An exploration of ego impairment in Bipolar Mood Disorder using the Ego Impairment Index-2

By

Jenny Lee Simpson

A mini-dissertation submitted in partial fulfilment

of the requirements for the degree of

MA Clinical Psychology

In the Department of Psychology at the

UNIVERSITY OF PRETORIA

FACULTY OF HUMANITIES

SUPERVISOR: Dr Maurice Aronstam

March 2010

ACKNOWLEDGEMENTS

An Exploration of Ego Impairment in Bipolar Mood Disorder using the Ego Impairment Index-2

Jenny Lee Simpson

Department of Psychology

University of Pretoria

MA Clinical Psychology

ABSTRACT

The study was exploratory in nature, with 62 adult participants participating in this research. The aim of the study was to determine the level of ego impairment, if any, among a group of patients diagnosed with Bipolar Disorder. The data obtained from this sample was subjected to the Rorschach-based Ego Impairment Index-2 (EII-2). An in-depth analysis of the composite variables of this index was performed, allowing a comprehensive grasp of the implications of ego impairment in everyday functioning. The study was conducted in order to ascertain the nature of the psychological dynamics at play amongst this population group. The value of using the EII-2 is seen in its ability to establish various strengths and weaknesses in areas of ego functioning that are a core component of the personality, rather than behavioural manifestations that are sporadic and subject to change. Thus the results will reflect traits that are enduring and fundamental when considering the personality. In addition, the areas of psychological functioning that were determined were linked to the

current conceptualisation of Bipolar Disorder, which, at present, is primarily conceived of as a biological disorder.

The results of the EII-2 yielded from this sample indicated an overall moderate ego impairment falling within the moderate range, indicating that for this population, an impairment of ego was evident. Particularly, the domains of reality testing, cognitive functioning and object relatedness seemed to be most impaired.

Keywords: Bipolar Disorder, ego impairment, Rorschach Inkblot Test, Rorschach Comprehensive System, Ego Impairment Index-2, Ego psychology, Beres, Weiner.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1   Rationale for the study

Bipolar Disorder is primarily considered a biological disorder, with little available literature suggesting that psychological factors may be involved in the manifestation and maintenance of this disorder. Furthermore, this disorder's prevalence in the population (Saddock & Saddock, 2007), together with both its complexity and perplexity, suggests a need to determine whether some psychological impairment is pertinent. Although it is acknowledged that the Bipolar spectrum disorders have a large biological base, there is some evidence that suggests that certain structural components of the personality as well as significant dynamic issues may contribute to the onset and maintenance of Bipolar Disorder (Guitierrez & Scott, 1994). This study thus serves to ascertain the extent, if any, of ego impairment in Bipolar Disorder. In order to determine this quantitatively, the Ego Impairment Index-2 (EII-2) (Viglione, Perry & Meyer, 2003) will be the assessment tool used to determine the extent of ego impairment.

The EII-2 claims to be able to assess a core component of the personality, rather than behavioural manifestations which are subject to change (Perry & Viglione, 1991). The Rorschach imposes a set of demands whereby internal processes tend to be relied on by the subject in order to organise the inkblots; the EII-2, a Rorschach-based index, is able to access psychological organising structures and capacities that are not readily assessable through other measures (Perry, Viglione & Braff, 1992). Thus the information obtained will reflect relatively stable aspects within the personality – traits that are enduring and are fundamental

when considering the personality, and which are probably contributing to the individual's pathology.

The developers of the EII-2, namely Perry, Viglione and Braff (1992), have suggested that further research is needed on the EII-2 to understand the measure across different diagnostic groups. Previous studies have focused mainly on schizophrenia, schizotypal personality disorder and depression. Thus studies focusing on other diagnostic groups are needed. Therefore, research on the bipolar patient population will not only contribute to the body of knowledge that exists regarding the EII-2, but will further provide knowledge on this index in relation to this mood disorder.

1.2   Objectives of the study

The aim of this research is not to verify or nullify the diagnosis of the participants, but rather, to explore the extent of ego impairment, if any, as manifested on the E11-2. Thus a clearer picture of Bipolar Disorder's ego impairment, or lack thereof, will be obtained.

The main aim of this study is to determine the extent of ego impairment in Bipolar Disorder using the Ego Impairment Index-2. Furthermore, such information can potentially provide significant contributions to both theoretical and practical implications of understanding psychological aspects of Bipolar Disorder. The dilemma at present regarding the available literature is that not enough is known about the psychological functioning of this patient population, namely the unchanging, core components of the personality that may be contributing to the onset or maintenance of the disorder. Thus the research will aim to aid our understanding of psychological dynamics at play amongst the Bipolar patient population.

In order to achieve these objectives, the Rorschach will be administered to a Bipolar patient population, consisting of a sample of 12 individuals which will be added to an already collected sample of 50 protocols of the same population (Daws, 2009). Thereafter, the Rorschach will be coded according to the guidelines stipulated by the Comprehensive System (Exner, 2003). The EII-2 will then be calculated according to Perry and Viglione's prescribed guidelines (1991). The study will be quantitative in nature. Furthermore, an in-depth exploration of ego impairment will be discussed, and differences and similarities found in the ego functioning of these individuals will be explored thereafter. This will entail reflecting on Beres' (1956) and Weiner's (1966) understanding of ego functioning, and the implications for day-to-day functioning.

1.3   Hypotheses

It is hypothesised that individuals with a diagnosis of Bipolar Disorder will show some impairment in ego functioning. The Ego Impairment Index-2 has been deemed an appropriate measurement tool in determining important aspects of an individual's ego functioning (Perry, McDougall & Viglione, 1995). The various constructs that have been mentioned in this section will be elaborated on in the chapters to follow. It is therefore hypothesised that the data collected will indicate that there is a psychological component involved in the diagnosis of Bipolar Disorder. An in-depth investigation of the composite variables of the EII-2 will determine whether this is indeed so, and the subsequent nature of the psychological dynamics involved, if any, can be identified.

In summation, the research proposes to address the following questions:

- Is there ego impairment in this Bipolar Mood Disorder sample as measured by the EII-2?

- If so, what is the extent of this impairment?

- What would it mean if the ego is impaired?

- Are there predominant areas of ego functioning that are impaired?

1.4   Outline of mini-dissertation

Chapter one will outline the rationale and objectives for the study, as well as formulate the hypotheses. A brief synopsis will be given of what the research will entail, together with the reasons for such an undertaking.

Chapter two will review current literature available on Bipolar Disorder, assessing both views from a psychiatric and psychological perspective. A synopsis of Bipolar Disorder will be given, based on the DSM-IV-TR (*Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition, Text Revision) criteria, and typical symptoms will be discussed. In addition, a biological view of the disorder will be addressed. Furthermore, current perceptions of the disorder will be discussed, including the current debate regarding the diagnostic classification of the disorder.

Chapter three focuses on the theoretical understanding of the Ego Impairment Index. Particularly, the ego-psychology model will be discussed. The history of this model will be addressed together with the description of the relevant constructs. Beres' (1956) and Weiner's (1966) models will be reviewed, and thorough descriptions of the applicable ego functions will be examined.

Chapter four will discuss the Ego Impairment Index and the Rorschach. The development of this index will be examined, as well as its applicability and relevance to this study, and how it has been utilised in the past. A brief description of the Rorschach will be given, its history, and how elements of ego functioning can be determined using this assessment measure.

Chapter five is the methodology chapter. This chapter will describe the nature of the data collection procedures and the assessment tools used to obtain the information. It will include selection criteria, demographic variables of the participants, sampling procedures and data analysis processes.

Chapter six will focus on the results of the study. In this section, a comprehensive analysis of the results yielded will be done. The values of the ego impairment results will be interpreted according to Perry and Viglione's (1991) table of ego impairment categories. Thereafter, the composite variables of the EII-2 will be evaluated. Statistical analysis of all the relevant variables will be given, including means, standard deviations, mode, range and median.

Chapter seven is the final chapter, and will include a discussion of the findings, recommendations for future studies, limitations of this mini-dissertation, and a conclusion integrating the various chapters.

1.5   Conclusion

At present, the focus on biological aspects of Bipolar Disorder has resulted in a lack of psychological understanding of this disorder. Determining psychological functions that may be underlying this disorder may have significant implications for various disciplines

(particularly psychiatry and psychology). Understanding this disorder purely by the DSM-IV-TR diagnosis and categorisation, and treating it accordingly, is limiting for both the patient and the psychotherapeutic approach. A comprehensive understanding of the dynamics of the disorder may bring about a greater clarity and insight into both the complexity and severity of this disorder. As such, the Ego Impairment Index-2 is calculated using variables obtained through the analysis of the Rorschach data, following the Comprehensive System guidelines; in an attempt to uncover and determine any possible psychological aspects that may be impacting this disorder, and to use the results to ascertain the role of psychological factors in what was previously considered a "biological disorder".

CHAPTER TWO

LITERATURE REVIEW: BIPOLAR DISORDER

2.1 Introduction

In this section, the psychiatric pathology of Bipolar Disorder will be discussed. In particular, a brief description of its symptoms will be given, the clinical presentation and aetiology will be addressed, and the current DSM-IV-TR criteria will be reviewed. A historical perspective of the disorder will be given, where fundamental theorists will be discussed. The aim of this is to attempt to illustrate the historical development of this disorder, in terms of the understanding and conceptualisation of the symptomatology. The progression of ideas over the centuries has shifted vastly, further emphasising the complexity of this disorder. Thus it seems significant to be cognisant of the current viewpoints of the mental health fraternity when considering Bipolar Disorder, and to understand where these originated and developed from. In addition, Bipolar Disorder will be discussed from both a psychiatric and a psychological perspective. Although the current literature is somewhat limited, a psychological description of the disorder will be reviewed.

2.2 Bipolar Disorder: A synopsis

According to the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition, Text Revision) (DSM-IV-TR; APA, 2000), the diagnosis of Bipolar I Disorder requires an individual to meet the following diagnostic criteria:

A. Criteria, except for duration, are currently (or mostly recently) met for a manic, a hypomanic, a mixed, or a major depressive episode.

B. There has previously been at least one manic episode or mixed episode.

C. The mood symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The mood symptoms in Criteria A and B are not better accounted for by schizo-affective disorder and are not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

E. The mood symptoms in Criteria A and B are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism).

According to the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition, Text Revision) (DSM-IV-TR; APA, 2000), the diagnosis of Bipolar II Disorder requires an individual to meet the following diagnostic criteria:

A. Presence (or history) of one or more major depressive episodes.

B. Presence (or history) of at least one hypomanic episode.

C. There has never been a manic episode or a mixed episode.

D. The mood symptoms in Criteria A and B are not better accounted for by schizoaffective disorder, and are not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

E. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

2.3   Clinical presentation of Bipolar Disorder

This section describes the clinical picture that is often seen by clinicians working with Bipolar Disorder. It seems relevant to include this aspect in order to fully grasp the manifestation of the symptoms of this disorder. Therefore the mental health professional would need to understand how this disorder presents in day-to-day functioning.

Sadock and Sadock (2007) describe the two basic symptom patterns in mood disorders as depression and mania. Depressive episodes are characterised by a depressed mood and a loss of interest or pleasure. Feelings of worthlessness and hopelessness are also evident. Approximately two-thirds of all depressed patients contemplate suicide, while 10 – 15% actually commit suicide (Sadock & Sadock, 2007). Most patients complain of reduced energy, difficulty in sleeping, change in appetite and weight, impairment in concentration and difficulty finishing tasks. Manic episodes, which are present in Bipolar I Disorder, are characterised by an elevated, expansive or irritable mood. Responsibility for actions is often shifted to others, and weaknesses of others are often exploited. Several patients experiencing a manic episode consume excessive alcohol (Merikangas, Herrell, Swendsen, Rossler, Ajdacic-Gross & Angst, 2008). Furthermore, such patients may act impulsively (Sadock & Sadock, 2007).

Bipolar II Disorder is characterised by similar depressive episode symptoms; however, these are combined with those of a hypomanic episode. Bipolar II Disorder is associated with increased marital disruption and earlier age of onset than Bipolar I Disorder. Evidence indicates that patients diagnosed with Bipolar II Disorder are at a greater risk for both attempting and completing suicide than patients diagnosed with Bipolar I Disorder

(Merikangas *et al.*, 2007; Sadock & Sadock, 2007). Different mood disorders are the diagnoses most commonly associated with suicide (Sadock & Sadock, 2007).

2.4   History of Bipolar Disorder

- In 150 AD, Aretaeus of Cappadocia observed a variety of symptoms that accompanied melancholia. He gave the following description of his observations, emphasising the relationship between affective states and its vicissitudes:

  "It appears to me that melancholy is the commencement and a part of mania….there are infinite forms of mania but the disease is one. They believe they are experts in astronomy, philosophy, or poetry … the patient may become excitable, suspicious and irritable" (Akiskal in Maj, Akiskal, Lopex-lbor, & Sartorius, 2002, p. 5).

- Falret and Baillarger introduced the notion of "cyclicity and lucid intervals". It was in 1854 that Falret described patients experiencing alternating moods of depression and mania (Sadock & Sadock, 2007).

- Emil Kraepelin described a systematic presentation of Bipolar Disorder. He described manic-depressive psychosis, using most of the criteria that are currently used to diagnose Bipolar I. His description included three domains, namely mood, thinking and activity; if domains moved in the same direction, it would lead to either manic/hypomanic states, or depressive states; if they moved in opposite directions, it would lead to mixed states (Benazzi, 2007).

- In the 1960s, Angst, Perris and Winokur made the bipolar-unipolar distinction.

- Karl Abraham was the first psychoanalyst to describe the defensive structures of mania and its general relationship to depression. The depressive aspect of Bipolar Disorder was relatively well understood – a result of Freud's significant contributions – but during this time, the understanding of mania was not as comprehensive. It was a common psychoanalytical hypothesis that mania and depression suffer the same complex; however, the attitude with which each complex was faced differed. Depressed individuals tend to be weighted down by the complex, while manic individuals tend to treat it with indifference and feelings of triumph.

- In 1917, Freud ascertained that the depressed or melancholic patient's ego succumbs to the loss and subsequently feels depleted, while the manic patient seems to act as if they have mastered the loss and its implications (Aronstam & Daws, 2008). "This loss can be of either a real or an imagined object, as it is the unconscious significance that is of importance. Psychoanalytic and psychodynamic perspectives post-1930 focus largely on the interpersonal difficulties of Bipolar patients evident in marital, family and group research" (Aronstam & Daws, 2008, p. 34).

2.5   Bipolar Disorder: A biological perspective

Bipolar Disorder, formerly known as manic-depressive illness, is believed to be one of the primary causes of disability all over the world (Mahli *et al.,* 2009). Furthermore, this illness is exacerbated by the fact that high risk of suicide and self-harm generally accompany the disorder.

In practice, the diagnosis of Bipolar Disorder is often delayed, having serious implications for the management and treatment thereof. In addition, anxiety disorders and substance abuse

often form part of the differential diagnosis, making treatment efficacy all the more complex (Mahli *et al.*, 2009; Merikangas *et al.*, 2008).

Literature confirms that the aetiology of Bipolar Disorder is largely unknown (Bentall & Jones, 2006; Mahli *et al.*, 2009; Merikangas *et al.*, 2008; Sadock & Sadock, 2007). However, evidence exists to support the premise that psychological, social and biological factors are implicated in the manifestation of Bipolar Disorder (Mahli *et al.*, 2009). In addition to these three areas of functioning that may be involved, environmental factors and lifestyle issues are believed to impact the severity and trajectory of the illness. It has been suggested that stressful life events, together with substance misuse, have serious implications for recovery time and treatment response (Mahli *et al.*, 2009).

Professionals in the medical field of psychiatry are led to believe that Bipolar Disorder has a strong biological component as there is a strong indication of heritability in the disorder, resulting in higher rates of mood disorders among first-degree relatives (Mahli *et al.*, 2009).

Recent research suggests that Bipolar Disorder affects almost 4% of adults (Mahli *et al.*, 2009) – a number nearly twice that of past studies. However, Mahli *et al.* (2009) believe that even this statistic may be conservative in nature if one views the disorder as existing along a Bipolar spectrum. They postulate that several individuals may be suffering from a Bipolar spectrum disorder, but have insufficient symptoms to classify it as a Bipolar Disorder proper.

It is believed that much of the uncertainty surrounding this disorder results from the nature of the onset of the illness, as more often than not, the disorder begins with a depressive episode, which is naturally diagnosed as a depressive disorder or episode. Furthermore, this is

compounded by the fact that in most cases, several depressive episodes occur before a manic or hypomanic episode manifests. In addition, manic and hypomanic episodes are often under-reported and often not followed by clinical consultation. This may be because symptoms of hypomania in particular are often not problematic to the patient, and together with delusions of grandeur and elevated perceptions of self-worth, patients often believe that they do not have a problem, and are above the illness. Furthermore, patients may be inclined to recount only the problematic areas of functioning that are most often reported in the depressive phases. It is thus essential that an in-depth inquiry be conducted in order to ascertain whether manic or hypomanic features are evident (Mahli *et al*., 2009; Berk & Dodd, 2005; Benazzi, 2007).

Table 2A

Facts and Figures of Bipolar Disorder

Epidemiological statistics

- Lifetime prevalence of Bipolar I is 1%, mean reported age of first mood episode is 18.2 years.

- Lifetime prevalence of Bipolar II is 1.1%, mean reported age of first mood episode is 20.3 years.

- Bipolar I affects both genders equally; Bipolar II is more common in women.

Illness characteristics

- Emergence of first symptoms of Bipolar Disorder is highest between 15 and 19 years.

