

**THE EFFECTS OF FAMILIARITY ON STIGMA
COMPONENTS IN POTENTIAL EMPLOYERS TOWARDS
PEOPLE WITH A SERIOUS MENTAL ILLNESS
IN DURBAN KWAZULU-NATAL**

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DECLARATION

I, Amanda Smith declare that this dissertation entitled 'THE EFFECTS OF FAMILIARITY ON STIGMA COMPONENTS IN POTENTIAL EMPLOYERS TOWARDS PEOPLE WITH A SERIOUS MENTAL ILLNESS IN DURBAN KWAZULU- NATAL' is my own work and has not been submitted for any other degree or examination in any other university other than the University of KwaZulu-Natal. I have given complete acknowledgment to the resources referred to in the study.



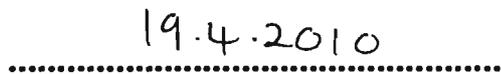
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Date



Dr L. Middleton
(Supervisor)



Date

DEDICATION

This dissertation is dedicated to my father whose joy in my achievements was only exceeded by his ability to love unconditionally.

ACKNOWLEDGMENTS

Dr Lyn Middleton, who provided me with an open door and consistently supported my efforts and showed confidence in my abilities,

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To my mother who encouraged the work despite the circumstances.

ABSTRACT

Aim

The purpose of the research study was to explore and to describe stereotypes associated with serious mental illness and the effects of familiarity on the serious mental illness stigma process in potential employer informants in the greater Durban area, eThekweni district, KwaZulu-Natal.

Methods

A quantitative non-experimental cross sectional survey relational research design was used to describe firstly, the stereotyping and individual discriminatory behavior (desire for social distance) of potential employers to a person with a SMI, and secondly, the effect of familiarity and other person variables (culture, age and gender) on the stigma components of stereotyping, emotional reaction and individual discriminatory behavior (desire for social distance). The population included potential employers of the SMI person in the greater Durban area, eThekweni District, KwaZulu-Natal. The target population was all students enrolled for a part-time management course at two academic institutions in the Durban central area. Non-randomized, non-probability purposive sampling was used. Demographic data and four self report tools were compiled into one self report questionnaire to collect data.

Results

The sample was evenly distributed amongst male and female within the various age groups. All cultural groups were represented but this representation was not a perfect fit with national or provincial population statistics. Just less than half of the participants (48% n=55), both genders and across all cultural groups, had intimate and or personal contact with persons with a serious mental illness. Demographic associations suggest that male participants had greater perceptions of dangerousness, unpredictability and incompetence and a greater desire for social distance. The statistical results indicated limited correlations between emotional reactions and desire for social distance, stigmatizing attitudes and desire for social distance, and evidence of no significant relationship between familiarity and other components within the stigmatizing path. Fear was associated with a desire for social distance and with perceptions of limited potential for recovery. Stigmatising attitudes were most negative

towards persons who had a previous admission to a psychiatric hospital and the least negative towards 'bipolar mood disorder'. Stigmatising attitudes were recorded for all serious mental illness labels (including that of bipolar) with 75% of participants scoring closer to the negative polar adjective of stigmatizing attitude.

Conclusion and Recommendations

In conclusion, the supposed lack of desire for social distance, the dependent variable in this study, may reflect political policy and current ideology but the strength of the negative stereotypes suggests that changing policy is easier than changing attitudes. It is suggested that the stigmatizing stereotype of limited potential for recovery may have more salience in developing countries such as South African than the developed western world. Limited potential for recovery has financial and emotional implication within a developing country and to this extent, desire for social distance and fear are correlated to perceptions of limited potential for recovery. Recommendations include additional research include measures of social desirability bias to clarify the relationship between familiarity, emotional reaction and social distance. Secondly, intervention studies, specifically with potential employers, are required to obtain empirical data related to the combine effectiveness of disconfirming information and contact with people with a serious mental illness. Further, that health departments actively engage in evidence based anti-stigma initiatives. Lastly it is recommended nursing curricula recognise the importance of student psychiatric nurses developing a balanced view of mental health care users assigned the serious mental illness labels through a balanced clinical exposure to recovered, as well as acutely ill mental health care users. That the new undergraduate nursing degree curricula strengthen content related to recovery and psychosocial rehabilitation, specifically nursing interventions / strategies to facilitate rehabilitation in all the areas of study, socialization, community living, and specifically in the area of work.

ABBREVIATIONS

DoH	Department of Health
DSM	Diagnostic and statistical manual
ERMIS	Emotional reaction to mental illness scale
ERA	Emotional reaction anger
ERF	Emotional reaction fear
ERP	Emotional reaction pity
GAF	Global assessment of functioning scale
LOC	Level of contact scale
MBA	Master in business administration
MHCP	Mental health care practitioner
MHCU	Mental health care user
PSR	Psychosocial rehabilitation
SDM	Semantic differential measure
SDS	Social distance scale
SMI	Serious mental illness

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1. BACKGROUND

Psychosocial rehabilitation (PSR) is one of the major health care movements currently influencing mental health care in most public health sectors world-wide (Gureje & Alem, 2000; World Health Organization (WHO) World Report Mental Health: New Understanding New Hope, 2001; WHO National burden of disease studies, a practical guide, 2001; WHO Dollars DALYS and decisions, economic aspects of the mental health system, 2006). In South Africa this move is contextualized within the primary health care approach to service organization and delivery and is legislated for in the Mental Health Care Act (Number 17 of 2002) (Uys & Middleton, 2004). This Act refers in chapter three, section 8 to the rights and duties relating to the mental health care user (MHCU). In this section it states: “every mental health care user must be provided with care treatment and rehabilitation services that improve the mental capacity of the user to develop to full potential to facilitate his/her integration into community life”. In this respect, psychosocial rehabilitation is defined by the WHO, as a process that offers the opportunity for individuals who are impaired, disabled or handicapped by a mental disorder to reach their optimal level of independent functioning in the community. Strategies of PSR vary according to client needs but the primary components are housing, social network development, work or vocation and education or study.

The psychosocial rehabilitation research argues that it is not only the individual’s disability or symptoms that impacts on social and occupational functioning, but also the social handicap (Corrigan 1998; Iannelli & Wilding, 2007; Lieberman, 1988; Lysaker, Buck, Taylor & Roe, 2008; Ssebunnya, Kigozi, Lund, Kizza & Okello, 2009). Social handicap is defined as the social disadvantage experienced by persons with psychiatric disabilities relative to others in society that occurs through stigma and discrimination (Lieberman, 1988). The primary aim of psychosocial rehabilitation is thus to facilitate recovery.

Recovery is broadly defined as the capacity for living a meaningful and productive life alongside the limitations of the illness and as an integral member of a community without social handicap and stigma (Spaniol, 2008; Roe, Rudnick & Gill, 2007). Recovery has a subjective domain that is reflected in the degree to which the person with a mental illness is able to experience themselves as unique individuals with a sense of purpose and value (Lysaker et al., 2008; Roe et al., 2007; Spaniol, 2008). Research in the area of work and psychosocial rehabilitation emphasizes the role work plays in facilitating recovery and specifically, the subjective sense of self as purposeful and valuable (Cross, 2003; Iannelli & Wilding, 2007; Ramon, Shera, Healy, Lachman & Renouf, 2009; Provincher, Gregg, Mead & Murser, 2002).

The possibility for employment has been identified as one of the critical factors in the recovery and rehabilitation of adults with serious mental illness (Iannelli & Wilding, 2007). The background and literature review will show that it is very possible that many of those who are unable to find employment in the open labour market and thus to support themselves, are hindered more by social handicap constraints such as negative employer attitudes, than by the disabilities related to their mental illness (Corrigan, Edwards, Green, Diwan & Penn, 2001; Corrigan, Green, Lundin, Kuba & Penn, 2001; Farina & Felner, 1973; Feldman & Crandall, 2007; Hand & Tryssenaar, 2006; Iannelli & Wilding, 2007; Link, 1982; Modiba, 2001; Putman, 2008).

Reluctance on the part of employers to employ people with a mental illness negatively impacts on the effectiveness of psychosocial rehabilitation programs and thus, the recovery potential of people with serious mental illness (Iannelli & Wilding, 2007; Liberman, 1988; Rössler, 2006). A number of studies have highlighted the various reasons employers offer for their reluctance to employ people with a mental illness. These reasons include poor quality and quantity of work, absenteeism, inability to be flexible, inability to follow instructions, limited ability to socialize, angry outbursts, low work persistence, and increase likelihood of injury (Cook, Razzano, Straiton & Ross, 1994; Diksa & Rogers, 1996; Hand & Tryssenaar, 2006). Hand and Tryssenaar (2006) suggest that negative attitudes of the mentally ill person as incompetent, unable to communicate effectively and as unpredictable and dangerous, generally underlie these reasons and that these attitudes, together with these reasons are aspects of stigma which work

intentionally or unintentionally, to exclude the person from the workplace.

Unemployment is high amongst the general population and particularly so amongst people with mental disorders. With respect to the general population, the current statistics from the Quarterly Labour Force Survey (Department of labour, 2008) indicate that 4,114 million South Africans (23.5%) are unemployed, and that the 15-30 age group accounted for the largest number of unemployed. Burns and Esterhuizen (2008) in their study on poverty, inequality and treated first incidence of psychosis report a national unemployment rate of 41% for the general population and a 78% unemployment rate for their psychiatric sample. Although this reported national unemployment rate of 41% differs from the rate provided by the labour force survey, the phenomena of unemployment is evident and has significant social, health and economic consequences.

The economic weight of mental illness for the social system is illustrated in figures associated with disability grants for the province of KwaZulu-Natal. For example, on the 31st August 2009, approximately 393901 (28.7%) people in KwaZulu-Natal were receiving a monthly government disability grant (DG) of R1010, with a total monthly cost of R 3,675,4001 (South African Social Security Agency (SASSA), August 2009). This DG is provided to those who are considered to be “unable to support themselves because of the nature of their disability and other reasons” (SASSA, 2009). Although physical and mental disabilities are not separated out in this report, epidemiological data suggest that it would be incorrect to assume that the bulk of this money is allocated to physical disability. The World Health Organisation Report (Integrating mental health care in to primary care, a global perspective, 2008) argues that psychiatric disorders account for 33% of the global burden of non-communicable diseases and that more than 25% of all people will be affected sometime in their lifetime with a mental illness, with a point prevalence of 10% in the adult population (WHO, 2008; Mathers, Vos, Lopez, Salomon, & Ezzati, 2001).

The relationship between mental health, poverty and economic productivity, social disadvantage and stigma is an increasing focus of research in public mental health (Miranda & Patel, 2005). These authors argue that these social issues may occur as a result of or result in mental ill-health and are influenced by increased health care costs to the social system, the family, human rights

violations and loss of social opportunities (specifically employment) through the processes of stigmatization and discrimination (Miranda & Patel, 2005). Ssebunnya, Kigozi, Lund, Kizza, and Okello (2009) described the opinions of mental health stakeholders regarding poverty, stigma, mental illness and their relationship to the Ugandan context, as part of a broader study exploring mental health policy strategies for interrupting the cycle of mental ill-health and poverty. These authors argue that the stigma attached to the label of mental illness makes it difficult, if not impossible, for the person to enter or re-enter the work-force. Furthermore, poverty is frequently experienced as a catalyst for social stigma characterised by feelings of devaluation, exclusion and disadvantage (Ssebunnya et al., 2009). Thus three forces, namely material deprivation, stigma related to the label of mental illness and stigma related to poverty interact in the lives of people living with a SMI (Marin-Leon, Bosco de Oliveira, de Azevedo Barros, Dalgalarondo, & Botega, 2006; Miranda & Patel, 2005; Ssebunnya et al., 2009). Vocational rehabilitation, with the increased possibility for employment and economic productivity has personal as well as social and economic value and is therefore, an important strategy for community-based mental health care.

The province of KwaZulu-Natal responded to this imperative for rehabilitation and specifically, for vocational productivity among the psychiatric population, through the development of a psychosocial rehabilitation (PSR) policy 'Mental Health for Psychosocial Rehabilitation' (KZN DoH, October 2006). The overall goal of this PSR policy is to "...ensure that MHCU sustain an optimum quality of life and integration into community life through comprehensive psychosocial rehabilitation" (KZN DoH, October 2006, p, 15). The policy framework makes direct reference to social and occupational skills as projected outputs. For example, output two is to improve the functional status of the MHCU and states that "within 1 year 50% of MHCU will be trained in social and occupational skills" (KZN DoH, October 2006, p 10). This output is based on several assumptions outlined in the policy framework, most notably that the MHCU will be supported by the family and community in this process (KZN DoH, October 2006, p 16).

Although the policy clearly aims to dismantle stigma, discrimination and inadequate services, there are no strategic plans in place for this (KZN DoH, October 2006, p 14 -15). Furthermore, the policy is not clear about how families and communities are to become involved in supporting

MHCU in the process of vocational rehabilitation except to state that “evidence shows that paid work can be achieved through the use of supported employment services that focus on securing a desirable job and supporting the person to retain it” (KZN DoH, October 2006, p 21).

1.2. STATEMENT OF THE PROBLEM

Despite the stigma-dismantling intention of the policy ‘Mental Health for Psychosocial Rehabilitation’ (KZN DoH, 2006), the nature and extent of stigma as it relates to serious mental illness (SMI) and potential employers in the South African context is not well understood or documented (Hugo, Boshoff, Traut, Zungu-Dirwayi & Stein, 2003; Link, Yang, Phelan & Collins, 2004; Modiba, 2001). Although the disabilities associated with SMI can impede achieving life goals, vocational stigma seems to directly reduce the opportunities of the SMI person for obtaining competitive employment and economic productivity (Corrigan, 1998; Havenaar, Geerlings, Vivian, Collinson & Robertson, 2008). Several studies have shown that stigma on the part of employers remains a major barrier for the SMI person accessing and maintaining employment (Cook et al., 1994; Diska & Rogers, 1996; Farina & Felner, 1973; Hand & Tryssenaar, 2006; Link, 1982; Modiba, 2001; Thornicroft, 2009).

Economic productivity is a critical social issue for South Africa and other low income countries. Since the SMIs’ commonly manifest at the point of entry to tertiary study and/or the workforce (between the ages of 16-25), it becomes all the more critical to map and to measure the experiences of stigma within the employment context and recommend strategies for its alleviation. Local and contextual understandings are especially significant since the stigmatizing process involves distinguishing and labelling differences or characteristics that are deemed socially significant within a specific time, place and culture (Link & Phelan, 2001; Link et al., 2004; Ssebunnya et al., 2009).

Current research in the area of rehabilitation argues that plans to dismantle stigma and discrimination require a two-fold approach. Firstly, research is required to understand, to map and to measure the experiences of stigma within specific contexts. Secondly, the development of evidence-based, strategic plans to alleviate the impact of stigma in these different contexts is

necessary (Corrigan, 1998; Corrigan, Kerr & Knudsen, 2005; Feldman & Crandall, 2007; Hugo et al., 2003; Link, 1982; Link et al., 2004; Modiba, 2001; Rűsch, Angermeyer & Corrigan, 2005; Wahl, 1999).

It is therefore important to establish the attitudes of potential employers towards people with a mental illness, the extent or effect of these attitudes on individual discrimination and to explore possible reasons, within the South African context, for differences in stigmatizing attitudes and discriminatory behaviour.

1.3. SIGNIFICANCE OF THE STUDY

Research in the area of stigma in the workplace in South African contexts is particularly valuable at this time when public mental health policy is focused on community oriented care and PSR as strategies for alleviating social poverty. Research into the extent and nature of stigma associated with SMI within local contexts can therefore inform developing psychosocial rehabilitation strategies and initiatives targeted at changing social perceptions of mental illness which as Byrne (1997, p 618) argues, may, in lieu of correct information or direct experience, utilize the exaggerations in the media as "...*the* source of language, concepts and images of psychiatry".

Exploring stigmatizing attitudes associated with the SMI labels and emotional reactions that may precede desire for social distance can inform nursing research aimed at exploring anti-stigma strategies and their effectiveness into reducing discrimination. Stigma process and implications for recovery and rehabilitation are being included in undergraduate mental health nursing curricula and knowledge of the process within different social contexts will inform dialogue with clients, their families and communities and thus, enrich the curriculum.

1.4. PURPOSE OF THE STUDY

The purpose of the research study was to explore and to describe stereotypes associated with SMI, and the effects of familiarity on the serious mental illness stigma process in potential employer informants in the greater Durban area, eThekweni district, KwaZulu-Natal.

1.5. RESEARCH OBJECTIVES

The objectives of this study were two-fold.

1.5.1 To describe the essential components of the stigmatizing process among potential employers in the greater Durban area, eThekweni district KwaZulu-Natal.

1.5.2 To identify and describe the factors that produced and sustained these processes among potential employers in the greater Durban area, eThekweni District, KwaZulu-Natal.

1.6. RESEARCH QUESTIONS

A number of research questions were formulated, based on each of the above-mentioned research objectives.

1.6.1. Research questions for objective 1

1.6.1.1. What aspects of the stigma process - labeling, stereotypical beliefs, emotional reactions and social distance - are evident in potential employers?

1.6.1.2. Which of these aspects are more or less evident in the stigmatizing process?

1.6.2. Research questions for objective 2

1.6.2.1. How and to what extent does familiarity with a mentally ill person influence the stigmatizing process?

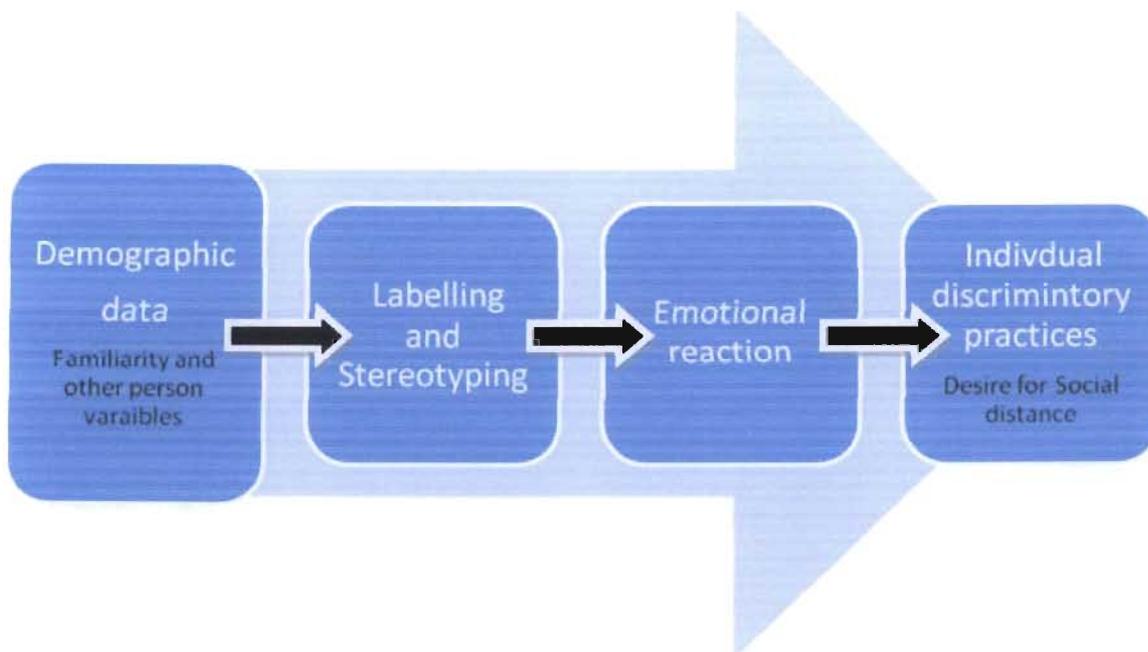
1.6.2.2. How and to what extent do personal demographic data (age, gender, cultural group) influence the stigmatizing process?

1.6.2.3. What is the nature and extent of the relationship between demographic data, familiarity, stereotypical beliefs, emotional reactions, and the need for social distance within the stigmatizing process?

1.7. CONCEPTUAL FRAMEWORK

This study draws on the conceptual framework of Link and Phelan's (2001) description of the components of stigma and on Corrigan's (2001) ideas about familiarity and social distance in unfolding the stigma process. These perspectives are discussed in greater detail in chapter two, section 2.2.1, p 10, and section 2.3, p 16).

Figure 1: Stigma components and their unfolding



Link and Phelan (2001) describe five components of stigma - labelling, stereotyping, and separating ('us' and 'them'), emotional reactions, and status loss and discrimination – that occur as stigma in differential social power relations. These authors extend their concept of stigma beyond that of Corrigan and colleagues (2001) to account for how these components unfold as stigma and for the discrimination and exclusion that a stigmatized person may experience in different social contexts (Corrigan et al., 2005; Link et al., 2004).

These components together with Corrigan and colleagues (2001) constructs of familiarity and social distance are schematically represented and described in Figure 1. In this model, Corrigan and colleagues (2001) constructs of familiarity (a demographic variable) and desire for social distance (a marker for individual discrimination) anchor each end of the stigma process.

Person variables such as age, gender, cultural background and familiarity, are suggested to influence the extent of stereotypes associated with the SMI labels. Familiarity is defined as the level of contact with a person with a SMI and can range from limited contact such as reading a magazine article to intimate personal daily contact such as living with a person with a SMI. Familiarity is thus suggested to have a mediating effect on stigmatizing attitudes (Angermeyer, Matschinger & Corrigan, 2003; Corrigan, Green et al., 2001; Corrigan, Edwards, et al., 2001). The stigmatizing attitudes associated with the SMI labels are, in turn, proposed to influence emotional reactions which determine the desire for social distance. The desire for social distance is defined as the extent of a person's willingness to readily interact with a person with a SMI in various social and occupational activities such as employing a person with a SMI or dating a person with a SMI. The desire for social distance is used in stigma research as a proxy for behavioural indexes of discrimination against people with mental illness (Corrigan et al., 2001; Holmes, Corrigan, Williams, Canar & Kubiak, 1999).

1.8. SUMMARY OF THE CHAPTER

This chapter has set the context for the study purpose and objectives in highlighting the link between psychiatric disability, unemployment, poverty and psychosocial rehabilitation in the community context. Stigma has been identified as an important influence in how the poverty-mental illness cycle unfolds and is experienced by people living with serious mental disorders. The stigmatizing process has been operationalised in the conceptual framework. In Chapter two, literature relating to serious mental illness, vocational rehabilitation and stigma will be discussed.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

The literature review will present current and seminal research studies that relate to the stigmatizing process and the significance of stigma as a barrier to successful psychosocial rehabilitation (PSR) outcomes, such as employment, financial independence, and community reintegration.

First the concepts of stigma and serious mental illness will be reviewed. Secondly, the components of the stigmatizing process namely labelling- stereotyping - separating, and emotional reactions – discrimination - the mediating effect of familiarity will be explored and described. Thirdly the impact of stigma and psychosocial rehabilitation outcomes, particularly employment, will be discussed. Finally a brief overview of stigma reduction interventions will be presented.

2.2. THE CONCEPTS STIGMA AND SERIOUS MENTAL ILLNESS

This section will provide a description of the stigmatizing process and through the exploration of serious mental illness as a diagnostic label illustrate the use of labels as cues to stereotypes and the stigmatizing process.

2.2.1. Stigma

In 1963 Erving Goffman in his seminal work describing the stigmatizing process, adopted the term 'stigma' from the Greek language where the word was used to represent a mark or sign on the body that indicated something bad about the moral character of the person so marked (Corrigan et al., 2005). Thus the stigmatizing process was perceived to involve a socially conferred judgment and separating from a person or group of persons who were considered to be

'less than' (Pescosolido, Martin, Lang & Olafsdottir, 2008). Goffman's distinction between the 'discredited' and the 'discreditable' is evident in contemporary literature which makes a distinction between public stigma and stigmatization of self (Corrigan et al., 2005; Corrigan, 1998; Fife & Wright, 2000; Link et al., 2004; Lysaker et al., 2008; Rüsçh et al., 2005).

In defining stigma Goffman's definition continues to prevail in that stigma is usually defined stigma according to its effects rather than its source (Arboleda-Flórez, 2003; Link & Phelan, 2001). Although social identity theory considers how people use constructs to judge or label someone who is different or disfavoured the focus tends to be on 'how' rather than 'why' of the stigma process (Overton & Medina, 2008). Link and Phelan (2001) point to the definition by Jones, Farina, Hastorf, Markus, Miller, and Scott (1984) that defined stigma as a attribute ('mark') that links a person to a stereotype ('undesirable characteristics') as useful. Link Phelan, Bresnahan, Stueve, and Pescosolido (1999) added the component of discrimination to the Jones and colleagues (1984) definition and described stigma by referring to the relationships between a set of interrelated components that unfold as stigma when they co-occur in differential social power relations (Link & Phelan, 2001).

These authors argue that the unfolding of the stigmatizing process in the social world is conditional on access to social, economic, and political power that supports the identification of differentness, the building of stereotypes, the separation of labelled persons into different categories and the implementation of disapproval, rejection, exclusion and discrimination. For example, mental health care users (MHCUs) may agree on negative stereotypes for mental health care professionals and view themselves as separated into an "us" (patients) and "them" (professionals) grouping. However, it is not possible for this to be a stigmatizing situation because the MHCUs' do not have the power to attach or to implement discriminatory consequences (Link & Phelan, 2001).

