This finding may be explained by taking into account that many children or adolescents are often placed in childrens' homes due to abuse or neglect in their homes. In this regard, abuse and neglect are factors which are significantly associated with the development of personality pathology – particularly Borderline PD (D'Ambrasio, 2008; Vanderploeg et al., 2007). One could also question the quality of attachment that such adolescents who have been removed from their homes may have experienced during infancy – a factor also linked to the development of personality pathology (Kernberg et al., 2000). Further to this, some adolescents are removed from their homes in circumstances where their parents cannot cope with extreme forms of acting-out behaviour – behaviour which could be symptomatic of the presence of personality pathology. However, it is important to consider that perhaps diagnosing clinicians are more amenable to including references of personality pathology in the files of adolescents who are living in childrens' homes, as the potential pressure that may exist for clinicians when dealing with parents, and the possibility that parents would want access to their child's file, may be missing in such circumstances – thus giving the clinician the freedom to diagnose more unhindered than may otherwise be the case.

A final point to discuss is the treatment implications of a PD diagnosis in adolescents. Kernberg et al. (2000) emphasise the importance of timely diagnosis, as treatment planning can then be structured accordingly. This research did not assess treatment issues, and further research should be conducted regarding the treatment implications of a PD diagnosis being rendered in adolescents within the South African context.

Chapter 6

6.1 Conclusion

The findings of this study suggest that personality pathology is being diagnosed in South African adolescents, but not consistently at varying psychiatric institutions. Predominantly, such diagnoses are being made by referring to "traits" of DSM-IV-TR-defined personality disorders being present. Within the South African context, Borderline Personality Disorder seems to be most prevalent in adolescents, with the overwhelming majority of personality pathology diagnoses falling under Cluster B. In terms of demographics, the findings suggest that female adolescents are being diagnosed with personality pathology twice as much as adolescent males and personality pathology is predominantly being diagnosed in White and Coloured populations, with comparatively few diagnoses being made in Black populations. The findings further suggest that attachment difficulties and familial psychiatric history are significantly associated with the presence of personality pathology in adolescents; and that there is a significant association between the presence of personality pathology in an adolescent (and/or the inclusion of a reference to personality pathology in the adolescent's patient file) and the child having been removed from the family home to a children's home or place of safety. Finally, the study revealed that the Axis I disorders of Major Depressive Disorder, Substance Abuse and Conduct Disorder are significantly associated with the presence of diagnosed personality pathology in adolescent patients.

6.2 Limitations and strengths of this study

This study has a number of limitations. Firstly, the sample was limited in size – which may limit the generalisability of the findings. Also, the geographical area in which this study took place was limited and the validity of this study would have been enhanced had data been gathered from different regions within South Africa.

Another limitation to this study is the poor diagnostic definition of personality pathology that was evidenced in adolescent files, and this placed limits on unbiased epidemiological research. Regarding issues of bias, the researcher worked alone in collecting the data. Whilst no effort was spared in meticulously noting details contained in patient files on the questionnaire, the researcher had to sometimes

determine how to code ambiguous information – especially with regard to severity of personality pathology. The researcher (when reference to the severity of personality pathology was ambiguous) decided to code such a file with the least severe of the often conflicting terminologies used to describe the patient's personality pathology. This may have resulted in a conservative recording of the severity of the personality pathology present for some files, and it is submitted that without triangulation and without a more collaborative style that occurs when more than one researcher is involved in collecting the data, inherent subjectivity may indeed have been unavoidable in the analysis of literature and in the collection of the data for this study. However, there was triangulation regarding the analysis of the data, as the assistance of an experienced statistician was sought in this regard.

A further limitation which impacts archival research of this nature is that access to patient files is hindered in situations where poor or disorganised archiving of patient files in hospitals occurs – and such a limitation was apparent at the data collection stage of this research. It should be noted, however, that this does not limit the reliability or validity of the data that was found, captured and analysed for this study.

A final limitation relates to the potential that the differences across the three hospitals, and most likely across individual practitioners in each hospital, may have affected the prevalence rates as well.

Despite the limitations, the findings of this research provide valuable data on the prevalence and type of personality pathology in South African adolescents. It is the first study of this kind undertaken within the South African diagnostic context and it has added to the accumulation of knowledge in a very under-researched area. Finally, this research corroborates published research and literature on many factors which have been found to be associated with personality pathology in adolescents.

6.3 Clinical implications and directions for further research

An anomaly has been shown to exist within the South African diagnostic context – where clinicians have stated (both in this study and in a previous study by the researcher and his supervisor) that they are extremely hesitant to include references to personality pathology in adolescent files - supporting the existence of the presence of personality pathology in adolescents, but questioning the utility (and in

some cases, the validity) of DSM-IV-TR PD diagnoses for this population. However, this research has shown that DSM-IV-TR personality pathology diagnoses are being made in South African adolescents, even if at rates lower than ones evidenced in international studies. Thus, discussion is required at tertiary training departmental level, as well as between diagnostic clinicians, in order to formulate more explicit and uniform policy with regard to the diagnosis of PDs in adolescents and/or the inclusion of references to personality pathology in adolescent patient files. Allied to this would be research regarding which type of clinician is mostly making personality pathology diagnoses (for example, a psychiatrist as opposed to a psychologist; or a clinician with more clinical experience or vice versa). Perhaps the need for clinical and theoretical discussion at a national level is also warranted, on issues pertaining to the presence of personality pathology and its treatment in adolescents.