- First mood episode is likely to be depression; this is also the predominant phase of the illness.

Treatment responsiveness

- Rapid cycling and psychotic features are associated with greater treatment resistance.

Table adapted from Mahli *et al*. (2009).

The complexity of Bipolar Disorder requires that its treatment be dealt with by the expertise of a multidisciplinary team (Mahli *et al.*, 2009; Berk & Dodd, 2005). There often exists comorbid disorders that exacerbate the clinical picture and make diagnosis more convoluted. Ghaemi *et al*. (2008) suggest that there is a high comorbidity of Bipolar Disorder with multiple mood, anxiety, personality and psychotic disorders. In particular an occurrence of comorbidity with Bipolar II seems to be the rule rather than the exception. Patients are "twice as likely to have comorbid than non-comorbid Bipolar II Disorder" (Berk & Dodd, 2005, p. 13). 33% of patients diagnosed with Bipolar II Disorder in Berk and Dodd's study (2005) have a comorbid diagnosis of a personality disorder, whilst 13.6% of the same population present with Obsessive Compulsive Disorder (OCD), in which sexual and religious themes seem to be most prominent. "Anxiety disorders are particularly common and tend to have an 8% point prevalence and a 45% lifetime prevalence" (Berk & Dodd, 2005, p. 13). Almost 50% of the individuals diagnosed with Bipolar II Disorder abuse substances, with the abuse of alcohol being the most common. Furthermore, both panic disorder and social phobia have been found to be associated with Bipolar II Disorder (Berk & Dodd, 2005).

At present, there is much debate within the medical fraternity as to whether or not Bipolar Disorder should be considered a categorical or a dimensional disorder (Magill, 2004). Currently, researchers are beginning to speculate whether Bipolar Disorder should rather be considered to be a spectrum of disorders, with patients falling somewhere on the continuum, rather than categorically determining whether symptoms are sufficient to support a diagnosis (Berk & Dodd, 2005; Ghaemie *et al*., 2008; Kasper *et al.,* 2008; Magill, 2004). Bipolar studies (e.g. Ghaemie *et al*., 2008*)* have suggested that Bipolar II Disorder was among the least reliable diagnoses, resulting in the authors suggesting that Bipolar II Disorder best be

conceptualised as a part of the spectrum of Bipolar illness. The purpose of this, according to these researchers, would be to clearly differentiate between the two extremes of the continuum, namely clear mania and clear normality. Researchers are suggesting that there is more to the disorder than merely assessing symptoms and classifying absence or presence of the disorder, based on a "checklist" of symptoms and the extent to which the patient meets these (Ghaemi *et al.*, 2008; Merikangas *et al.*, 2007; Magill, 2004; Kasper *et al.*, 2008). Phelps, Angst, Katzow and Sadler (2008) revealed that epidemiological and phenomenological literature was fairly supportive of a spectrum model or conceptualisation of Bipolar Disorder. This perception of a spectrum disorder suggests that the different presentations of the condition are considered to be more or less prominent manic symptoms, rather than simply a presence or absence of full manic or hypomanic syndrome (Phelps *et al.*, 2008). Magill (2004) argues that this spectrum conceptualisation would include more subtle forms of hypomania that could also occur in a cyclothymic or hyperthymic temperament. At present, these researchers propose that both dimensional and categorical interpretations are deemed useful, depending on the purpose of the interpretation (Phelps *et al.*, 2008).

It is believed that Bipolar Depression and Unipolar Depression can be differentiated on a dimensional basis, and not merely categorically, as was previously believed (Ghaemie *et al.*, 2008). Ghaemie *et al.* (2008) argue that this distinction can be based fundamentally on phenomenology, with particular emphasis on hypersomnia/hyperphagia, psychomotor changes and psychotic features. These authors further believe that the depressive course in Bipolar Disorder is informative, with more recurrent and briefer depressive episodes in Bipolar illness when compared with unipolar depression. Some symptoms of depression may be especially characteristic of Bipolar Depression, namely "increased sleep and/or appetite, marked psychomotor retardation, psychotic features, mood lability, early age of onset of

depression, a highly recurrent course, psychomotor changes, brief major depressive episodes, a rapid cycling course, and a positive family history of Bipolar Disorder" (Ghaemie *et al.*, 2008, p. 123).

Although Ghaemie *et al.* (2008) substantiated the support of a categorical definition of rapid cycling, they found that some evidence existed for further examining dimensional approaches to boundaries between ultra-rapid mood swing states and mixed episodes, and describing concepts such as ultra-rapid cycling.

Ghaemie *et al.* (2008) suggest that the DSM-IV-TR criteria for Bipolar Depression should be revised to include a final criteria stating that "Special consideration should be given to the presence of

(i)   atypical depressive symptoms (hypersomnia, hyperphagia, or leaden paralysis),

(ii)   psychomotor disturbance,

(iii)   psychotic features or pathological guilt, and

(iv)   a positive family history of bipolar disorder" (Ghaemie *et al.*, 2008, p. 123).

Ghaemie *et al.* (2008) support the creation of the Bipolar spectrum disorder category in order to accommodate the broadening of the Bipolar Disorder diagnosis. Mahli *et al.* (2009) suggest that Bipolar Depression is similar to that of Unipolar Depression; however, more atypical symptoms seem to be present in the former. Current literature suggests that the 4-day duration of hypomania as required by the DSM-IV-TR is somewhat controversial. Studies suggest that median duration of hypomania is between 1 and 3 days, averaging on 2 days (Berk & Dodd, 2005). This literature alludes to the possibility of a significant number of undiagnosed Bipolar Disorder patients, implicating a clinically relevant sub-group of

individuals that are being missed (Berk & Dodd, 2005; Merikangas *et al*., 2007; Benazzi, 2007). Benazzi (2007) is of the opinion that as many as one out of every two depressed outpatients may actually be suffering from Bipolar Disorder.

2.6   Psychological explanations involved in Bipolar Disorder

There exists some evidence that social stressors, including criticism from significant others, can further exacerbate the severity of the onset of mania. There are also indications that individuals may hold certain perceptions about themselves, their internal states, and their social world (including a need to accomplish and achieve high standards, regardless of whether or not it causes distress) that may make them vulnerable during changing mood states in the face of relevant life events (Mansell & Pedley, 2008). Mansell and Pedley (2008) postulate that the variation in mood, as experienced by the Bipolar patient, may be a result of intricate interaction between internal and external variables that unfold over time, as opposed to a cyclical or random response. Literature suggests that stressful life events often precede the onset of the mood disorder, rather than follow it, particularly in depression and Bipolar I (Sadock & Sadock, 2007).

Freud's psychodynamic views of depression were expanded on by Karl Abraham. Their views postulate four key areas: (1) disturbances exist in the mother-child relationship during the oral phase of development; (2) disturbances can be an association with real or imagined object loss; (3) introjection of the object loss as a defence mechanism as a means of coping; and (4) as a result of the inability to perceive the lost object with both hate and love, the anger is directed towards the self (Sadock & Sadock, 2007). The ambivalent perception of the love-object is met with sadistic tendencies (Cameron & Rychlak, 1985). This ambivalent

attitude occurs in the oral stage of psychosexual development, where the individual experiences an early identification or oral incorporation of the love-object's behaviour into the rudimentary ego as well as the primitive superego (Cameron & Rychlak, 1985). Denial or distortion of reality can occur, and is most often a result of the external reality conforming to the internally generated fantasies and conflicts (Cameron & Rychlak, 1985). When having faced early childhood trauma, the depressed individual develops an unstable ego organisation, faulty reality testing and a distorted defensive structure (Cameron & Rychlak, 1985). Freud's main premise regarding depression was that of an "ego divided, in the sense of the archaic superego being arrayed against the primitive ego. The sadistic hostility of the love-object is carried by the superego via identification (oral incorporation) and this attitude is directed toward the ego" (Cameron & Rychlak, 1985, p. 402).

There is much contention within the field regarding the psychodynamic views of mania. Several theorists believe that the manifestation of mania is a defence against an underlying depression (Sadock & Sadock, 2007). Lewin (Sadock & Sadock, 2007) believed that the manic's ego is overwhelmed by either feared or pleasurable impulses, like aggression and sex. Klein (Sadock & Sadock, 2007) viewed the mania as a defensive reaction to depression, where the mechanism of omnipotence is utilised, resulting in the development of delusions of grandeur. Freud (as cited in Cameron & Rychlak, 1985) suggests that the precipitating factors of mania are no different to that of depression, particularly the loss of love, personal security and self-esteem. He believed that a manic episode functioned as a substitute method of working through problems that threatened the onset of a psychotic depression, with a distinction between the latent content (the depressive symptomatology) and the manifest content (the manic symptomatology). However, he believed that opposed to a divided ego, there also existed an ego ideal, where the ego and superego become fused, resulting in a

mood of triumph, self-satisfaction and a loss of inhibition. Cameron and Rychlak (1985) propose that the defence mechanisms of regression, defective repression, denial, reaction-formation and identification are used during manic episodes.

2.7 Psychotherapy as a treatment mode

The monitoring of Bipolar Disorder is imperative for long-term management, and it has been suggested that a close therapeutic alliance facilitates the monitoring of the symptomatology as well as treatment compliance. In addition, this alliance can be used to optimise functioning through the use of psycho-education and emotional support (Mahli *et al.*, 2009).

The literature does state that psychotherapy is not indicated as a mono-therapeutic intervention for Bipolar Disorder; however, several studies do encourage that it forms part of the treatment method, in conjunction with pharmacotherapy (Berk & Dodd, 2005; Mahli *et al*., 2009; Yatham *et al.,* 2006; Yatham *et al.,* 2009).

Intensive psychosocial interventions, such as family-focused therapy and cognitive behavioural therapy, when compared against psycho-education as part of the treatment for Bipolar Depression, indicates that the former methods have superior clinical outcomes (Mahli *et al*., 2009). Furthermore, when psychotherapy is used together with pharmacological treatment, it appears that the risk of relapse is reduced and functioning is improved (Mahli *et al*., 2009). The research of Yatham *et al*. (2006) yielded results indicating that a consistent psycho-educational program significantly reduced the rate of relapse of both manic/hypomanic and depressive episodes.

However, significant research on psychotherapeutic interventions with the Bipolar II population is lacking (Berk & Dodd, 2005). Despite this, it is acknowledged that existing information from studies involving the Bipolar I population indicates that psychotherapy, in conjunction with pharmacological treatment, shows reduced manic relapses, less hospitalisation and better work and social functioning (Berk & Dodd, 2005).

2.8   Summary

This chapter has addressed the current formal diagnostic criteria of the Bipolar I and Bipolar II Disorders, as well as their clinical presentation and aetiology. Furthermore it has attempted to identify the psychological and psychiatric trends that have developed over the years in the Bipolar Disorder field. This "timeline approach" has allowed for a greater understanding of the present controversies of the formal diagnostic categories. Focusing on the historical developments provides a basis for comparison of current conceptions, and highlighting the significant shifts that there have been in the understanding of this disorder over time. In addition, new perceptions of the disorder and prospective changes that may soon occur were addressed.

Although the value of the DSM-IV-TR is not undermined, the shortcomings of using such an approach often result in a rather "either-or" outcome. Patients either fully meet a diagnosis for either Bipolar I or II, or they lack sufficient symptoms for it to be categorised as the disorder. Subsequently, it seems essential that future research and practice within the psychiatric population consider that disorders such as Bipolar can exist on a continuum, with varying degrees and severity of the disorder. Researchers argue that should such an approach be followed, more provision would be made for ascertaining severity of symptoms,

determining degree of impairment, and carrying with it implications for treatment and intervention. Should one consider this disorder as more dimensional than categorical, more room is made for in-depth analysis of personality structure, and accompanying ego strengths and weaknesses. Using such an approach allows the patient the opportunity to be better understood and not merely boxed into a category based on a checklist-like approach (Benazzi, 2007). However, the value of DSM-IV-TR as a diagnostic tool is not criticised, and its usefulness in a multidisciplinary team within a psychiatric hospital is acknowledged. It is for this reason that this dissertation will aim to address the symptomatology and presentation of Bipolar Disorder from a more in-depth perspective, using an ego-psychological approach.

CHAPTER THREE

LITERATURE REVIEW: EGO PSYCHOLOGY

3.1   Introduction

This chapter will discuss the development of the construct "ego", as well as various theorists' understanding of the ego, and the implications thereof for psychological understanding. The purpose of this section is to gain a greater understanding of the concept of ego psychology and the value that lies in using such an approach. A historical understanding of the development of the concept of "ego" will be explored, and other significant ego-psychological contributions will be summarised. In particular, Beres' and Weiner's models of ego functioning will be discussed. The constituent ego functions will be broken down and their meanings explored. The ego-psychological approach can fundamentally be conceived of as an elaboration of Freud's theory, which is used as the basis for this theoretical standpoint (Suzuki, 2002).

3.2   History of the Ego-psychology model

Some of the significant developments of the ego-psychology model of thinking resulted from Freud's theoretical paradigmatic point of departure. Although Freud has used the construct of ego throughout his psychoanalytic work, it was only in the publication of *The Ego and the Id* (Freud, 1923) that ego psychology as it is known today was begun (Sadock & Sadock, 2007).

The structural tripartite model often remains the cornerstone of ego psychology. This was

developed to combat the dilemmas Freud faced when he realised that not all unconscious elements could be attributed to the id, and that by implication, a topographical model of thinking was not sufficient in explaining these dynamics. These three constructs, namely the id, ego and superego, are distinguished by their different functions. The id is considered the unorganised instinctual drives of an individual. The id is under the control of the primary process, and is unable to delay or modify the instinctual drives. The superego maintains and establishes an individual's moral conscience. This is developed from an internalisation of the ideals and values of the parents, the moral and ethical restraints placed on the individual by the caregivers. The internalisation of the father figure takes place in the oedipal complex via identification resulting from the experience of castration anxiety, becoming the first internal object representing the superego, after the dissolution of the oedipal complex (Strachey, 1934). The ego involves all three topographical areas of consciousness, preconsciousness, and unconsciousness. Defence mechanisms are believed to reside in the unconscious area of the ego, whilst logical and abstract thinking, together with verbal expression, can be located in the conscious and preconscious functions of the ego (Meyer, Moore & Viljoen, 2002). In Freud's earlier works, he believed the ego was still organised around conscious perceptual capacities, yet it now had unconscious features responsible for repression and other defensive operations. The ego was, at this stage, considered relatively passive and weak (Ausubel, 1952). However, the construct was later revised and was considered more robust. The ego was now believed to be an important function, controlling the id impulses, and being responsible for integration of an individual's functioning into a whole. In addition, Freud elaborated that the ego was critically involved in reality testing. In accordance with this function, the ego attempts to combine all mental processes, allowing for a higher order of organisation (Jacobs, 2003).

The ego is viewed differently by different schools of thought and different theorists. There are considered to be two significant lines of development in ego psychology, namely the theory of Heinz Hartmann and that of Anna Freud. Heinz Hartmann is considered to be one of the major contributors to the ego-psychological perspective. Following Hartmann, Anna Freud added noteworthy ideas, and thereafter, Beres and Weiner made valuable additions to our understanding of the ego and its implications for individual functioning.

Hartmann and Anna Freud added significant contributions to the ego-psychology model, each having different focal areas when considering ego functioning. Heinz Hartmann considered certain ego functions as autonomous from the id, whilst Anna Freud focused mainly on defence mechanisms in order to understand the ego (Suzuki, 2002).

Heinz Hartmann (1958) focused on the "autonomous ego" rather than the "defensive ego" as Anna Freud had done. He was of the belief that a great number of ego functions develop autonomously in conflict-free situations. He focused more on adaptation of the ego, rather than its ability to defend against conflict. He believed that ego functions of perception, memory, language, and motility developed independently without arising from conflict between the id and reality. Although he did view the ego as able to autonomously develop such functions, he did not believe that it was inherently separate from the id in individuals from the beginning of life. Hartmann believed that at birth, the ego is still a part of the id. The subsequent separation results from the infant's frustrations with the external world. Thus the ego splits from the id, at a time when the individual is able to differentiate himself from the external world (Suzuki, 2002).

Anna Freud (1966) believed that the ego arose as a result of a conflict between the id and external reality, and develops through the conflicts between the id, the superego and reality. She therefore assumed that it was only logical to focus on the reaction of the ego in the face of conflict, to understand how it functions. Anna Freud acknowledged the importance of the defence mechanisms of regression, repression, reaction formation, isolation, undoing, projection, introjections, turning against the self and reversal, as were mentioned by her father, Sigmund Freud. She expanded on these defence mechanisms and added sublimation, denial, restriction of the ego, identification with the aggressor, and a form of altruism (Suzuki, 2002). Anna Freud believed it was less important to interpret repressed content, than it was to understand the methods by which the ego kept things out of the consciousness (Barone, Hersen & Van Hasselt, 1998).

Other theorists added valuable information to the body of knowledge of ego psychology. Many of these contributions have proven extremely beneficial in our psychological understanding of ego functioning, and as such, a brief description of these seems useful. Several theorists, including Margaret Mahler (1968), Edith Jacobson (1964) and Rene Spitz (1965), took their interpretations of infant behaviour and integrated them into ego-psychological perceptions. The culmination of their research gave insight into successful and flawed or defective ego development, initial attachment matters, and the impact of interpersonal relations on psychological development. Jacobson highlighted the function of libidinal and aggressive drives and how these develop in the context of environmental factors and early relationships. Spitz focused mainly on non-verbal emotional reciprocity of the mother-infant relationship. Mahler focused on the various developmental phases and added the phase of separation-individuation (Blanck & Blanck, 1994). Erikson (1956) added onto Freud's ego-psychological theory by determining the impact of socio-cultural factors on ego

development. Erikson suggests the "push and pull" model, which describes an individual as being pushed by instinctual drives and biological urges and pulled by socio-cultural forces (Barone, Hersen & Van Hasselt, 1998).