Self-stigma is the internalisation of a 'spoiled identity' (Goffman in Fife & Wright, 2000). This internalisation sets the individual apart from others and manifests as loss of self esteem and self efficacy as the person accepts the stereotype and has a negative emotional reaction to self (Corrigan et al., 2005; Corrigan, 1998; Link, 1987; Lysaker et al., 2008; Overton & Medina,

2008; Rüsçh et al., 2005). The negative emotional reaction is followed by negative behavioural reactions such as defensiveness and social withdrawal in anticipation of rejection and this may result in the person failing to pursue life goals (Corrigan et al., 2005; Link, 1982; Rüsçh et al., 2005). These authors suggest that stigma experiences such as societal scorn, social distancing and discrimination have been shown to cause hurt, anger, discouragement and lasting damage to self esteem and self efficacy. These experiences have been so painful that they have led many MHCUs and their families to maintain a secrecy that not only is uncomfortable but also may contribute to the symptoms the MHCUs already has to cope with (Corrigan 1998; Corrigan, 2007; Wahl, 1999).

Stigma expressed in terms of exclusionary social practices is an issue of concern for psychiatric nursing practice where the mandate is to reintegrate MHCUs' into communities and through PSR strategies assist in the attainment of life goals. Research by South African psychiatric nurses into the stigma phenomenon as it relates to mental illness is limited. This author could find only one nursing study (Hugo et al., 2003) which focused on public perceptions of mental illness and describing mental illness stereotypes. Other mental health care practitioners in Africa are exploring the stigma phenomenon as it relates to perceptions of mental health care users (Botha, Koen & Niehaus, 2006), to the perceptions of mental health care practitioners (Adewuya & Oguntade, 2007), to public perceptions (Adewuya & Makanjuola, 2008b; Kabir, Iliyasu, Abubakar & Aliyu, 2004; Ssebunnya et al., 2009), and the mediating effects of familiarity and other person variables (Adewuya & Makanjuola, 2008a).

More recently, stigma and its role in health outcomes is an increasingly funded public health research phenomenon particularly emphasised in the treatment and management of chronic diseases such as HIV/Aids. For example, Holzemer, Uys, Makoe, Stewart, Phetlhu, Dlamini, Greeff, Kohi, Chirwa, Cuca and Naidoo (2007) have developed a stigma model from data from five African countries that describes the process of stigmatization in people living with HIV/Aids. The components of this model will be very briefly outlined here to illustrate the relevance of the stigma process for understanding how marks of difference whether HIV/Aids, cancer or mental illness unfold in exclusionary behaviours and practices with devaluing effects.

This stigma model for HIV/Aids suggests that the process occurs within the context of the

environment, the health care system and different agents or people while the stigma process consists of stigma triggers, stigmatizing behaviours, types of stigma and stigma outcomes. The components of this process are similar to those described in the psychiatric psychosocial rehabilitation literature. For example, stigma triggers refer to situations that precipitate the process of labelling on the basis of difference, stigma behaviours are those that harm, isolate or exclude the person. Types of stigma in this model refer to stigma behaviours received from the external world (prejudice and discriminatory practices), internal or self-stigma behaviours and stigma experienced through association with another who is different (Holzemer et al., 2007).

Understanding the stigma process in mental disorders as a basis for developing stigma reduction strategies and improving community integration has been an important focus within psychosocial rehabilitation for the past two to three decades and there are a number of models outlining the stigma process. The majority of models developed in the area of mental illness and stigma draw on the seminal works of Link and Phelan (2001) and Corrigan and colleagues (2001) and are integrated into a description of the process outlined in section 1.7 p 8, and 2.2.1. p 10.

2.2.2. Serious mental illness

Serious mental illness (SMI) is a label that is commonly applied to schizophrenic disorders, major depressive disorder, and bipolar mood disorder. The critical factors for applying the category of SMI seem to relate to the extent of impairment during the acute and more specifically the residual phases of the illness. The SMI label seems to be a universal label and it is generally accepted that the extent of impaired social and occupational functioning inherent in the so-called SMI and the poor prognosis that is frequently associated with such impairment are the root characteristics of such a label. Kessler, Barker, Colpe, Epstein, Gfroerer, Hiripi, Howes, Normand, Manderscheid, Walters, and Zaslavsky (2003) in their study to identify a rating scale that would distinguish SMI from other mental illnesses for the purpose of grant payment, defined SMI as any 12-month DSM-IV disorder, other than a substance use disorder, with a global assessment of functioning (GAF) score of less than 60.

Historically labels of mental illness were only applied to persons whose incomprehensible

behaviour was extremely strange and disruptive (Horwitz, 2002). There were only two major diagnostic categories identified by Emil Kraepelin, dementia praecox (currently known as schizophrenia) and depression, including bipolar mood disorder. Although the range of behaviour that was viewed as a sign of mental illness was expanded at the height of the psychodynamic psychiatric era (early 1900's), labels seemed to have lost some significance until the advent of the diagnostic and statistical manual (DSM III) in 1980. This publication overthrew the broad, continuous and vague concepts of psychiatry and reclaimed the categorical illnesses of asylum psychiatry (Horwitz, 2002). Over recent years this manual has undergone many revisions and the range of mental disorders with recognisable clusters of symptomatology is extensive. Throughout the development of psychiatry the labelling of those persons with identifiable differentness, strange behaviour and or/ disruptive behaviour that is different from the norm has always included the so-called serious mental illnesses. As Horwitz (2002, p.12) states, *mental disorders always have cultural specific as well as universal components: mental disorders are internal dysfunctions that a particular culture defines as inappropriate.*

Although psychiatric nursing has a bio-psycho-social mandate, it frequently focuses on the biological aspects of psychiatry as the source of illness assessment, treatment and long-term management (Middleton & Uys, 2009). Psychiatric nursing practice and education therefore draws heavily on the presence and/or absence of psychiatric symptoms and hence, on the diagnostic classification system of the DSM IVTR (Middleton & Uys, 2009). This categorization in psychiatric nursing has the potential to overshadow the MHCUs' relationships and life context in a number of related ways (Hayne, 2003; Horwitz, 2002). In the first place, psychiatric nursing might give more consideration to the diagnostic label rather than to its own mandate, the lived experience of the mental health care user (MHCU). For example, Middleton (2007) found that student psychiatric nurses in conversation with community-based clients generally construct MHCUs' expressions of their life-world as potential sources of information about psychiatric symptoms rather than as opportunities for exercising the therapeutic interactional mandate of psychiatric nursing. Secondly, the MHCU is seen as the diagnostic label and thus the problem which again is inconsistent with psychiatric nursing's systemic and holistic view of the individual-in-context (Haynes, 2003; Middleton, 2007). Thirdly, the uniqueness of each

individual's experience and expression of illness is subsumed within 'diagnostic group of labels' which trigger the stigmatizing process in both MHCUs and others (Corrigan, 2007; Middleton, 2007). For example, Putman (2008) reported that even within the mental health care user (MHCU) group there was recognition of a 'diagnostic group' and a hierarchical system where the major depressive disorder label was perceived by MHCU as less negative than the schizophrenia label.

There are however, benefits to the classification system. The DSM 1VTR as a classification system also provides an efficient system for mental health care practitioners (MHCP) to describe MHCUs' symptoms, the expected course of the illness, the prognosis, and to direct the practitioner to specific interventions. The SMI label also serves the purpose of alerting policy makers and health care providers to the extent of support and resources required for the individual within this category (Horwitz, 2002). Hayne (2003) outlines some of the benefits of a diagnostic label reported by families and MHCU such as access to disability grants and other social benefits. Furthermore, many families and MHCU appreciate the diagnostic label for its biological-based assumptions about the cause of the illness and experience relief at having the "blame" shifted from family relationships and dynamics to biology. Nevertheless, MHCU generally experience labeling negatively in their daily life-world.

Thus, while there are reported benefits to a diagnostic labeling system it is also true that in the absence of a visible cue or stigmatizing mark it is the diagnostic label that becomes the unintended cue to stigmatizing attitudes, prejudice and discrimination (Corrigan, 2004; Overton & Medina, 2008). Once the cue is received stereotypes are activated and the cognitive and affective response to the negative stereotypes produces prejudice (emotional response) and discrimination (behavioral response). The diagnostic label adds salience to the 'us' and 'them' separation by providing characteristics or attributes that assist in the creation of the 'out group'. Although the label 'mental illness' is one of the cues for stigma, that is, for stereotyping-separating - discriminating specific labels such as schizophrenia seem to result in even greater negative stereotypes (Link, Cullen, Frank & Wozniak, 1987; Link, 1987; Link et al., 2004). This is exacerbated by the classification characteristics which are assumed to be experienced by all in the labeled 'out group'. This generalization leaves little room for individuality and frequently generates pessimism regarding prognosis and the potential for recovery (Corrigan, 2007).

2.3. EXPLORING THE COMPONENTS OF THE STIGMATIZING PROCESS

Studies in the area of stigma and mental illness are generally focussed on public or consumer opinion. With regards to public opinion these studies usually focus on four related issues. The first relates to public opinion of the characteristics associated with specific psychiatric labels and the second to perceptions of causation and the success of treatment strategies (Adewuya & Makanjuola, 2008b; Kabir et al., 2004; Hugo et al., 2003; Link, 1982). The third foci relates to stigmatizing stereotypes and the mediating effects of variables such as familiarity and accurate knowledge on the stereotypes, emotional reactions and discriminatory practices, such as the need for social distance (Adewuya & Makanjuola, 2008a; Angermeyer et al., 2003; Corrigan, Green et al., 2001; Corrigan, Edwards et al., 2001; Link et al., 2004; Rüsç et al., 2005). The fourth foci related to consumer opinions of mental illness and are generally concerned with the impact of the stigmatizing process on perceptions of self, willingness to engage in and selection of treatment strategies, quality of life and recovery (Burns & Esterhuizen, 2008; Botha et al., 2006; Farina, Allen & Saul, 1968; Farina & Felner, 1973; Hand & Tryssenaar, 2006; Link et al., 1999; Link et al., 2004; Link, 1982; Modiba, 2001; Wahl, 1999).

Studies within each of these four areas will be reviewed within the exploration of stigma components and the implications of their findings for this study will be highlighted.

The literature review for this study focuses on public stigma, specifically as it relates to potential employers, but also includes self stigma. The components of labelling, stereotyping and separating into 'us' and 'them' as outlined by Link and Phelan (2001) will be presented first. Thereafter the emotional reaction, individual discrimination, and the possible mediating effects of familiarity as outlined by Corrigan and colleagues (2001) will be addressed.

2.3.1. Labeling, Stereotyping and Separating

As presented in the introduction to the conceptual framework (Section 1.7, p, 8) the first three components of the stigmatizing process are social accomplishments. The second component, stereotyping, is perceived to involve dominant cultural and personal beliefs linking labeled

differences to undesirable characteristics or attributes. Link and colleagues (1999) argue that the history of social psychiatry illustrates that cultural conceptions of mental illness have dramatic consequences for help seeking behaviour, stereotyping, and the kinds of treatment structures created for people with mental illnesses. Once the stereotypes are established separating occurs.

There are two potential outcomes of the third component, the separating process, particularly if the process is well-entrenched. In the first outcome, it is possible for members of the stigmatised group to be viewed as almost less than human and this, as history has shown, makes horrific treatment of “them” a possibility. A second outcome is that the members of the stigmatized group may accept stereotypes about themselves and view themselves as fundamentally different from and inferior to other people (Link et al., 2004).

2.3.1.1. Labelling and its effects

Presented here are six studies that provide insight into the effects of labelling on the members of the general public, that is, on people with and without a psychiatric background or history and on the experiences of those labelled (Botha et al., 2006; Farina et al., 1968; Hugo et al., 2003; Kabir et al., 2004; Link, 1982; Wahl 1999).

An early seminal study conducted in the 1960's in the United States examined the effects of labelling on the stigmatized or labelled person and highlighted the relationship between self-stigma and ongoing self-defeating behaviour as an important outcome of labelling (Farina, Allen & Saul, 1968, cited in Corrigan et al., 2005; Corrigan, 1998; Link, 1982; Corrigan, 1998; Rüscher et al., 2005). The study involved unacquainted male college students and demonstrated the effect a label can have even when the assigned label has no basis in fact. In the study one member of the pair of students was lead to believe that the other had been told that the former was either a homosexual or mentally ill when in fact only neutral information had been given. The results showed that merely believing that one is stigmatised can influence the subject's behaviour and result in rejection.

A second seminal study by Link in 1982 described the negative impact of a mental illness label

on income and work status for those so labelled (cited in Corrigan et al., 2005; Corrigan, 1998; Rüsçh et al., 2005). In this study, conducted in the United States of America (USA), Link (1982) developed two comparable groups by selecting people who had been found to be similar in terms of psychiatric condition but differed in terms of receiving treatment and thus, a label. In this way the effects of the psychiatric label was assessed independently of the level of psychiatric impairment. The data was collected over a two year period (1965 – 1967). The total population of 'not patients' (N = 391) was drawn from two large probability samples stratified on educational level within ethnic groups. Comparable subjects, 'patients' (N = 149), were selected from a psychiatric clinic to accommodate six behavioural types described in the 'Star Vignettes' (Star, 1955). Both groups were randomly assigned to a psychiatrist interviewer and to either the Structured Interview Schedule (DoHrenwend and Crandell, 1979) or the Psychiatric Status Schedule (DoHrenwend, 1970). Completed interviews, with complete information on all variables resulted in a 'not patient' sample (n = 209), and a 'patient' sample (n = 84). A correlation of .09 between psychiatric impairment and patient status shows that impairment levels were not significantly higher.

The results indicated that labelling, that is, receiving an official psychiatric diagnosis, had a significant independent negative effect on income. This 'labelling effect' was negative even when comparing the least impaired 'patients' to the most impaired 'not patients'. Link (1982) concluded that the findings strongly suggested that acquiring a mental illness label has a negative effect on the person's chances of getting and keeping a job. Link (1982) further suggested that the extent to which a psychiatric label has pejorative effects on other areas of the person's life (jobs, friendships, family relations, and mate selection) is underemphasised.

Mental illness labels and associated stereotypes applied by the general public have been explored to some extent, within the South African context. Hugo, Boshoff, Traut, Zungu-Dirwayi, and Stein, (2003) explored public attitudes of perceived cause of mental illness, perceptions of desirable treatment strategies for mental illness, the effectiveness of current treatment strategies and the consequent health seeking pathways favoured by the general public. They employed a non-experimental field research survey design in the Cape Town area. Data was collected from a convenience sample (n= 667) and instruments included a self report questionnaire where

participants were required to respond on a 5-point Likert-type scale ranging from 'definitively yes' to 'unsure' to 'definitively no'. This was followed by a fully structured interview, and the use of 1 of 8 vignettes.

The results indicate that stress and or weak character were regarded as the major cause of mental illness; 81.7% believed stress caused schizophrenia, additionally 52.3% stating that weak character was the cause of schizophrenia. With respect to treatment strategies, participants indicated their preference for dialogue. Talking it over was selected by 84.8% of participants, praying selected by 69.7% of participants, and psychotherapy selected by 69.7% of participants. Participants' selection of typically medical intervention was considerable less than the preference for dialogue with only 54% of participants opting to consulting a general practitioner, hospital or clinic. This reluctance to consult typically medical intervention may be related to participants' unfavourable view of psychotropic medications, which are usually associated with doctors, hospitals and clinics. Psychotropic medication was perceived by participants to be addictive 67.6%; not the best treatment option 54.6%; and not able to prevent relapse 49.5%. The findings seem to indicate fewer stigmas associated with psychotherapy than with psychiatric clinics, hospitals and psychotropic medication. It is possible that these results are related to the labelling consequences outlined by Link (1982) as seldom does psychotherapy, a largely narrative intervention, produce a definitive label.

Knowledge about the perceptions of adults relating to mental illness labels is beginning to emerge within the African region. For example, Kabir, Iliyasu, Abubakar and Aliyu (2004) used a cross sectional survey design to describe these perceptions of adults residing in Kafir village, northern Nigeria. The sample (n=250) was obtained through random multistage sampling of the wards and households in the village. Data was collected through the use of a semi structured questionnaire, tested in a pilot study and containing three sections: section requested personal data including age, sex, ethnicity, religion, marital status, educational level and occupation; section two focused on the extent of participants' awareness of mental illness, knowledge of causal factors, manifestations and preference of treatment options; and section three on participants attitudes, beliefs and perception towards the mentally ill. The results of this study revealed that almost half of the participants expressed negative stigmatizing attitudes towards the

mentally ill and manifested fear and avoidance. The most common symptoms perceived to equate to mental illness included aggression/destructiveness (22.0%), loquaciousness (21.2%), eccentric behaviour (16.1%) and wandering (13.3%). Drug misuse including alcohol, cannabis, and other street drugs were reported by 34.3% of participants as a major cause of mental illness, followed by divine wrath/God's will (19%), and magic/spirit possession (18.0%). Preferred treatment was reported as orthodox medical care (46%), spiritual healing (34%) and the use of traditional medicines (18%). Literate participants were seven times more likely to exhibit positive feelings towards the mentally ill as compared to non-literate participants (OR = 7.6, 95% confidence interval = 3.8–15.1).

Public stigma regarding mental illness is evident in everyday language and particularly, in the descriptive terms people use to signify these illnesses. Rüsçh, Angermeyer and Corrigan (2005) illustrate how the person with a psychiatric label is commonly referred to as the label, for example, s/he 'is' schizophrenic, while the person with a physical illness remains separate from the illness or problem for example, s/he 'has' cancer.

Interpersonal experiences of stigma and discrimination are also well documented. A study by Wahl (1999) explored interpersonal experiences of stigma and discrimination associated with the mental illness label as well as the sources of stigma, and the impact of stigma. A nation wide survey was conducted with mental health consumers in USA. The sample (n = 1301) was largely obtained through national non government support organizations and included participants with various mental illness diagnoses, 59% with the so-called SMI label (25% had a bipolar mood disorder diagnosis, 19% a schizophrenic disorder diagnosis, and 15% a major depressive disorder diagnosis). Participants were requested to rate statements on a 5 point Likert-type rating scale from 'never' to 'very often' with an additional section encouraging participants to write additional information. There were three main sections to the survey; 9 items related to interpersonal experiences as consumers, 12 items to experiences of discrimination, and a demographic and diagnostic information section. Of the initial sample 100 were randomly selected for interview. The focus of the interviews was firstly the sources of stigma, secondly the impact of stigma, and finally, strategies employed to cope with and or reduce stigma. The following results presented include only participants reports of interpersonal experiences of

stigma and discrimination associated with a mental illness label that occurred 'often' or 'very often'. Hearing hurtful or offensive stigmatizing comments about mental illness was reported by 50% of participants, and hearing such comments in the media as well as in social settings was reported by 47 % of participants. With regards to direct personal experiences of communicated stigmatizing attitudes 27% of participants reported being advised to lower their expectations in life. Sources of stigmatizing attitudes reported by participants include the general public (46% incidence), family members (39% incidence), coworkers (36% incidence), and mental health care practitioners (28% incidence). Discriminatory practices reported by participants tended to focus on work and or employment. For example, 36 % of participants reported being treated as less competent by colleagues and peers once their mental illness label became known and 32 % of participants reported being turned down for a job that they were qualified for once their mental illness label became known.

The results of the interview portion of the study indicated that 95% of participants experienced the impact of stigma as a lasting impact. Participant's reports of the personal effect of this lasting impact include lowered self esteem (57%), and social withdrawal (31%), both of which are likely to inversely effect occupational and social functioning. For example, it is noted that 21% of participants reported being less likely to apply for an educational or vocational opportunity. The impact of stigma on occupational functioning is further evidenced by the demographic data which indicated that 41% of participants had previously worked but were no longer working at the time of the study. It is not surprising that 74% of participants reported resorting to secrecy about their mental illness label as a strategy to cope with and or reduce stigma.

Interpersonal experiences of stigma have also been explored in South Africa. A study by Botha, Koen and Niehaus (2006) aimed to investigate the experience of internalise stigma in a group of MHCU with a diagnostic label of schizophrenia (n=100). The convenience sample was recruited from 10 different psychiatric clinics in the Eastern Cape. Participants completed a modified version of the Internalized Stigma of Mental Illness Scale (ISMI). Results indicated that 65% of participants felt that they were discredited due to their mental illness label and yet 60% agreed that a person with a psychiatric illness was dangerous. Other contradictions included 78% of participants reporting that their diagnosis should not stop them from living a full life but 24%

stating that people with schizophrenia should not marry. Indicators of abuse included; 58% of participants reported being subjected to name calling and verbal abuse, 39% of participants reported being physically abused due to their mental illness. Within this 39% who experienced physical abuse the participants variables included: Xhosa speaking males, more frequent admissions, and longer duration of illness. A relatively small number (16%) reported difficulty attending psychiatric clinics as it would expose their illness. There was a significant negative correlation between being employed and experiences of verbal abuse and social withdrawal.

The study by Link (1982) suggests that the ability to perform and be financially independent is less about the presence of psychiatric symptomatology and more about the labelling effect inherent in the treatment process. Whether this is a result of self stigma (seeing self as incompetent and less able) suggested in the results of Farina and colleagues (1968) and Wahl (1999) or public stigma (reluctance on the part of employers) suggested in the results of Link (1987) and other studies reported in section 2.4.1.(p, 29) is unclear. What is suggested is that a psychiatric label is detrimental to economic and social viability.

2.3.1.2. Specific negative characteristics inherent in mental illness stereotypes

The findings of several research studies (Corrigan, Green, et al., 2001; Corrigan, Edwards et al., 2001; Crisp, Gelder, Rix, Meltzer & Rowlands, 2000; Feldman & Crandall, 2007; Hugo et al., 2003; Wahl, 1999) and review articles (Byrne, 1997, Pescosolido et al., 2008; Rusch et al., 2005) suggest that stigmatizing attitudes towards people with a mental illness are widespread, commonly held and endorsed. Some of these studies are presented here (Crisp et al., 2000; Feldman & Crandall, 2007) and others (Andewuya and Makanjuola, 2008a; Corrigan, Green, et al., 2001; Corrigan, Edwards et al., 2001) under section 2.3.2 emotional reactions, discrimination and familiarity (p 24).

A relational study by Crisp and colleagues (2000) used a cross sectional survey design investigating stigmatizing attitudes towards mental illness, and the mediating effect of familiarity. The purpose being to guide the 5 year campaign instituted in Great Britain by the Royal College of Psychiatrists in 1998 entitled 'Changing Minds: Every Family in the Land'.

The random stratified sample was taken from the general public according to postal sectors, regions and socio-economic groups, and included adults over the age of 16 (N = 2679, n=1737). Data was collected using two self report questionnaires. The first instrument collected demographic data such as employment variables and the level of familiarity with persons with a mental illness. The second instrument was a semantic differential measurement scale including seven mental illness labels (severe depression, panic attacks, schizophrenia, dementia, eating disorder, alcohol addiction, and drug addiction). Each of these labels was rated against eight characteristics (dangerousness, unpredictability, conversational ability, culpability, ability to recover, ability to help self, and response to treatment).

The findings indicated that schizophrenia, alcoholism and drug addiction elicited the most negative stereotypes. For example, 70% of participants rated these three labels as dangerous, and 80% of participants reported them as unpredictable. Proportioning blame did not seem to impact on perceptions of unpredictability and dangerousness as although participants appropriated blame with alcoholism and drug addiction only 7% of participants reporting that people with Schizophrenia were to blame for their illness. Stigmatizing attitudes to people with depression were minimal with 84% of participants reporting that recovery was possible. Finally, the results of this study indicated no significant relationship between familiarity and stigmatizing attitudes.

In a study conducted by Feldman and Crandall (2007) the stereotype of dangerousness was reported on as well as further stereotypical beliefs about mental illness. These authors focused on the characteristics across mental disorders that seemed to lead to stigmatization and social rejection. To achieve this the researchers designed 40 vignettes to represent 40 different mental disorders from the DSM 1V TR. Participants included undergraduate psychology students (n=270) each being presented with 2 vignettes, randomly assigned, each one depicting a mental disorder. Participants were requested to rate the target individuals illness on 17 dimensions using a 7-point semantic differential scale. Secondly participants were asked to rate seven items on a seven point social distance scale.

Characteristics on the semantic differential measure that significantly positively correlated to desire for social distance were dangerousness, personal responsibility, unavailability, out of

touch with reality, rarity, social disruptiveness and treatable with medication. A forward step wise regression was used to simplify the results regarding the characteristics that determine stigmatisation. This yielded a three predictor result. The largest predictor was personal responsibility followed by dangerousness and then rarity.

2.3.2. Emotional Reactions, Discrimination and Familiarity

As indicated in the introduction to the conceptual framework (Section 1.7, p, 8) the relationship between these components of the stigmatizing process have received greater focus in recent years (Link et al., 2004). Particularly with reference to the relationship between prejudice and negative emotional reaction (Angermeyer et al., 2003; Corrigan, Green et al., 2001; Corrigan, Edwards et al., 2001; Link et al., 2004; Rüsçh et al., 2005), and the mediating effect of familiarity (Adewuya & Makanjuola, 2008a; Angermeyer et al., 2003; Corrigan, Green et al., 2001; Corrigan, Edwards et al., 2001; Link et al., 2004).