It is also suggested that a direction for future research concerns issues of how the severity of personality pathology is noted in adolescent patients. In this regard, future research should clarify what exactly is meant by clinicians when they use terms such as “traits present” or “emerging PD” – and indeed whether such terms are used as a substitute for the full PD within South African clinical settings.

A further important direction for future research pertains to the possible presence of cross-cultural clinical judgement bias in PD diagnosis by clinicians within the South African context. It is submitted that this research can be conducted in the parameters suggested by Szabo (1995) – namely, that race should only be included as a variable in South African research, only when information derived from such inclusion could have a positive impact on equality of patient care.

A further suggested direction for future research is for studies to be conducted on whether the coding of antisocial / conduct symptoms as the disruptive behavioural disorder of Conduct Disorder on Axis I has implications for understanding and treating patients’ difficulties if such patients’ difficulties are not being conceptualised in terms of Axis II personality disorder constructs. Related to this would be the need to examine why in South Africa nearly twice as many female adolescents are being diagnosed with personality pathology present as compared with male adolescents.

A final suggested direction for future research would be to examine whether there are both positive and/or negative treatment implications for the adolescent who is diagnosed with having personality pathology present.

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"Annexure A"

To be placed on Wits letterhead

Date:_____

Dear _____,

Formal request to have access to adolescent psychiatric files for the purposes of my research

My name is Alan Sosnovik. I am currently studying for a Masters degree in Clinical Psychology at the University of the Witwatersrand. I am conducting research on whether international trends of diagnosing DSM-IV-TR personality disorder diagnoses in adolescent populations are reflected in the South African diagnostic context. I hope to describe and summarise characteristics of the content notes of personality pathology as presented in patient files; to assess what personality disorders / emerging personality disorders / personality disorder traits are most commonly being diagnosed in South African adolescents; and to look at key factors associated with the rendering of such diagnosis. In this regard, I would be most obliged if you would agree to give me access to the adolescent patient files in your ward, for the purposes of gathering the data necessary to conduct this study.

I am hoping to review adolescent patient files from your adolescent psychiatric ward for the following periods:

- 1 January – 31 March 2004;
- 1 July – 30 September 2005;
- 1 April – 30 June 2006; and
- 1 October – 31 December 2007.

These dates were chosen in order to obtain a sufficient amount and spread of information from files that are practically accessible for review.

It is my belief that this research will provide valuable statistics regarding personality pathology in adolescents within the South African context, as well as an indication of South African clinicians' practice with regards to diagnosing pathology in adolescents.

The Wits HREC (medical) requires written permission from each of the research sites I wish to include in my study (which are the ____, _____, and _____) before any ethical clearance certificates will be issued . In this regard, should you agree to grant me access to the files,

please would you fill out the consent form which is attached to this letter and I can then collect this from you and then pass it on to the HREC. You are fully entitled to decline consent to give me access to your ward's patient files, or to withdraw from consenting to such access at any time, without explanation. I confirm that participation in this study will pose no risks or benefits to you, your clinicians or your patients.

Regarding issues of confidentiality, I am registered as a student clinical psychologist with the Health Professions Council of South Africa, (registration number: PS S _____) and I am thus bound by their ethical rules and regulations. Further to this, I am willing to sign a confidentiality agreement with your hospital, in which ethical obligations and stipulations on confidentiality are included. I would like to emphasise that no identifying information of any patient (or diagnosing clinician) will be recorded for the purposes of this research. All raw data (which will be in the form of completed questionnaires – a copy of such questionnaire is attached hereto marked Annexure 1) will be kept in a locked filing cabinet in my home. Once this research report has been marked for the purposes of my degree, all raw data sheets will be destroyed. I therefore emphasise that your patient's and clinicians' confidentiality will be upheld at all times. I also confirm that they will remain anonymous to all third parties, other than my supervisor being able to view completed questionnaires.

Once this research report has been examined and graded, I will gladly send a copy of the report to you.

Finally, my supervisor for this study is Ms Renate Gericke – a lecturer in the Wits Psychology Department and a member of the clinical psychology masters' training team. Her contact details are: (011) 717-4555, email: renate.gericke@wits.co.za

Yours sincerely

Alan Sosnovik

Email:

Tel (h):

Fax:

Cell:

“Annexure B”

COPY OF THE CLEARANCE CERTIFICATE ISSUED BY THE HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL) OF THE UNIVERSITY OF THE WITWATERSRAND

“Annexure C”

QUESTIONNAIRE (To be filled out for each patient file)

HOSPITAL CODE: _____ (in / out patient:_____)_

1. Month and year file opened:_____
2. Patient date of birth:_____
3. Race:_____
4. Gender:_____
5. Primary Axis I diagnosis:_____

   _____

   _____
6. Primary Axis II diagnosis:_____
7. Exact wording of personality pathology reference in file:

Type	Yes / No
None	
Full PD (Type:	
Emerging PD (Type:	
PD Trait/s (Type:	
Provisional PD diagnosis (Type:	
PD Differential (Type:	
Other:	
Presence of PD in family (Type and family member:	
Report of Axis I Reactive Attachment Disorder:	
Report of any other Attachment diagnosis (Type:	