3.3   Beres' model and Weiner's elaboration

According to Beres' model of ego assessment (Beres, 1956), six overlapping ego functions were found which collectively can assess the capacity of the ego. These six ego functions are:

> (a) relation to reality,
>
> (b) defensive functions and the regulation and control of instinctual drives,
>
> (c) object relations,
>
> (d) thought processes,
>
> (e) autonomous functions, and
>
> (f) synthetic functions.

A function of this model is to organise measures of ego impairment that look beyond personality styles and symptomatology.

Thereafter, Beres (1956) and Bellak (1958) reconceptualised Beres' original model into seven ego functions, splitting one of the ego functions into two separate executive functions:

- Relation to reality
- Regulation and control of drives
- Object relations
- Thought processes
- Defensive functions

- Autonomous functions

- Synthetic functions

Beres' (1956) work later formed the basis of Weiner's (1966) model of ego functions and its assessment. Weiner made these changes (particularly in content and emphasis) in order to enhance the applicability of the ego-disturbance model to psychodiagnostics. Weiner (1966) identified the following ego functions:

- Relation to reality

    - Reality testing

    - Sense of reality

- Thought Processes

- Object relations

- Defensive operations

- Autonomous functions

- Synthetic functions

Each of Weiner's (1966) ego functions will be discussed in order to fully conceptualise their meanings and how they contribute to the operation of the ego. Additional theorists' understandings will be incorporated where applicable.

3.3.1 *Relation to reality*

Weiner's (1966) conceptualisation of this ego function involves two separate but related constituents, namely the capacity to maintain an adequate sense of reality, and a capacity to test reality. He describes the relation to reality as a perceptual process. Grinker, Werbel and Drye (1968) added a third element: the adaptation to reality.

(1) Reality testing :

Reality testing involves tentative actions that test and objectively evaluate the nature and limits of the environment, including the ability to distinguish between the external and the internal world, and to judge accurately the relationship between the self and the environment (Sadock & Sadock, 2007).   It involves perceiving the environment accurately, and an impairment in reality testing involves inaccurate perceptions, poor judgement and the incapability to distinguish typical modes of response (Weiner, 1966; Grinker *et al*., 1968). This exemplifies the inability to distinguish self-representations from object relations. This is the ego function that is most commonly assessed when attempting to determine a diagnosis of psychosis, as a psychotic state is defined as a period marked by impairment in reality testing (Goldstein, 1985).

(2) Sense of reality

Weiner (1966) explains reality sense as relating to an individual's bodily perceptions. A distortion of this sense of reality is evidenced in unclear ego boundaries as well as misrepresented body imagery. Goldstein (1985) suggests that an intact reality sense is indicated by the capacity to experience one's self and body, together with an external event, as authentic and recognisable. Dumas (2009, p. 25) gives examples of defects in the sense of reality as, "confused body image, feelings of estrangement, depersonalisation, and déjà vu phenomena".

(3) Adaptation to reality

The adaptation to reality, added by Grinker *et al.* (1968), can be understood as one's capacity to cope with and relate to the external world. The individual is required to have a variety of

internalised social roles that can be spontaneously adapted to a situation as and when required. These roles include the ability to create actions towards tasks, things and people in order to adapt to society. For Grinker *et al*. (1968) this denotes the ability to develop, differentiate and integrate. Effective adaptation is not uncommon for individuals, even if impairments exist in other areas of ego functioning (Goldstein, 1985).

3.3.2 *Thought processes*

Thought disorders are understood to be disturbances in thinking that affect language, communication or thought content. Thought disorders often result from an interference of primary process thinking, where secondary process thinking should have been utilised (Goldstein, 1985). This ego function involves the capability to think abstractly, coherently, understandably, lucidly, rationally and comprehensibly. The secondary processes involve more simplistic ideation, involving goal-directed, logical and easily understood thinking, whilst primary process thinking is a more distinctive style of thinking (Goldstein, 1985). Weiner (1966) explains the constituents of the thought process as cognitive focusing, reasoning and concept formation. Included are the following capacities:

- the ability to selectively scan information, focusing on important and disregarding unrelated stimuli;

- the capacity to infer logically regarding the connection between objects and events;

- the ability to abstractly interpret experiences;

- the capacity to avoid faults through the expression of drives; and

- memory and concentration.

3.3.3   Defensive operations

Defence mechanisms are considered to be regularly occurring, unconscious mental phenomena that are used by the ego in order to resolve the existing conflicts between the instinctual drives, the external world and the superego. Thus the main function is believed to be the ability a defence mechanism has to keep unwanted aggressive or libidinal drives at bay. Defences can be grouped hierarchically according to the degree of maturity associated with them (Sadock & Sadock, 2007). Common defence mechanisms employed by the Bipolar Disordered patient during a manic phase are omnipotence and introjection.

3.3.4   Object relations

A major impairment in an individual's functioning is the inability to form and maintain healthy relationships with others. This is further exacerbated by an inability to accept the ambivalent nature of objects, and the rejections and frustrations experienced in the relationship (Weiner, 1966; Grinker *et al*., 1968). Individuals who lack this capacity to engage appropriately with others will often withdraw socially, avoid contact with others and seclude or separate themselves in social contexts (Weiner, 1966). Object relations encompass the internalised result of interpersonal interactions, and involve both object images and self-images. Object images are "built up in the ego as a result of the way the individual has perceived, processed, and internalised past interpersonal experiences, whilst self images are built up in the ego as a result of the way that the individual has perceived, processed and internalised his or her varying past conceptions of his or her self" (Dumas, 2009, p. 27). Object relation pathology often lies in the individual's inability to synthesise both good and bad introjections and self-representations.

Kernberg (1980) further emphasises that he views self-representations and object relations, together with their affective charge, as the fundamental aspects of the id, ego and superego. Therefore, understanding ego impairment will provide insight into an individual's emotional/affective response and how this links to object relations, and perceptions of both the self and others. Kernberg (1980) furthermore states that structures determined by internalised object relations constitute a crucial determinant of ego integration and as such, an abnormal development of internalised object relations determines varying types of psychopathology. Early object relations contribute to the establishment of the ego identity and the availability of assets termed "ego strength".

3.3.5   Autonomous functions

These functions arise independently of intrapsychic and interpersonal conflict, although they are somewhat influenced by such conflicts. There are various functions of cognition that are believed to be the indicators of such a conflict-free ego; these are intelligence, intention, language capacity, memory, perception, productivity, motor development and an inherent learning capacity (Weiner, 1966; Grinker *et al*., 1968; Goldstein, 1985).

3.3.6   Synthetic functions

Although the synthetic functions involve a number of the above-mentioned functions, the distinctive function involved is the individual's capacity to organise itself. All the synthetic operations include the ability to integrate and organise cognitive capabilities, to relate to reality, the capacity for object relations, and the current utilisation of defensive resources (Weiner, 1966). Thus the synthetic function can be viewed as the ego's ability to combine all the prior mentioned functions into one integrated whole. The reason for such a function to exists effectively is to allow an individual to integrate opposing ideas or experiences, which

may include affect, thought, feelings, actions and self- and object representations. Furthermore, this function is essential to integrate those experiences that are not conflicting.

3.4 Ego functions

A core belief within the ego-psychology theoretical approach is that ego functions are the ultimate common route for mentalisation to occur. These functions of the ego are developed over time, as a response to the evolving mastery of developmental abilities of the social environment. These ego functions are seen in the expression of discernible and desirable behaviours (Grinker *et al.*, 1968). Feifel (2006) describes the ego as an organisation of adaptive, executive (including intelligence) and defensive functions. Subsequently, the analysis of the dynamics and structure of the ego, and ultimately the understanding of its functions, can be considered an effective way of obtaining insight into an individual's behaviours. Thus it is essential that the ego functions, including both ego strengths and ego weaknesses, be addressed. Goldstein (1985) supports this idea, stating that a useful way of understanding and describing individuals is through the study of ego functions.

3.5 Conclusion

This chapter has addressed the fundamental functions of the ego, and how such functions impact on daily interactions, be it on a cognitive or relational level. The subsequent impairment in ego has also been addressed, as has the problematic areas of functioning that may arise as a result of this. This chapter is thus essential in comprehending the implications of an impaired ego, and the ramifications of this into various areas of functioning. The following chapter will address how these very ego functions are measured quantitatively on

the Ego Impairment Index on the Rorschach. Should this sample show an overall impairment in the ego, this chapter has provided the theoretical insight into the nature of such impairment, and the implications thereof.

CHAPTER FOUR

LITERATURE REVIEW:

THE RORSCHACH INKBLOT TEST AND THE EGO IMPAIRMENT INDEX

4.1   Introduction

This chapter will give a thorough explanation of the Rorschach Inkblot Test, including its value and use in relation to this study. Attention will then be given to the concept of ego, as it is understood in relation to the Ego Impairment Index-2, and subsequently to the impairment thereof. The purpose of this is to provide the reader with a concise understanding of ego, as employed in the Ego Impairment Index-2.

4.2   Rorschach Inkblot Test

4.2.1   Introduction

The Rorschach Inkblot Test is a cognitive perceptual test designed to examine the personality characteristics and emotional functioning of individuals (Exner, 2003). The Rorschach imposes a set of demands whereby internal processes tend to be relied on by the subject in order to organise the inkblots. The EII-2, a Rorschach-based index, is able to access psychological organising structures and capacities that are not readily assessable through other measures (Perry, Viglione & Braff, 1992). This information is considered valuable as it will reflect relatively stable aspects within the personality; traits that are enduring and are fundamental when considering the personality, and which are probably contributing to the individual's pathology.

4.2.2   Rorschach Comprehensive System

The Rorschach Comprehensive System is currently the most widely used system of Rorschach interpretation (Exner, 2003). This system was primarily developed as a result of the need for a system that allowed consistent administration, adequate norms, scoring reliability and a psychometrically sound mode of assessment. It was introduced by Exner in 1974, and has expanded considerably since then. The Comprehensive System was developed around three fundamental areas, namely: standardised administration, objective and reliable coding, and a representative norm base. Subsequently, the test is deemed reliable in determining an individual's personality structure and psychological functioning (Exner, 2003).

The Rorschach is used to enhance the understanding of a person, as an individual, in order to determine intervention strategies, or to provide significant information on the individual's personality structure when needed for additional decision-making (Exner, 2003). Several psychological characteristics are called into play when decision-making occurs in response to the presented stimuli. The responses tend to reflect the processes that generate the behaviour of the person as he or she goes about the routine decision-making of everyday living (Exner, 2003).

More recently it has been considered a diagnostic aid for several conditions that contain specific patterns of personality functioning. It also allows valuable suggestions in terms of treatment procedures, potential challenges or complications in psychotherapy, the appropriate selection of treatment modalities, and the monitoring of improvement and change over a period of time (Weiner, 1998).

4.3   Ego as a construct

'Ego' has become a generic term within the psychological field. It has become a standard concept that is often used loosely to describe an individual's core "persona". However, it seems that the fundamental meaning of this construct has been lost along the way. This section will describe the definition of the ego as it is understood in this study. Perry, McDougall and Viglione (1995) state that the ego is often defined by its functions, thus necessitating a focus on this area, and is often assessed via mental processes (reality testing, abstract reasoning and so forth). When considering the nature of this research, it seems imperative to clarify the concept of "ego" according to the developers of the Ego Impairment Index-2. Viglione, Perry and Meyer (2003) view ego functions as consisting of reality testing, reasoning processes and the quality of object relations.

Ego psychology emphasises the development and functions of the ego as the adaptational core of the personality (Avery & Ryan, 1988). Thus ego development refers to the "emergence, differentiation and integration of the functions that serve to maintain the person and orient him to the environment" (Avery & Ryan, 1988, p. 550). Within this mini-dissertation, the ego is understood to include Weiner's (1966) functions of thought processes, relation to reality, object relations, defensive operations, autonomous functions and synthetic functions.

Ego functions occur and are expressed in behaviours which are observable and desirable (Grinker, 1968). It is thus important to explore the ego functions, both in their ego strengths or underlying ego weaknesses. Goldstein (1985) believes that studying the ego functions provides an effective means of describing and understanding the behaviour of individuals.

Ego strengths are made up of intact reality testing, thought processes, interpersonal relationships, and adaptation to reality. Underlying ego weaknesses include poor impulse control and poor frustration tolerance, the use of primitive ego defences, identity diffusion, affective instability, and a lack of superego integration (Goldstein, 1985). These ego strengths and weaknesses correspond with Beres' (1956) view of the ego and its functions.

4.4   Ego Impairment Index-2

4.4.1   Development of the Ego Impairment Index (EII)

Ego impairment can be defined as a deficiency in any one of the above-mentioned ego functions. The EII is a "composite measure of psychological impairment and thought disturbance developed from the empirical and theoretical literature on Rorschach" (Viglione, Perry & Meyer, 2003, p. 149). The index was developed in order to provide an indication of deficits in ego functioning, and includes aspects of reality testing, object relations and reasoning processes. The value lies in the richness of the results obtained, as these extend further than information obtained via self-report and symptom rating scales (Viglione, Perry & Meyer, 2003). The EII is derived from the data collected from the Rorschach Inkblot Test, which is reported by literature as calling up one's inner world and serves as an indication of one's ego functioning (Perry & Viglione, 1991). The EII uses variables obtained through interpretation of the Rorschach data, using Exner's (2003) Comprehensive System. In line with the ego-psychology model, from which the EII was derived, these variables are assumed to indicate deficits in ego functions leading to impaired adaptation to external reality (Tibon, Porcelli & Weinberger, 2005).

The EII has demonstrated strong reliability and validity (Viglione, Perry & Meyer, 2003). Accordingly, research has supported the hypothesis that the EII is associated with psychological impairment (Viglione, Perry & Meyer, 2003). Perry, Minassian, Cadenhead, Sprock and Braff (2003) found that high EII scores were indicative of increased pathology. Furthermore, the EII increased in the pathological direction across a continuum of severity.

The variables included in the EII were chosen as they are measures of adequacy of impairment in major areas of adaptive personality functioning (Adrian & Kaser-Boyd, 1995). The EII gives significant attention to object relations and its relevance to personality functioning, and subsequently, its role in ego impairment. This is similar to various personality theories that place significant importance on object relations in determining an individual's functioning and interpersonal relations (Adrian & Kaser-Boyd, 1995).

The measurement tool of choice, namely the EII-2, is based on Beres' assessment model. According to Beres' (1956) model of ego assessment, six overlapping ego functions were found which collectively can assess the ego's functional capacity. The EII determined five variables that correspond with one or more of these ego functions. Each of the variables has indicated empirical links with impairment and psychological disturbance (Viglione, Perry & Meyer, 2003).

Five Rorschach variables were chosen by Perry and Viglione (1991) to form the EII, and represent a synthesis of Beres' (1956) model.

4.4.2 *Differentiation between EII-1 and EII-2*

The EII-1 and EII-2 are extremely similar, differing only in the use of the Good-to-Poor Human Experience variable (HEV) in the former and the Human Representational variable (HRV) in the latter. Initially the EII incorporated the HEV. This was however adapted in 2003 to increase validity and psychometric properties, and was renamed the HRV (Viglione, Perry, Meyer, Jansak & Exner, 2003; Viglione, Perry & Meyer, 2003). Subsequently the EII-2 may be more sensitive to problems of adaptation to external reality regarding both cognitive and object relations difficulties (Tibon, Porcelli & Weinberger, 2005). The relevance of this sensitivity is applicable as severe psychological disturbance is often characterised by impaired thought and perception and poor interpersonal relationships (Perry *et al.*, 2003). The EII-2 has also been found to correlate with measures of functional, interpersonal and occupational adaptation (Perry *et al.*, 2003).

According to Viglione, Perry and Meyer (2003), the EII-2 is calculated using the following formula:

EII-2 = $[(0.141) \times (\text{number of FQ}- \text{responses})]$

$+ [(0.049) \times (\text{WSum6})]$

$+ [(0.072)] \times (\text{critical contents})]$

$+ [(0.198) \times (\text{number of M}- \text{responses})]$

$+ [(0.117) \times (\text{number of Poor human responses})]$

$+ [(-0.104) \times (\text{number of Good human responses})]$

$+ [(-0.066) \times \text{R}]$

$+ [(-0.038)]$ (Viglione, Perry & Meyer, 2003).

4.4.3   Composite variables of the EII-2

4.4.3.1 FQ–

The first measure is of perceptual inaccuracy or poor reality testing as assessed by the sum of the Form Quality minus (FQ–) responses (Perry & Viglione, 1991). These distorted responses are understood to be the perceptual equivalent of reality testing failures and assess what Beres (1956) referred to as relation to reality. The form quality (FQ) coding determines information regarding the "fit" of the response. This entails whether or not the area of the blot that is used in the response conforms to the form requirements of the object stated. A form quality minus (FQ–) response is coded when this overall "fit" between the object and contours is desecrated considerably. Many FQ– responses involve the individual creating contours that actually do not exist (Exner, 2003).

Typically, it is believed to be an "ego" operation when form is included in a response (Rapaport, Gill & Schafer, 1968). Ego psychology, as emphasised by Rapaport, Gill and Schafer (1968), maintains that the use of form suggests a process of formal reasoning in which the mediation of the stimulus calls attention to the contours. Directing attention, forms of control and making discriminating judgements with regards to the standards of the environment are inherent in this process (Exner, 2003).