Emotions of anger, irritation, anxiety, pity, and fear are commonly experienced by stigmatizers as the process of stigmatizing – labeling, stereotyping and separating - unfolds. Discrimination is viewed as the behavioural reaction to the negative emotional reaction. These authors suggest that people who are familiar with mental illness are less likely to endorse or to demonstrate the negative stigmatizing components of stereotyping, separating, and emotional reactions with the consequent discriminatory practices.

Allport's 1954 contact theory (Pettigrew, 1998) refers to the concept of familiarity. Although this theory was originally developed for ethnicities and race it holds equally true for other groups such as the mentally ill (Pettigrew, 1998). Within Allport's work, and that of later authors, the stigmatized individual / group is referred to as the 'out group' and for the purpose of this and subsequent chapters the 'out group' will be referred to as the stigmatized individual or group. Allport's 1954 intergroup contact hypothesis is firmly established through meta analysis of 516 studies that confirm it's basic contention that intergroup contact typically diminishes intergroup prejudice (Pettigrew & Tropp, 2006; Pettigrew, Christ, Wagner & Stellmacher, 2007). Allport described four conditions of contact that he hypothesized as necessary for contact to reduce

prejudice. Firstly that the situation is perceived by those in it to offer equal status, secondly that the group has common goals, thirdly that these common goals facilitate interdependent effort and cooperation rather than intergroup competition as the group pursues attainment of the common goals, and finally that the intergroup contact has explicit social sanction

Of the 516 studies 95% reported a negative correlation between contact and prejudice concluding that Allport's (1954) four conditions of contact do facilitate the process the process of prejudice reduction but are not essential to reducing prejudice (Pettigrew & Tropp, 2006; Pettigrew et al., 2007).

2.3.2.1. Familiarity and its effects

Although the study by Crisp and colleagues (2000) suggested no mediating effects of familiarity / contact on the stigmatizing process the four studies outlined in this section, published between 2001 and 2008, continued to explore this relationship.

Exploration of the paths between prejudicial attitudes and behavioural discrimination is illustrated in a study by Corrigan, Edwards, Green, Diwan and Penn (2001). These authors conducted a study to explore the paths between two prejudicial attitudes (authoritarianism and benevolence) and behavioural discrimination (social distance). Included in the study were the effects of two demographic variables (familiarity with mental illness and ethnicity). The sample (n=151) included paraprofessional community workers at a community college in Chicago, United States of America. Participants completed three self report questionnaires. The level of contact questionnaire (LOC) developed by Holmes, Corrigan, Williams, Canar and Kubiak (1999) consisting of 12 yes/no statements varying in intimacy of contact. Prejudicial attitudes were measured by using the OMI questionnaire which comprises 70 statements about the presentation and treatment of mental illness to be rated on a 6-point agreement scale. Behavioural discrimination was measured with the Social Distance scale (SDS) which required participants to rate seven statements on a 3-point willingness scale (3= definitely unwilling).

Results indicated that prejudicial attitudes do influence discriminatory behaviour, in that words

stigmatizing attitudes about mental illness correlated with increased desire for social distance. What is interesting in this study is that those participants whose stigmatizing attitudes indicated a benevolent perspective (the mentally ill person as childlike and needing to be watched by a compassionate care giver) had equally high scores on the social distance scale as those participants whose stigmatizing attitudes represented authoritarianism. Familiarity and membership to a minority group (ethnic minority) did indicate a reduced likelihood of endorsing prejudicial attitudes about mental illness. In particular, persons from minority ethnic groups seem to be less likely to endorse prejudices about mental illness possible due to them experiencing prejudice more harshly than a majority group. Thus two person variables (familiarity and ethnicity) should inversely influence prejudicial attitudes towards mental illness (benevolence and authoritarianism) which in turn will affect the believers' social distance from persons with mental illness.

Corrigan, Green, Lundin, Kubiak and Penn (2001) conducted a path analysis study to test a version of a model in which it was proposed that familiarity influences perception of dangerousness, which in turn influences fear, which influences social distance from persons who sufferer from a mental illness. The sample ($n=208$) included community college students in Chicago, United States of America. Findings indicated that correlations between perceptions of dangerousness and fear, as well as between fear and social distance were particularly strong ($p<.001$). Fear of persons with mental illness correlated to a desire for social distance ($r = .51$) as did perceptions of dangerousness ($r = .44$). Familiarity with mental illness correlated with a decreased desire for social distance ($r = .20$). This study would support the premise that familiarity inversely influences stigma, which in turn influences discrimination in the form of social distance.

To establish if the impact of familiarity produce the same results when applied to specific serious mental illness labels, as opposed to the general mental illness label Angermeyer, Matschinger and Corrigan (2003) replicated the study by Corrigan, Green and colleagues (2001). The focus of these authors study was to examine the impact of familiarity on the three components of stigma outlined by the initial researchers (Corrigan, Green et al., 2001) in relation to two serious mental illnesses' (SMI) labels (schizophrenia and major depression). A representative survey carried out

in Germany in 2001 was used as the sampling frame and stratified random sampling was employed to establish the sample (n=50525). The results indicated that in terms of schizophrenia all path coefficients were significant; familiarity inversely predicts the perception of dangerousness, also inversely associated with fear, although the relationship is less strong, and also negatively associated with a desire for social distance. The results for major depression are the same but not as strong. The path model for schizophrenia explains 20.6 % of the variance of social distance, while the path model for or major depression explains only 14.8% of the variance of social distance. Thus the effect of familiarity was perceived as pervasive, the finding of this study fully supports the conclusions drawn by Corrigan, Green and colleagues (2001). The only difference in the results of this study as opposed to the study replicated (Corrigan, Green et al., 2001) was that the relationship between perceived dangerousness and social distance was strong and direct.

A more recent study in Sub Sahara Africa, Nigeria, by Andewuya and Makanjuola (2008b) aimed to establish a knowledge base of community attitudes (perceived causation, perceived personal attributes, and perceived prognosis) towards the mentally ill, public attitudes (preferred social distance), and factors correlating to public attitudes (sociodemographic variables, including familiarity with mental illness). A cross sectional survey design was used and the sample of adults over the age of 18 (n=2078) was achieved through a multistage probability sampling technique of three communities (urban, semi urban, and rural). Participants completed a semi structured questionnaire that requested demographic data (age, gender, marital status, ethnicity, highest education obtained, and occupation), and familiarity with mental illness (direct contact, direct care, relative or friend). A four point Likert type scale was used to collect data about perceptions of causation on nine items detailing possible causes within the categories of: psychosocial factors, supernatural factors, and biological factors. Perceptions of personal attributes of persons with a mental illness focused on perceived dangerousness and perceived dependency. Perceptions of prognosis were obtained by participants choosing one of four options that indicated perceptions of a good prognosis to perceptions of a poor prognosis. Desire for social distance was measured by a modified version of the Borgardus Social Distance Scale containing six items representing social relationships of various levels of intimacy and contact (marriage to a conversation) rated on a four point Likert type scale from definitely not to

definitely so.

Results indicated that 29.5% of participants had a family member or friend with a mental illness. Causation of mental illness was significantly endorsed by participants as; psychosocial (43.9%), supernatural (48.9%) and biological (30.4%). Dangerousness was endorsed by 57.9% of participants, and dependency by 21.1% of participants. Prognosis was rated as good by 9.5%, fair by 53.4%, and poor by 37.1%. The desire for social distance was seen to increase with level of intimacy depicted in the contact/relationship. Familiarity with a person through friendship or family relationship did not mediate desire for social distance but having previously cared for someone with a mental illness had a negative relationship with desire for social distance. Finally there were significant positive correlations between supernatural belief of causation and desire for social distance, and perceived dangerousness and a desire for social distance.

The more recent studies that focus on measurement of stigmatizing attitudes, emotional reactions and social distance make the following assumptions; firstly, the existence of stigmatizing attitudes is evidence of the existence of the stigma components of labels as salient and associated with negative characteristics. Secondly, the existence of social distance is evidence of the stigma component of discriminatory behaviour that occurs once the stigma components of separation and emotional reaction have occurred. In these studies the stigma components of labelling and stereotyping are operationalised by the constructs of stereotypical beliefs to mental illness labels, and the stigma components of separating, emotional reaction and discrimination are operationalised by the constructs of social distance.

2.4. STIGMA AND PSYCHOSOCIAL REHABILITATION OUTCOMES

Recovery is defined as a process of transcending symptoms, psychiatric disabilities and social handicap (Spaniol, 2008). It involves redefining a sense of self, embracing hope, and facilitating empowerment to enable the person to live as full a life as possible in relationship with others. This concept is closely linked to psychosocial rehabilitation (PSR). The aim of PSR, reviewed in the background (section 1.1, p,1) is to assist the person suffering from a serious or long term mental illness to be successful and satisfied within the roles (living, working, learning and

socialising) that they choose to fulfil in the community (Provincher et al., 2002; Uys & Middleton, 2004; Spaniol, 2008)).

It is suggested that being able to work in the open labour market is central to recovery and rehabilitation in that it, employment, is central to self esteem, hope, empowerment, and self-actualization (Hand & Tryssenaar, 2006; Provincher et al., 2002; Tsang, Angell, Corrigan, Lee, Shi, Lam Shenghua Jin & Fung, 2007).

2.4.1. Mental illness Stigma in the workplace

There are few studies that provide information related to stigma and the workplace. This may indicate that few SMI are gainfully employed in the open labour market, that it is possible that and those who are employed in the open labour market maintain secrecy about their mental illness label. This may also speak to why there appears to be limited strategies in place to address the issues of stigma against the SMI in the workplace or to inform social anti-stigma interventions.

However the studies reviewed suggest that stigma on the part of employers remains a major barrier for the SMI accessing and maintaining employment (Farina & Felner, 1973; Hand & Tryssenaar 2006; Link, 1982; Modiba, 2001; Tsang et al., 2007). For example, Farina and Felner (1973, cited in Corrigan et al., 2005) explored the impact of stigma associated with mental illness on employment possibilities. In this study a male posing as an unemployed worker sought jobs at 32 businesses. The same work history was reported at each of the job interviews except that the male posing as an unemployed worker disclosed information about a past psychiatric hospitalization to 50% of the potential employers. Employers were less friendly in an interview situation and significantly less inclined to employ someone once a history of mental illness was revealed.

The factors influencing the employment of people with mental illness in Soweto South Africa were investigated by Modiba (2001). An unmatched case-control study design was used to compare demographic data and experience of mental illness characteristics such as

hospitalization, diagnosis, period of illness, exposure to community mental health services, social networks, and involvement of family and social support. The two groups compared were employed MHCU (n=29), and unemployed MHCU (n=37). Secondly, semi structured interviews were carried out with human resource managers, community mental health service providers and policy implementers in the Johannesburg business district. Data gathered from these key informants indicated that stigma on the part of employers and professionals remain a major barrier for MHCU accessing and maintaining employment. The findings of the study indicated that characteristics such as; gender, age, frequency of hospitalisations and work experience seemed to influenced the likelihood of employment. Characteristics such as; diagnosis, exposure to PSR, and educational levels where found not significant in predicting employment.

Exploration and description of employer concerns are reported in a more recent study by Hand and Tryssenaar (2006) conducted in Ontario, Canada, using a cross sectional survey design investigated the beliefs of small business employers regarding hiring individuals with mental illness. A simple random sample was generated from a business directory (N=143, n= 58). Three employer aspects were explored: beliefs regarding hiring a person with a mental illness, concerns regarding characteristics of individuals with mental illness, and willingness to hire a person with a mental illness. The study further examined the relationship between beliefs and willingness, and employer characteristics and willingness. Interviews were used to obtain employer characteristic and questionnaires to collect data regarding beliefs.

Results showed that belief subscales were strongly correlated to willingness to hire. Results indicated a positive correlation between beliefs regarding advantages of competitive employment (ACE) and willingness to hire (0.471) and a negative correlations between disadvantages of competitive employment (DCE) and a willingness to hire (-0.497). Employers tended to endorse positive views regarding employing individuals with mental illness with a mean ACE score of 5.02 (SD =.94). However, employers revealed a moderate to high degree of concern regarding all employee characteristics. The top seven concerns of employers related to aspects of work personality; handling of criticism, emotional control, persistence, violent behaviour, need for supervision, judgment, and conflict resolution. The study suggests that although employers may agree in principle with the benefits of competitive employment they still held to the stereotypes

that mental illness has inherent characteristics of unpredictability, dangerousness and incompetence. A regression analysis revealed that the only significant predictor of willingness to hire was the variable 'nature of interactions' ($b = .336$, $p=0.013$), positive interactions being more persuasive than negative interactions.

The qualities employers seek and their fears regarding employing persons with a psychotic illness was explored in a cross cultural study by Tsang, Angell, Corrigan, Lee, Shi, Lam Shenghua Jin, & Fung, (2007). The study involved participants in three cities, Chicago ($n=40$), Hong Kong ($n=30$) and Beijing ($n=30$). Participants included employers in private small scale firms with discretionary hiring authority who would not be hampered by human resource regulations. Using audiotape semi structured interviews and content analysis the researchers explored qualities employers seek when hiring for entry level positions and the specific concerns potential employers would have in hiring a person with a psychotic disorder for an entry level position.

Results suggest that the qualities desired in an entry level employee are, in descending order, skills/qualifications to do the job, communication skills, trustworthiness, diligence and compatibility with others. Concerns regarding hiring a person with a psychotic illness included in descending order: safety threat to other employees and customers, productivity and job performance, behaviours being strange and unpredictable, and the potential for symptom relapse. Results confirm those of previous studies reported on, that dangerousness is one of the most common stereotypes associated with mental illness. Although there were differences within the hierarchical placing of qualities and concerns between the three sites the results related significantly to all sites. Previous contact, previous employment of a person with a psychotic disorder was suggested to have limited impact on employer concerns and more benign attitudes were not displayed.

In summary, stereotypes and prejudices alone are not enough to produce the discriminatory effects of stigma. Stigmatization of a group requires the application of social, economic, and political power. Thus stigma exists when labels, stereotypes, prejudice, and discrimination co-occur in the context of power differences that simultaneously allow these processes to unfold and

enable these reactions in the general public toward the stigmatised group (Link & Phelan, 2001; Rüsçh et al., 2005). Despite research suggesting that employment is central to recovery and rehabilitation there remains no legislation in South Africa that specifically obliges employers to offer employment to the SMI. Although the Employment Equity Act (Department of Labour, Republic of South Africa Act No 55 of 1998) makes reference to the employment of the disabled person there is no distinction between mental or physical disability. In the absence of specific legislation although employers may agree in principle to the benefits of employment stigmatizing beliefs and attitudes remain a barrier to the employment of the SMI.

2.5. OVERVIEW OF EFFECTIVE (AND NOT SO-EFFECTIVE) STIGMA REDUCTION INTERVENTIONS

Stigma research identifies three major anti-stigma strategies namely protest, education and contact. This section will present education and contact as the two fundamental approaches to anti-stigma campaigns most relevant to psychiatric nursing. Anti-stigma strategies and campaigns are relevant to psychiatric nurses' in South Africa due to their majority status in the mental health care workforce. It is psychiatric nurses who are being charged with bringing to life the psychosocial rehabilitation policy of the KwaZulu-Natal department of health at both hospital and clinic level.

Four common stereotypes applied to people with mental illness that prevail in the media have been identified (Byrne, 1997). These are the simple ineffectual idiot who is a figure of fun; the poor wretch who cannot cope with life's adversities and is deserving of charity and sympathy; the volatile and violent person who is to be feared and avoided; and the lazy person who is unwilling to recover. Byrne's (1997) review of stereotypes illustrates the task of anti-stigma campaigns and initiatives. Not only is it suggested that the correct information should be given but that action needs to be taken to hold the media accountable for its negative and inaccurate portrayal of mental illness. This negative and inaccurate portrayal of mental illness, specifically serious mental illness has been experienced by the researcher, in her role as educator. The researcher has found that with every new group of undergraduate students certain misconceptions need to be addressed. The most common misconception students report on is that

a person suffering from schizophrenia has a split personality with potential homicidal tendencies, an image generally derived from fictional television characters.

2.5.1. The effect of Education and Contact

These two approaches to anti-stigma campaigns are presented together as the research indicates that one is most effective when combined with the other. Education alone is suggested to mitigate stigma but does not endure overtime (Overton & Medina, 2008). Unlike education which changes attitudes but not behaviour, contact is suggested to change both (Overton & Medina, 2008).

Research regarding Allport's 1954 original contact hypothesis has evolved to focus more on process or intervening variables facilitate or impede contact (Pettigrew, 1998). The question of how contact reduces prejudice was first thought to be answered by education. Rüsçh and colleagues (2005) describe education as attempts to decrease stigma by providing contradictory information. Putman's (2008) systematic review revealed that promotion of mental health was closely linked to education was in 25% of the studies reviewed. Essentially contact is viewed as facilitating learning about the stigmatized group and this new knowledge is presumed to lead to a reduction in prejudice. However in the meta analysis by Pettigrew and Tropp (2006) knowledge mediation was found to be of minor significance. More important in mediation was empathy; the ability to take the perspective of the stigmatized group, thus producing a new view characterized by a reduction in prejudice and of intergroup threat and anxiety (Pettigrew et al., 2007). Pettigrew and Tropp (2006) concluded that affective mediators (an increase in empathy and a reduction in anxiety) seem more important than cognitive mediators (knowledge) although both play a role.

More recent research suggests that disconfirming evidence alters stereotypes only if three specific characteristics are present. These are firstly, that the stigmatized persons' behavior is starkly inconsistent with the stereotype *and* strongly associated with their label. Secondly, that contact occurs often and in many situations with the possibility for generating affective ties, and thirdly, that the stigmatized person is seen as typical of the group (Pettigrew et al., 2007;

Pettigrew & Tropp, 2006). As Pettigrew (1988) points out intergroup contact is a benign form of behavior modification. Behavioral change results in revisiting of attitudes which may result in liking a member of the stigmatized group. Social representations change from 'us' versus 'them' to more inclusive 'we'. It is important to note that although continued contact generally reduces anxiety, bad experiences can increase it (Pettigrew, 1988) and high intergroup anxiety and threat perception can impede both contact and its positive effects.

This is problematic for psychiatric nursing on two fronts. Firstly nursing education typically involves contact with persons who are typical of the group labels and their behavior consistent with the stereotype. This has implications for nurse's stereotypes and the development of negative stigmatizing attitudes (Adewuya & Oguntade, 2007). Secondly, with respect to anti-stigma initiatives this suggests that in order for contact to correlate negatively to discrimination and prejudice, those persons with SMI that are most likely to have the greatest impact through contact need to be typical of their group but inconsistent with the stereotype (Pettigrew et al., 2007). This requires programs to identify persons with SMI who are prepared to participate in anti-stigma campaigns, thereby giving up their privacy, and who are inconsistent with the stereotype but believable as a member of the diagnostic label.

The literature reports that various advocacy groups believe that education is the way to change public attitudes to mental illness and thus enhance the quality of life of the SMI (Rüsch et al., 2005). To this end educative strategies have been embraced and education programs exist in schools, police academies, and media environments. For example, the alliance for mentally ill people based in Munich runs several education initiatives including, 'Madly Human' and a school education campaign called 'Crazy? So What!' Sane Australia, a national anti-stigma campaign active for 23 years, has been particularly successful in educating journalists and fighting media messages (Corrigan et al., 2005; Holmes et al., 1999; Rüsch et al., 2005). These authors and organizations have suggested that an important component of this education needs to focus on the possibility of recovery and movement away from the misconception that symptom control is the goal.

The need for such inclusion and shift in focus is illustrated in Wahl's study (1999) where the

incidence (27%) of the participants being advised about lowering their expectations in life was experienced by participating mental health care users (MHCUs') as patronizing, devaluing, and demoralizing. It is possible that such advice may represent misplaced caring. This is frequently aimed at helping the MHCU take what seems to be a more realistic view of their situation and steer them away from challenges that are perceived as too stressful. This suggests that reducing expectations is possibly a risk management strategy. This is confirmed in Putman's (2008) systematic review which revealed that from the MHCU perspective, the most intolerant employer groups were within health and social care, and the most overt displays of stigmatization were reported in the nursing and social work professions (Read & Barker (1996) and Warner (2002) in Putman, 2008)

Despite the need for accurate information to be disseminated and for advocacy group support for educative initiatives, the three studies presented below agree with contact theorists and suggest that education alone is possibly not particularly effective.

Investigation of the effects of short-term education programs was the focus of a study by Holmes, Corrigan, Williams, Canar and Kubiak (1999). These authors conducted a study to determine if the effects of short term education programs on severe mental illness were mediated by characteristics of program participants such as; pre-education knowledge about, and contact with severe mental illness. A quantitative comparative design was used and data collected through self report questionnaires. Data was analysed using multiple regression and collected with two measurement tools. A pre and post test on knowledge (Opinions of Mental Illness Questionnaire (OMI)), and a pre test regarding contact with people with a serious mental illness (Level of Contact measurement scale (LOC). Participants (n=83) were students enrolled for one of two courses; Introduction to General Psychology (n=48), and Severe Mental Illness and PSR (n=35), at a community college in Chicago, United States of America. The participants enrolled in the introduction to general psychology course were selected as the comparison group as this course included basic theories without specific information about mental illness.

Results suggested that the effects of education and its interaction with pre knowledge and contact varied with attitude content. There was no significant relationship between scores and

demographic data ($p > 0.10$). Pre-test and post-test scores on the OMI with regards to benevolence ($p < 0.001$) and social restrictiveness ($p < 0.01$) were significant. Education seemed to have significant effects on benevolence ($r = -0.24$, $p < 0.05$) and social restrictiveness ($r = -0.24$, $p < 0.05$). Further, participants with greater pre-test knowledge scores showed greater improvement in benevolence ($r = 0.31$, $p < 0.0001$). These results support the premise that knowledge and contact are effective anti-stigma strategies. None of the correlation coefficients suggested that the effects of education affected the authoritarianism attitude factor. Participants completing the serious mental illness course showed greater improvement than participants completing the General psychology course suggesting that the amount and type of information is critical. A hierarchical step wise multiple regression revealed that the variables; education group, knowledge pre-test score, and level of contact, accounted for independent changes in benevolence and social restrictiveness change scores. These three independent variables accounted for 19.3% of the variance in benevolence change and 22.9% of change score variance in social restrictiveness. The results did not meet the Bonferroni criterion for significance and it is likely that the impact of education alone is limited (Holmes et al., 1999).

A second study that aimed to investigate the effectiveness of education in interrupting the stigmatizing process was conducted by Penn, Kommana, Mansfield, and Link (1999). This study in Illinois, USA investigated whether the presentation of factual or corrective information, describing the association between violent behaviour and schizophrenia and placing violent behaviour in context, could affect the participant's impressions of dangerousness of both a target person with schizophrenia, and persons with mental illness in general. A second aim was to extend findings from a previous study that familiarity / contact with a person with a mental illness is associated with less negative reactions. Two specific types of information were used in this study. The first information form compared the violence rates of schizophrenia with other psychiatric disorders, for example substance abuse disorder, and included a 'consensus statement' that stated that mental disorders account for less violence in society than do alcohol and drug abuse. The second information form focused on the misconception that individuals with a serious mental illness are always unpredictable and dangerous. These two information forms were compared with a no information control group who received a standard information sheet describing the clinical characteristics of schizophrenia only.

Results supported the hypothesis that when participants became aware of the true base rate of violence behaviour they would be less inclined to stigmatise. However information on psychotic symptoms and aggression had no significant effect on stigmatizing attitudes. Finally results supported that those with regular contact rated lower perceptions of dangerousness for both specific target person and people with mental illness in general. Supporting that regular contact increases positive attitudes about mental illness and psychiatric disability.

Lastly, a study by Spagnolo, Murphy and Librera (2008) examined the effects of public education developed and delivered largely by a mental health care user and a faculty member on the attitudes of high school students (n= 277) in New Jersey, USA. The content included facts about mental illness, characteristic symptoms, recovery strategies and personal stories told by MHCU. Student attitudes were assessed pre-and post the intervention, using the Attribution Questionnaire-Short Form for Children (Corrigan and colleagues, Chicago Consortium for Stigma Research, 2002). Results indicated a reduction in stigmatizing attitudes on seven of the nine factors incorporating attitudes that reflected changes related to pity, dangerousness, fear, need for social distance, and willingness to seek help for self. The two factors that did not change pertained to responsibility and anger, both of which had been scored positively in the pre test and thus showed no significant change in the post test. What is not factored into this study is the sustainability of the changes in attitudes.

In summary, although corrective information is effective as an anti-stigma strategy the nature of the information is core to its success, as is the repetitiveness or confirmation of this information. Information about acute phases of illness can serve to increase perceptions of dangerousness as can failure to place behavior in context. Despite education initiatives it is suggested that frequent contact serves as the most effective form of education, again dependent on the length of time and the place of the contact. The increasing success of MHCU (often through consumer-run programs) may be the most effective strategy to dispel the lingering stereotypes of people with serious mental illnesses (Wahl, 1999). This success may result in greater social networks and thus social contact providing time and place for the facilitation of affective mediators.

2.6. SUMMARY OF THE CHAPTER

Stigma is understood as a socially constructed phenomenon that has a profound impact on individuals and groups through the multiple ways in which it is subjectively experienced. Research suggests that there are mediating constructs such as education and familiarity or contact that can interrupt the public stigmatizing process. Identification of stereotypes and behavioural responses and mediating constructs are suggested as important to inform anti-stigma initiatives and improve the quality of life of the seriously mental ill. Quality of life for the seriously mentally ill is related to possibilities of rehabilitation and recovery, and employment is central to this process.

There are ethical, social and clinical reasons for assisting persons with mental illness to work (Crowther, Marshall, Bond & Huxley, 2001). Firstly, from an ethical standpoint the Declaration of Human Rights enshrined in the South African Constitution no 18 (1996) indicates the right to gainful employment and forbids discrimination. The Mental Health Care Act no 17 (2002) legislates clearly the mentally ill person's right to rehabilitation and community participation. Research also indicates that the majority of people with a mental illness want to obtain competitive employment and live independently in a safe and comfortable home (Corrigan, 2007; Provincher et al., 2002). Secondly, from a social perspective, work offers social networks, social status in the economy and a route out of poverty (Thornicroft, 2009). Lastly, from a clinical perspective, it is suggested that employment may lead to improvements in recovery outcomes through increasing self esteem, alleviating psychiatric symptoms and reducing dependent behaviour (Corrigan, 2007; Crowther et al., 2001; Provincher et al., 2002; Thornicroft, 2009).

CHAPTER THREE

METHODOLOGY

3.1. INTRODUCTION

This section describes how the research was conducted. The research design, sample frame, size and sampling technique, data collection technique and instruments will be described and motivated (Terre Blanche, Durrheim & Painter, 2006).

3.2. RESEARCH DESIGN

A quantitative non-experimental cross sectional survey relational research design was used to describe firstly, the stereotyping and individual discriminatory behavior (desire for social distance) of potential employers to a person with a SMI, and secondly, the effect of familiarity and other person variables (culture, age and gender) on the stigma components of stereotyping, emotional reaction and individual discriminatory behavior (desire for social distance).

Terre Blanche, Durrheim and Painter (2006) argue that relational research is non-manipulative and involves the coordinated observation of at least two variables. In this study, these independent variables were identified as SMI stereotypes, person variables (familiarity, cultural, age, and gender), and emotional reaction. The dependent variable is desire for social distance. A relational research design enables a description of how changes in one variable correspond to changes in another variable.

3.3. SETTING AND TARGET POPULATION

The population included potential employers of the SMI person in the greater Durban area, eThekweni District, KwaZulu-Natal. The target population was all students enrolled for a part-time management course at two English medium academic institutions in the Durban central area.

Several studies have indicated that students from part time certificate/diploma and or degree management studies programs are possibly a useful purposive sample of the target population (Corrigan, Edwards et al., 2001; Corrigan, Green et al., 2001; Feldman & Crandall, 2007; Holmes et al., 1999). In the first instance, it is likely that these participants will be more demographically representative of the population as a whole since they represent diversity within the occupational environment (Corrigan, Green et al., 2001; Holmes et al., 1999). In the second instance, working students enrolled in part-time management courses are likely to represent a greater number of companies than can be achieved by targeting specific companies individually.

3.4. SAMPLE AND SAMPLING PROCEDURE

Non-randomized, non-probability purposive sampling was used. Two major academic institutions in the Durban central area offering full-time and or part-time management diploma and/or degree studies were included with a total population of $N = 167$. The intention was to include the entire population to obtain a large enough sample size to enable analysis to be completed with good statistical power (Polit & Beck, 2006).

Respondents from participating institutions were required to be employed at the time of the data collection, to be currently registered as a student in any one or more of the part time courses including project management, business management, human resource management, Pastel accounting and/or the masters degree in business administration (MBA) and to be present in class on the day of data collection. Due to students not being present in class on the day of data collection an actual sample of $n=122$ resulted.

3.5. DATA COLLECTION INSTRUMENTS AND THEIR VALIDITY AND RELIABILITY

Demographic data and four self report tools were compiled into one self report questionnaire to collect data (please see Appendix A). The questionnaire was offered in English only. In the first instance the academic institutions are English language mediums and it is assumed that participants will be able to answer the questionnaire in English. Secondly it is beyond the scope

of this dissertation to translate and validate scales for another language. The four tools are individually described below in accordance with the flow of the questionnaire, to facilitate cross referencing, rather than with the conceptual framework. Validity and reliability for each tool are included as an aspect of the description of each tool in order to improve the overall readability of this section (Terre Blanche et al., 2006).

3.5.1. Demographic data and their validity and reliability

In accordance with ethical principles only demographic data that was used in the data analysis process was obtained and these included age, gender and cultural group (Polit & Beck, 2006). Age was requested because previous studies have indicated an increase in danger perceptions with increasing age (Adewuya, and Makanjuola, 2008a; Link et al., 2004; Link et al., 1999). Gender was requested as women are typically viewed as more nurturing than males and may be less likely to engage in stigmatizing behavior (Link et al., 2004) while cultural group was required to potentially illustrate the representativeness of the sample to the KwaZulu-Natal population (Polit & Beck, 2006). Content validity of the demographic data (age, gender, and cultural group) is established through the extent to which these variables are central to studies in stigma (Adewuya & Oguntade, 2007; Adewuya & Makanjuola, 2008a; Byrne, 1997; Corrigan, Green et al., 2001; Corrigan, Edwards et al., 2001; Crisp et al., 2000; Hugo et al., 2003; Pescosolido et al., 2008; Rusch et al., 2005; Wahl, 1999).

3.5.2. The Social Distance Scale (SDS) and its validity and reliability

This tool was also developed by Link and associates (1987) and is available in the public domain (Link et al., 1987; Penn et al., 1999). The vignette used depicts the basic vignette developed by Link and colleagues (1987) and revised by Penn and colleagues (1999). The vignette is the point of reference for participants' responses on the SDS. The SDS is a 7-item tool that participants are required to rate on a 3-point willingness scale (0 = definitely willing, 1 = probably willing, 2 = probably unwilling and 3 = defiantly unwilling). Social distance is reflected in the participants self report on unwillingness to engage the mentally ill person in such activities as employing them to baby-sit, dating them, renting accommodation to them.

The internal consistency and thus reliability of this measure using Cronbach's alpha has been reported as $\alpha=0.92$ by Link (1987) and as $\alpha=0.75$ by Corrigan and colleagues (2001). Content validity is supported by Corrigan and colleagues (2001), Feldman and Crandall (2007), Holmes and colleagues (1999), Link and colleagues (1999), and Penn and colleagues (1999).

3.5.3. The Semantic Differential Measure (SDM) and its validity and reliability

This is a measurement technique, rather than a measurement tool, that provides a direct measurement of stereotyping (Link et al., 2004). It was developed in 1957 to measure the psychological meaning concepts have for people and was later applied to public conceptions of people with mental illness (Byrne, 1997; Crisp et al., 2000; Feldman & Crandall, 2007).

The semantic differential provides participants with target labels (e.g. Schizophrenic, mentally ill) and asks them to evaluate the extent to which these are associated with specific characteristics, such as dangerousness, on a 5 or 7 point scale. Each scale is bound by a set of polar adjectives such as "Very dangerous" through to "Not dangerous at all" (Link et al., 2004). Participants are also asked to rate the label of "average person" or "me" on identical response scales. Thus each characteristic to be rated against the target labels has the additional label of "average person" or "me". This additional rating provides a point of comparison for participants' evaluations of the target labels (Link et al., 2004).

The five labels evaluated in the SDM for this study were derived from the literature and expert opinion and to this extent, have content validity. They encompass the serious mental illnesses of schizophrenia, bipolar mood disorder and major depression (Corrigan 1998; Corrigan, Green, et al., 2001; Crisp et al., 2000; Pescosolido et al., 2008; Wahl, 1999); 'previously admitted to a psychiatric hospital' and 'average person'. 'Previously admitted to a psychiatric hospital' was included because a number of studies, including two local studies have suggested that the stereotyping of mental ill persons is greater for those who have been admitted for in-patient treatment than for out-patient care (Hugo et al., 2003; Link et al., 1987; Modiba, 2001). The label "average person" was used as a point of comparison for participants as this was perceived by expert opinion to be less threatening to participants than the use of "me".

Six characteristics, or stigmatizing attitudes, related to stereotyping of serious mental illness were identified within the current literature. These included the characteristics of dangerousness, unpredictability, incompetence, impaired communication, responsibility for illness, and non response to treatment (Adewuya & Makanjuola, 2008b; Adewuya & Oguntade, 2007; Byrne, 1997; Corrigan, Green et al., 2001; Crisp et al., 2000; Feldman & Crandall, 2007; Hugo et al., 2003; Pescosolido et al., 2008; Putman, 2008). These characteristics were evaluated on a 5-point scale with polar adjectives against each of the five labels (schizophrenia, bipolar mood disorder, major depressive disorder, previously admitted to a psychiatric hospital, and average person).

Table 3.1. Content validity for the characteristics on the semantic differential measure

Characteristics included	SDM Item number	Studies
Dangerous	1	Adewuya and Oguntade, 2007 Byrne, 1997. Corrigan, Green et al., 2001. Crisp et al., 2000. Feldman and Crandall, 2007. Pescosolido et al., 2008. Putman, 2008
Unpredictable	2	Adewuya and Oguntade, 2007 Corrigan, Green et al., 2001 Crisp et al., 2000. Putman, 2008
Incompetent or ineffectual	3	Adewuya and Oguntade, 2007 Byrne, 1997. Corrigan, Edwards et al., 2001. Putman, 2008 Rusch et al., 2005. Wahl, 1999.
Impaired communication	4	Crisp et al., 2000. Putman, 2008
Responsible or at fault for illness	5	Adewuya and Oguntade, 2007 Byrne, 1997. Corrigan, Green et al., 2001. Crisp et al., 2000. Feldman and Crandall, 2007 Hugo et al., 2003. Putman, 2008.
Response to treatment	6	Adewuya and Oguntade, 2007 Crisp et al, 200 Feldman and Crandall, 2007 Hugo et al, 2003 Putman, 2008 Wahl, 1999

Content validity for the characteristics was established by using characteristics relating to stereotyping of mental illness identified within the current literature. Table 3.1 identifies each characteristic included in the SDM (column 1 and 2) and its associated body of literature

(column 3). Face validity was addressed through expert opinions of mental health / research specialists at the presentation of the proposal to the UKZN School of Nursing. The extent of expert agreements was used to determine possible changes or additions to the tool (Polit & Beck, 2006).

Stability was checked by a test-retest to establish the extent to which the same scores were obtained when using the SDM with the same group of people on different occasions. Two persons, selected from the finance department at the researcher's work place, participated in the test-retest. Both met the core inclusion criteria for the sample; presently employed, and registered for a part time business management course. The SDM section of the questionnaire was completed by the participants in the test-retest on two separate occasions with a 72 hour time interval between first and second completion. A reliability coefficient was computed using Cronbach's alpha ($\alpha = 0.872$), indicating the stability of the SDM.

3.5.4. The Level of familiarity Questionnaire (LOC) and its validity and reliability

This tool was developed by Patrick Corrigan and colleagues at the Chicago Centre for Psychiatric Rehabilitation and is in the public domain available online at <http://www.stigmaresearch.org>. Email contact was made with Patrick Corrigan to indicate intention to use the tool and permission was confirmed (please see Appendix B1 for letter of confirmation and the scale).

The LOC contains a series of eleven yes/no questions regarding familiarity with mental illness. Familiarity is defined as the level of contact with a person with a SMI and can range from limited contact such as reading a magazine article, seeing a program on the television, to intimate contact and familiarity, such as personal daily contact (Angermeyer et al., 2003; Corrigan, Green, et al., 2001; Corrigan, Edwards, et al., 2001).

Participants were requested to tick all of the situations on the 11-item list that they have experienced in their life time. The situations vary in level of intimacy from least intimacy (I have never observed a person that I was aware had a serious mental illness) to medium intimacy

(I have worked with a person who had a serious mental illness at my place of employment) to high intimacy (I have a mental illness). Each situation has a score. The index for familiarity is the rank score of the most intimate situation ticked by the participant. For example, although a participant may tick three or more items the item that represents the most intimacy (the highest score) was the rank order score captured.

Content validity of this measure is supported by Corrigan, Edwards et al., (2001), Corrigan, Green, et al., (2001) and Holmes et al., (1999). Reliability was achieved when the level of contact was developed by Holmes and colleagues (1999). Three experts in psychiatric disability ranked the situation in terms of intimacy of contact. Validation of the rank order was achieved with a sample of a hundred participants and the mean rank order correlations summarizing inter-rater reliability was 0.83.

3.5.5. Emotional Reaction to Mental Illness Scale (ERMIS) and its validity and reliability

This instrument was developed by Matthias Angermeyer and Herbert Matschinger (2003) and translated into English by Rüsck and Brück (2007). Permission was granted from Prof. Dr. Matthias C. Angermeyer, Centre for Public Mental Health, Austria (please see Appendix B2 for the letter of permission and the scale).

The instrument makes use of a vignette depicting a case of serious mental illness (psychotic symptoms are evident) as a stimulus. Participants were required to respond on a 5 point Likert-type scale to 9 statements regarding their applicability to participant's personal emotional response. The statements comprise three subscales that indicate three emotional reactions: 'fear' (items 1, 2, 5) 'pity' (items 4, 7, 9) and 'anger' (items 3, 6, 8). Thus participants generated three scores from the three subscales from this instrument. Reverse scoring was used in all items; the higher the score the greater the strength of the emotional reaction.

The internal consistency of the three subscales within the instrument were measured by Cronbach's alpha and found to be good (fear: 0.79, pity: 0.74, anger: 0.77). Further confirmatory factor analysis to identify groups among the inter-correlations between the set of variables

yielded a fairly good fit for the three dimensions; fear, pity, anger, as indicated by: CFI = 0.953, TLI = 0.930 (Angermeyer & Matschinger, 2003).

3.6. DATA COLLECTION PROCEDURE

Written request for support was emailed to the heads of department at both academic institutions selected for the sample. This email include the information and consent sheet (see Appendix B) and clearly indicated the purpose of the study, the estimated time required for completion of the questionnaire, the ethical clearance number provided by UKZN Ethics committee, and the contact details of the researcher and the researcher's supervisor.

This was followed by a telephonic request to the heads of department for class schedules and contact details of individual lecturers. Telephonic contact and email confirmation with the departmental secretary of institution A and a personal meeting with the head of department in institution B resulted in a suitable time to deliver information and consent sheets to potential participants and confirmation of dates, times, and venues for data collection.

The venues for data collection were the lecture rooms. The data was collected from institution A on two separate occasions from two separate groups. Data was collected from Institution B on one occasion, from three separate groups. Data collection was completed within 7 days of commencement. Prior to the administration of the self report questionnaires, the researcher gave a brief verbal explanation of the purpose of the study, made available further copies of the information and consent sheet to participants, and estimated the time required to complete the questionnaire, stressing no names to be recorded and that completion of the questionnaires consisted of ticking items and no writing.

The researcher explained that no written consent was required and that their completion of the questionnaire signified implied consent. Anyone who did not consent was instructed to merely not complete the questionnaire. Motivation for the use of implied rather than written consent can be found under ethical considerations (p 47, paragraph 5). Time was given for questions to facilitate informed participation and to clarify misunderstandings. None of the participant asked

any questions before completing the questionnaire. During the completion of the questionnaire the researcher was asked for an explanation of item no 5 section 3 by two participants within the same participating group. This was explained as perceptions of responsibility for ill-health and this explanation seemed to satisfy the participants. No assistance or guidance was given to participants regarding answers selected. Completed questionnaires were placed in a sealed box by the participants and this was only opened by the researcher once the data collection process was completed.

3.7. ETHICAL CONSIDERATIONS AND DATA MANAGMENT

Both the researcher and research supervisor completed the UKZN Research Policy V Research Ethics on line course and certificates are attached in Appendix D1. The research proposal was presented to the School of Nursing Ethics Committee and then to the Ethics Committee at the University of KwaZulu-Natal for approval. The Approval and ethical clearance number are provided in Appendix D2.

Based on scientific honesty, the researcher acknowledged all others work and obtained permission to use the data collection instruments from Patrick Corrigan at the Chicago Centre for Psychiatric Rehabilitation (Level of Contact Questionnaire), and from Prof. Dr. Matthias C. Angermeyer, Centre for Public Mental Health, Austria (Emotional reaction to mental illness scale).

In reviewing the risk benefit ratio, the risk to participants was minimized in the following ways. Recognition of participants right to full disclosure was addressed by the information and consent sheet (please see Appendix C). Applied consent rather than signed consent ensured anonymity no names (individual, institutional or employer names) were recorded thus limiting the possibility of data being traced back to individuals or institutions. All information is and will remain in the confidential custody of the researcher, in a locked cabinet until it is destroyed within five years of analysis and reporting. Participants were assured of their right to not participate and to withdraw from the study, without prejudice, both in the information and consent sheet and again verbally at the beginning of the data collection session. Participants were also provided with

researcher and research supervisor contact information in order to exercise their rights for additional information about the study. Participants were informed that it would not be possible to withdraw their data from the study at a later stage since the data is anonymous to the researcher.

Implied consent is defined as “Consent to participate in a study that a researcher assumes has been given based on certain actions of the participant, such as returning a completed questionnaire...” (Polit & Beck, 2006, p 501). This is useful in situations where self report questionnaires are used to collect data and the researcher wants to assure participants of anonymity and attempt to reduce responses that may represent social desirability bias (Polit & Beck, 2006, p 300).

3.8. DATA ANALYSIS

Data was entered into SPSS and analysed using the statistical analysis program version 15.0. Descriptive statistics were used, to describe and synthesize data and calculate parameters in the form of frequency distributions, variability as well as contingency tables and correlation procedures. Inferential statistics were also calculated using both bivariate tests (parametric and nonparametric) and multivariate statistical analysis. Null hypotheses were assumed for the purpose of data analysis (Polit & Beck, 2006).

3.9. SUMMARY OF THE CHAPTER

This chapter presented the research design and methodology including a detailed description of the research instrument, issues of validity and reliability. The data collection process and ethical considerations related to the research process were highlighted. The chapter concluded with a brief summary of the data analysis which is the substance of Chapter 4. This chapter provides a detailed description of the statistical analysis of the data for each of the four tools that comprised the single self report questionnaire. This chapter also presents the data and findings from the data analysis in narrative form.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1. INTRODUCTION

Data was entered into SPSS using a code book and analysed using the statistical analysis package version 15.0. Initially the total target population included 167 post graduate students who met the inclusion criteria (N=167). Due to non attendance at class on the data collection day the final sample was n=122. Of this group 8 (6.5%) of the completed questionnaires had sections of missing data. The 'exclude cases list wise' option available in SPSS V 15 was selected to ensure that cases were only included in the analysis if they had the full data on all variables. Thus the sample of analysed data was n=114. This option was selected as the planned data analysis included extensive correlations and associations among groups of variables (Pallant, 2007).

Descriptive statistics in the form of frequency distributions cross tabulations, graphic representations, variability and inferential statistics were calculated, to describe and synthesize data and calculate parameters. The median, mode, minimum, maximum and the interquartile percentiles were requested as these measures of central tendency and distribution were suggested to have more meaning in this study than the mean and standard deviation (Pallant, 2007). The median, representing the mid point of participants score, rather than the arithmetic mean, an arithmetic average, is more appropriate to this study where the incidence of a specific response score is more pertinent than a mathematical average. The interquartile results, or percentiles, indicate the distribution of participant's responses. The median is the 50th percentile and this result indicates that 50% of participant's scores lie above and below this mid point or median. In the same way the 25th percentile indicates that 25% of participant's scores lie below this point, and the 75th percentile indicates that 75% of respondent's scores lie below that point. The mode reflects the most commonly reoccurring score and need not necessarily be the midpoint or median (Pallant, 2007; Polit & Beck, 2006; Tredoux & Durrheim, 2002).

A detailed description of the statistical analysis of the data for the demographic data and each of the four subsections (scales) that comprised the single self report questionnaire is presented in detail.

The data is presented in the following way. Firstly, frequency distributions, measures of central tendency and distribution are presented for the demographic data and each of the subsections / scales (LOC, SDM, ERMIS, and SDS). These are presented in keeping with the structure of the conceptual framework rather than the questionnaire to facilitate analysis of the data within the context of the stigmatizing process and the proposed path. Secondly, associations between demographic data namely age, gender and cultural group and scores on the scales (SDM, ERMIS, and SDS) are presented. Thirdly correlation procedures between scales and their results are presented. Due to the extensiveness of this section a summary of the results of all correlations is presented at its conclusion. The histograms and scatterplots are included as separate appendices, and will be referenced within the text, to facilitate cross checking and to prevent the chapter from becoming too cumbersome. Finally, a summary of the chapter is given.

4.2. DEMOGRAPHIC DATA

The sample is described through the creation of nominal scales, frequency counts, and cross tabulations of numbers and percentages of participants: age group, gender, and cultural group. Although the extent of familiarity with persons with serious mental illness is also part of the demographic data in this study this variable will be described separately (4.3) as it represents a scale of measurement (LOC) and a subsection of the questionnaire.

4.2.1. Demographic characteristics of the participants

The demographic variables are illustrated in Table 4.1. Participants comprised 57% (n=65) male and 44% (n=49) female. No participant reported being in the 18-20 age group. The largest portion of participants (46%, n=53) were found in the 31-40 age group. The second largest portion of participants were found in the 21-30 age group (34%, n=39). The later age groups namely the 41-50 years and the 51-60 years were least represented in the sample (13% (n=15))

and (6% (n=7) respectively)). The data indicates that the majority of participants ranged between 21–40 years (80%, n=92) of age. Of this group 54% (n=50) were male and 46% (n=42) female.

Table 4.1. Demographic variables; age, gender, and cultural group.

Age Groups	21-30		31-40		41-50		51-60		Total n=114	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Black / African	9	12	12	13	2	1	1	0	24	26
Coloured	3	2	0	1	0	0	0	0	3	3
Indian	4	4	16	3	6	4	1	1	27	12
White	2	3	4	4	2	0	3	1	11	8
Total	18	21	32	21	10	5	5	2	65	49

4.2.2. Representativeness of the sample

The majority of the participants were found to be between 21- 40 years of age (80%, n=92). Table 4.2 illustrates participant's gender and their membership to one of the four population/cultural groups (Table 4.2, column 1 'the study sample') and compares this to national (column 2) and provincial (column 3) population group statistics. With the exception of Indian females, who are possibly under represented, the distribution between males and females within the study sample is similar to national population gender distributions within cultural groups in that the genders are relatively equal in their distribution.

Table 4.2. Population groups: Study sample, national and provincial

	This Study Sample			National population estimates mid year 2008			Provincial population estimates 2001
	Total %	male	female	Total %	male	female	Total %
Black / African	44%	21%	22.8%	79.3%	79.2%	79.5%	22.6%
Coloured	5%	2.6%	2.6%	9%	9%	9%	3.6%
Indian	34%	23.6%	10.5%	2.6%	2.6%	2.5%	71.6%
White	17%	9.6%	7%	9.1%	9.2%	9%	11.3%

National and provincial statistics are available online at www.statssa.gov.za

Participant representation of the various cultural groups was as follows: 44% (n=50) Black/African, 34% (n=39) Indian, 17% (n=19) White and 5% (n=6) Coloured. This is not representative of the national mid-year population estimates (Statistics South Africa (SSA), 2008). National population estimates indicate a higher representation of Black/African members (79.3%) and Coloured members (9%), a lower representation from Indian (2.6%) and White (9.1%) members. However, provincial population group statistics for the KwaZulu-Natal province (which accounts for 21% of the total national population) are markedly different from national percentages (SSA, South African National Census, 2001). The national census (SSA, 2001) gives the most recent data related to provincial population group statistics and indicates for KwaZulu-Natal province, a smaller representation of the Black/African population group (22.6%) and a much higher representation of the Indian population group (71.6%).

In conclusion the study sample cannot be said to be absolutely representative of the total population of potential employers in KwaZulu-Natal but nor is it completely divergent. The male female representation, with the exception of Indian females, is equal or almost equal in distribution in keeping with national and provincial population statistics. Cultural group distribution is similar to the KwaZulu-Natal statistics in that the Indian participants comprise the largest portion of the sample followed by Black/African participants. White and the Coloured participants are the minority.

4.3. LEVEL OF FAMILIARITY / LEVEL OF CONTACT SCALE (LOC)

An ordinal scale was created (coded = LOC) and the single highest score for each participant was recorded. As described in the methodology chapter (p 44) familiarity is defined as the level of contact with a person with a SMI. As the level of contact becomes more intimate so the score increases with scores ranging from 1-11.