4.4.3.2 WSum6

The WSum6 comprises six cognitive special scores. It is used to identify difficulties in conceptual thinking (ideation), and to measure thought disturbance in varying forms, and also to address ideational clarity. It involves strained reasoning and inappropriate combinations of objects. This score reflects cognitive disruption and impairment in primary process thinking

(Perry & Viglione, 1991). Cognitive slippages are indicative of a failure in problem-solving abilities and refer to thought processes in Beres' (1956) model.

The Weighted Sum of the six special scores (WSum6) includes the following special scores:

- Deviant Verbalisation (DV),

- Incongruous Combinations (INCOM),

- Deviant Response (DR),

- Fabulised Combination (FABCOM),

- Inappropriate Logic (ALOG), and

- Contamination (CONTAM) (Exner, 2003).

These scores (with the exclusion of ALOG and CONTAM) may be coded as a Level 1 response, or a Level 2 response. The latter refers to more severe or bizarre responses, reflective of more severe instances of dissociated, illogical, fluid or circumstantial thinking; whilst the former represents a mild or relatively modest instance of illogical, fluid, peculiar, or circumstantial thinking (Exner, 2003). Exner (2003) elaborates that these special scores can be placed on a continuum, with levels of severity varying on each side of this continuum. DV1, INCOM1 and DR1 can be considered "milder" cognitive special scores, whilst DV2, FABCOM1, INCOM2, and ALOG are believed to be serious cognitive special scores, and lastly, DR2, FABCOM2 and CONTAM responses fall on the severe end of the continuum.

DV responses are scored when inappropriate words have been used. These can take two forms: the responses are either considered redundancies or neologisms. These are assigned if either creates an oddity in the answer. Furthermore, this special score is coded when a wrong

word is used in identifying parts of an object. A neologism is scored when an inapplicable word is used in the place of an appropriate word that falls within the person's verbal ability. Redundancy involves the use of strange language to identify the nature of an object twice (Exner, 2003).

A DR response is assigned when answers have a strange or peculiar quality. This results from a tendency to distort or detach from the current task. This can happen when an individual adds a phrase that is irrelevant to the task. In addition, this score can be coded when individuals ramble on inappropriately. Thus DRs can be considered as either inappropriate phrases, or circumstantial responses (Exner, 2003). A DR response reflects some kind of ideational distraction and indicates the difficulty the individual experiences in obtaining a definition of the object, or in concluding the response (Exner, 2003).

INCOM, FABCOM and CONTAM responses are used to "identify responses in which unreal features are reported or inferred between objects, implausible activities are attributed to objects, or an inappropriate condensation of impressions occurs in a manner that violates reality" (Exner, 2003, p. 138). INCOM responses are assigned when an impossible feature is assigned to a single object. INCOMs can be distinguished between level 1 and level 2 responses, the differentiation being the level of bizarreness (Exner, 2003). FABCOM responses are coded when two or more objects have been hypothesised to be in an implausible or impossible relationship. In addition, a FABCOM is coded for transparencies, where only one object is needed to assign this special score. Similar to the INCOM response, FABCOMs can be differentiated by levels, depending on the bizarre nature of the response (Exner, 2003). CONTAM responses are considered the most bizarre cognitive special score that can be assigned. This score reflects "two or more impressions that have been fused into

a single response in a manner that clearly violates reality. The CONTAM response involves the use of a discrete area and, in effect, one response psychologically overlays another, as in a photographic double exposure" (Exner, 2003, p. 139).

The ALOG response is assigned when strained or unusual reasoning is used to rationalise or justify the response. It can be considered a loose or simplistic form of thinking (Exner, 2003).

4.4.3.3 Critical contents

Increased drive-related themes are commonly linked to lapses in ego defences. The failure of repression is thus seen in the expression of primitive content areas (Perry & Viglione, 1991). Beres (1956) referred to this as a failure of the defensive functions and the regulation and control of instinctual drives. The critical content category consists of the following content scores (Exner, 2003; Viglione, 1990): anatomy (An), blood (Bl), explosion (Ex), fire (Fi), food (Fd), sex (Sx), x-ray (Xy), morbid (MOR) and aggressive movement (AG).

4.4.3.4 M–

The M– response is assigned to a human representational movement that has a form quality of minus. It is considered distorted human movement. A human movement response is generally considered an advantageous response, but when the response is ruined with a form quality of minus, it is believed to be done as a result of primitive aggressive fears and/or an inability to differentiate between self and other. The presence of M– responses may also suggest a form of disordered thinking that may be impacting on mediation (Exner, 2003). This is often seen in the protocols of individuals with primitive ego structures (Perry & Viglione, 1991). In addition, it measures clouding of thinking, and may suggest the

possibility of peculiar or disturbed ideation. It further reflects distortions of interpersonal perception and object representations.

4.4.3.5 GHR and PHR

These variables assist in assessing internal object representations, and of all the Rorschach variables, give the most insight into this dynamic. Object representations are perceived as the internalised images of interpersonal relationships that an individual has and those with whom they relate (Kernberg, 1980). Human representational responses are understood as a broad-based approach to the study of interpersonal behaviour and their effectiveness. PHR responses correlate with patterns of interpersonal behaviour that are ineffective or maladaptive, suggesting that such people are often rejected or shunned by others and are often socially inept (Exner, 2003). GHR suggests that the individual is generally well regarded by others, and their interpersonal activities tend to be reasonably free of chaos (Exner, 2003). Exner (2003) sets out guidelines to follow in order to determine whether a response with human representation should be coded as GHR or PHR. Satisfying relationships are generally typified by GHP > PHR and is in dynamic relation with M (Human Movement) and H (Pure Human) responses (Exner, 2003).

4.4.4   Ranges of EII-2 scores

The EII-2 scores yielded will indicate the level of functioning of the ego, its capacity to tolerate stressful life events and its ability to handle demands effectively. If the EII-2 yields positive scores, it implies an impairment of ego function; thus the EII-2 is essentially a measurement of a negative characteristic, with low scores implying an absence of disturbance of impairment. Therefore, high EII-2 scores probably indicate difficulties with problem-solving skills or ineffective thinking in complex and demanding life situations (Viglione,

Perry & Meyer, 2003). Viglione, Perry and Meyer (2003) predict that high EII-2 scores would indicate behavioural dysfunction and failures in adaptation. Healthy EII-2 scores are expected to be below –0.3 (Tibon, Porcelli & Weinberger, 2005). The EII-2 is able to measure negative characteristics relative to the limitations in thoughts of individuals that function relatively well (EII-2 = +0.0 to +0.6), as well as determining when the ego is significantly impaired (EII-2 ≥ +1.3).

4.4.5   Ego functioning and the Ego Impairment Index

The Rorschach's ability to measure underlying ego functioning makes it a valuable assessment tool. This includes measuring aspects of ego strength or impairment apart from current symptoms or diagnosis (Adrian & Kaser-Boyd, 1995). The value of using the Rorschach to measure ego functioning lies in its ability to encourage an individual's use of available cognitive, affective and human resources to organise a response to an ambiguous stimulus. Furthermore, the manner in which the Rorschach is administered offers little guidance and structure for decision-making and organisation of complex contradictory and interconnected response alternatives (Viglione, Perry & Meyer, 2003). This approach prevents external variables from affecting the response, and as such the responses are influenced greatly by an individual's personal problem-solving style and idiosyncrasies (Viglione, Perry & Meyer, 2003).

It is assumed that an indication of ego functioning will allow insight into an individual's mental representations and inner world of thought (Perry, McDougall & Viglione, 1995). Exner (2003) is of the opinion that the Rorschach is possibly the most favourable instrument in determining these internal ego functions. The Rorschach Comprehensive System is assumed to be able to assess ego impairment, as environmental influences are minimised and

it encourages the individual to utilise accessible cognitive, affective and human/object representational resources that are fundamental in ego functioning (Perry, McDougall & Viglione, 1995). These aspects are organised in response to an ambiguous and complex task (Viglione, 1990).

The Ego Impairment Index is also assumed to measure aspects considered to draw on features of psychotic processes (Perry, McDougall & Viglione, 1995). Perry's research with patients previously diagnosed with depression (according to the DSM-IV TR) concluded that the stability of the Ego Impairment Index by implication suggests that the Index is possibly addressing fundamental components of personality that persist despite symptomatic change (Perry, McDougall & Viglione, 1995).

According to Perry *et al*. (1995), the EII is a stable measure of psychological disturbance. By implication this broadens the use of the EII in diagnostic procedures, and it can be considered a tool in determination of pathology, which subsequently may have prognostic consequences (Perry, McDougall & Viglione, 1995). Furthermore, Adrian and Kaser-Boyd (1995) found that the EII differed between an in- and an outpatient population. Their research determined that the severity of ego impairment was high in those individuals being treated on an inpatient basis. This indicates that as severity of pathology increases (resulting in inpatient treatment rather than outpatient treatment), the EII also increases. EII can be considered a measure of psychological impairment and thought disorder (Viglione, 1990). The Rorschach's ambiguous nature allows the respondent's problem-solving style and idiosyncrasies, including thinking disturbances, to come to the fore. Impairments in ego functioning are conceptualised as impairments in reality testing, reasoning processes and object relations.

The implication of the EII for prognostic outcomes and treatment possibilities has been confirmed by Perry and Viglione (1991), where successful tricyclic antidepressant treatment correlated with lower EII scores in depressive patients. Therefore, the need to develop this index has significant implications for the psychopathological population. Viglione, Perry and Meyer (2003) encourage additional research to determine the association between the EII-2 and impairments in thinking, problem solving, and coping.

4.5 Conclusion

This chapter has served to explain the nature of the Rorschach Inkblot Test and its applicability to measure levels of ego functioning. In particular, the recently developed Ego Impairment Index has incorporated Rorschach variables to determine this level of impairment. The results obtained are believed to be stable and enduring, thus not being easily influenced by extraneous or environmental variables at the time of assessment. This adds to the valuable nature of such an index, and as such, the following chapter will address the manner in which the data was collected.

CHAPTER FIVE

METHODOLOGY

5.1   Research strategy and design

This study is a cross-sectional study which focuses on and studies a cross-section of the Bipolar Disorder population at a single point in time. This refers to a broad sampling of persons with different demographic characteristics, such as different ages, races, gender, educational levels and marital statuses. A group of patients diagnosed with Bipolar Disorder was selected and the Rorschach Inkblot Test was administered. Administration and coding then followed the Comprehensive System guidelines, after which the variables were used in order to ascertain the Ego Impairment Index-2. This research is mainly explorative in nature, which allows familiarisation with a designated topic (Babbie, 2005).

5.2   Participants

Twelve participants were selected, over a period of three months, to take part in this study, and 50 participants' data was obtained from the University of Pretoria's database (Daws, 2009). The total number of participants equalled sixty two (n = 62). As the purpose of this study is exploratory, sampling was purposive, rather than representative. The initial 12 participants were patients from a psychiatric hospital, and included both inpatients and outpatients, whilst the data of the additional 50 patients also consisted of inpatients and outpatients. Participants were selected based on a diagnosis of Bipolar Disorder made by a multidisciplinary team at formal ward round conferences at a local psychiatric hospital. Participation in the study was voluntary and without remuneration.

5.2.1 Selection criteria

The 12 participants who were selected for the research met the same inclusion criteria designated in the sample obtained from the University's database. These include the following criteria:

1. Male and/or female between the ages of 18 and 60.

2. Have met sufficient criteria from the DSM-IV-TR to be diagnosed with Bipolar Disorder on Axis I. This diagnosis was made by a multidisciplinary team consisting of a psychiatrist, registrar, clinical psychologist, occupational therapist and social worker.

3. Can freely converse in English or Afrikaans.

4. Absence of organic impairment, mental retardation or acute psychosis.

5. Currently being treated psychiatrically as either inpatients or outpatients.

Most of the participants were taking prescribed medication which varied according to the presentation of the symptoms and their diagnoses.

5.2.2   Demographic variables

5.2.2.1 Gender

Figure 5a
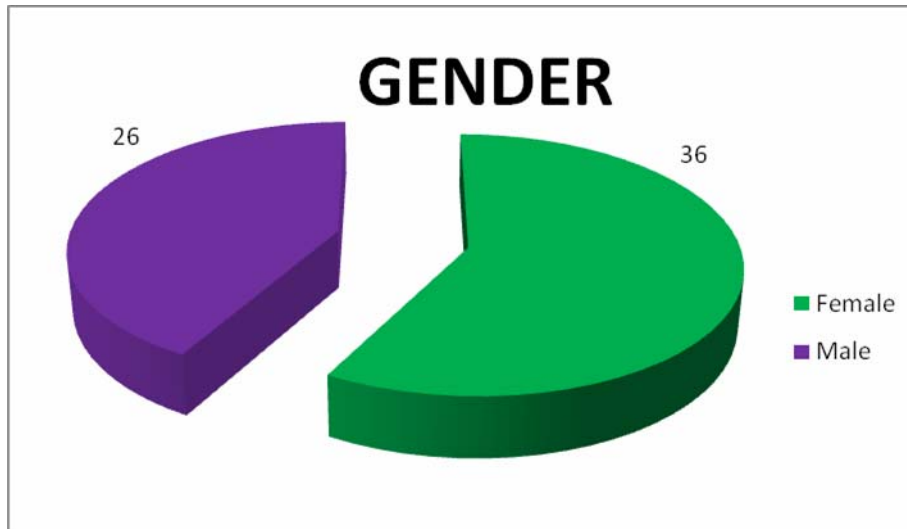
Thirty six (36) (58%) participants of the study were female, whilst 26 (42%) participants were male.

5.2.2.2 Age

Figure 5b
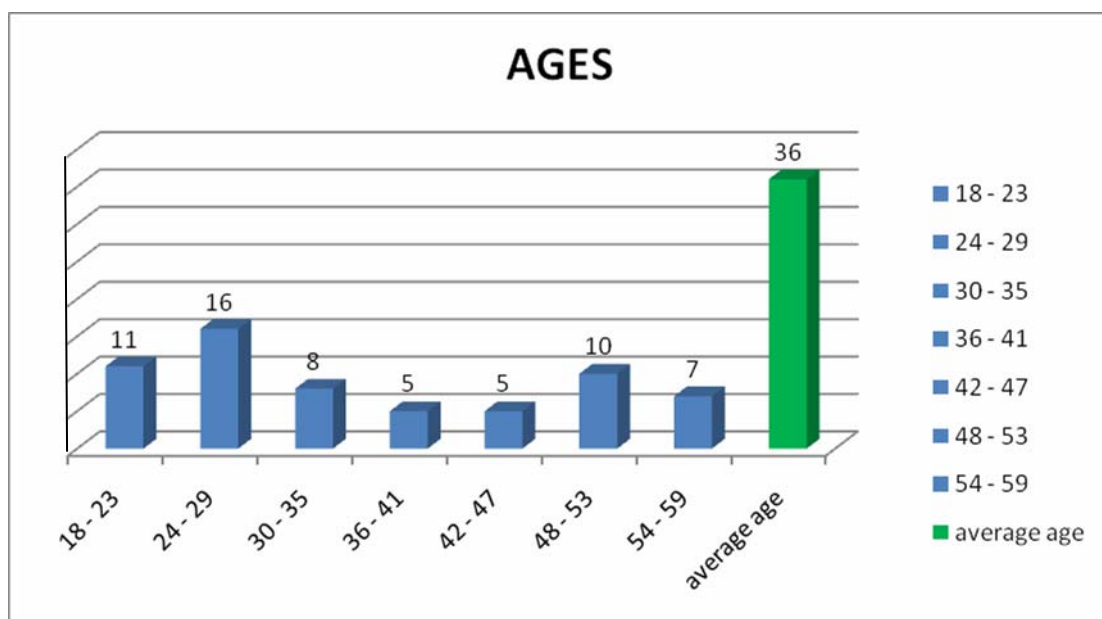
Ages of participants ranged from a minimum age of 18 years to a maximum age of 58 years. Most of the participants fell between the ages of 18 and 35 years (56.5% fall in this category). The mean age was calculated and found to be 36 years.