A Histogram and distribution curve was computed (please see Appendix E1) and the result suggests a normal distribution as does the skewness statistic (.250) and the standard error of skewness statistic (.226). This information is presented in Table 4.3.

Table 4.3. LOC: Central tendency and distribution

n	Valid	114
	Missing	0
Median		5.00
Mode		4
Skewness		.250
Std. Error of Skewness		.226
Minimum		1
Maximum		11
Percentiles	25	4.00
	50	5.00
	75	8.00

The mid point or median (Md=5), the point where the scores are divided in half, reflects 'observation of persons with a SMI on a regular basis' and suggests that 50% of the sample are above and below this level of familiarity. The range, as seen in Table 4.4, spans the entire scale (1-11).

Table 4.4 gives a description of the various levels of contact and illustrates the level of intimacy / contact of the participants of this study. The results are presented in descending order, from most frequent choice to least frequent choice and include distributions between gender and cultural group. The mode, the most frequently selected level of contact, revealed that level 4 was the most frequent level of contact amongst participants (n=36, 31.6%).

As displayed in table 4.4, 48% (n=55) of the participants selected levels of contact that indicated some personal contact with a person with a SMI, ranging between level 6, 'I have worked with a person with a serious mental illness' to 11, 'I have a serious mental illness'. Of this 48% (n=55), 44.6% (n=29) were male and 53% (n=26) female; 54% (n=27) were Black/African participants, 41.1% (n=16) were Indian participants, 50% (n=3) were Coloured participants, and 47.9% (n=9) were White participants.

Further, more intimate levels of personal contact, ranging between level 8, 'A friend of the family has a serious mental illness' and level 11 'I have a serious mental illness' were reported

by 34.3% (n=39) of the sample. Of this 34.3% (n=39), 30.7% (n=20) were male and 38.7% (n=19) were female; 28% (n=14) were Black/African participants, 38.5% (n=15) Indian participants, 33.3% (n=2) Coloured participants, and 30.8% (n=8) were White participants. There was thus a good proportion of the participants across gender and Black/African, Indian, Coloured, and White, who had higher levels of contact or intimacy with persons with a SMI.

Table 4.4. Level of contact / familiarity frequency distributions

Level of intimacy	Level score	Gender								n	%
		Male				Female					
		I	B/A	W	C	I	B/A	W	C		
4	'watching a documentary on television'	12	5	5		6	5	2	1	36	31.6
9	'I have a relative with a SMI'	7	1			4	4	1		17	14.9
8	'A friend of the family has a SMI'	3	2	2	1	1	3	1	1	14	12.3
6	'I have worked with a person with a SMI'	1	3		1		5			10	8.8
3	'I have seen a movie depicting a character with a SMI'	2	3			1	2	1	1	10	8.8
5	'I have observed persons with a SMI on a frequent basis'	1	2		1		2	1		7	6.1
7	'my job involves providing services or treatment for persons with a SMI'		3	1			2			6	5.3
10	'I live with a person with a SMI'		1	2			2	2		6	5.3
2	'I have observed in passing a person believed to have a SMI'		3				1			4	3.5
1	'never observed a person with a SMI'	1		1						2	1.8
11	'I have a SMI'		1					1		2	1.8
Total										114	100

I = Indian B/A = Black/ African W=White C= Coloured

4.4. SEMATIC DIFFERENTIAL MEASURE (SDM)

Each of the four mental illness labels were placed on an ordinal scale and coded: bp = bipolar mood disorder; sch = schizophrenia; dep = major depressive disorder; and hos = previous admission to a psychiatric hospital. Each of these four ordinal scales was then further refined and 6 ordinal scales were created within each mental illness label to represent each of the 6

stigmatizing attitudes. For example, bpd = bipolar mood disorder and dangerousness, bpu = bipolar mood disorder and unpredictability, bpde = bipolar mood disorder and incompetence, bpt = bipolar mood disorder and impaired communication, bpr = bipolar mood disorder and responsibility for mental illness, and bpre = bipolar mood disorder and potential for recovery.

The label 'average person' was not assigned a ordinal scale and no scores were calculated because its function was purely as a point of comparison for the participants to reduce the incidence of false positive rating of the four mental illness labels (Link et al, 2004).

Each stigmatizing attitude was assigned a numeric value from 1 for the positive polar adjective or non-stigmatizing attitude to 5 for the negative polar adjective or stigmatizing attitude. In this way higher scores indicated a greater tendency to a stigmatizing attitude. A score was generated for each stigmatizing attitude within each of the four mental illness labels giving a total of six scores per label per participant with a total of 24 scores that ranged from 1-5. Internal consistency of the SDM was then measured by calculating a Cronbach's coefficient alpha ($\alpha = .867$) suggesting good internal consistency (Pallant, 2007; Polit & Beck, 2006).

The data was then exported to excel and ordinal scales were created to represent each participant's total score for each of the four mental illness labels and for the total score on the SDM. The data was then imported back into SPSS V 15. Ordinal scales representing the SDM included: a score for each of the six (6) stigmatizing attitudes within each of the four mental illness labels (a total of 24 scores, each out of 5); a final score for each of the four mental illness labels (one score per label out of 30); and a final total score for the SDM (out of 120).

Histograms with distribution curves were computed for the total scores on each of the four mental illness labels and for the total score on the SDM in order to examine the shape of the distribution and test for normality (Please see Appendices E2a – E2e). These were confirmed by the Skewness statistics and Std. Error Skewness statistics (displayed in Table 4.5). Participant's scores displayed normal curves and distributions on three of the four mental illness labels: 'bipolar mood disorder', 'schizophrenia', and 'major depressive disorder'. The 'previous admission to a psychiatric hospital' label revealed a significant negative skew, the skewness statistic (-.694) being more than twice the size of the Std. Error skewness statistic (.226). The

skew to the left suggested a greater number of participants on the right hand side of the distribution, or negative polar adjectives. This distribution suggests greater stigmatizing attitudes towards this label than towards the other three mental illness labels.

Table 4.5. SDM: Central tendency and distribution

		Total score bipolar mood disorder	Total score schizophrenia	Total score major depressive disorder	Total score previous admission to a psychiatric hospital	Total SDM score
N	Valid	114	114	114	114	114
	Missing	0	0	0	0	0
Median		18.0000	20.0000	21.0000	23.0000	82.0000
Mode		19.00	20.00	20.00(a)	20.00(a)	87.00
Skewness		-.174	-.168	-.353	-.694	-.728
Std. Error of Skewness		.226	.226	.226	.226	.226
Minimum		8.00	9.00	9.00	8.00	37.00
Maximum		26.00	30.00	30.00	30.00	112.00
Percentiles	25	15.0000	18.0000	18.0000	20.0000	74.0000
	50	18.0000	20.0000	21.0000	23.0000	82.0000
	75	20.0000	22.0000	23.0000	26.0000	87.0000

a Multiple modes exist. The smallest value is shown

Although Table 4.5 reports similar modes for ‘schizophrenia’, ‘major depressive disorder’, and ‘previous admission to a psychiatric hospital’ the results also indicates multiple modes (a) for scores on the major depressive disorder label and on the previous admission to a psychiatric hospital label. The mode is the most commonly occurring score and thus in essence, within each of the labels reported to have a multiple mode, more than one score was achieved with the same frequency. Table 4.5 reports the smallest mode value and potentially gives the erroneous impression that the modes are similar when in fact examination of the multiple modes adds clarity.

The label ‘previous admission to a psychiatric hospital’ has two modes: scores of 20 and 25, both occurring 11 times, and the label ‘major depressive disorder’ has three modes; scores of 20, 21, and 23 all occurring 13 times. This indicates that although 11 participants scored 20/30 a further 11 participants scored 25/ 30 in relation to stigmatizing attitudes towards the person who has been previously admitted to a psychiatric hospital. This suggests greater negative polar adjective selection for the label ‘previous admission to a psychiatric hospital’ (Md=23, Mo=20 & 25,

range 8-30) than for the schizophrenia label (Md=20, Mo=20, range 9-30). The same follows for the label 'major depressive disorder' were 13 participants scored 20/30, a further 13 participants scored 21/30, and a further 13 participants scored 23/30. The scores indicate a greater selection of the negative polar adjectives for the major depressive disorder label (Md=21, Mo=20, 21, & 23, range 7-30) than the schizophrenia label (Md=20, Mo=20, range 9-30).

The results suggest that the 'previous admission to a psychiatric hospital' label has the greatest association with stigmatizing attitudes (Md=23, Mo=20 & 25, range 8-30). Followed by the major depressive disorder label (Md=21, Mo=20, 21, 23, range 7-30) then the schizophrenia label (Md=20, Mo=20, range 9-30). The results suggest that the 'bipolar mood disorder' is the label with the least associated stigmatizing attitudes (Md=18, Mo=19, range 8-26).

The distribution for the total score on the SDM also displayed a significant skew to the left (a negative skew), the skewness statistic (-.728) being more than twice the size of the Std. Error skewness statistic (.226) suggested that greater numbers of participants reflected greater stigmatizing attitudes overall. This is also suggested in the measures of central tendency and the range of scores (Md=82, Mo=87, range 37-112). All median scores, on all four of the mental illness labels, were above 50% of the available score (30). The median for three of the mental illness labels: 'schizophrenia' (Md=20), 'major depressive disorder' (Md=21), and 'previous admission to a psychiatric hospital' (Md=23) were above 66% of the available score. The maximum score (30) recorded for these three labels: 'schizophrenia' (n=1), 'major depressive disorder' (n=1), and 'previous admission to a psychiatric hospital' (n=5) all represent the maximum score available and thus the extreme negative polar adjective or stigmatizing attitudes.

These results are confirmed by the frequency distributions displayed in Table 4.6. This table shows the range of participants scores (column 2-6) regarding each of the stigmatizing attitudes per mental illness label (column 1). Results indicate that participants recorded the greatest negative perceptions in relations to 'previous admission to a psychiatric hospital' on all six stigmatizing attitudes.

Table 4.6.

SDM: Frequency distributions

Stigmatizing attitudes and SMI labels	Range of stigmatizing attitudes									
	+ polar adjective					- polar adjective				
	1		2		3		4		5	
	n	%	n	%	n	%	n	%	n	%
Dangerousness										
Bipolar mood disorder	9	7.9	34	29.9	42	36.8	23	20.2	6	5.3
Schizophrenia	1	.9	15	13.2	49	43	32	28.1	17	14.9
Major depressive disorder	5	7.9	17	29.8	40	36.8	23	20.2	6	5.3
Previous hospitalization	2	1.8	8	7	23	20.2	34	29.8	47	41.2
Unpredictability										
Bipolar mood disorder	5	4.4	12	10.5	32	28.1	35	30.7	30	26.3
Schizophrenia	2	1.8	8	7	25	21.9	51	44.7	28	24.6
Major depressive disorder	3	2.6	12	10.5	15	13.2	61	53.5	23	20.5
Previous hospitalization	5	4.4	8	7	19	16.7	30	26.3	52	45.6
Incompetence										
Bipolar mood disorder	10	8.8	39	34.2	39	34.2	21	18.4	5	4.4
Schizophrenia	3	2.6	21	18.4	45	39.5	28	24.6	17	14.9
Major depressive disorder	4	3.5	14	12.3	34	29.8	40	35.1	22	19.3
Previous hospitalization	4	3.5	7	6.1	24	21.1	38	33.3	41	36
Impaired communication										
Bipolar mood disorder	8	7	31	27.2	43	37.7	18	15.8	14	12.3
Schizophrenia	6	5.3	18	15.8	46	40.4	30	26	14	12.3
Major depressive disorder	3	2.6	14	12.3	26	22.8	44	38.6	27	23.7
Previous hospitalization	3	2.6	15	13.2	29	25.4	33	28.9	34	29.8
Responsible for mental illness										
Bipolar mood disorder	14	12.3	33	28.9	50	43.9	12	10.5	5	4.4
Schizophrenia	19	16.7	19	16.7	46	40.4	23	20.2	7	6.1
Major depressive disorder	11	9.6	16	14	35	30.7	36	31.6	16	14
Previous hospitalization	15	13.2	15	13.2	36	31.6	28	24.6	20	17.5
Potential for recovery										
Bipolar mood disorder	11	9.6	35	30.7	40	35.1	21	18.4	7	6.1
Schizophrenia	10	8.8	17	14.9	46	40.4	25	21.9	16	14
Major depressive disorder	9	7.9	28	24.6	36	31.6	32	28.1	9	7.9
Previous hospitalization	9	7.9	17	14.9	29	25.4	32	28.1	27	23.7

Results pertaining to the other mental illness labels revealed that: 'Schizophrenia' was reported as more dangerous and having less potential for recovery than 'major depressive disorder' and 'bipolar mood disorder'. 'Bipolar mood disorder' was reported as more unpredictable than 'schizophrenia' and 'major depressive disorder'. Finally, 'major depressive disorder' was reported as more; incompetent, unable to communicate, and responsible for mental illness than 'schizophrenia' and 'bipolar mood disorder'.

4.5. EMOTIONAL REACTION TO MENTAL ILLNESS SCALE (ERMIS)

Three ordinal scales were created (coded: ERA = anger; ERP = pity; and ERF = fear) and assigned numerical values. Scores were reversed to allow for data analysis. Higher scores related to a strong emotional response rather than a weak emotional response. Each of the three subscales of the ERMIS (anger, pity, fear) represent a combination of 3 individual item scores (each out of 5), added together and divided by 3 to obtain a single composite score for each subscale, with a range of 1-5.

Table 4.7. ERMS: Central tendency and distribution

		emotional reaction fear	emotional reaction pity	emotional reaction anger
N	Valid	114	114	114
	Missing	0	0	0
Median		3.000	4.000	2.000
Mode		3.0	4.0	2.0
Skewness		-.126	-.051	.452
Std. Error of Skewness		.226	.226	.226
Minimum		.6	2.0	1.0
Maximum		5.0	5.0	4.0
Percentiles	25	2.000	3.000	1.000
	50	3.000	4.000	2.000
	75	4.000	4.000	3.000

Histograms for each of the three subscales (please see Appendices E3a – E3c) revealed normal distributions on the fear and pity scales and a positive skew (skewed to the right) on the anger scale indicating that participants scores tended to indicate a greater distribution in the lower

scores for anger (Md=2, Mo= 2, range = 1-4). As shown in Table 4.7, this skewed distribution was confirmed by the skewness statistic (.452) being exactly twice the size of the Std. Error of skewness statistic (.226). Anger was indicated as the least experienced emotion (Md=2, Mo=2, range 1-4), and pity the most commonly experienced emotion (Md=4, Mo=4, range 2-5).

4.6. SOCIAL DISTANCE SCALE (SDS)

Each of the seven ratings was assigned a numeric value from 0 (definitely willing) to 3 (definitely unwilling). In this way higher scores indicate a greater tendency to the desire for social distance. Scores for each item were added together and divided by 7 to form a composite social distance measure varying from 0-3 (Link, 1987). An ordinal scale was then created (coded = SDS) and the single composite score for each participant recorded. The histogram (please see Appendix E4) and skewness statistics (displayed in Table 4.8), suggest a normal distribution of scores. The median (Md=1.390) reflects a position between ‘probably willing’ and ‘probably unwilling’. Just less than half the participants (44.7%, n=51) had a composite score of 1 ‘probably willing’. The second largest representation of participants composite scores was ‘probably unwilling’ (37.7%, p=43).

Table 4.8. SDS: Central tendency and distribution

N	Valid	114
	Missing	0
Median		1.3900
Mode		1.00
Skewness		.235
Std. Error of Skewness		.226
Minimum		.00
Maximum		3.00
Percentiles	25	1.0000
	50	1.3900
	75	2.0000

The results indicate that the bulk of participants’ scores are represented by these two central options on the scale. Only 4.4% (n=5) of participants had a composite score of ‘definitely willing’, and 9.6% (n=11) represented ‘definitely unwilling’. All other scores within these

parameters, between 1 and 2, and between 2 and 3, recorded the same incidence .9% (n=1).

Despite the scale having four options, eliminating a central or middle ground, the participants still seemed to cluster around the two central options (82.4%, n=94). These choices could represent their actual opinions, or be related to social desirability bias and issues of human rights and discrimination in the South African context. This will be discussed further in chapter 5.

4.7. ASSOCIATIONS AND CORRELATIONS

The presence of outliers in the box plots and the negative skew distributions on the SDM scores ('previous admission to a psychiatric hospital' label scores and the total SDM scores), and the positive skew on the ERMIS (anger subscale) combined with the size of the sample (n=114) led to the use of non parametric tests.

Non parametric or distribution free tests are suggested to be more robust than parametric tests when there are violations of the assumptions of symmetry of the population distribution and outliers in the data set are present (Lachenicht in Tredoux & Durrheim, 2002, p386).

The non parametric or distribution-free tests used in this study to test associations are describe below and those that were used to test for correlations are described at the beginning of the section on correlations (point 4.7.2, p 71).

4.7.1. ASSOCIATIONS

For the purpose of this section of the data analysis the demographic data, age, gender and cultural group, were viewed as the independent variables and the scores on the scales (SDM, ERMIS, SDS) as the dependent variables.

Mann-Whitney U Test was used to test for associations between two independent groups on a continuous measure by converting the scores on the continuous variable to ranks and comparing medians (Pallant, 2007, p 220). The Mann-Whitney U test was also used to test associations

between gender (one categorical variable with two groups) and stigmatizing attitudes (SDM), emotional reactions to SMI (ERMIS), and desire for social distance (SDS).

Kruskal-Wallis H Test allows for the comparison of scores on a continuous variable for three or more groups (Pallant, 2007). The Kruskal-Wallis H Test was used to test for associations between cultural group (one categorical variable with four groups) and stigmatizing attitudes (SDM), emotional reactions (ERMIS), and desire for social distance (SDS). The Kruskal-Wallis H Test was also used to test for associations between age group (one categorical variable with five groups) and stigmatizing attitudes (SDM), emotional reactions (ERMIS), and desire for social distance (SDS).

Results are specifically reported where there is significant ($p < .05$) and possible trends (p value between .05 and 1). The approximation of the effect size (r), or strength of the association, was calculated using the formula $r = Z / \text{square root of } N$ where N equals the total number of cases (Pallant, 2007, p 223). Determination of the value of the effect size makes use of Cohen's (1988) (Cohen in Pallant, 2007, p223) criteria of .1 = small / weak effect, .3 = medium / moderate effect, and .5 = large / strong effect.

These next sections present the data per demographic variable.

4.7.1.1. Gender associations

The results of the Man-Whitney U test comparing medians between the two genders for each of the 6 stigmatizing attitudes on all of the four mental illness labels, measured by the SDM, are outlined in Table 4.9. (p 63). The median scores between males and females in relation to stigmatizing attitudes are identical on 20 of the 24 items representing the 6 stigmatizing attitudes within the four mental illness labels.

Significant differences pertained to the perception of the bipolar mood disorder label as dangerous of males ($Md=3$, $n=65$) and females ($Md=3$, $n=49$), $U=1126.000$, $Z = -2.792$, $p = .005$, $r = .261$.

Table 4.9. Mann-Whitney U Test Associations: Gender and stigmatizing attitudes (SDM)

Stigmatizing attitudes	Gender						p value
	Male			Female			
	Percentile 25	Median	Percentil e 75	Percentil e 25	Median	Percentile 75	
bp dangerousness	2.00	3.00	4.00	2.00	3.00	3.00	.005
bp unpredictable	3.00	4.00	5.00	3.00	3.00	4.00	.074
bp incompetent	2.00	3.00	3.00	2.00	2.00	3.00	.088
bp impaired communication	2.00	3.00	4.00	2.00	3.00	3.00	.126
bp responsible for mental illness	2.00	3.00	3.00	2.00	3.00	3.00	.836
bp potential for recovery	2.00	3.00	3.00	2.00	3.00	4.00	.694
sch dangerousness	3.00	3.00	4.00	3.00	3.00	4.00	.199
sch unpredictable	3.00	4.00	5.00	3.00	4.00	4.00	.399
sch incompetent	3.00	3.00	4.00	3.00	3.00	4.00	.568
sch impaired communication	3.00	3.00	4.00	2.00	3.00	4.00	.175
sch responsible for mental illness	2.00	3.00	3.00	2.00	3.00	4.00	.669
sch potential for recovery	3.00	3.00	4.00	2.00	3.00	4.00	.294
dep dangerousness	3.00	3.00	4.00	3.00	4.00	4.00	.415
dep unpredictable	3.00	4.00	4.00	4.00	4.00	4.00	.493
dep incompetent	3.00	4.00	4.00	3.00	4.00	4.00	.659
dep impaired communication	3.00	4.00	4.00	3.00	4.00	4.00	.175
dep responsible for mental illness	3.00	3.00	4.00	2.00	3.00	4.00	.953
dep potential for recovery	2.00	3.00	4.00	2.00	3.00	4.00	.676
hos dangerousness	3.00	4.00	5.00	3.00	4.00	5.00	.797
hos unpredictable	3.00	4.00	5.00	3.00	4.00	5.00	.701
hos incompetent	3.00	4.00	5.00	3.00	4.00	5.00	.725
hos impaired communication	3.00	4.00	5.00	3.00	4.00	5.00	.870
hos responsible for mental illness	3.00	3.00	4.00	2.00	3.00	4.00	.426
hos potential for recovery	3.00	4.00	4.00	2.00	3.00	5.00	.762

bp= bipolar mood disorder

sch = schizophrenia

dep = Major depressive disorder

hos = previous admission to a psychiatric hospital

Although, as seen in Table 4.9, the medians are the same for both males and females, the 75th percentile indicates that 75% of the scores for males were at or below a score of 4 while 75% of females' scores were at or below a score of 3. Thus the results indicate that males rated

dangerousness higher than females. Other differences that may suggest a trend pertained to two other stigmatizing attitudes within the bipolar mood disorder label. Firstly, males perceived greater unpredictability (Md = 4, n=65) than females (Md =3, n=49) $U= 12915.500$, $Z= -1.787$, $p=.074$, $r = .167$. The 75th percentile indicates that 75% of male scores lay at and below 5; while 75% of female scores lay at or below 4.

The results suggest that males rated unpredictability higher than females. Secondly, another possible trend between males and females is indicated in perceived incompetence. Although the 25th and 75th percentiles are the same the median scores suggest that males achieved greater scores, rated incompetence higher, (Md = 3, n=65) than females (Md = 2, n = 49) $U= 1307.500$, $Z = -1.707$, $p = .088$, $r = .159$.

The results suggest that male participants held to more negative polar adjectives (stigmatizing attitudes) than females. However, in all three associations between gender and stigmatizing attitudes reported above, the effect size (dangerousness $r = .261$; unpredictability $r = .167$; and incompetence $r = .159$) is small and suggests that a small portion of variance of the stigmatizing attitudes: dangerousness, unpredictability and incompetence, is explained by gender.

Associations between gender and scores on the ERMIS revealed no significant association between: gender and pity (ERP) $U=1570.500$, $Z= -.132$, $P=.895$; and gender and anger (ERA) $U=1564.000$, $Z= -.173$, $p=.863$. A trend may be suggested by the results pertaining to males (Md=3, n=65) and females (Md=3, n=49) and fear (ERF) $U=1293.500$, $Z= -1.788$, $p=.074$, $r = .167$. Although the medians are the same males have a slightly wider range (.6-5) than females (1-5) and suggest the possibility of greater fear being experienced by females. Again the effect size is small and suggests that a small portion of variance of fear is explained by gender.

Associations between gender and the composite score on the SDS revealed a significant difference in the desire for social distance of males (Md=2, n=65) and females (Md=1, n=49), $U=1237.000$, $Z=-2.199$, $p=.028$, $r = .205$. Comparison of the median scores of males (Md =2 = probably unwilling) and females (Md = 1 = probably willing), suggests that male participants desired greater social distance from persons with a serious mental illness than female

participants. Again this may be linked to assumption of nurturing in females (Link et al., 2004) and the results of gender associations with stigmatizing attitudes that report male participant scores closer to the negative polar adjective for perceptions of dangerousness, unpredictability and incompetence. However the effect size ($r = .205$) is small and suggests that a small portion of the variance in the desire for social distance can be explained by gender.

4.7.1.2. Age associations

There were no statistically significant association between the age groups and stigmatizing attitudes measured by the SDM. The results of the Kruskal-Wallis H Test and the associations between age group and stigmatizing attitudes are displayed in Table 4.10. (p 66). This table also displays the medians, and percentiles of each of the age groups and the stigmatizing attitudes.

The Kruskal-Wallis H Test revealed no statistically significant association between age groups and scores on the ERMIS: age and fear (ERF) = $\chi^2(2, n=114) = 2.606, p=12.584, p=.456$; age and pity (ERP) = $\chi^2(2, n=114) = .857, p=.836$; and age and anger (ERA) = $\chi^2(2, n=114) = .535, p=.911$.

The Kruskal-Wallis H Test did reveal a possible trend between differences in desire for social distance (SDS) and the four age groups (group 2 (21-30 years), $n=39$; group 3 (31-40 years), $n=53$; group 4 (41-50 years), $n=15$; and group 5 (51-60 years), $n=7, \chi^2(2, n=114) = 7.745, p=.052$. Group 5 and 3 achieved the highest median score related to desire for social distance. The older age group, group 5, achieved the same median score ($Md=2$) as group 3 but recorded a shorter range (1-3) than group 3 (0-3). The range suggests a possible greater desire for social distance in group 5 than group 3.