5.2.2.3 Years of education

Figure 5c
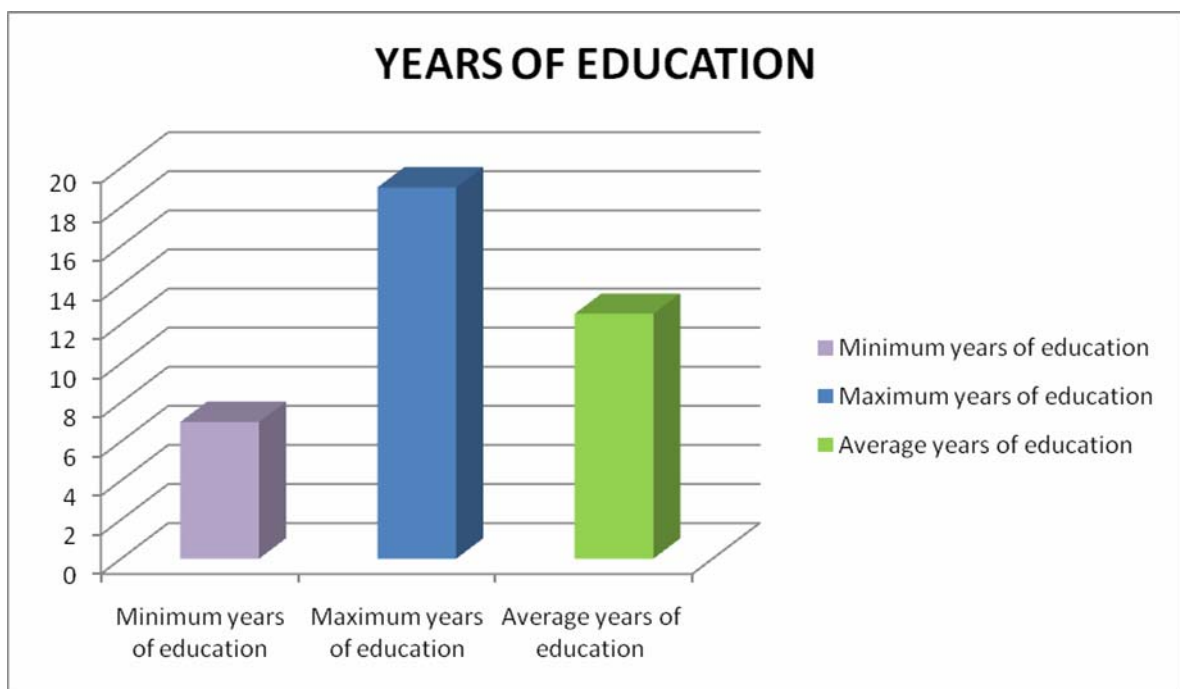
The years of education of the participants ranged from a minimum of 7 years (i.e. Grade 7) to a maximum of 19 years (i.e. post-graduate degree). The average number of years of education for the total sample population is 12.53 (i.e. Grade 12).

5.2.2.4 Other demographic variables

Table 5A

VARIABLE	n	%	VARIABLE	n	%__
MARITAL STATUS			***RACE***		
Single	38	61%	Caucasian	31	50%
Married	6	10%	African	27	44%
Divorced	17	27%	Other	4	6%
Widowed	1	2%			

5.2.3   Ethical considerations

Ethical approval was obtained from the University of Pretoria, Faculty of Humanities, Ethics Department as well as the University of Pretoria, Faculty of Health Sciences, Ethics Department prior to commencement of the research. Informed consent was obtained from all the participants (see Appendix A). In addition, participants were made aware of the nature of the study as well as voluntary participation and minimal risk. Participants were made aware that they could opt to withdraw from the study at any time, without any negative consequences. Furthermore, they were aware that the data obtained in this study would be kept safe and confidential. The general ethical guidelines applied in all research were adhered to, and aspects of respect were promoted. Confidentiality and anonymity were ensured at all times during the research. The participants' names were replaced on their records with randomly assigned numbers between 1 and 12 to ensure anonymity. The records of the protocols obtained from the University's database were already numbered, thus further ensuring anonymity. Due to the confidential status of the study as well as the quantitative nature of the study, participants were made aware that no formal feedback would be given. In

continuation of ethical practice, participants will have psychiatric and psychotherapeutic treatment made available to them as a result of their hospital status (either in- or outpatient).

5.3   Sampling

Purposive sampling was used as participants were selected based on meeting the DSM-IV-TR criteria for Bipolar Disorder (Huck, 2004). Furthermore, this type of sampling was used as participants were chosen based on the most useful or representative requirements relative to the study (Babbie, 2005). The patients were all diagnosed by a multidisciplinary team at a local psychiatric hospital; this included a psychiatrist, psychologist, registrar, social worker and occupation therapist. Diagnoses were made in formal ward conferences where each patient was presented to the above-mentioned panel. As the diagnosis of Bipolar Disorder is often a contentious topic, concerns are acknowledged pertaining to the reliability of the diagnosis. However, the scope of the study did not warrant comprehensive screening of participants with other objective methods. This may have implications for the reliability and validity of the study.

Protocols that have already been administered and coded to the same diagnostic population, with the same selection parameters, were also included in the study. These protocols are an additional 50 protocols obtained by administering the same assessment tool to a homogenous group. These protocols were obtained from the available database of Bipolar Disorder patients from the University of Pretoria.

In addition, it is acknowledged, as was indicated in the literature review, that there often exists comorbid disorders with a diagnosis of Bipolar Disorder. Although there may not

always be a formal diagnosis of a comorbid disorder, it should be borne in mind that additional symptomatology may confound the research results.

5.4   Assessment measure

The Rorschach Inkblot Test was used as the measurement tool, which yielded the raw data. Administration followed those guidelines specified by Exner's (2003) Comprehensive System. All Rorschach protocols require a minimum of 14 responses, as well as at least one response to each of the ten cards, in order to comply with validity requirements (Adrian & Kaser-Boyd, 1995).

5.5   Data collection procedures

Data was collected using the Rorschach Inkblot test, following the Comprehensive System as set out by Exner (2003), which was administered to each participant. The initial 50 protocols were administered by four different administrators, all proficient in the administration of the Comprehensive System Rorschach.   The final 12 protocols were administered by the researcher.   The Comprehensive System procedures of preparation of the patient, administration, instructions, recording and coding were strictly followed.

The research protocols all contained the required number of a minimum of 14 responses to provide reliable data and to support valid interpretations. The Comprehensive System's standard procedures were followed by the researcher to code all of the responses. Following this, 25% of the protocols were randomly selected and scoring was independently re-evaluated by a further two Rorschach examiners, using the Comprehensive System's

principles and guidelines for inter-rater reliability. This allows for quantification of the degree of consistency of each rater, after which the data is deemed reliable (McDowell & Acklin, 1996; Foxcroft & Roodt, 2005; Huck, 2004; Rosenthal & Rosnow, 1991). The Statistical Department at the University of Pretoria performed an analysis on the data and determined an inter-rater reliability of 0.91 (i.e. 91%). The Rorschach Interpretive Assistance Programme, Version 4.1 (RIAP-4; Exner & Weiner, 2003), was used thereafter to produce structural summaries for the accepted protocols. The RIAP-4 is based on Exner's Comprehensive System. These protocols, which, as a result of the above steps, are viewed as "reliable samples of behaviour", were encoded by the Department of Statistics at the University of Pretoria.

The necessary variables were then taken and the EII-2 scores were calculated according to the formula set out by Viglione, Perry and Meyer (2003).

5.6   Data analysis

- The study is primarily quantitative in nature. This allows for statistical analysis of the results yielded.

- Differences and similarities will be pointed out, and results will be shown or depicted in table or chart form in the following chapter.

- Insight into the impairment of the ego will allow for a greater understanding of the individual's object relations, reality testing and efficacy of cognitive processes. Thus the results will be interpreted in terms of these areas, determining the impact of impaired ego functions on present behaviour and interpersonal relations in everyday functioning.

- Considering the small size of this sample, results yielded will, at most, be preliminary in nature, and only applicable to the specified sample.

Considering the scope of the study, as well as the small sample size, statistical analysis will mainly consist of descriptive statistics. A frequency distribution will determine how many participants ended up in the same category, i.e. how many patients indicated that the Ego Impairment Index-2 was positive (Huck, 2004). In addition, measures of central tendency will be determined, where the mode, median and mean scores will give insight into the research topic (Huck, 2004; Taylor, 2000; Elifson, Runyon & Haber, 1982; Wright, 1997). Where it is applicable, this information will be displayed graphically or in tabulated form to assist in clarifying the data.

The calculated EII-2 scores are then positioned on a continuum according to positive and negative values. Negative scores are indicative of positive or advantageous outcomes, proposing that there exists an ability of the ego to effectively deal with demands. Positive or high EII scores may suggest that thoughts are ineffective during demanding and stressful life situations, or that problem resolution has failed (Perry & Viglione, 1991; Stokes, Pogge, Powell-Lunder, Ward, Bilginer & DeLuca, 2003). When considering that the purpose of this mini-dissertation was to ascertain whether there exists impairment in ego functioning of these individuals, the cut-off point of the EII-2 score used will be the category of +0.4 to +0.8, where the ego is considered to be mildly to moderately impaired. Thus scores falling in this category would suggest that some level of ego impairment exists. Stokes *et al*. (2003) used similar means of interpretation, breaking results down into each category and drawing conclusions from these values.

57

5.7 Conclusion

The Rorschach was administered and coded using the Comprehensive System guidelines. Thereafter the necessary variables were used to calculate EII-2 scores, using the formula set out by Viglione, Perry and Meyer (2003). The results were then interpreted in accordance with the values obtained. These results will be discussed in the following chapter.

CHAPTER SIX

RESULTS

6.1 Introduction

This chapter will address the results obtained from the analysed data. It will focus on the EII-2 scores yielded, and where these scores fall on the continuum of ego impairment, ranging from no impairment to significant ego impairment. Furthermore, an analysis of each of the composite variables will be given, and relevant tables and charts will be used to illustrate the results. Descriptive statistical analysis of various means, modes, range and standard deviation will be explored. As a result of the sample size of the study, the results found and indicated in this chapter will apply only to the population that was researched, and cannot be generalised to the entire Bipolar Disorder population. The application and implications of the results, together with how this relates to the literature, will be discussed in the next chapter.

6.2 Research question

The research aimed to address the following question:

- Does the Bipolar Disorder sample population indicate an impairment in ego functioning as measured by the Ego Impairment Index-2; and if so, what is the extent of this and the implications for functioning for the individual concerned?

6.3   EII-2

6.3.1   Interpretation of EII-2 scores

The calculated EII-2 scores are positioned on a continuum according to positive and negative values. The range of this continuum from negative to positive is from < –0.3 to 0.0 and from 0.0 to > +1.3 respectively.   Negative scores are indicative of positive or advantageous outcomes, indicating that there exists an ability of the ego to effectively deal with demands. Positive or high EII scores may suggest that thoughts are ineffective during demanding and stressful life situations, or that problem resolution has failed.   Interpretative boundaries are not discreet as it is practically impossible to distinguish between degrees of impairment. A broad spectrum of psychological impairment can be interpreted between the following ranges, as shown in the table below:

Interpretation of scores

Table 6A

< –0.3	Optimum level, indicating no impairment exists
–0.4 to +0.2	Typical result for non-patients, indicating no impairment exists
+0.0 to +0.6	Result that indicates that there is minimum impairment
+0.4 to +0.8	Result that indicates that there is mild to moderate impairment
+0.7 to +1.5	Result that indicates that there is moderate to severe impairment
> +1.3	Result that indicates that there is significant impairment

(Viglione, Perry & Meyer, 2003)

As can be seen in the above table, some of the ranges overlap. In particular, the category of minimum impairment overlaps with the category of mild to moderate impairment. When

considering that psychiatric patients were the sample population for this mini-dissertation, the higher level of impairment was selected in instances where EII-2 scores fell in these categories.

6.3.2 EII-2 Scores of the research sample
Table 6B

Participant	1	2	3	4	5	6	7	8	9
EII-2	−0.515	+3.302	+0.029	+2.285	−0.566	+0.636	+0.254	−0.667	+0.538
Participant	10	11	12	13	14	15	16	17	18
EII-2	+2.882	+0.989	+0.312	+4.176	+1.869	−0.3	+1.218	+0.73	−0.498
Participant	19	20	21	22	23	24	25	26	27
EII-2	+0.356	−0.009	−1.046	+1.468	−0.474	+1.501	+0.239	+0.698	−0.833
Participant	28	29	30	31	32	33	34	35	36
EII-2	+0.082	+0.295	−0.029	+1.071	−0.135	−0.427	−1.264	+1.184	+0.007
Participant	37	38	39	40	41	42	43	44	45
EII-2	−1.351	−1.274	+0.734	+2.33	+0.316	−0.199	+1.007	+0.012	−0.898
Participant	46	47	48	49	50	51	52	53	54
EII-2	+0.161	+1.741	−0.54	+1.598	+0.218	+0.039	+0.114	−0.736	+1.748
Participant	55	56	57	58	59	60	61	62	
EII-2	−0.61	−0.564	+2.329	+3.263	+0.107	+3.847	−0.017	+1.187	

The EII-2 scores for this population ranged from a minimum of −0.736 to a maximum score of +3.847. The mean score calculated was +0.54 and the standard deviation was +0.80.

When considering the EII-2 scores for the 62 participants, 27.4% (17 participants) yielded results of no ego impairment; 11.3% (7 participants) had no significant impairment; 21% (13

participants) had minimal ego impairment; 4.8% (3 participants) had moderate ego impairment; 14.5% (9 participants) had severe ego impairment, whilst 21% (13 participants) indicated significantly impaired egos. The average Ego Impairment Index score calculated is +0.54, placing the overall average in the moderate impairment category.

These results are illustrated graphically in the following three diagrams:

Figure 6a, 6b and 6c

EII-2 SCORES

Dispersion of EII-2 Scores
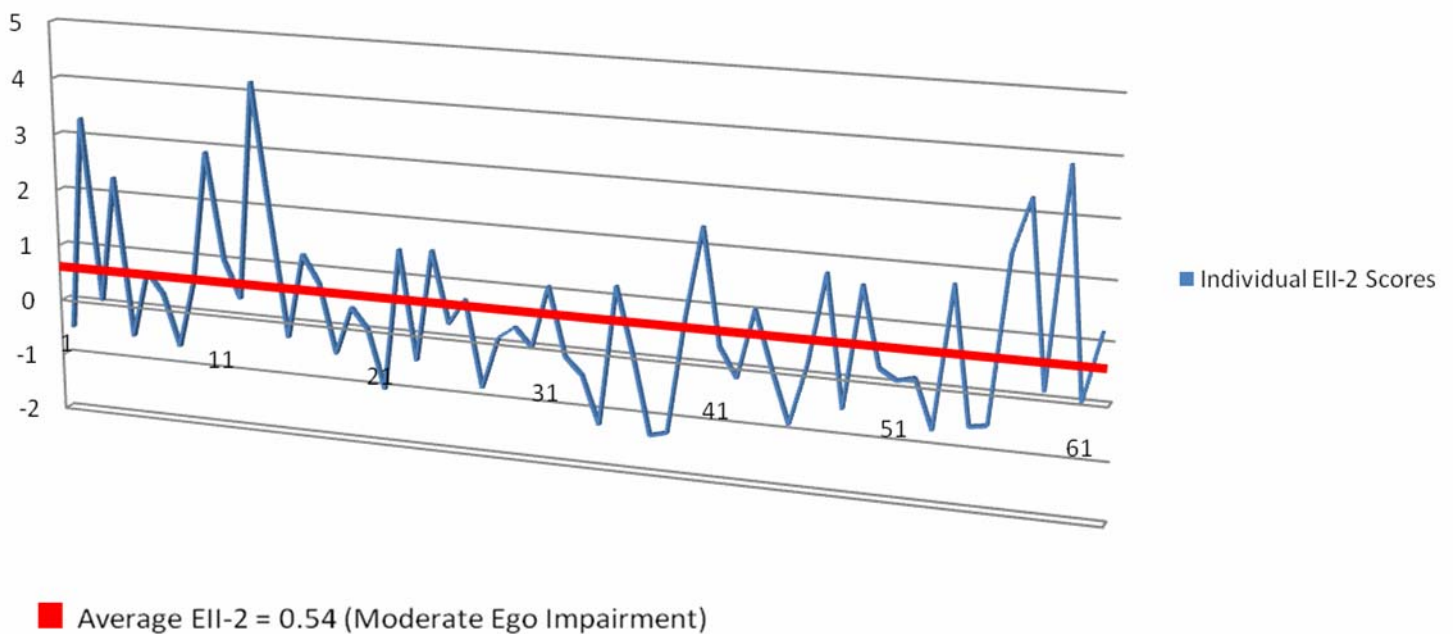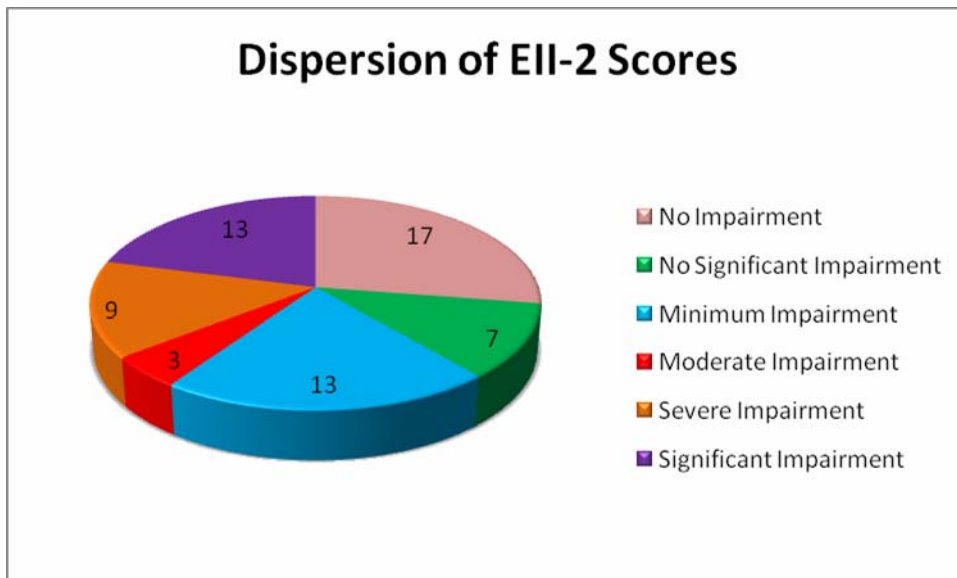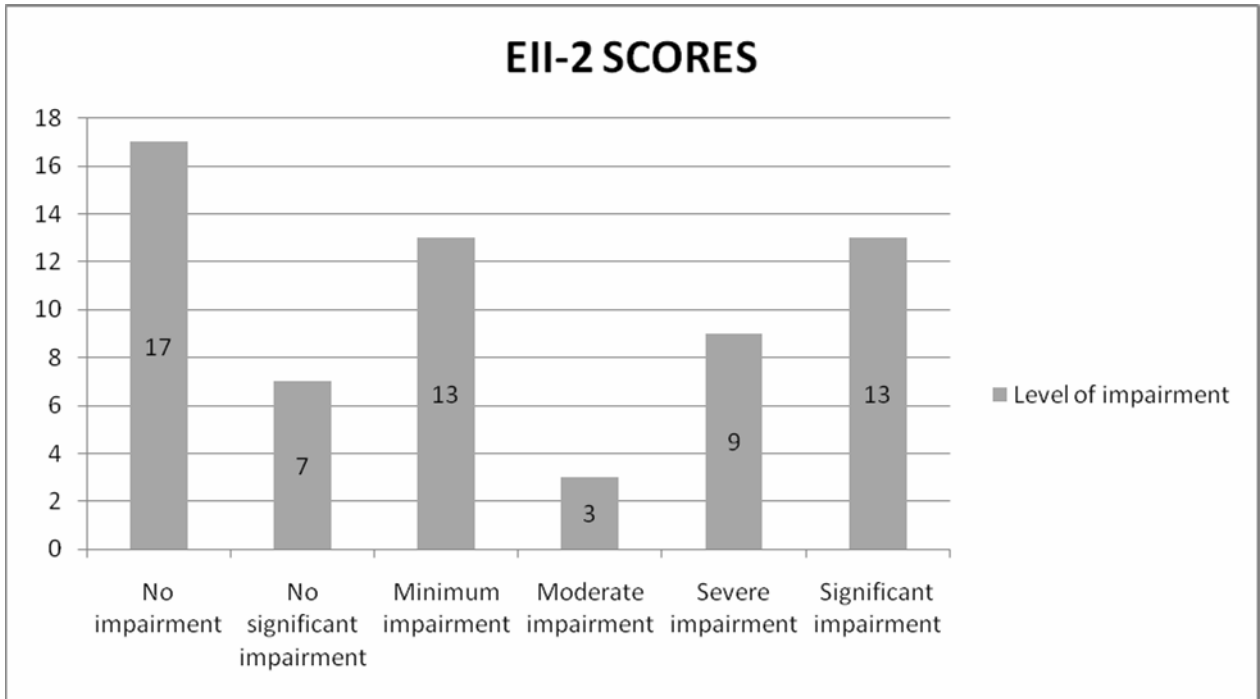
6.4   Analysis of composite variables of the EII-2