Table 4.10. Results of Kruskal-Wallis H Test : Age and stigmatizing attitudes (SDM)

Stigmatizing attitudes	Age												P value
	21-30			31-40			41-50			51-60			
	Percentile 25	Median	Percentile 75										
bp d	2.00	3.00	3.00	2.00	3.00	4.00	2.00	3.00	4.00	2.00	2.00	3.00	.705
bp u	3.00	4.00	5.00	3.00	3.00	5.00	3.00	4.00	5.00	2.00	4.00	4.00	.930
bp i	2.00	3.00	3.00	2.00	3.00	3.00	2.00	3.00	4.00	2.00	3.00	4.00	.425
bp com	2.00	3.00	4.00	2.00	3.00	4.00	2.00	3.00	4.00	2.00	2.00	5.00	.872
bp res	2.00	3.00	3.00	2.00	3.00	3.00	1.00	3.00	3.00	2.00	3.00	3.00	.942
bp rec	2.00	3.00	4.00	2.00	3.00	3.00	2.00	3.00	4.00	3.00	3.00	4.00	.972
sch d	3.00	3.00	4.00	3.00	3.00	4.00	3.00	3.00	4.00	2.00	3.00	3.00	.337
sch u	3.00	4.00	5.00	3.00	4.00	4.00	3.00	4.00	4.00	2.00	4.00	4.00	.279
sch i	3.00	3.00	4.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	3.00	4.00	.701
sch com	3.00	3.00	4.00	3.00	3.00	4.00	3.00	3.00	4.00	2.00	3.00	4.00	.887
sch res	2.00	3.00	4.00	2.00	3.00	3.00	1.00	3.00	3.00	2.00	3.00	4.00	.465
sch rec	2.00	3.00	4.00	3.00	3.00	4.00	2.00	4.00	5.00	3.00	4.00	4.00	.651
dep d	3.00	3.00	4.00	3.00	4.00	4.00	2.00	3.00	4.00	2.00	3.00	4.00	.192
dep u	3.00	4.00	4.00	4.00	4.00	5.00	3.00	4.00	4.00	3.00	4.00	4.00	.279
dep i	3.00	4.00	5.00	3.00	4.00	4.00	3.00	3.00	4.00	2.00	4.00	4.00	.683
dep com	3.00	4.00	5.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	.954
dep res	3.00	4.00	4.00	2.00	3.00	4.00	3.00	4.00	4.00	2.00	4.00	4.00	.432
dep rec	2.00	3.00	4.00	2.00	3.00	4.00	2.00	2.00	4.00	3.00	4.00	4.00	.447
hos d	3.00	4.00	5.00	3.00	4.00	5.00	4.00	5.00	5.00	3.00	4.00	5.00	.374
hos u	3.00	4.00	5.00	3.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	.889
hos i	3.00	4.00	5.00	3.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	.448
hos com	3.00	4.00	4.00	3.00	4.00	5.00	3.00	4.00	5.00	4.00	4.00	5.00	.317
hos res	2.00	3.00	4.00	2.00	3.00	4.00	3.00	4.00	5.00	1.00	4.00	5.00	.573
hos rec	3.00	4.00	5.00	3.00	3.00	4.00	2.00	4.00	5.00	3.00	4.00	5.00	.759

bp= bipolar mood disorder sch = schizophrenia dep = Major depressive disorder hos = previous admission to a psychiatric hospital
d = dangerousness u = unpredictability i = incompetent com = impaired communication res = responsible for mental illness rec = potential for recovery

The Mann-Whitney U Test was used to compare group 3 and 5 and the scores on the SDS, $U=165.000$, $Z= -.516$, $p= .606$, revealed no significant difference between the two groups. The Bonferonni adjustment to the alpha was not used as only the two groups (3 and 5) were compared once. Groups 2 and 4 both achieved the same median ($Md=1$) with group 4, the older of the two age groups, recording a shorter range (1-3) than group 2 (0-3).

The median score and range of group 5, the oldest group, suggest that, as reported in previous studies, there may be a greater desire for social distance with advancing age (Adewugya and Makanjuola, 2008a; Link et al., 1999; Link et al., 2004)

4.7.1.3. Cultural group associations

Within three of the mental illness labels, 'major depressive disorder', 'previous admission to a psychiatric hospital', and 'bipolar mood disorder' the Kruskal-Wallis H Test revealed statistically significant differences (displayed in Table 4.11. p 68) amongst stigmatizing attitudes between the participants representing the four cultural groups within this study (Black/African, $n=50$; Indian, $n=39$; Coloured, $n=6$; White, $n=19$). Table 4.11 also displays the medians and percentiles for the different participating cultural groups and stigmatizing attitudes measured by the SDM. The descriptions of associations below are per mental illness label.

Within the 'major depressive disorder' label significant differences were revealed. Firstly, perceptions of dangerousness ($\chi^2(2, n=114) = 8.448$, $p=.038$) differed between the cultural groups. The Black/African participants recording a higher median score ($Md = 4$) than the three other cultural groups who all recorded the same median value ($Md = 3$). Percentiles also revealed a higher 25th percentile for the Black/African and Indian participants (3) than the Coloured and White participants (2). The 75th percentile is the same for all participants (4) except Coloured participants (3). The results suggest greater perceptions of dangerousness from Black/ African participants and least perceptions of dangerousness from the Coloured participants.

Table 4.11. Results of Kruskal-Wallis H Test: Cultural group and stigmatizing attitudes (SDM)

Stigmatizing attitudes	cultural group												P value
	Black / African			Indian			Coloured			White			
	Percentile 25	Median	Percentile 75	Percentile 25	Median	Percentile 75	Percentile 25	Median	Percentile 75	Percentile 25	Median	Percentile 75	
bp d	2.00	3.00	3.00	2.00	3.00	4.00	3.00	3.00	4.00	2.00	3.00	4.00	.300
bp u	3.00	3.00	4.00	3.00	4.00	5.00	4.00	4.00	4.00	2.00	3.00	5.00	.473
bp i	2.00	3.00	3.00	2.00	3.00	4.00	2.00	2.00	3.00	2.00	2.00	3.00	.271
bp com	2.00	3.00	4.00	2.00	3.00	4.00	2.00	2.00	2.00	2.00	2.00	4.00	.075
bp res	2.00	3.00	3.00	2.00	3.00	3.00	2.00	2.50	3.00	2.00	3.00	3.00	.688
bp rec	2.00	3.00	3.00	2.00	3.00	4.00	1.00	2.00	3.00	2.00	3.00	4.00	.269
sch d	3.00	3.00	4.00	3.00	4.00	4.00	3.00	3.00	4.00	3.00	3.00	3.00	.170
sch u	3.00	4.00	5.00	3.00	4.00	4.00	4.00	4.50	5.00	3.00	4.00	4.00	.125
sch i	3.00	3.00	4.00	3.00	3.00	4.00	2.00	3.00	4.00	3.00	3.00	3.00	.449
sch com	3.00	3.00	4.00	3.00	3.00	4.00	2.00	2.50	3.00	3.00	3.00	4.00	.359
sch res	3.00	3.00	4.00	2.00	3.00	3.00	2.00	2.00	2.00	2.00	3.00	4.00	.213
sch rec	2.00	3.00	4.00	3.00	3.00	4.00	1.00	3.00	5.00	3.00	3.00	4.00	.665
dep d	3.00	4.00	4.00	3.00	3.00	4.00	2.00	3.00	3.00	2.00	3.00	4.00	.038
dep u	4.00	4.00	5.00	4.00	4.00	4.00	2.00	3.50	4.00	2.00	4.00	4.00	.009
dep i	3.00	4.00	5.00	3.00	4.00	4.00	2.00	2.50	3.00	3.00	3.00	4.00	.023
dep com	3.00	4.00	4.00	3.00	4.00	5.00	2.00	3.50	5.00	3.00	4.00	4.00	.381
dep res	3.00	4.00	4.00	3.00	3.00	4.00	2.00	3.00	4.00	2.00	3.00	3.00	.078
dep rec	2.00	3.00	4.00	2.00	3.00	4.00	1.00	2.00	3.00	2.00	3.00	4.00	.292
hos d	4.00	4.00	5.00	4.00	4.00	5.00	3.00	3.50	5.00	3.00	4.00	4.00	.080
hos u	3.00	4.00	5.00	4.00	5.00	5.00	3.00	3.50	4.00	3.00	4.00	4.00	.006
hos i	3.00	4.00	5.00	4.00	4.00	5.00	3.00	3.50	4.00	3.00	4.00	4.00	.119
hos com	3.00	4.00	5.00	3.00	4.00	5.00	2.00	4.00	4.00	3.00	4.00	4.00	.498
hos res	3.00	3.00	4.00	2.00	3.00	4.00	2.00	2.50	4.00	2.00	3.00	3.00	.225
hos rec	2.00	3.00	5.00	3.00	4.00	4.00	1.00	3.50	4.00	3.00	3.00	4.00	.581

bp= bipolar mood disorder

sch = schizophrenia

dep = Major depressive disorder

hos = previous admission to a psychiatric hospital

d = dangerousness u = unpredictability i = incompetent

com = impaired communication

res = responsible for mental illness rec = potential for recovery

Secondly, perceptions of unpredictability differed between the cultural groups ($\chi^2(2, n=114) = 11.473, p=.009$). Coloured participants recorded a lower median score (Md = 3.50) than the other three cultural groups who all recorded the same median value (Md=4). In addition Coloured and White participants achieved a lower score on the 25th percentile (2) compared to the Black/African and Indian participants (3). White participants recorded 75% of their scores from 3 and below while the other three cultural groups recorded 75% of their scores from 4 and below.

The results suggest that White participants' perceptions of unpredictability were lower than Coloured participants and that White and Coloured participants' perceptions were lower than Indian and Black/African participants who achieve the same scores.

Thirdly, perceptions of incompetence differed between the four cultural groups ($\chi^2(2, n=114) = 9.552, p=.023$). Coloured participants recorded a lower median score (Md=2.50) than White participants (Md=3), and Indian and Black/African participants both recorded the same median value (Md=4). Coloured participants reflected a 25th percentile (2) that is lower than the other three groups (3). The Black/African participant's results indicated a higher 75th percentile (5) than the other three groups. These results suggest that Coloured participants had lower perceptions of incompetence than the other three cultural groups participating and that Black/African participants had greater perceptions of incompetence.

Lastly, although not significant, the difference between the cultural groups and perceptions of responsibility for mental illness on the major depressive disorder label may suggest a trend ($\chi^2(2, n=114) = 6.813, p=.078$). The median scores and percentiles suggest that Black/African (Md=4, 25th percentile =3 and 75th percentile =4) participants may be more likely to perceive the person with a major depressive disorder as responsible for their mental illness than Indian participants (Md=3, 25th percentile=3, 75th percentile=4), Coloured participants (Md=3, 25th percentile=2, 75th percentile=4), and White participants (Md=3, 25th percentile =2, 75th percentile =3).

Stigmatizing attitudes within the 'previously admitted to a psychiatric hospital' label revealed one statistically significant difference and one possible trend. Firstly, perceptions of unpredictability differed between the cultural groups ($\chi^2(2, n=114)=12.684, p=.006$). Indian participants showed a higher median score (Md=5) than the Black/African and White participants who both recorded the same median value (Md=4) and Coloured participants (Md=3.50). The 25th percentile revealed that 25% of Indian participants achieved a score of 4 and below while the 25th percentile for the other three cultural groups indicated that 25% of participants achieved a score of 3 and below. The 75th percentile is higher for the Indian and Black African participants (5) than the Coloured and White participants (4). The results suggest that Indian participants perceived the person who had previously been admitted to a psychiatric hospital as more unpredictable (Md=5, 25th percentile = 4, 75th percentile = 5) than Black/African participants (Md=4, 25th percentile = 3, 75th percentile = 5), White participants (Md=4, 25th percentile = 3, 75th percentile = 4), and Coloured participants (Md=3.5, 25th percentile = 3, 75th percentile = 4).

Secondly, on the same mental illness label, 'previously admitted to a psychiatric hospital', a possible trend is suggested for differences between the different cultural groups' perceptions of dangerousness ($\chi^2(2, n=114)=6.757, p=.080$). Coloured participants achieved a lower median (Md=3.5) than the other three cultural groups who achieved the same median value (Md=4). Both Coloured and White participants recorded a 25th percentile of 3, indicating that 25% of participants in these groups lay at or below a score of 3. The 25th percentile for Indian and Black/African participants was 4. The 75th percentile revealed that 75% of White participants lay at or below a score of 4 while 75% the other three cultural groups participating lay at and below a score of 5. The results suggest that White participants (Md=4, 25th percentile=3, 75th percentile =4) and Coloured participants (Md=3.5, 25th percentile = 3, 75th percentile = 5) perceived the person who has previously been admitted to a psychiatric hospital as less dangerous than Indian and Black/African participants (Md=4, 25th percentile =4, 75th percentile =5).

The bipolar mood disorder label revealed only a possible trend between differing perceptions of impaired communication between the cultural groups ($\chi^2(2, n=114)=6.894, p=.075$). The median values indicated greater perceptions of impaired communication amongst Black/ African and Indian participants (Md=3) than White and Coloured participants (Md=2). Percentiles revealed that 75% of the black African, Indian and White participants' scores lay at and below 4 while 75% of the Coloured participants scores lay at and below 2. The 25 percentile was the same for all cultural groups (2).

The results of this study suggest that Coloured participants stigmatized less than the other three cultural groups. White participants stigmatized less than Indian and Black/ African participants. Black/African participants held greater stigmatizing attitudes than the other three cultural groups. This is in keeping with assertion by Corrigan and Edwards et al (2001) that minority groups tend to stigmatize less than other groups. In KwaZulu-Natal and in this study, the Coloured and White cultural groups form the two minority groups.

Results of the Kruskal-Wallis Test between cultural group and emotional reactions, measured by the ERMIS, revealed no association between cultural group and scores on the ERMIS: cultural group and fear ($\chi^2(2, n=114)=4.029, p=.258$); cultural group and pity ($\chi^2(2, n=114)=6.190, p=.103$); and cultural group and anger ($\chi^2(2, n=114)=6.229, p=.101$).

Finally, the Kruskal-Wallis Test revealed no significant association between cultural group and a desire for social distance, measured by the SDS, ($\chi^2(2, n=114)=8.448, p=.594$), suggesting that the extent of the desire for social distance is not related to cultural group.

4.7.2. CORRELATIONS

Correlation coefficients were calculated to establish the existence of positive or negative relationships and their strength. As outlined in section 4.7. (p 61) a non parametric test

was used as these tests are suggested to be more robust when the assumptions for parametric tests are violated. Spearman's rho Correlation Coefficient was used to investigate correlations between the various scales. Results are specifically reported where there is significance ($p < .05$). The guidelines provided by Cohen (1988, in Pallant, 2007, p132) were used to determine the size of the value (strength) of the correlation coefficient. Thus strength of the correlation is determined as small/weak ($\rho = .10$ to $.29$), medium/moderate ($\rho = .30$ to $.49$), and large/strong ($\rho = .50$ to 1.0). Strong correlations coefficients ($\rho > .50$) were seen as definitive relationships and moderate correlations coefficients ($\rho > .40$) were seen a possible trends. In several instances although the p values suggest significance, the correlation coefficients are weak and this may be related to the size of the sample and not to the actual significance of the results.

The stigmatizing path outlined in chapter one (p 8) suggests that stigmatizing attitudes, measured by the SDM, influence emotional reaction, measured by the ERMIS, which in turn determines the desire for social distance, measured by the SDS. Familiarity, measured by the LOC, is suggested to have a mediating effect on stigmatizing attitudes and thus on the path. Correlations were carried out in accordance with the proposed path and are presented in two phases. Within each of the three phases are sets of correlations to establish the existence, strength and direction of relationships. Each phase includes a schematic representation of the subsets of correlations to facilitate clarity.

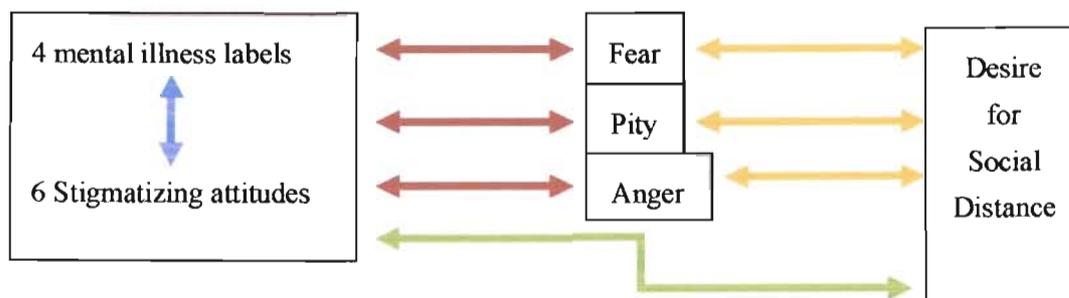
4.7.2.1. Phase 1 Correlations: Components of the stigmatizing path

The first phase, displayed in Figure 2, involved an exploration of the stigma components within the conceptual framework wherein stigmatizing attitudes (SDM) influence emotional reaction (ERMIS) which in turn determines the desire for social distance (SDS).

Firstly inter-correlations were explored between each of the six stigmatizing attitudes within the four mental illness labels, measured by the SDM (the blue arrow in Figure 2). Secondly, correlations were explored between the six stigmatizing attitudes within each

of the four mental illness labels and the three emotional reactions, fear, pity and anger, measured by the ERMIS subscales (the red arrows in Figure 2). Thirdly, correlations were explored between the three emotional reactions, fear, pity and anger and the desire for social distance, measured by the SDS (yellow arrows in Figure 2).

Figure 2: Phase one correlations: Components of the stigma path



Finally, correlations were explored between six stigmatizing attitudes within the four mental illness labels (measured by the SDM) and desire for social distance (measured by the SDS) (green arrow in Figure 2). The purposes of these correlations were to explore a direct relationship between stigmatizing attitudes and the desire for social distance.

4.7.2.1.1. Inter-Correlations between stigmatizing attitudes measured by the SDM

Spearman's rho Correlation Coefficient revealed that all correlations of the stigmatizing attitudes within the four mental illness labels were positive indicating that increasing levels of one stigmatizing attitude are associated with increasing levels of another.

This next section presents a description of the correlations between the 6 stigmatizing attitudes per mental illness label.

4.7.2.1.1.1. Bipolar mood disorder and stigmatizing attitudes

As indicated in Table 4.12. (p 74), there were no strong significant correlations within the

bipolar mood disorder label. A moderate strength significant positive correlation occurred between unpredictability and dangerousness ($\rho=.424$, $n=114$, $p<0.001$) suggesting a possible rather than definitive trend. A second moderate strength significant correlation occurred between incompetence and dangerousness ($\rho=.381$, $n=114$, $p<0.001$) but the correlation coefficient was too low to suggest a trend.

Table 4.12. Bipolar Mood Disorder and stigmatizing attitudes

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
dangerous	Correlation	1.000	.424**	.381**	.262**	.256**	.129
	Coefficient		.000	.000	.005	.006	.170
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
unpredictable	Correlation		1.000	.280**	.197*	-.015	.161
	Coefficient			.003	.035	.874	.086
	Sig.(2-tailed)		114	114	114	114	114
	N						
incompetence	Correlation			1.000	.057	.179	.172
	Coefficient				.549	.057	.068
	Sig.(2-tailed)			114	114	114	114
	N						
Impaired communication	Correlation				1.000	.210*	.271**
	Coefficient					.025	.004
	Sig.(2-tailed)				114	114	114
	N						
Responsible for illness	Correlation					1.000	.112
	Coefficient						.233
	Sig.(2-tailed)					114	114
	N						
Recovery	Correlation						1.000
	Coefficient						
	Sig.(2-tailed)						114
	N						

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Other weak significant positive correlations included: incompetence and unpredictability ($\rho=.280$, $n=114$, $p=.003$), limited potential for recovery and impaired communication ($\rho=.271$, $n=114$, $p=.004$), impaired communication and dangerousness ($\rho=.262$, $n=114$, $p=.005$), responsibility for mental illness and dangerousness ($\rho=.256$, $n=114$,

$p=.006$), and responsibility for mental illness and impaired communication ($\rho=.210$, $n=114$, $p=.025$). These correlation coefficients are also too weak to suggest a trend.

4.7.2.1.1.2. Schizophrenia and stigmatizing attitudes

Within this label there were no strong significant correlations between stigmatizing attitudes.

Table 4.13. Schizophrenia and stigmatizing attitudes

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
dangerous	Correlation	1.000	.446**	.358**	.380**	.208*	.350**
	Coefficient		.000	.000	.000	.026	.000
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
unpredictable	Correlation		1.000	.345**	.222*	.028	.251**
	Coefficient			.000	.018	.770	.007
	Sig.(2-tailed)		114	114	114	114	114
	N						
incompetence	Correlation			1.000	.399**	.174	.358**
	Coefficient				.000	.065	.000
	Sig.(2-tailed)			114	114	114	114
	N						
Impaired communication	Correlation				1.000	.367**	.275**
	Coefficient					.000	.003
	Sig.(2-tailed)				114	114	114
	N						
Responsible for illness	Correlation					1.000	.196*
	Coefficient						.036
	Sig.(2-tailed)					114	114
	N						
Recovery	Correlation						1.000
	Coefficient						
	Sig.(2-tailed)						114
	N						

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 4.13, moderate significant correlations included: unpredictability and dangerousness ($\rho=.446$, $n=114$, $p<0.001$), impaired communication and incompetence ($\rho=.399$, $n=114$, $p<0.001$), impaired communication and dangerousness ($\rho=.380$,

n=114, $p<0.001$), responsibility for mental illness and impaired communication ($\rho=.367$, $n=114$, $p<0.001$), incompetence and dangerousness ($\rho=.358$, $n=114$, $p<0.001$), potential for recovery and incompetence ($\rho=.358$, $n=114$, $p<0.001$), potential for recovery and dangerousness ($\rho=.350$, $n=114$, $p<0.001$), and incompetence and unpredictability ($\rho=.345$, $n=114$, $p<0.001$). Of these moderate correlations the only correlation coefficient with sufficient strength to suggest a possible trend is between unpredictability and dangerousness.

Weak positive significant correlations related to potential for recovery. A higher level of perceived limited potential for recovery was associated with higher levels of perceived impaired communication ($\rho=.275$, $n=114$, $p=.003$), and unpredictability ($\rho=.251$, $n=114$, $p=.007$). However, the strength of all these correlations is too weak to suggest a trend.

4.7.2.1.1.3. Major depressive disorder and stigmatizing attitudes

There were no correlations between responsibility for mental illness and the other stigmatizing attitudes on the major depressive disorder label, Table 4.14. (p 77).

Moderate strength significant positive correlations included: incompetence and unpredictability ($\rho=.477$, $n=114$, $p<0.001$), impaired communication and incompetence ($\rho=.432$, $n=114$, $p<0.001$), unpredictability and dangerousness ($\rho=.416$, $n=114$, $p<0.001$), incompetence and dangerousness ($\rho=.408$, $n=114$, $p<0.001$), potential for recovery and incompetence ($\rho=.372$, $n=114$, $p<0.001$), potential for recovery and impaired communication ($\rho=.352$, $n=114$, $p<0.001$), potential for recovery and responsibility for mental illness ($\rho=.309$, $n=114$, $p<0.001$), and impaired communication and dangerousness ($\rho=.300$, $n=114$, $p<0.001$).

Due to the strength of the correlation coefficients these results may suggest a trend between incompetence, unpredictability, impaired communication and incompetence; unpredictability and dangerousness; and dangerousness and incompetence only.

Table 4.14. Major Depressive Disorder and stigmatizing attitudes

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
Dangerous	Correlation	1.000	.416**	.408**	.300**	.072	.196*
	Coefficient		.000	.000	.001	.449	.037
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Unpredictable	Correlation		1.000	.447**	.246**	.122	.291**
	Coefficient			.000	.008	.196	.002
	Sig.(2-tailed)		114	114	114	114	114
	N						
Incompetence	Correlation			1.000	.432**	.007	.372**
	Coefficient				.000	.939	.000
	Sig.(2-tailed)			114	114	114	114
	N						
Impaired Communication	Correlation				1.000	.187*	.352**
	Coefficient					.046	.000
	Sig.(2-tailed)				114	114	114
	N						
Responsible for illness	Correlation					1.000	.309**
	Coefficient						.001
	Sig.(2-tailed)					114	114
	N						
Recovery	Correlation						1.000
	Coefficient						
	Sig.(2-tailed)						114
	N						

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Weak significant positive correlations occurred between: impaired communication and unpredictability ($\rho=.246$, $n=114$, $p=.008$), and potential for recovery and unpredictability ($\rho=.291$, $n=114$, $p=.002$). The correlations coefficients for both of these are too low to suggest a trend.

4.7.2.1.1.4. Previous admission to a psychiatric hospital and stigmatizing attitudes

The results for this mental illness label, displayed in Table 4.15. (p 78), revealed the strongest significant positive correlations of all the mental illness labels.

Strong significant positive correlations included: incompetence and impaired communication ($\rho=.649$, $n=114$, $p<0.001$), impaired communication and dangerousness ($\rho=.573$, $n=114$, $p<0.001$), dangerousness and incompetence ($\rho=.566$, $n=114$, $p<0.001$), and incompetence and potential for recovery ($\rho=.538$, $n=114$, $p<0.001$). These strong correlation coefficients indicate a trend between each of the stigmatizing attitudes.

Table 4.15. Previously admitted to a Psychiatric Hospital and stigmatizing attitudes

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
dangerous	Correlation	1.000	.491**	.566**	.573**	.266**	.322
	Coefficient		.000	.000	.000	.004	.000
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
unpredictable	Correlation		1.000	.466**	.448**	.267**	.251**
	Coefficient			.000	.000	.004	.007
	Sig.(2-tailed)		114	114	114	114	114
	N						
incompetence	Correlation			1.000	.649**	.346**	.538**
	Coefficient				.000	.000	.000
	Sig.(2-tailed)			114	114	114	114
	N						
Impaired communication	Correlation				1.000	.388**	.458**
	Coefficient					.000	.000
	Sig.(2-tailed)				114	114	114
	N						
Responsible for illness	Correlation					1.000	.322**
	Coefficient						.000
	Sig.(2-tailed)					114	114
	N						
Recovery	Correlation						1.000
	Coefficient						
	Sig.(2-tailed)						114
	N						

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Moderate strength significant positive correlations occurred between: unpredictability and dangerousness ($\rho=.491$, $n=114$, $p<0.001$), incompetence and unpredictability ($\rho=.466$, $n=114$, $p<0.001$), potential for recovery and impaired communication

(rho=.453, n=114, p<0.001), impaired communication and unpredictability (rho=.448, n=114, p<0.001), responsibility for mental illness and impaired communication (rho=.388, n=114, p<0.001), responsibility for mental illness and incompetence (rho=.346, n=114, p<0.001), potential for recovery and dangerousness (rho=.322, n=114, p<0.001), and potential for recovery and responsibility for mental illness (rho=.322, n=114, p<0.001).

Within these moderate strength correlations trends are not definitive but may be suggested between: increased perceptions of unpredictability positively correlate to increased perceptions of dangerousness and incompetence and perceptions of impaired communication positively correlate to limited potential for recovery and unpredictability.

Weak significant positive correlations occurred between responsibility for mental illness and dangerousness (rho=.266, n=114, p=.004); responsibility for mental illness and unpredictability (rho=.267, n=114, p=.004); and potential for recovery and unpredictability (rho=.251, n=114, p=.007). The correlation coefficients are too weak to suggest a trend.

4.7.2.1.1.5. Correlations between the four mental illness labels

The total scores on each of the four mental illness labels were correlated with each other and these are presented in Table 4.16. (p 80). All correlations were positive indicating that an increase in stigmatizing attitudes on one mental illness label coincided with an increase in stigmatizing attitudes on another.

Strong significant positive correlations occurred between: 'previous admission to a psychiatric hospital' and 'major depressive disorder' (rho = .603, p<0.001): 'schizophrenia' and 'major depressive disorder' (rho=.557, p<0.001): and 'schizophrenia' and 'bipolar mood disorder' (rho= .526, p<0.001). All correlations are of sufficient strength to suggest a trend.

Table 4.16. Correlations between the four mental illness labels

Spearman's rho		Total SDM bipolar mood disorder	Total SDM Schizophrenia	Total SDM major depressive disorder	Total SDM previous admission to a psychiatric hospital
Total SDM bipolar mood disorder	Correlation Coefficient Sig.(2-tailed) N	1.000 114	.526** .000 114	.396** .000 114	.130 .167 114
Total SDM Schizophrenia	Correlation Coefficient Sig.(2-tailed) N		1.000 114	.557** .000 114	.338** .000 114
Total SDM major depressive disorder	Correlation Coefficient Sig.(2-tailed) N			1.000 114	.603** .000 114
Total SDM previous admission to a psychiatric hospital	Correlation Coefficient Sig.(2-tailed) N				1.000 114

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Moderate significant positive correlations occurred between: 'bipolar mood disorder' and 'major depressive disorder' ($\rho=.396, p<0.001$); and 'previous admission to a psychiatric hospital' and 'schizophrenia' ($\rho=.338, p<0.001$). These correlation coefficients are not of sufficient strength to suggest a trend. Results suggest that participants in this study, although reporting specific stigmatizing attitudes for the differing mental illness labels also may generalize negative stigmatizing attitudes across mental illness labels.

4.7.2.1.2. Correlations between stigmatizing attitudes (SDM) and emotional reaction (ERMIS)

Results of the correlations between the ERMIS subscales, fear, pity, and anger, are described in Table 4.17. (p 81). These results indicate no correlation between pity and fear. A moderate positive significant correlation between fear and anger ($\rho=.241, n=114, p=.010$), suggests that an increase in fear, is associated with an increase in anger.

A moderate negative significant correlation between pity and anger ($\rho = -.267$, $n=114$, $p=.004$) suggests an increase in pity is associated with a decrease in anger. Both of these moderate correlations are not of sufficient strength to suggest a trend.

Table 4.17. Correlations between the ERMIS sub scales

Spearman's rho		ERF	ERP	ERA
ERF	Correlation Coefficient	1.000	-.052	.241**
	Sig.(2-tailed)		.585	.010
	N	114	114	114
ERP	Correlation Coefficient		1.000	-.267**
	Sig.(2-tailed)			.004
	N		114	114
ERA	Correlation Coefficient			1.000
	Sig.(2-tailed)			
	N			114

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Correlations between the subscales of the ERMIS and the six stigmatizing attitudes are presented per mental illness label and a table is produced for each. Within the bipolar mood disorder label (Table 4.18), there is one moderate significant positive correlation between anger and limited potential for recovery ($\rho=.254$, $n=114$, $p=.006$).

Table 4.18. Stigmatizing attitudes within the bipolar mood disorder label correlated to ERMIS subscales

Spearman's rho		dangerous	Unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
Anger	Correlation	-.039	-.007	.094	.148	.040	.254*
	Coefficient	.677	.939	.319	.116	.669	.006
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Pity	Correlation	.113	.008	.016	.009	.179	-.059
	Coefficient	.233	.936	.865	.295	.057	.530
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Fear	Correlation	.096	.124	.146	.070	-.040	.094
	Coefficient	.309	.190	.121	.460	.672	.322
	Sig.(2-tailed)	114	114	114	114	114	114
	N						

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

This suggests an increased perception of limited potential for recovery is associated with an increased emotional reaction of anger.

Within the schizophrenia label (Table 4.19), moderate positive significant correlations occurred between fear and: perceptions of incompetence ($\rho=.263$, $n=114$, $p=.005$), and fear and impaired communication ($\rho=.214$, $n=114$, $p=.022$). These correlations suggest that an increased emotional reaction of fear is associated with increased perceptions of incompetence and impaired communication. Also within the schizophrenia label, weak significant positive correlations occurred between anger and perceptions of incompetence ($\rho=.197$, $n=114$, $p=.036$), and anger and impaired communication ($\rho=.192$, $n=114$, $p=.039$). These correlations suggest that, within the schizophrenia label, increasing emotional reactions of anger and fear are associated with increasing perceptions of incompetence and impaired communication. This is in keeping with the inter-correlations within the ERMIS that revealed a positive relationship between fear and anger.

Table 4.19. Stigmatizing attitudes within the schizophrenia label correlated to ERMIS subscales

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
Anger	Correlation	.110	-.004	.197*	.193*	.168	.040
	Coefficient	.243	.966	.036	.039	.075	.675
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Pity	Correlation	.016	.038	-.057	-.050	.048	.034
	Coefficient	.864	.691	.547	.598	.615	.718
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Fear	Correlation	-.007	.014	.263*	.214*	.112	.060
	Coefficient	.938	.881	.005	.022	.237	.524
	Sig.(2-tailed)	114	114	114	114	114	114
	N						

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Within the major depressive disorder label (Table 4.20. p 83), there are significant positive correlations between all of the subscales on the ERMIS. Firstly, there are positive correlations between fear and two of the stigmatizing attitudes. A moderate significant positive correlation between fear and perceptions of dangerousness ($\rho=.287$, $n=114$, $p=.002$), and a weak significant positive correlation between fear and perceptions of incompetence ($\rho=.198$, $n=114$, $p=.035$), suggests that an increasing emotional

reaction of fear is associated with increasing perceptions of dangerousness and incompetence.

Table 4.20. Stigmatizing attitudes within the major depressive disorder label correlated to ERMIS subscales

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
Anger	Correlation	.091	-.039	.219*	-.001	-.007	.169
	Coefficient	.337	.682	.020	.991	.943	.073
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Pity	Correlation	-.002	.238*	.003	-.027	.169	-.004
	Coefficient	.987	.011	.974	.777	.084	.963
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Fear	Correlation	.287*	.171	.198*	.141	.104	.142
	Coefficient	.002	.069	.035	.134	.271	.133
	Sig.(2-tailed)	114	114	114	114	114	114
	N						

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Secondly, a moderate positive significant correlation with pity and perceptions of unpredictability ($\rho=.238$, $n=114$, $p=.011$), suggests that increasing perceptions of unpredictability are associated with an increasing emotional reaction of pity. Finally, there was a moderate significant positive correlation between an emotional reaction of anger and perceptions of incompetence ($\rho=.219$, $n=114$, $p=.020$).

Major depressive disorder is the only mental illness label where stigmatizing attitudes correlate to all of the emotional subscales measured by the ERMIS. The results suggest increasing perceptions of dangerousness are associated with anger and fear, incompetence with fear, and unpredictability with pity.

Within the previous admission to a psychiatric hospital label (Table 4.21. p 84), there are only two significant positive correlations. A moderate positive correlation between fear and increasing perceptions of impaired communication ($\rho=.203$, $n=114$, $p=.031$), and a weak significant positive correlation between anger and increasing perceptions of dangerousness ($\rho=.185$, $n=114$, $p=.049$).

Table 4.21. Stigmatizing attitudes within the previous admission to a psychiatric hospital label correlated to ERMIS subscales

Spearman's rho		dangerous	unpredictable	incompetence	Impaired communication	Responsible for illness	Recovery
Anger	Correlation	.185*	-.061	.177	.077	.019	.100
	Coefficient	.049	.520	.060	.415	.839	.289
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Pity	Correlation	-.041	.074	-.080	-.030	.128	-.089
	Coefficient	.666	.432	.400	.748	.176	.344
	Sig.(2-tailed)	114	114	114	114	114	114
	N						
Fear	Correlation	.115	.131	.132	.203*	.179	.027
	Coefficient	.223	.166	.162	.031	.056	.778
	Sig.(2-tailed)	114	114	114	114	114	114
	N						

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The results of this study indicate positive relationships between fear and anger and perceptions of dangerousness, incompetence, impaired communication, and limited potential for recovery. The only label to produce correlations to pity was the major depressive disorder label and this was associated with increasing perceptions of unpredictability.

4.7.2.1.3. Correlations between emotional reactions (ERMIS) and desire for social distance (SDS)

To determine correlations between desire for social distance and specific emotional reaction to serious mental illness Spearman's rho Correlation Coefficient was use to correlate the scores on the SDS scale and the scores on the three subscales(fear, pity, and anger) on the ERMIS.

Results suggest a weak significant positive correlation between desire for social distance associated with an increasing emotional fear reaction ($\rho=.118$, $n=114$, $p=.045$). There were no correlations between desire for social distance and pity ($\rho=.080$, $n=114$, $p=.400$) or anger ($\rho=.071$, $n=114$, $p=.454$)

4.7.2.1.4. Correlations between stigmatizing attitudes (SDM) and the desire for social distance (SDS)

In order to determine if specific stigmatizing attitudes within the four mental illness labels (predictor or independent variables) related to desire for social distance (dependent variable) scores from the SDS were correlated with ratings on the six stigmatizing attitudes on the SDM using Spearman's rho Correlation Coefficient.

The results, presented in Table 4.22, yielded only one moderate significant positive correlation. This correlation was within the schizophrenia label and between an increasing desire for social distance associated with increasing perceptions of limited potential for recovery ($\rho = .262$, $n=114$, $p=.005$). All other correlations were positive, weak and non-significant.

Table 4.22. Correlations: Social distance scale and stigmatizing attitudes

Correlation		Spearman's rho Correlation Coefficient	P value	Sample
SDS	bp dangerousness	$\rho = .115$	$p = .223$	$n=114$
SDS	sch dangerousness	$\rho = .125$	$p = .187$	$n=114$
SDS	dep dangerousness	$\rho = .001$	$p = .995$	$n=114$
SDS	hos dangerousness	$\rho = .042$	$p = .657$	$n=114$
SDS	bp unpredictable	$\rho = .173$	$p = .065$	$n=114$
SDS	sch unpredictable	$\rho = .152$	$p = .106$	$n=114$
SDS	dep unpredictable	$\rho = .066$	$p = .484$	$n=114$
SDS	hos unpredictable	$\rho = .139$	$p = .140$	$n=114$
SDS	bp incompetent	$\rho = .038$	$p = .685$	$n=114$
SDS	sch incompetent	$\rho = .137$	$p = .145$	$n=114$
SDS	dep incompetent	$\rho = .108$	$p = .252$	$n=114$
SDS	hos incompetent	$\rho = .089$	$p = .347$	$n=114$
SDS	bp impaired communication	$\rho = .110$	$p = .243$	$n=114$
SDS	sch impaired communication	$\rho = .125$	$p = .184$	$n=114$
SDS	dep impaired communication	$\rho = .139$	$p = .141$	$n=114$
SDS	hos impaired communication	$\rho = .140$	$p = .138$	$n=114$
SDS	bp responsible for mental illness	$\rho = -.088$	$p = .353$	$n=114$
SDS	sch responsible for mental illness	$\rho = -.031$	$p = .743$	$n=114$
SDS	dep responsible for mental illness	$\rho = .093$	$p = .323$	$n=114$
SDS	hos responsible for mental illness	$\rho = .074$	$p = .435$	$n=114$
SDS	bp potential for recovery	$\rho = .146$	$p = .122$	$n=114$
SDS	sch potential for recovery	$\rho = .262^*$	$p = .005$	$n=114$
SDS	dep potential for recovery	$\rho = -.029$	$p = .761$	$n=114$
SDS	hos potential for recovery	$\rho = .062$	$p = .513$	$n=114$

bp= bipolar mood disorder

sch = schizophrenia

dep = Major depressive disorder hos = previous admission to a psychiatric hospital

Semi partial correlations were explored between stigmatizing attitudes per mental illness label, measured by the SDM, and desire for social distance, measured by the SDS, while controlling for emotional reaction, measured by the ERMIS. Semi partial correlations, to explore partial or shared variance and correlation, is a parametric test, an extension of Pearson's product-moment correlation coefficient, with no non-parametric alternative and requires three continuous variables (Pallant, 2007, p, 101).

The purpose in controlling for emotional reactions was to establish the possibility of emotional reactions as mediating or moderating variables. A strong initial correlation between the two variables (stigmatizing attitudes and desire for social distance) and a low partial correlation after holding emotional reactions constant would indicate possible mediation.

Results of the partial correlation ($r=.219$, $n=114$, $p=.021$) and inspection of the zero order correlation ($r=.226$, $n=114$, $p=.015$) suggests that controlling for emotional reaction had very little effect on the strength of the relationship between these two variables, stigmatizing attitudes and desire for social distance, and thus no mediating or moderating effect of emotional reactions is suggested.

4.7.2.2. Phase 2 correlations: Familiarity and the components of the stigmatizing path

The second phase involved exploring the possible mediating effect of familiarity, measured by the LOC, and the stigmatizing process. Figure 3 illustrates schematically the subsets of correlations within this phase.

Firstly correlations were explored between the level of familiarity (measured by the LOC) and the six stigmatizing attitudes within the four mental illness labels as measured by the SDM (blue arrow in figure 3, p 87). Secondly, correlations were explored between the levels of familiarity and emotional reaction subscales (red arrow in Figure 3, p 87). Finally, levels of familiarity and the desire for social distance, measured by the SDS

(green arrow in Figure 3) were explored.

Figure 3. Phase two correlations: Mediating effect of familiarity



The purposes of the three sets of correlations were to explore the mediating effect of familiarity and to identify the stage within the stigmatizing process where familiarity may have the greatest effect.

4.7.2.2.1. Correlations between familiarity (LOC) and stigmatizing attitudes (SDM)

Scatterplots were computed to explore relationships between the level of familiarity and the six stigmatizing attitudes within each of the four mental illness labels (Please see Appendix F). The scores from the scales representing each of the stigmatizing attitudes within the four mental illness labels were considered to be the dependent variables and placed on the Y / vertical axis and the LOC scores on the X / horizontal axis. The scatterplots revealed the linear relationship between the variables. The distribution did not indicate either positive or negative relationships between the variables and the distribution of the points within the scatterplots indicated no strong relationships between variables.

In Table 4.23 (p 88) the correlations are presented according to stigmatizing attitudes across the labels in order to facilitate the exploration of the mediating effect, if any, of familiarity (LOC). The results suggest no strong or significant correlations between the

level of familiarity (LOC) and stigmatizing attitudes across all four of the mental illness labels. Correlations ranged from weak, with no significance, to no correlation.

Table 4.23. Correlations : Stigmatizing attitudes (SDM) and familiarity (LOC)

Correlation		Spearman's rho Correlation Coefficient	P value	Sample
LOC	bp dangerousness	rho = -.033	p =.727	n = 114
LOC	sch dangerousness	rho = -.097	p =.304	n = 114
LOC	dep dangerousness	rho = .056	p =.555	n = 114
LOC	hos dangerousness	rho = -.150	p =.112	n = 114
LOC	bp unpredictable	rho = .001	p =.988	n = 114
LOC	sch unpredictable	rho = .034	p =.723	n = 114
LOC	dep unpredictable	rho = .127	p =.177	n = 114
LOC	hos unpredictable	rho = .126	p =.182	n = 114
LOC	bp incompetent	rho = -.066	p =.483	n = 114
LOC	sch incompetent	rho = .006	p =.947	n = 114
LOC	dep incompetent	rho = .048	p =.615	n = 114
LOC	hos incompetent	rho = -.057	p =.550	n = 114
LOC	bp impaired communication	rho = .095	p =.317	n = 114
LOC	sch impaired communication	rho = .050	p =.596	n = 114
LOC	dep impaired communication	rho = .062	p =.515	n = 114
LOC	hos impaired communication	rho = -.048	p =.614	n = 114
LOC	bp responsible for mental illness	rho = .068	p =.469	n = 114
LOC	sch responsible for mental illness	rho = .071	p =.455	n = 114
LOC	dep responsible for mental illness	rho = -.071	p =.455	n = 114
LOC	hos responsible for mental illness	rho = -.154	p =.102	n = 114
LOC	bp potential for recovery	rho = .058	p =.543	n = 114
LOC	sch potential for recovery	rho = -.117	p =.215	n = 114
LOC	dep potential for recovery	rho = .030	p =.754	n = 114
LOC	hos potential for recovery	rho = -.162	p =.086	n = 114

bp= bipolar mood disorder

sch = schizophrenia

dep = Major depressive disorder hos = previous admission to a psychiatric hospital

The results include several negative correlation coefficients all with a p value that indicated non-significance. Some of these correlations coefficients are so low the

correlation coefficient statistic indicates no correlation with the statistic so close to zero that the negative correlations could have occurred by chance.

The only indication of any correlation at all includes a non-significant ($p > .05$) negative weak correlation coefficient on the previous admission to a psychiatric hospital label, suggesting an increase in familiarity is associated with a decrease in perceptions of limited potential for recovery ($\rho = -.162$, $n=114$, $p=.086$). This is not sufficient to suggest a trend or relationship.

The results of the correlations between level of familiarity (scores on the LOC) and stigmatizing attitudes (all 24 items on the SDM) suggest evidence for the absence of a relationship between level of familiarity and the extent of stigmatizing attitudes. The size of the sample ($n=114$) suggests that such results are not a type 2 error.

4.7.2.2.2. Correlations between Familiarity (LOC) and emotional reaction (ERMIS)

Correlations between levels of familiarity (LOC) and the ERMIS revealed evidence of no significant correlations between familiarity and fear (ERF) ($\rho = .022$, $p=.819$); familiarity and pity (ERP) ($\rho = .108$, $p= .254$); and familiarity and anger (ERA) ($\rho = -.122$, $p=.236$). There was a weak positive correlation between familiarity and pity ($\rho = .108$) which suggest that increased familiarity is associated with emotional reaction of pity and a weak negative correlation between familiarity and anger ($\rho = -.112$) which suggests that increased familiarity is associated with decreased emotional reaction of anger. However, neither was significant nor do they suggest a trend.

4.7.2.2.3. Correlations between Familiarity (LOC) and desire for social distance (SDS)

Correlations between level of familiarity and scores on the SDS revealed no correlation between the two ($\rho = -.037$, $n=114$, $p=.692$).

4.7.2.3. Summary of Correlations

Common on all four of the serious mental illness labels inter-correlations of stigmatizing attitudes were significant positive relationships between dangerousness and; unpredictability, incompetence, and impaired communication, between incompetence and unpredictability, and between impaired communication and limited potential for recovery.

The most significant positive correlations on the bipolar mood disorder label and schizophrenia label are the negative polar adjectives of unpredictability and dangerousness.

On the major depressive disorder label the most significant positive correlations relate to incompetence and dangerous, unpredictability, and impaired communication.

The previous admission to psychiatric hospital label had significant positive correlations between dangerousness and impaired communication, unpredictability, and incompetence; and incompetence and limited potential for recovery.

The statistical results indicated limited correlations between emotional reactions and desire for social distance, stigmatizing attitudes and desire for social distance, and evidence of no significant relationship between familiarity and other components within the stigmatizing path. In view of this, further tests exploring relationships between familiarity and the other components of the stigmatizing path were redundant. Multiple regression and path analysis involves the subdivision of correlations between the various independent / predictor variables and thus is appropriate when correlations of sufficient strength exist between independent and the dependent variable.

4.8. SUMMARY OF THE CHAPTER

The participants reflected a sample that had a relatively even distribution amongst male and female within the various age groups. The bulk of the sample (80%, n=92) represented the bulk of the working population (age 21-40). All cultural groups were represented but not a perfect fit to national or provincial population statistics. The sample included participants, both genders and across all cultural groups, who had intimate and or personal contact with persons with a serious mental illness (48% n= 55).

Demographic associations suggest that male participants had greater perceptions of dangerousness, unpredictability and incompetence, and a greater desire for social distance. Fear was associated with a desire for social distance and with perceptions of unpredictability and dangerousness.

Stigmatizing attitudes were most negative towards persons who had a previous admission to a psychiatric hospital and the least negative towards 'bipolar mood disorder'. Stigmatizing attitudes were recorded for all serious mental illness labels and even with reference to the bipolar mood disorder label, the least stigmatised label, 75% of participants scores reflecting 2/3 of the available score and thus closer to the negative polar adjective of stigmatizing attitude.

CHAPTER FIVE

DISCUSSION AND RECOMENDATIONS

5.1. INTRODUCTION

Chapter five concludes the study with discussion and recommendations for future research as well as study limitations.

The objectives of the study were to describe the essential components of the stigmatizing process in potential employers and indicate the extent to which these were more or less evident in the stigmatizing process. Secondly to identify the factors that produce and sustain this process by examining the mediating or moderating effect of demographic variables and the relationships, if any, between the stigma components, stereotyping - emotional reaction - individual discrimination (desire for social distance).

5.2. DISCUSSION

The discussion that follows focuses on the aspects of the essential stigmatizing process that are evident in potential employers and aspects of the study that suggest difference from previous studies. The differences in this study are: stigmatizing attitudes associated with certain mental illness labels, evidence of absence of a relationship between familiarity and components of the stigma process, and the lack of strong significant correlations between the components of the stigmatizing process and the desire for social distance.

5.2.1. The extent of stigmatizing attitudes

Stigmatizing attitudes were strongly evident in this study. The participants overall scores tended to be high indicating frequent selection of negative polar adjectives and extreme negative polar adjectives.

The previous admission to a psychiatric hospital label was most strongly associated with the extreme negative polar adjectives on all of the characteristics rated in the semantic differential measure (SDM): dangerousness, unpredictability, incompetence, impaired communication, responsibility for mental illness and limited potential for recovery. This is also reflected in Modiba's (2001) study where previous admission to a psychiatric hospital was reported to be one of the variables that distinguishing the unemployed mental health care user from the employed mental health care user.

With reference to the other three mental illness labels included in the study participants' responses to the major depressive disorder label indicated the most extreme negative polar adjectives on three characteristics: incompetence, impaired communication, and responsibility for mental illness. This label recorded the second most extreme negative polar adjectives overall. Secondly, the schizophrenia label reported the greatest negative polar adjectives in relation to dangerousness and limited potential for recovery. Lastly, extreme negative polar adjectives on the bipolar mood disorder label were highest in relation to one characteristic only, unpredictability.