The EII-2 is calculated using various variables obtained from the structural summaries of each participant. This section will devote attention to each contributing variable, and bring

insight into the intricacies of each of these, and as well as an in-depth description of the significance of each variable, and how it pertains to ego impairment. Where applicable, Exner's (2003) interpretative norm data will be used. This will facilitate a better understanding of the implications of the scores for each particular variable, and allow a comparison with data found in non-pathological populations.

6.4.1 FQ– responses

The first quantitative criterion involved in the calculation of the EII-2 is the sum of FQ–. This variable measures poor reality testing or perceptual inaccuracy. The FQ– cannot be interpreted in isolation, and is only interpretable when the number of responses given in a protocol is taken into account. Thus it is calculated into the distorted form (X-%) variable. X-% involves the proportion of answers where form use does not correspond with the blot features (Exner, 2003). The following formula is used for its calculation:

X-% = Sum FQ– ÷ Number of responses (Exner, 2003).

Distribution of FQ– responses

Table 6C

Participant	1	2	3	4	5	6	7	8	9
X-%	0.00	0.53	0.32	0.39	0.07	0.19	0.25	0.00	0.13
Participant	10	11	12	13	14	15	16	17	18
X-%	0.35	0.33	0.25	0.21	0.35	0.07	0.26	0.27	0.36
Participant	19	20	21	22	23	24	25	26	27
X-%	0.33	0.08	0.20	0.19	0.31	0.06	0.11	0.31	0.07
Participant	28	29	30	31	32	33	34	35	36
X-%	0.06	0.28	0.33	0.33	0.27	0.21	0.14	0.20	0.12
Participant	37	38	39	40	41	42	43	44	45
X-%	0.10	0.05	0.31	0.41	0.43	0.18	0.43	0.24	0.11
Participant	46	47	48	49	50	51	52	53	54
X-%	0.17	0.29	0.07	0.28	0.07	0.50	0.17	0.45	0.20
Participant	55	56	57	58	59	60	61	62	
X-%	0.38	0.24	0.18	0.35	0.29	0.07	0.25	0.25	

The X-% scores ranged from 0.00 to 0.53, with a mean of 0.23.

It is expected that the X-% would be less than 0.15 and the frequency of *FQ–* responses is expected to fall between 1 and 3. Eighteen (18) (29%) of the participants showed X-%s of less than 0.15. Therefore, it can be deduced that for 29% of the sample, events of mediational dysfunction occur no more nor less frequently than for most people (when compared with norms set out in Exner, 2003). Some concern is warranted when the X-% falls in the range of

0.15 to 0.20, as there is a moderate elevation in the occurrence of mediational dysfunction. Nine (14.5%) of the participants showed X-%s between 0.15 and 0.20. Some pervasive tendencies to mediational dysfunction may occur when the X-% falls between 0.21 and 0.25. Eight (13%) of the participants yielded X-%s between 0.21 and 0.25. When the X-% is greater than 0.25, and especially when it is 0.30 or higher, it implies the likelihood of serious mediational impairment. These individuals are victims of some disabling problem because the basic ingredient for adequate reality testing is seriously impaired. Twenty seven (27) (43.5%) participants showed X-%s greater than 0.25. These latter two categories indicate that nearly half of the sample shows significant impairment in reality testing.

Figure 6d
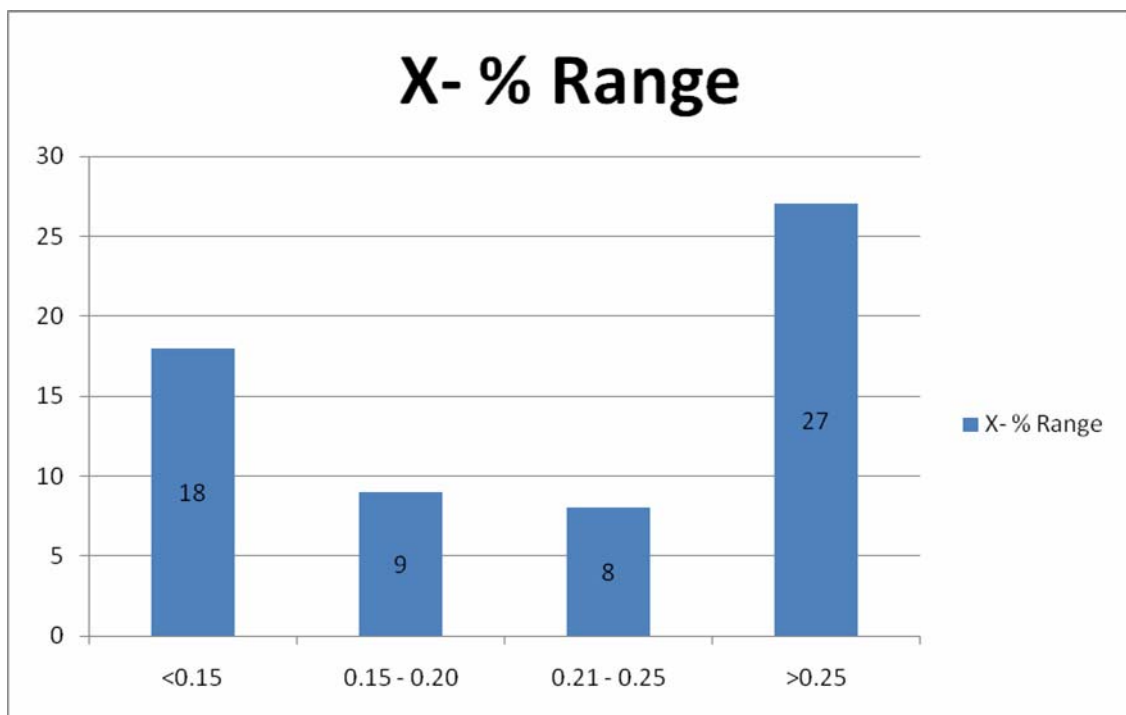
This table illustrates the distribution of X-% scores along a continuum of scores ranging from <0.15 and >0.25. Furthermore, the number of participants falling in each category is included.

6.4.2 WSum6 Responses

The WSum6 comprises six cognitive special scores. It is used to identify difficulties in conceptual thinking, and to measure thought disturbance in varying forms, and also addresses ideational clarity. The Raw Sum6 score is obtained by adding the number of times a protocol receives a cognitive special score, while the WSum6 score is calculated by using the formula set out by Exner (2003) involving the multiplication of the number of types a certain cognitive special score appears in a protocol (and its classification as a level one or level two response) by a specific number as included in the structural summary. The following table shows the calculation of WSum6:

Calculating cognitive special scores

Table 6D

	Lv 1	Lv 2
DV	x1=	x2=
INC	x2=	x4=
DR	x3=	x6=
FAB	x4=	x7=
ALOG	x5=	
CON	x7=	
Raw Sum 6		
Wgtd Sum 6		

(Exner, 2003).

The WSum6 responses ranged from a minimum of 0 to a maximum of 61. The mean WSum6 calculated was 14.7. Only 7 protocols (11%) contained no cognitive special scores, thus having a WSum6 score of 0.

Distribution of WSum6 scores

Table 6E

Participant	1	2	3	4	5	6	7	8	9
WSum6	7	49	4	31	2	28	4	22	7
Participant	10	11	12	13	14	15	16	17	18
WSum6	29	12	4	61	34	9	26	11	0
Participant	19	20	21	22	23	24	25	26	27
WSum6	16	26	2	23	0	21	26	16	4
Participant	28	29	30	31	32	33	34	35	36
WSum6	21	6	4	14	10	0	4	18	25
Participant	37	38	39	40	41	42	43	44	45
WSum6	10	2	12	16	8	2	3	6	0
Participant	46	47	48	49	50	51	52	53	54
WSum6	7	24	4	18	10	59	54	11	51
Participant	55	56	57	58	59	60	61	62	
WSum6	0	4	1	0	28	0	4	2	

There is no reason to query the clarity of conceptual thinking when the WSum6 is six or less, regardless of the number of responses given. Twenty six (26) participants (42%) in this sample had WSum6 scores of < 6. Eight (8) participants (13%) had an elevated WSum6 score between 7 and 10. This suggests that, for these individuals, ideational slippage often occurs during thinking and that faulty judgements occur more often than is the norm. It is indicative that for these 8 participants, conceptualisations are less mature or sophisticated than expected, and does not necessarily imply the existence of a formal thought disorder.

The elevated WSum6 scores in 8 of the participants (13%) indicate a serious thinking problem where episodes of ideational slippage or faulty conceptualisations occur more often than the norm. In 21 participants (34%) the WSum6 scores (>18) reveal that thinking is likely to be seriously disturbed. When this occurs, the reality testing of the individual is marginal, at best.

Table 6F

Distribution of WSum6 Scores	
< 5	23
6 – 10	10
11 – 15	5
16 – 20	5
> 20	19

Figure 6e
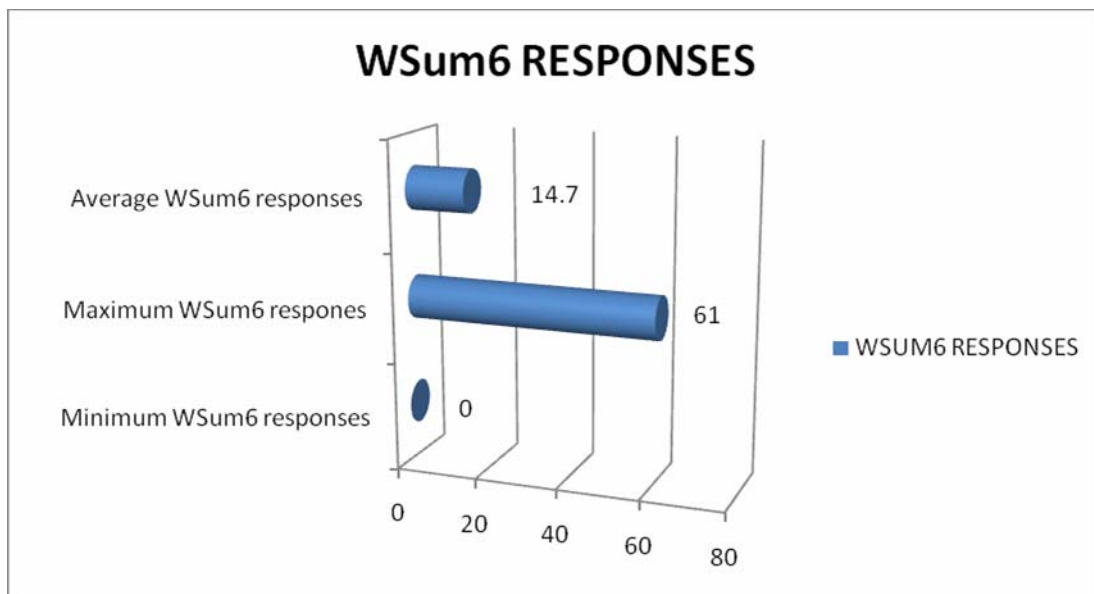
6.4.3   Critical content responses

This variable measures images related to need demands and urges that are typically inhibited, minimised, or indirectly expressed in adaptive thinking, Rorschach responses, and social discourse. The following chart indicates the maximum and minimum performances of the sample, and the average obtained for the study population.

Figure 6f
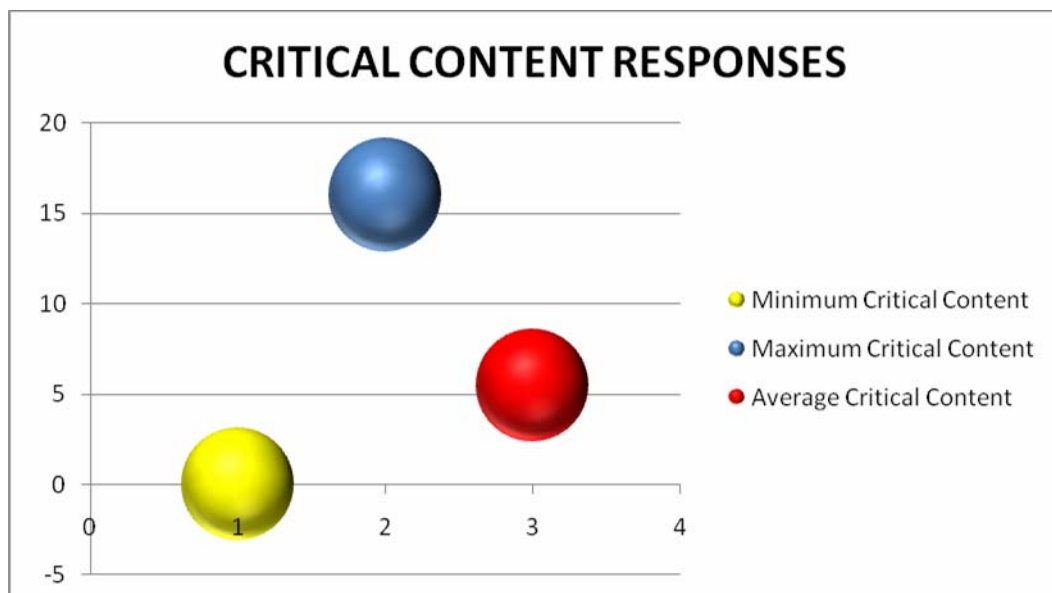
The minimum number of critical content responses given was 0, whilst the maximum number of responses given was 16. The mean number of critical content responses in this sample was 5.43. Exner's (2003) norm tables indicate that, regardless of an individual's response style, the average frequency of critical content responses is 3.77. The average is thus substantially higher than the norm. Twenty three (23) participants (37%) fell below the norm, whilst 39 participants (63%) scored above the norm – indicating that overall, the sample had a higher number of critical content responses than is usually the norm.

Table 6G

Distribution of Scores for Critical Content	
<3.77	23
>3.77	39

6.4.4 M– responses
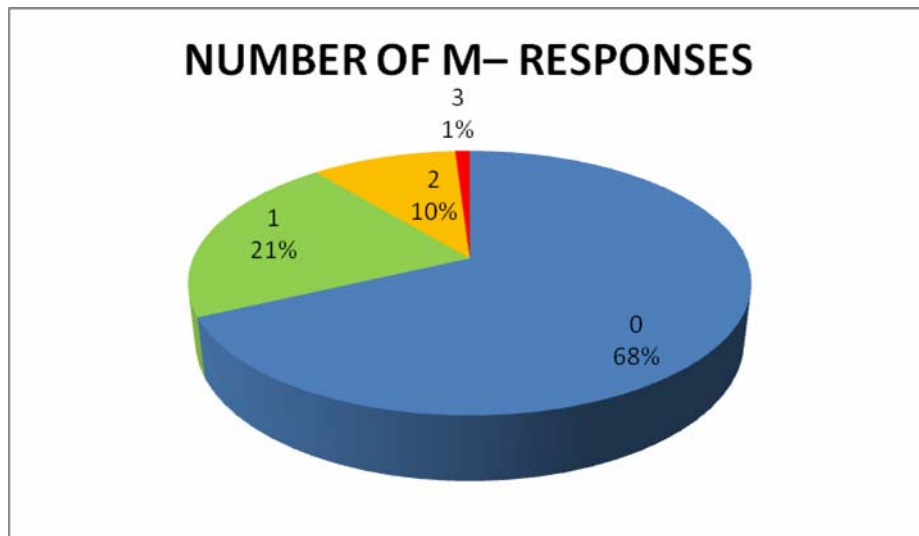
This variable measures clouding of thinking, and may suggest the possibility of peculiar or disturbed ideation. It further reflects distortions of interpersonal perception and object representations.

Table 6H

M–	Total	Percentage
0	42	68%
1	13	21%
2	6	10%
3	1	1%
Total	62	

Figure 6g

The results ranged from a minimum number of M– responses of 0, to a maximum number of M– responses of 3. The mean number of M– responses is 0.45.

Although these scores may seem relatively conservative, Exner (2003) explains that even the presence of just one M– response may indicate some form of peculiarity in thinking. This peculiarity is generally brought about by a preoccupation of some kind that clouds the thinking process. Exner (2003) suggests that a protocol with only one M– response may indicate some form of ideational disarray. Forty two (42) participants (68%) had no M– responses in their protocols, whilst 13 participants (21%) had one M– response, 6 participants (10%) had 2 M– responses, and 1 participant (1%) had 3 M– responses.

6.4.5   Poor Human Representation (PHR) responses

Human representational responses are understood as a broad-based approach to the study of interpersonal behaviour and its effectiveness. PHR responses correlate with patterns of interpersonal behaviour that are ineffective or maladaptive. A high number of PHR responses in a protocol typically indicate interpersonal histories marked by conflict or failure.

These individuals are often rejected or shunned by others as they develop social ineptness. It incorporates the following dimensions: distortions, malevolence, aggression, damage, confusion and illogical views on interpersonal relationships (Exner, 2003).

Table 6I

Summary of GHR and PHR results	
GHR > PHR	42 %
PHR > GHR	37 %
GHR = PHR	21 %
Mean GHR	2.3
Mean PHR	2.4

The range of PHR responses in the sample is a minimum of 0 PHR responses, to a maximum of 9 PHR responses. The mean number of PHR responses is 2.4. In total, there were 145 PHR responses and a total of 144 GHR.

PHR values are expected to be lower than GHR values. Twenty three (23) participants (37%) had a greater number of PHR responses than GHR responses; therefore it can be assumed that they generally engage in forms of interpersonal behaviours that are less likely to be adaptive to situations. The elevated PHR scores may reflect interpersonal interactions marked by conflict and/or failure.

6.4.6   Good Human Representation (GHR) responses

Protocols with a high number of GHR responses typically indicate interpersonal histories that are generally considered effective and adaptive. Furthermore, it suggests individuals who are generally well regarded by others, and whose interpersonal activities tend to be reasonably free of chaos. It incorporates the following dimensions: accuracy and convention, benevolence, reality and logical views. Although GHR responses are found more often in the non-patient protocols, it is not uncommon to see them in the protocols of psychiatric patients whose problems do not extend into the interpersonal domain (Exner, 2003).

Twelve (12) protocols (20%) did not have any GHR response. The minimum number of GHR responses given was 0, whilst the maximum was 7. The average number of GHR responses in this sample is 2.3.   The number of GHR responses is expected to be higher than the number of PHR responses in a protocol. Twenty six (26) participants (42%) showed a greater number of GHR responses than PHR responses in their respective protocols. This suggests that these people generally engage in interpersonal behaviour that is adaptive to the situation.

6.4.7   Number of responses (R) given in each protocol

All the protocols had a total response number of 14 or more, indicating that they are valid protocols and further interpretation could continue.

6.5   Conclusion

Of all the participants, 56.5% showed some level of mediational impairment. Most of these can be considered serious impairment, with more than half of the sample indicating a

significant impairment in reality testing. Sixty per cent (60%) of the sample showed some cognitive slippage. Most of these suggested faulty conceptualisations and impairment in ideational activity. In addition, 32% of the participants showed a peculiarity in thinking, indicating that some preoccupation is clouding the thinking process and may indicate some form of ideational disarray. Furthermore, 37% of the sample indicated a style of interpersonal interaction that is less likely to be adaptive to situations. These interactions may be marked by conflict or failure, suggesting that there is disturbed thinking in relation to interpersonal perception or object representations. Overall there were slightly more PHR responses than GHR responses.

As has been identified, the culmination of the above variables (most of which show deficits in functioning), give an overall average impairment of the ego falling in the moderate category along the continuum. These findings will be elaborated on in the following chapter.

CHAPTER SEVEN

DISCUSSION AND CONCLUSION

7.1   Introduction

This chapter will attempt to provide a summary of the findings, and offer a final discussion of the implications thereof. In addition, it will provide a conclusion to this mini-dissertation, through the integration of the various chapters. It will also address problematic areas or limitations of the study, and suggestions for future similar studies.

7.2   Summary of the findings

When considering the tentative hypotheses initially made, one may conclude that they have been confirmed by the results given in the previous chapter.   Primarily, the research set out to determine the extent of ego impairment in this Bipolar Disorder sample population. The results seem to be somewhat scattered across the various areas of impairment, with several participants indicating no level of ego impairment, whilst others indicate severe and significant ego impairment. Of significance is the overall average of the EII-2 scores of the total number of participants (62), which was found to be a score of +0.54, indicating that the mean EII-2 of this sample lies in the range of a moderate level of impairment. Thus the primary hypothesis can be confirmed in that in this sample, there is indeed evidence of some ego impairment. However, it must be noted that almost all areas of impairment or lack thereof, are represented fairly well, with participants falling in all of these categories. Therefore the range of possible impairment remains wide, and similarities cannot easily be drawn.

Once the EII-2 scores were calculated, they were positioned on a continuum according to positive and negative values. The range of the EII-2 continuum from negative to positive is from < –0.3 to 0.0 and 0.0 to > +1.3 respectively. The EII-2 scores for this population ranged from a minimum of –0.736 to a maximum score of +3.847. The mean score calculated was +0.54 and the standard deviation was 0.80. Negative scores are indicative of positive or advantageous outcomes, suggesting that there exists an ability of the ego to effectively deal with demands. Positive or high EII-2 scores may suggest that thoughts are ineffective during demanding and stressful life situations, or that problem resolution has failed. Twenty two (22) participants (35%) yielded negative EII-2 scores, indicating an optimistic or beneficial outcome, whilst 40 participants (65%) yielded positive EII-2 scores, suggesting some level of ego impairment. The significance of this is that, regardless of whether these 40 participants can be categorised as severely impaired or only slightly impaired, it cannot be disputed that 65% of the sample indicated some level of ego impairment.

Upon a more in-depth investigation into these results, participants fell into the following categories of impairment: 27.4% (17 participants) yielded results of no ego impairment; 11.3% (7 participants) had no significant impairment; 21% (13 participants) had minimal ego impairment; 4.8% (3 participants) had moderate ego impairment; 14.5% (9 participants) had severe ego impairment, whilst 21% (13 participants) indicated significantly impaired egos. The results suggest that more than a third of this sample yielded ego impairments in the severe or significantly impaired range.

In addition, a more comprehensive summary of the results of the composite variables indicates the following: 56.5% of the participants showed some level of mediational

impairment, as indicated by the FQ– responses. Most of these are serious impairment, with more than half of the sample indicating some impairment in reality testing. In addition, 60% of the sample showed some cognitive slippage. Most of these suggested faulty conceptualisations and impairment in ideational activity, as was evidenced by the WSum6 scores. In addition, 32% of the participants showed a peculiarity in thinking, indicating that some preoccupation is clouding the thinking process and may indicate some form of ideational disarray, as indicated by the number of M– responses. However, this distortion of thinking tends to occur only in object-relatedness or interpersonal relationships. Furthermore, 37% of the sample indicated a style of interpersonal interaction that is less likely to be adaptive to situations. These interactions may be marked by conflict or failure, thus suggesting that there is a disturbance in thinking in relation to interpersonal perception or object representations. A proportion of 63% of the sample gave more critical content responses when compared with the norms established by Exner (2003). This suggests that for these participants increased drive-related themes are present. This can be attributed to the failure of repression, and becomes manifest in the expression of primitive content areas.

As has been identified, the culmination of the above variables (most of which show deficits in functioning), give an overall average impairment of the ego falling in the moderate category along the continuum. Thus it can be concluded that this sample did indicate at least a minimal impairment of ego.

7.3 Discussion of the findings

When considering the research question that this study aimed to ascertain, it can be concluded that there was an overall impairment in the ego for this sample of participants.

Although the analysis of this index is complex and intricate, a simplistic interpretation is to differentiate between negative and positive scores (negative scores imply an optimal outcome, whilst a positive score is a more detrimental outcome and indicates some form of impairment in the ego). For this sample, 65% of the participants had positive scores, indicating some level of impairment. The average, or mean, level of impairment was 0.54, indicating that this average fell in the category of moderate ego impairment. Although it is not significant or severe overall impairment, it can still be concluded that the impairment in the ego is sufficient to warrant further exploration when considering treatment and diagnosis. However, it remains that a third of the sample showed no significant impairment of ego functioning. These figures may possibly be attributed to incorrect diagnoses, good response to treatment, lengthy time out of the institution thus possibly developing more adequate coping mechanisms and the ability to handle psychological stressors.

At present, the focus on biological aspects of Bipolar Disorder has resulted in some lack of psychological understanding of this disorder. Determining psychological functions that may be affecting this disorder may have significant implications for various disciplines (psychology and psychiatry in particular). Understanding this disorder purely by the DSM-IV diagnosis and categorisation, and treating it accordingly, is limiting for both the patient and the psychotherapeutic team. Until recently, Bipolar Disorder has been almost entirely neglected by psychological researchers. It is only in the last few years that substantial psychological research programmes in Europe and America have begun to explore the role of psychosocial factors in the disorder (Bentall & Jones, 2006). Yet an understanding of these influences will be essential for those trying to understand how to treat individuals suffering from Bipolar Disorder. Evidence exists that treating Bipolar Disorder with psychotherapy may significantly reduce symptoms, enhance social adjustment and functioning, and reduce

relapses and hospitalisations in such patients (Guitierrez & Scott, 1994). Determining the level of ego functioning of an individual is beneficial in that it will allow clarification of the central issues and conflicts, serving as a stabilising force when conducting psychotherapy (Perry, Cooper & Michels, 1987). Furthermore, such understanding will allow the clinician to predict how such conflicts are likely to affect treatment and the therapeutic relationship. This is relevant as such formulations indicate that the patient's dynamics may directly affect depressive symptoms and compliance with the treatment procedures (Perry, Cooper & Michels, 1987). Therefore a comprehensive understanding of the dynamics of the disorder may bring about greater clarity and insight into both the complexity and severity of this disorder. As such, the Rorschach Inkblot measure was used in an attempt to uncover and determine any possible psychological functions that may be impacting this disorder; and to use the results to ascertain the role of psychological factors in what was previously considered a "biological disorder".

Perry, Viglione and Braff (1992) emphasise the usefulness of using the Ego Impairment Index-2, as the information obtained is regarded as reflecting relatively stable aspects within the personality – traits that are considered enduring and fundamental, which are probably contributing to the individual's pathology. Thus it can be assumed that the results obtained will not be easily influenced by factors arising on the day of assessment; but rather, that these results are reliable in determining an individual's ego impairment over a period of time. Furthermore, the value of determining levels of ego functioning is that the ego attempts to combine all mental processes, allowing for a higher order of organisation (Jacobs, 2003). Viglione, Perry and Meyer (2003) state that high EII-2 scores are associated with psychological impairment.

Therefore, it can be considered that the results yielded from this sample are relatively stable and that each individual's psychological complexity is portrayed accurately. When considering the statistical analysis of this sample, it is evident that the areas of ego functioning most impaired lie within the domains of ideation and mediation. Nearly two-thirds of this sample demonstrates impairment in reality testing. One of the primary functions of the ego, stemming from both traditional theories of the ego as a construct, and more current conceptualisations of ego psychology, is its organisational ability in distinguishing accurately between the external and the internal world. This would indicate that the individual would be able to accurately judge the relationship between the self and the environment, and appropriate differentiation would follow. In one-third of the participants the impairment in reality testing is further exacerbated within the context of a relationship. This ideational disarray is evident in the thought disturbances shown by these individuals when in relation to others, the implications of which are deficient empathic skills, inadequate social skills, poor interpersonal relationships, and ultimately an inability to establish and maintain good healthy object relations. Although this deduction brings about further difficulties in trying to distinguish which came first, the proverbial chicken or egg argument, it is likely that the ideational disarray caused by interpersonal relations allows for some disorganisation of the internal world of the individual. By implication, if the internal world is somewhat disorganised, the individual's ability to distinguish between the external and the internal world might become difficult, possibly resulting in impairment in the reality testing process.

The elevated number of critical content responses (in comparison to Exner's norm tables), suggests a failure of the regulation and control of instinctual drives. This can be understood in the acting-out behaviour that is so often seen in the manic phase of Bipolar Disorder.

Thus, in this population it appears that these individuals are unable to keep unwanted aggressive and libidinal drives at bay. When considering the presentation of the symptoms, and the behaviours so commonly seen within the institutions, it is thus not surprising that these individuals are often promiscuous, aggressive and impulsive. This is a result of the failure of both the defensive functions and the regulation and control of instinctual drives.

A third of the sample's results suggest that thinking is seriously disturbed, with a further 26% indicating occurrences of ideational slippage and faulty conceptualisations. These results indicate that more than half of the sample uses strained reasoning and inappropriate combinations of objects. Thus it would be expected to see more simplistic, concrete thinking in these individuals. These individuals are often unable to disregard irrelevant and unwanted stimuli in the environment, and as such cannot selectively scan information. This gives evidence to cognitive disruption and impairment in primary process thinking. When this occurs, we can assume that problem-solving abilities have failed. Thus the implications of this are that most of the individuals in this Bipolar population experience problem-solving difficulties, as well as flawed comprehension. This is a critical realisation, as it can therefore be assumed that this inability will be apparent in most everyday functions, as it forms one of the executive functions unique to human beings. One could speculate that the frustrations of this impairment will be experienced rather frequently, and will in turn exacerbate several areas of an individual's functioning. If an individual is unable to solve problems adequately, or to think clearly, without faulty judgements or distorted conceptualisations, he or she is able to perform relatively well. However, if such a problem is evident, it is suspected that various areas of functioning will be affected, including occupational and social domains. If this is indeed true, external stressors become increased, thus further exacerbating the severity of the disorder (Mansell & Pedley, 2008).

The results yielded in this study may also assist in ascertaining aspects of the personality structure which would add to current literature in an attempt to aid treatment and diagnostic interventions. Through understanding ego impairment, the clinician is able to better comprehend the patient's intrapsychic world and how strengths and weaknesses manifest in present behaviour. The knowledge of this has the potential to make treatment more focused, and to uncover relevant aspects that psychotherapy can address or target. The change that can be brought about through psychotherapy can occur at different levels of organisation, reflected in shifts in transference patterns indicating a reorganisation of internalised object relations (Kernberg, 1980). These changes are often brought about through interpretations based on the transference relationship. If psychotherapists are able to determine whether the ego is impaired, the extent of the impairment, and in particular, the areas of functioning that are most impaired, they can taper their interpretations to the vulnerability of the patient. This will be helpful in that interpretations may be accepted by the patient more readily if the psychotherapist is more aware of the underlying ego strengths and weaknesses. Kernberg (1980) further emphasises that he views self-representations and object relations, together with their affective charge, as the fundamental aspects of the id, ego and superego. Thus understanding ego impairment can provide insight into an individual's emotional/affective response and how this links to object relations, and perceptions of both the self and others. Furthermore, Kernberg (1980) states that structures determined by internalised object relations constitute a crucial determinant of ego integration and as such, an abnormal development of internalised object relations determines varying types of psychopathology. Early object relations contribute to the establishment of the ego identity and the availability of assets termed "ego strength".

As the research aimed to explore aspects of ego impairment in the Bipolar patient population, the impairments in ego functioning that became apparent through this research gave evidence to the difficulty in various areas of functioning and may therefore substantiate the hypothesis that psychological issues may be affecting or contributing to the disorder. Research conducted by Dawes, Faust and Meehl (2000) determined that a properly applied and developed actuarial method is able to assist diagnosis and prediction of human behaviour just as well or possibly better than clinical judgement (even when the clinician has access to greater amounts of information). These authors emphasise that, even if the information obtained equals that obtained via clinical judgements, using actuarial methods may be a time and expense saver. This further indicates the applicability and value in using an index such as the Ego Impairment Index-2. If this is contextualised to the current South African situation, the limited financial resources available to a great majority of the population is undoubtedly a pitfall to current treatment and maintenance of diagnoses in remission. Therefore a method saving time and expense is warranted in our country.

7.4   Limitations of this study

It is acknowledged that the study does not take into account comorbid disorders and the implications thereof for the results yielded. Therefore, this compounding variable must be kept in mind. Furthermore, the diagnosis of Bipolar Disorder made for all the participants in this sample is somewhat questionable. Although made in a formal ward round, the diagnosis was not screened in any additional manner. It is acknowledged that some participants may have presented with what looked like Bipolar Disorder but may have been a different psychiatric pathology. In addition, the current literature on the Rorschach Inkblot measure conducted on Bipolar Disorder patients is somewhat limited. This lack of information made

the literature review on past relevant studies rather restricted; however, this study will thus provide new insights into Rorschachs of Bipolar Disorder patients in general, and will thus suffice as a suitable reference source.

7.5   Recommendations for future research

Although the results yielded are significant, and bring in new dynamics and complexities in the understanding of Bipolar Disorder, the nature of the sample does not warrant generalisation of the results to the entire Bipolar Disorder population. A sample size of 62 participants was substantial enough for the purpose of this study, and did yield interesting results; however, this sample size is too small to make any conclusive comments that can be applied to this entire psychiatric population. Therefore the following suggestions are made for future research endeavours:

- A larger sample size – this would allow results to be generalised to the Bipolar population group.

- The inclusion of comorbid disorders (e.g. what impact would comorbid disorders have on the ego impairment? Is this impacting the results? How do comorbid disorders contribute to the impairment of the ego?)

- Distinction between Bipolar I Disorder and Bipolar II Disorder, and whether there are any subsequent differences in ego impairment.

- Diagnosis – the presentation of Bipolar Disorder is often quite similar to that of Borderline Personality Disorder (Magill, 2004), as well as other psychiatric disorders. Thus the diagnosis should be reassessed, and a specific screening process should be undertaken for the study. All participants should undergo a DSM-IV screening for the

- This study (together with its data) could be used in future studies.

7.6   Conclusion

Despite the above-mentioned limitations of this study, the explorative nature of the research has allowed for a significant insight into the ego functioning of this Bipolar Disorder population. This information is valuable in that the ego's operations can be considered relatively stable, and the assessment measure a valid and reliable instrument to determine this. This study indicated that there was some overall impairment in the ego functioning of these individuals, with a mean score falling in the moderate category of impairment. Within this study, this suggests that there may be complex psychological dynamics at play at the core of this pathology. It is not certain whether psychological difficulties triggered an onset of the disorder, or whether the manifestation of the disorder resulted in the development of psychological difficulties; however, what is relevant is that these individuals are currently faced with a great deal of challenges in their daily functioning as a result of an impairment in their ego functioning. So regardless of what caused the onset, the understanding of this dynamic may assist in the treatment of such individuals, and certainly aid the comprehension of the difficulties experienced at such a time. Thus it seems essential that a clinician be aware of the functioning of the ego, taking cognisance of both its strengths and weaknesses, in order to adequately treat and understand the patient.

REFERENCES

Adrian, C., & Kaser-Boyd, N. (1995). The Rorschach Ego Impairment Index in Heterogeneous Psychiatric Patients. *Journal of Personality Assessment, 65*(3), 408-414.

Akiskal, H.S. (1981). Subaffective disorders: dysthymic, cyclothymic, and bipolar II disorders in the "borderline" realm. *Psychiatric Clinics of North America, 4,* 25-46.

American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders.* (Rev. 4th edn.). Washington, DC: American Psychiatric Association.

Aronstam, M., & Daws, L. (2008). *Psychopathology – Study guide for Masters Students.* Pretoria: University of Pretoria.

Ausubel, D.P. (1952). *Ego Development and the Personality Disorders: A Developmental Approach to Psychopathology*. New York: Grune & Stratton.

Avery, R., & Ryan, R. (1988). Object Relations and Ego Development: Comparison and Correlates in Middle Childhood. *Journal of Personality, 56,* 547-569.

Babbie, E. (2005). *The Basics of Social Research.* (3rd edn.). Belmont. Wadsworth.

Barone, D.F., Hersen, M., & Van Hasselt, V.B. (1998). *Advanced Personality.* New York: Springer US.

Bellak, L. (1958). *Schizophrenia: A Review of the Syndrome*. New York: Logos Press.

Benazzi, F. (2007). Bipolar II Disorder: Epidemiology, Diagnosis and Management. *CNS Drugs 2007, 21*(9), 727-740.

Bentall, R., & Jones, S. (2006). *Psychology of Bipolar Mood Disorders: New Developments and Research Strategies.* New York City. Oxford University Press.

Beres, D. (1956). Ego Deviation and the concept of schizophrenia. *The Psychoanalytic Study of the Child, 11*, 164-253.

Berk, M., & Dodd, S. (2005). Bipolar II disorder: A review. *Bipolar Disorders 7,* 11-21.

Blanck, G., & Blanck, R. (1994). *Ego Psychology: Theory and Practice.* New York: Columbia University Press.

Cadenhead, K.S., Perry, W., & Braff, D.L. (1996). The relationship of information processing deficits and clinical symptoms in schizotypal personality disorder. *Biological Psychiatry, 40,* 853-858.

Cameron, N., & Rychlak, J. (1985). *Personality Development and Psychopathology: A Dynamic Approach.* (2nd edn.). Boston: Houghton Mifflin.

Dawes, R., Faust, D., & Meehl, P. (2000). Clinical Versus Acturial Judgment. *Psychological Science in the public interest, 1*(2), 67-103.

Daws, L. (2009). Exploring the Internal Configuration of the Cycloid Personality: A Rorschach Comprehensive System Study. Unpublished Doctoral Thesis. University of Pretoria. Pretoria.

Dumas, C. (2009). Exploring Ego Impairment in Borderline Personality Disorder using the Ego Impairment Index. MA dissertation, University of Pretoria, Pretoria.

Elifson, K., Runyon, R., & Haber, A. (1982). *Fundamentals of Social Statistics.* New York. McGraw-Hill.

Erikson, E.H. (1956). The problem of ego identity. *American Psychoanalytic Association, 4,* 56-121.

Exner, J.E. (2003). *The Rorschach: A Comprehension System: Volume 1. Basic Foundations and Principles of Interpretations*. New York: Wiley.

Exner, J.E., & Weiner, I.B. (2003). *Rorschach Interpretation Assistance Program, Version 5.30.154; Interpretation Assistance Program, Version 5.30.154.* North Florida: Psychological Assessment Resources.

Feifel, H. (2006). Ego Structure and Mental Deterioration. *Journal of Personality, 20*(2), 188-198.

Foxcroft, C., & Roodt, G. (2005). *An Introduction to Psychological Assessment in the South African Context.* Cape Town: Oxford University Press Southern Africa.

Freud, A. (1966). *The ego and the mechanisms of defense*. New York: International Universities Press, Inc.

Freud, S. (1923). *The ego and the id.* (Std. edn.). New York. W.W.Norton & Company.

Ghaemi, S., Bauer, M., Cassidy, F., Malhi, G., Mitchell, P., Phelps, J., *et al.* (2008). Diagnostic guidelines for Bipolar Disorder: A summary of the International Society for Bipolar Disorders Diagnostic Guidelines Task Force report. *Bipolar Disorders, 10,* 117-128.

Goldstein, W.N. (1985). *An Introduction to the Borderline Conditions*. Northvale: Jason Aronson Inc.

Grinker, R.R., Werble, B., & Drye, R.C. (1968). *The Borderline Syndrome: A Behavioural study of Ego-Functions.* New York: Basic Books.

Guitierrez, M., & Scott, J. (1994). Psychological treatment for Bipolar Disorders. *European Archives of Psychiatry and Clinical Neuroscience, 254*(2), 92-98.

Hartmann, H. (1958). *Ego psychology and the problem of adaptation.* New York: International Universities Press, Inc.

Huck, S.W. (2004). *Reading Statistics and Research.* (4th edn.). Boston: Pearston.

Jacobs, M. (2003). *Sigmund Freud.* London: SAGE Publications.

Jacobson, E. (1964). *The self and the object world.* New York: International Universities Press, Inc.

Kasper, S., Calabrese, J., Tajima, O., Vieta, F., Viguera, A., Yatham, L., *et al.* (2008). International Consensus Group on the Evidence-Based Pharmocologic Treatment of Bipolar I and II Depression. *Journal of Clinical Psychiatry, 69*(10), 1632-1646.

Kernberg, O. (1967). Borderline Personality Organization. *Journal of the American Psychoanalytic Association, 15,* 641-685.

Kernberg, O. (1980). *Internal World and External Reality: Object Relations Theory Applied.* New York: Jason Aronson Inc.

Lerner, P.M. (1998). *Psychoanalytic Perspectives on the Rorschach.* London: The Analytic Press, Inc.

Magill, C. (2004). The Boundary Between Borderline Personality Disorder and Bipolar Disorder: Current Concepts and Challenges. *The Canadian Journal of Psychiatry, 49,* 551-556.

Mahler, M. (1968). *On human symbiosis and the vicissitudes of individuation.* New York: International Universities Press, Inc.

Mahli, G., Adams, D., Lampe, L., Paton, M., O'Connor, N., Newton, L., *et al.* (2009). Clinical Practice Recommendations for Bipolar Disorder. *Acta Psychiatrica Scandinavica, 119*(439), 27-44.

Maj, M., Akiskal, H.S., Lopex-lbor, J.J., & Sartorius, N. (2002). *Bipolar Disorder.* West Sussex, U.K: John Wiley and Sons, LTD.

Mansell, W., & Pedley, R. (2008). The ascent into mania: a review of psychological processes associated with the development of manic symptoms. *Clinical Psychology Review. 28*(3), 494-520.

McDowell, C., & Acklin, M.W. (1996). Standardizing procedures for calculating Rorschach interrater reliability: conceptual and empirical foundations. *Journal of Personality Assessment, 66*(2), 308-320.

Merikangas, K., Akiskal, H., Angst, J., Greenberg, P., Hirschfield, R., Petukhova, M., e*t al.* (2007). Lifetime and 12-Month Prevalence of Bipolar Spectrum Disorder in the National Comorbidity Survey Replication. *Arch Gen Psychiatry 64,* 543-552.

Merikangas, K., Herrell, R., Swendsen, J., Rossler, W., Ajdacic-Gross, V., & Angst, J. (2008). Specificity of Bipolar Spectrum Conditions in the Comorbidity of Mood and Substance Use Disorders. *Arch Gen Psychiatry 65*(1), 47-52.

Meyer, W., Moore, C., & Viljoen, H. (2002). *Personology. From Individual to Ecosystem.* (3rd edn.). Cape Town: Heinemann.

Perry, S., Cooper, A., & Michels, R. (1987). The Psychodynamic Formulation: Its Purpose, Structure and Clinical Application. *American Journal of Psychiatry, 144*, 543-550.

Perry, W., McDougall, A., & Viglione, D. (1995). A Five-Year Follow-up on the Temporal Stability of the Ego Impairment Index. *Journal of Personality Assessment, 64*(1), 112-118.

Perry, W., Minassian, A., Cadenhead, K., Sprock, J., & Braff, D. (2003). The Use of the Ego Impairment Index Across the Schizophrenia Spectrum. *Journal of Personality Assessment, 80*(1), 50-57.

Perry, W., & Viglione, D.J. (1991). The Rorschach Ego Impairment Index as a predictor of outcome in melancholic depressed patients treated with tricyclic antidepressants. *Journal of Personality Assessment, 56*, 487-501.

Perry, W., Viglione, D.J., & Braff, D. (1992). The Ego Impairment Index and schizophrenia: A validation study. *Journal of Personality Assessment, 59*, 165-175.

Phelps, J., Angst, J., Katzow, J., & Sadler, J. (2008). Validity and utility of bipolar spectrum models. *Bipolar Disorder, 10*, 179-193.

Rapaport, D., Gill, M.M., & Schafer, R. (1968). *Diagnostic Psychological Testing*. New York: International Universities Press, Inc.

Rosenthal, R., & Rosnow, R. (1991). *Essentials of Behaviour Research: Methods and Data Analysis.* (2nd edn.). New York. McGraw-Hill.

Sadock, B.J., & Sadock, V.A. (2007). Synopsis of Psychiatry. Behavioral Sciences/Clinical Psychiatry. (10th edn.). London: Lippincott Williams & Wilkins.

Spitz, R. (1965). *The first year of life.* New York: International Universities Press.

Stokes, J.M., Pogge, D.L., Powell-Lunder, J., Ward, A.W., Bilginer, L., & DeLuca, V.A. (2003). The Rorschach Impairment Index: Prediction of treatment outcome in a child psychiatric unit. *Journal of Personality Assessment, 81*(1), 11-19.

Strachey, J. (1934). The Nature of the Therapeutic Action of Psycho-Analysis. *The International Journal of Psychoanalysis, 15,* 127-159.

Suzuki, Y. (2002). *Psychoanalytic Schools in Historical Perspective.* Retrieved October, 27, 2008, from https://qiv.kyushu-u.ac.jp/dspace/bitstream/2324/941/4/KJ00000050592-00001.pdf

Taylor, G. (2000). *Integrating Quantitative and Qualitative Methods in Research.* New York: University Press of America.

Tibon, S., Porcelli, P., & Weinberger, Y. (2005). The Ego Impairment Index and the Reality-Fantasy Scale: Comment on Viglione, Perry, and Meyer (2003). *Journal of Personality Assessment, 84*(3), 315-317.

Viglione, D.J. (1990). Severe disturbance or trauma-induced adaptive reaction: A Rorschach child case study. *Journal of Personality Assessment, 55,* 280-195.

Viglione, D.J., Perry, W., & Meyer, G. (2003). Refinements in the Rorschach Ego Impairment Index Incorporating the Human Representational Variable. *Journal of Personality Assessment, 81*(1), 149-156.

Viglione, D.J., Perry, W., Meyer, G., Jansak, D., & Exner, J.E. (2003). Modifying the Rorschach Human variable to Create the Human Representational Variable. *Journal of Personality Assessment, 81*(1), 64-73.

Weiner, I.B. (1966). *Psychodiagnosis in Schizophrenia.* New York: John Wiley & Sons, Inc.

Weiner, I.B. (1998). *Principles of Rorschach Interpretation.* New Jersey: Lawrence Erlbaum Associates.

Wright, D. (1997). *Understanding Statistics, an Introduction for the Social Sciences.* London: SAGE Publications Ltd.

Yatham, L., Kennedy, S., O'Donovan, C., Parikh, S., MacQueen, G., McIntyre, R., *et al.* (2006). *Bipolar Disorders, 8,* 721-739.

Yatham, L., Kennedy, S., Schaffer, A., Parikh, S., Beualieu, S., O'Donovan, C., *et al.* (2009).

   Canadian Network for Mood and Anxiety Treatments (CANMAT) and International

   Society for Bipolar Disorders (ISBD) collaborative update of CANMAT guidelines for

   the management of patients with bipolar disorder: update 2009. *Bipolar Disorders, 11,*

   225-255.

APPENDIX A

100
1908 - 2008

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Denkleiers • Leading Minds • Dikgopolo tša Dihlalefi

Faculty of Humanities
Department of Psychology

PATIENT INFORMATION LEAFLET AND INFORMED CONSENT

RESEARCHER: JENNY SIMPSON
CONTACT DETAILS: 084 513 8567

INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions do not hesitate to ask the researcher. You should not agree to take part unless you are completely satisfied about all the procedures involved. You have been diagnosed with Bipolar Mood Disorder. If you have further questions regarding your diagnosis please consult with your doctor.

TITLE OF STUDY

An exploration of ego impairment in Bipolar Mood Disorder using the Ego Impairment Index-2.

WHAT IS THE PURPOSE OF THIS STUDY?

It is the purpose of the current study to gain a deeper understanding of how patients with a Bipolar Mood Disorder diagnosis compare in terms of strengths and weaknesses of their psychological functioning. The study is mainly exploratory in nature, which means that I hope to add my research results to the existing knowledge about Bipolar Mood Disorder. The aim is not to make any further diagnosis or to prescribe treatment.

WHAT PROCEDURES WILL BE FOLLOWED IN THIS STUDY?

If you decide to take part in the current study you will become one of 12 participants. You will be asked by the current examiner to complete the Rorschach Inkblot Test. The procedures will take no more than approximately an hour and a half of your time. You will be given 10 Rorschach Cards to respond to. You will be asked what each card "looks like", and there are no right or wrong answers. The Rorschach Method is an internationally accepted and reputable instrument backed by 40 years of sound research.

WHAT ARE MY RIGHTS AS A PARTICIPANT IN THIS STUDY?

Your participation in this study is entirely voluntary. You will not receive any remuneration. You may refuse to participate. You may stop at any time without stating any reason. Your withdrawal will not affect your access to other medical care. Your contribution is confidential and nowhere will your particulars and results be used other than for statistical procedures. Due to the number of participants involved, as well as the confidential nature of the research, the Rorschach results will be processed without any direct feedback to you as participant. The group results will be relayed back to the hospitals for further study. There are no direct benefits for you as a participant.

WHAT ARE THE RISKS INVOLVED IN PARTICIPATING IN THIS STUDY?

There are no risks involved in the study. The Rorschach will not cause any emotional discomfort or distress to you as participant.

CONFIDENTIALITY

All information obtained during the course of this study is strictly confidential. Although the data may be reported in scientific journals or stored for further research purposes, it will not include any information which identifies you as a patient/participant in this study. If you wish to withdraw from the study, the data will be destroyed. The Ethics Committee of the Faculty of Health Sciences as well as the Ethics Committee of the Faculty of Humanities have approved the study.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Denkleiers • Leading Minds • Dikgopolo tša Dihlalefi

**Faculty of Humanities
Department of Psychology**

INFORMED CONSENT

I hereby confirm that I have been informed by the researcher/administrator, _____, about the nature, conduct and risks of the study. I have also received, read and understood the above written information regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will anonymously be processed into a trial report.

I may, at any stage, without prejudice, withdraw my consent and participation in the study. I have had sufficient opportunity to ask questions and declare myself prepared to participate in the study.

Patient Name:

Patient Signature: _____

Date: _____

I, _____, herewith confirm that the above patient has been informed fully about the nature, conduct and risks of the above trial.

Researcher Name:

Researcher Signature: _____

Date: _____

Supervisor Name: _____

Supervisor Signature: _____

Date: _____