The results of the extent of stigmatizing attitudes towards serious mental illness (SMI) in this study area are in keeping with current western (Angermeyer et al., 2003; Corrigan, Green., et al 2001; Corrigan, Edwards et al., 2001; Corrigan et al., 2005; Crisp et al., 2000; Feldman & Crandall, 2007; Hand & Tryssenaar, 2006; Penn et al., 1999; Putman, 2008; Spangnolo et al., 2008; Tsang et al., 2008) and non western (Adewuya & Makanjuola, 2008b; Botha et al., 2006; Hugo et al., 2003; Kabir et al., 2004; Modiba, 2001) studies. These studies suggest firstly that perceptions of dangerousness, unpredictability, and incompetence are the most common negative polar adjectives associated with serious mental illness labels. Secondly, that although stigmatizing attitudes can be generic to the mental illness label they also show specificity to the SMI labels.

Kabir and colleagues (2004) reported strong significant negative stigmatising attitudes from 50% of participants with regards to perceptions of dangerousness and destructive

behaviour. The results of the study by Andewuya and Makanjuola (2008b) support these findings and reported perceptions of dangerousness to be as high as 57.9% of participants and incompetence / dependency reported by 21.1 % of participants. Further Crisp and colleagues (2000) also reported perceptions of dangerousness and unpredictability as prominent amongst participants (70% and 80% respectively). It is interesting to note that in Botha and colleagues (2006) study the participants (schizophrenic mental health care users) also tended to embrace the perception that the mentally ill are dangerous, with 60% endorsing this view.

Perceptions of dangerousness and incompetence are also reported as specific to potential employers. Hand and Tryssenaar (2006) found that potential employers concerns related to personality, specifically issues of emotional control. These authors reported that potential employers worried about emotional unpredictability that would result in dangerous behaviour. Tsang and colleagues (2007) concur and argue that potential employer's primary concern involved the potential safety threat to others in the workplace. This concern regarding issues of safety is suggested to include the potential for violence as well as perceptions of incompetence.

What is a possible difference between this study and previous studies is the extent of stigmatizing attitudes associated with the major depressive disorder label, the hierarchical structure of the extent of the stigmatizing attitudes between 'major depressive disorder', 'schizophrenia' and 'bipolar mood disorder' and the extent of negative polar adjectives associated with perceived limited potential for recovery.

In this study the greatest extent of negative polar adjectives were associated with the major depressive disorder label and least with the bipolar mood disorder label. The schizophrenia label ranked between these two. This is not in keeping with previous studies. In Putman's (2008) review major depressive disorder and bipolar mood disorder are reported to be associated with the least negative polar adjectives as opposed to schizophrenia which is associated with the most negative polar adjectives and is the label most frequently associated with the greatest risk for violence. Although in this study the

schizophrenia label did record the most negative polar adjectives for dangerousness overall this label was not the recipient of the greatest extent of stigmatizing attitudes. This hierarchical placement of the serious mental illness labels is also reflected in the results of the study by Crisp and colleagues (2000) where schizophrenia was reported to be the label associated with the greatest negative polar adjectives and major depressive disorder the label associated with the least. The difference in this hierarchical structure of the three mental illness labels within this study is suggested to be linked to firstly perceptions of self responsibility for mental illness and secondly to changes within the South African health care context.

In this study perception of responsibility for mental illness was found to be more highly associated with the major depressive mood disorder label than the schizophrenia and bipolar mood disorder labels and is suggested as a predictor of negative polar adjectives. Although this study did not access data on perceptions of causation of mental illness the perception of responsibility for mental illness was captured and does have some bearing on perceptions of causation. Although Crisp and colleagues (2000) reported no correlation between appropriation of blame and the extent of stigmatizing attitudes several studies have associated the perception of responsibility for mental illness with increasing stigma (Andewuya & Makanjuola, 2008b; Feldman & Crandall, 2007; Hugo et al., 2003; Kabir et al., 2004). In the first instance Kabir and colleagues reported associations between perceptions of responsibility for mental illness with increasing stigma. Secondly, Feldman and Crandall (2007) had similar results where the perception of responsibility for mental illness was the strongest predictor, more so than dangerousness, of negative polar adjectives. Further, Andewuya and Makanjuola (2008b) reported that perceptions of causation as supernatural were predictors of negative polar adjectives. This supernatural causation may be perceived by the community as related to responsibility and punishment for bad acts. Finally, Hugo and colleagues (2003) report perceptions of causation as being related to weak character, again arguably perceived by participants as within the domain of self responsibility.

In the South African context the process of deinstitutionalization and the current primary health care model may have produced a situation where the public have greater contact with people who are ascribed the so-called SMI labels (Lazarus, 2005). Reintegration of people with a SMI into their communities is certainly one of the prominent goals of current legislation (Mental Health Care Act Number 17 of 2002, chapter three, section 8; Lazarus, 2005). This possible increase in experience with mental illness, of the general public and specifically potential employers, may have provided clarification of misconceptions, particularly regarding the schizophrenia label. It may also have altered public perception resulting in a reduction of stigmatizing attitudes on some mental illness labels and an increase on others. The study results reveal a measure of insight when participants recognise 'bipolar mood disorder' as unpredictable and 'schizophrenia' as possibly having the most limited potential for recovery. Spagnolo and colleagues (2008) argument that contact causes a shift in stigmatizing attitudes by providing opportunities for clarifying misconceptions and giving a real world view of the label might account in part, for this finding.

It is possible that the bipolar mood disorder may have achieved a reduction in stigma related to the basic 'fun' that can be the subjective experience of interpersonal contact (Pettigrew, 1998; Uys & Middleton, 2004). As Pettigrew (1998) states, familiarity / contact and its effectiveness are cumulative, we live what we learn. Further, the nature of the contact and the extent to which affective variables (empathy and liking) are invoked is more crucial than cognitive variables such as education and information. In a social setting it is possible that the person ascribed a bipolar mood disorder label is more likable than the person ascribed a major depressive disorder label. As mentioned in the literature review although continued contact generally reduces anxiety, bad experiences can increase it (Pettigrew, 1998; Pettigrew et al., 2006).

Limited potential for recovery correlated to the desire for social distance and is possibly linked to the South African context of home based care. This will be discussed further in section 5.2.3. (p 98).

5.2.2. The extent of emotional responses' and their correlation to stigmatizing attitudes

Within this study fear and pity were the most frequently reported emotional responses, and anger the least reported response. This correlates to other studies where anger is not reported as a significant response (Spagnolo et al., 2008) and fear is reported as the most frequent emotional response to mental illness (Angermeyer et al., 2003; Corrigan, Green et al., 2001).

Stigmatizing attitudes, other than perceptions of responsibility for mental illness, had significant moderate and weak correlations to all of the emotional responses, fear, anger and pity. These emotional responses revealed positive correlations to stigmatizing attitudes within specific mental illness labels. Fear was associated with impaired communications ('schizophrenia' and 'previous admission to a psychiatric hospital'), dangerousness ('major depressive disorder') and incompetence ('major depressive disorder' and 'schizophrenia').

Although the schizophrenia label was associated with the dangerous stereotype this did not correlate to an emotional response of fear. Positive correlations between perceptions of dangerousness and incompetence within the serious mental illness labels and an emotional response of fear are supported by previous studies (Angermeyer et al., 2003; Corrigan, Green et al., 2001).

The emotional response of anger positively correlated to incompetence ('major depressive disorder' and 'schizophrenia'), dangerousness ('previous admission to a psychiatric hospital'), impaired communication ('Schizophrenia'), and limited potential for recovery ('bipolar mood disorder'). The emotional response of pity was positively correlated to unpredictability (major depressive disorder) only.

5.2.3. The extent of desire for social distance as a measure of individual discrimination

There was not a strong desire for social distance reported by the participants of this study. The largest portion of participants, just less than half, reported being 'probably willing' to most aspects of the social distance scale. This supposed lack of desire for social distance is contradictory to the extent of the stigmatizing attitudes reported by participants.

The lack of a strong desire for social distance could reflect new ideals and utopias in South Africa. The freedom charter of the African National Congress in 1955 laid out an alternative vision and the chapter on the bill of rights of the new constitution of South Africa brings this to life. The bill of human rights states that neither the state nor any person may unfairly discriminate directly or indirectly against anyone on grounds including race, gender, sex, pregnancy, marital status, ethnic or social origin, color, sexual orientation, age, disability, religion, conscience, belief, culture, language, and birth (Paragraph 9 (3)). That the South African constitution (no 18 , 1996) was the first of its kind to prohibit discrimination on the basis of certain labels, such as sexual orientation, gives an indication of the importance of non-discrimination to its citizens (Ata, Bastian & Lusher, 2009). Consequently, the results of this study and the desire for social distance as a measure of individual discrimination may well represent social desirability bias.

Hand and Tryssenaar (2006) also reported results that may suggest social desirability bias. In their study potential employers endorse employment of the mentally ill as a good idea but the extent of stigmatizing attitudes reported by participants indicated extensive negative polar adjectives regarding emotional control and dangerousness that are contradictory to a willingness to employ. Putman (2008) also makes reference to contradictory evidence were respondents reported that having a person with a mental illness as a neighbor would be acceptable but also reported perceptions of the mentally ill as having an increased potential for violence and thus not desirable to have in the neighborhood.

The social transformation that has, and continues to occur in South Africa refers to initiatives aimed at helping reorganize human relationships through challenging oppressive structures or relationships and changing systems that represent injustice (South African Constitution no 18, 1996). Apartheid, viewed at times as a distinctive policy with a beginning (1948) and an end (1994), was a process of hierarchical classification of difference (race) with socio-economic consequences and lingering effects. A system that enforced oppression, segregation and discrimination on the basis of a racial label has paradoxically, resulted in a culture of inclusion (South African constitution no 18, 1996). South Africans who have experienced segregation, discrimination and prejudice due to a 'label' may be unlikely to acknowledge a desire to segregate and discriminate again others on the basis of a label (Corrigan, Edwards, et al., 2001; Link et al., 2004).

5.2.4. Mediation and moderation of demographic variables on stigma components: stigmatizing attitudes – emotional response- desire for social distance

It is suggested in the literature that familiarity and other demographic variable have a mediating effect on stigmatizing attitudes, emotional response and the desire for social distance.

5.2.4.1. Familiarity

Despite participants high level of personal (face to face) contact the results of this study indicate evidence of the absence of a relationship between familiarity with a person with a serious mental illness and stigmatizing attitudes. There were also no correlations between familiarity and emotional response or the desire for social distance.

The results of the work of Penn and colleagues (1999), Corrigan, Green and colleagues (2001), Corrigan, Edwards and colleagues (2001), and Angermeyer and colleagues (2003) are different to the ones reported in this study. These authors reported significant negative correlations between familiarity and stigmatizing attitudes, and between

familiarity and desire for social distance.

However some studies may support the findings within this study (Andewuya & Makanjuola 2008a, 2008b; Hand & Tryssenaar, 2008; Tsang et al., 2007). Tsang and colleagues (2007) reported no impact on potential employers who had previous experience with hiring a person with a mental illness, attitudes were not more benign than those employers who had no previous contact. Further, Hand and Tryssenaar (2008) concluded that familiarity or retrospective contact in and of itself is not necessarily negatively associated with reduced stigmatizing attitudes and desire for social distance, rather the nature of the contact is significant to the relationship between these components of the stigma process. Lastly, Andewuya and Makanjuola's (2008a, 2008b) Nigerian studies found that familiarity at the level of intimacy of a friend or family member did not mediate stigmatizing attitudes and desire for social distance. These authors found that the type of contact that did mediate these variables was that of 'care-giver'. Those who had been care-givers to persons with a serious mental illness were less likely to stigmatize and discriminate.

It is possible that the extent of care and involvement with a person who has a serious mental illness in South Africa is quite different from that of western countries where structures exist to ease the financial and emotional burden of being involved in the life of a person with a serious mental illness (Ramon et al., 2006). Breen, Swartz, Fisher, Joska, Corrigan, Plaatjie, and McDonanld (2007) draw attention to the fact that the current integration of mental health services into primary health care and the shift towards family-based care for chronic mental disorders has occurred concurrently with increases in cost of basic services such as water and electricity. The results of these authors study, conducted in Cape Town South Africa, concluded that poverty, crime rate, increasing cost of basic municipal services, and de-institutionalization has resulted in increased burden on households and compromised primary care environments (Breen et l., 2007; Schwabe, 2004) This suggestion of potential poverty and economic burden is supported by the South African Regional Poverty Network (SARPN) statistics for 2001 that indicate that 57% of all South Africans, and 61% of people living in KwaZulu-Natal, live below

the poverty datum line. This may explain why stigmatizing attitudes were not significantly impacted by familiarity. Pettigrew's (1998) argument that bad experiences can increase stigmatization and prejudice may be relevant to the South Africa context where formal support networks and formal social assistance are minimal. Although the results of this study suggest that anger was the least expressed emotional response amongst participants a moderate significant positive correlation existed between limited potential for recovery and anger. This result may link to experiences of limited formal support for home care within the South African context (Breen et al., 2005; first person accounts from family members, *Phrenaid* relatives support group, 2009; *Phrenaid* Schizophrenia conference, October 2009).

5.2.4.2. Associations between other demographic variables

Other demographic variables within this study; age group, gender and cultural group, did not have strong associations to the stigma components. This is supported by Putman (2008) who found little difference in the stigmatizing process within social class, gender and ethnicity. There was however, although not strong, some variation between gender and cultural group in relation to stigmatizing attitudes.

Pertaining to desire for social distance age and gender may have some associations to desire for social distance. Finally, there were no associations between age, gender or cultural group and emotional response.

Gender revealed some variation in study results. Females tended to stigmatize slightly less than males, males selection of the negative polar adjectives being slightly higher than females. This may relate to Link and colleagues (2004) assertion that females are more nurturing than males and thus less likely to stigmatize. This is supported by Andewuya and Makanjuola (2008b) who also reported less stigmatizing attitudes in female participants as opposed to male participants. Secondly, the association between stigmatizing attitudes and cultural groups indicated some differences. The two minority groups, Coloured participants and White participants, tended to report less negative polar

adjectives than participants representing the majority cultural groups, Black / African participants and Indian participants. This is supported by Corrigan, Edwards and colleagues (2001) that ethnic minorities are less likely to endorse stigmatizing attitudes.

Gender indicated a slight difference in desire for social distance, males reporting a slightly higher desire for social distance than females. This is likely linked to males reporting slightly higher scores of the negative polar adjectives than females. There was a weak association between advancing age and desire for social distance and this may be in keeping with findings in previous studies, that there may be a greater desire for social distance with advancing age (Andewuya and Makanjuola, 2008a; Link et al., 1999; Link et al., 2004).

5.3. LIMITATIONS OF THE STUDY

The semantic differential measure (SDM), emotional reaction to mental illness scale (ERMIS) and the social distance scale (SDS) are vulnerable to social desirability bias. The researcher believes this to be particularly relevant within the South African context where the level of awareness of the non desirability of prejudicial attitudes and discriminatory behaviour is known to citizens and residents. It is possible that participant responses may reflect this ideology rather than their true thoughts and feelings (Link et al., 2004). It is thus possible that, to the extent that social desirability bias is operative, reported stigmatising attitudes, emotional reactions and desire for social distance may be underestimated.

The study did not induce perceptions of causality which may influence stigma components to a large extent. However the inclusion of perceptions of responsibility for mental illness does have some bearing on perceptions of causation. It is suggested that results may contribute to understanding perceptions of causation to the extent that potential employers reported responsibility for mental illness and the extent to which this negative stereotype influenced the components of the stigma process in potential employers in KwaZulu-Natal.

Vignettes are hypothetical and abstract and limited in evaluating 'real' situations. Participants rarely encounter the amount of structured information posed in the vignette. Additionally there is no real person and thus no nonverbal cues. Participants are responding to cognitive schemes that may not reflect their actual behaviour in real situations (Link et al., 2004). However the vignettes used in this study had proven validity and to that extent, the results of this study may contribute to the understanding of the presence of stigmatizing attitudes and provide an indication of the extent of these stigmatizing attitudes in potential employers in KwaZulu-Natal.

Although purposive sampling was employed and the sample is not completely divergent from the population of KwaZulu-Natal the sample can not be assumed to be representative and thus the results can not be generalized to South Africa. However, these results may contribute to understanding stereotypes that potential employers associated with serious mental illness in this specific context and to that extent, they may well be appropriate for the province of KwaZulu-Natal.

5.4. RECOMMENDATIONS

This study can assist in developing a base line of the stigmatizing attitudes evident towards people with a serious mental illness in KwaZulu-Natal. The results of this and other African studies can assist in targeting the serious mental illnesses with the 'worst reputation' (Andewuya and Makanjuola, 2008a).

Additional research is recommended. Firstly, additional research is required to clarify the relationship between familiarity, emotional reaction and social distance. It is suggested that scales that measure social desirability bias be included in further research studies to determine the extent of mediation or moderation of this construct. Secondly, intervention studies, specifically with potential employers, are required to obtain empirical data related to the combine effectiveness of disconfirming information and contact with people with a serious mental illness. Although longitudinal studies are expensive they are recommended as their input into the nature and extent of contact required to sustain

behavioural change would produce valuable information to guide evidence based anti-stigma strategies.

In response to the current evidence there remain strategies that can be implemented at both local and national level. Firstly, health services and health departments could review all information / educative material, and treatment protocols produced that are made available to the general public and mental health care professions. The purpose of the review would be to check if the labelling language is derogatory and thus facilitating stigmatization of the seriously mentally ill. Secondly, mental health services could institute programs that assist mental health care practitioners to explore their own attitudes and beliefs about serious mental illness (SMI) and provide disconfirming information regarding potential for recovery and perceptions of incompetence. Thirdly, involvement of mental health care users' (MHCU) in educative and contact initiatives could be introduced and supported by the KwaZulu-Natal department of health. In this way implementing what is known about contact theory and also achieving personal benefits for the seriously mentally ill MHCU by proving employment, and facilitation of self efficacy (consultant, expert). This involvement of mental health care users with mental health care practitioners (MHCP) may also assist in adjustment of MHCPs' stereotypes of the seriously mentally ill.

With respect to policy development and implementation it is stressed that anti-stigma campaigns are central to the success of psychosocial rehabilitation initiatives. The implementation and success of these campaigns will involve a large degree of change. Change management theorists suggest that change is more likely to be successful when it affects the entire system rather than attempts to introduce change in isolation (Huber, 2006). Policy development, implementation and evaluation needs to be carefully managed and needs to include for example, policy development regarding mental disability discriminations (Gureje & Alem, 2000).

Lastly, there are specific recommendations for nursing education. This is especially pertinent during this time of preparation to change South African nursing education from

a diploma (college) education to a degree (university) education (South African Nursing Council (SANC), 2009). Putman (2008) reported that although British nursing education had undergone significant changes since the initiation of project 2000 (when universities initiated student nurse education) the resultant physical separation between the university and the clinical placement areas seems to have negatively impacted on sufficient clinical exposure or contact with mental health care users' (MHCU).

It is recommended that in the development of the new undergraduate nursing degree that the curricula recognise the importance of student psychiatric nurses developing a balanced view of MHCU, and an empathic understanding of the impact of stigma in the lives of the seriously mentally ill (SMI). To this end it is suggested that the curricula include firstly, a balanced clinical exposure to recovered, as well as acutely ill SMI mental health care users. The purpose of this exposure is to prevent reinforcement of the stereotype of a limited potential for recovery, dangerousness, unpredictability and incompetence. Secondly, it is recommended that curricula outline mandatory involvement with, and attendance at, family and sufferer support groups to promote a less medical and formal setting for contact. It is suggested that this variety in contact changes the view from the stigmatized 'out group' to the individual who exceeds the narrow description of the diagnostic label (Arboleda-Flórez, 2003; Corrigan, 2007). Further to this aim, it is strongly suggested that the SMI mental health care user be included in teaching as experts contributing to the nurses' education. Finally, that the new undergraduate nursing degree curricula strengthen content related to recovery and psychosocial rehabilitation, specifically nursing interventions / strategies to facilitate rehabilitation in all the areas of study, socialization, community living, and specifically in the area of work.

5.5. CONCLUSION

In conclusion, the supposed lack of desire for social distance, the dependent variable in this study, may reflect political policy and current ideology but the strength of the negative stereotypes suggests that changing policy is easier than changing attitudes. This

is also borne out in the field notes where participants laughed at the case studies within the questionnaire, several participants both male and female, made jokes with each other as they were filling in the questionnaire. Participants seem to have no qualms about making stigmatizing comments about mental illness. Such behavior prompted the British national director of mental health, Louis Appleby, to make the statement that it was necessary to “ *Make mental illness as socially unacceptable as racism*” (International summit on stigma and discrimination (Manchester, England, 2006))

The extent of reported desire for social distance correlated to fear and directly to perceptions of limited potential for recovery. Previous studies report that desire for social distance positively correlated to perceptions of dangerousness and fear (Corrigan, Green et al., 2001; Crisp et al., 2000; Kabir et al., 2004). The stigmatizing attitude associated with fear and desire for social distance differing between these previous studies and the results of this study. It is suggested that the stigmatizing stereotype of limited potential for recovery may have more salience in developing countries such as South African than the developed western world. As reported in section 5.2.4.1. (p 99) limited potential for recovery has financial and emotional implication within a developing country and to this extent, desire for social distance and fear are correlated to perceptions of limited potential for recovery.

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APPENDIX A: Self report questionnaire

QUESTIONNAIRE

DO NOT WRITE YOUR NAME ANYWHERE ON THIS DOCUMENT

The questionnaire has five sections. Please complete all items in all five sections.

Section 1

Answer each of the three questions by ticking the box next to your response.

Only one tick per question.

1. Select and tick the box that represents your age category in years

18-20	<input type="checkbox"/>
-------	--------------------------

21-30	<input type="checkbox"/>
-------	--------------------------

31-40	<input type="checkbox"/>
-------	--------------------------

41-50	<input type="checkbox"/>
-------	--------------------------

51-60	<input type="checkbox"/>
-------	--------------------------

2. Select and tick the box that represents your gender

Male	<input type="checkbox"/>
------	--------------------------

Female	<input type="checkbox"/>
--------	--------------------------

3. Select and tick the box that represents your cultural group

Black	<input type="checkbox"/>
-------	--------------------------

Indian	<input type="checkbox"/>
--------	--------------------------

Coloured	<input type="checkbox"/>
----------	--------------------------

White	<input type="checkbox"/>
-------	--------------------------

Section 2

Here is a description of a 27 year old man. Let's call him Jim.

About two years ago, he was hospitalized because of schizophrenia. After receiving treatment, he appears to be in remission and is doing pretty well. He takes his medication as prescribed and also attends weekly individual therapy with a psychologist.

Jim has a part time job as a cleaner. He is doing well, is well groomed and known for dressing neatly. At his job he gets along well with his coworkers and is on friendly terms with them. He begins his day chatting briefly with the people he works with and then gets down to work. He takes tea and lunch breaks just like everyone else and returns to work when his co-workers do. While on the job he checks his work carefully and doesn't go onto something else until it is finished. This might slow him down a little but he is never criticized for the quality of the work he completes.

Jim is interested in meeting and dating young woman in the community. He is considering joining a local church group to meet them. He would also like to get a job that gives him more responsibility and pays better than his current one.

Please read each of the seven questions and tick the box that contains the answer that best represents your response.

1. How would you feel about renting a room to someone like Jim?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

2. How about as a worker on the same office floor as Jim?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

3. How would you feel having someone like Jim as a neighbor?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

4. How about caring for your children for a couple of hours?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

5. How about having daughter marry someone like Jim?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

6. How would you feel about introducing Jim to a young woman you are friendly with?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

7. How would you feel about recommending someone like Jim for a job working for a friend of yours?

Definitely willing	Probably willing	Probably Unwilling	Definitely Unwilling
--------------------	------------------	--------------------	----------------------

Section 3

Each question requires you to rate each category of person, listed on the left hand side of the table, against the comment at the top of the table.

For example,

Question 1 asks you to rate the level of dangerousness of five categories of people (the 'average person', a person with a bipolar mood disorder, a person with schizophrenia, a person with a major depressive disorder, and a person with a history of admission to a psychiatric hospital). Number 1 is the lowest rating (i.e. 'not dangerous at all') and 5 is the highest rating (i.e. 'very dangerous').

You may choose only one number for each person per question. Thus at the end of each question you should have recorded one tick per line, a total of five ticks per box.

This process is repeated for all 6 questions

1

Is not a danger to others \longrightarrow Is very dangerous

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

2

Is consistent \longrightarrow Is unpredictable

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

3

Is independent and self-sufficient \longrightarrow Is dependent unable to care for self

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

4

Is easy to  Is difficult

To talk with to talk with

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

5

Is unable to  Contributes
prevent illness to ill health

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

6

Fully recovers  Never recovers
from illness from illness

	1	2	3	4	5
The 'average person'					
A person with bipolar mood disorder					
A person with schizophrenia					
A person with a major depressive disorder					
A person with a history of admission to a psychiatric hospital					

Section 4

Please read each of the following statements carefully. After you have read all of the statements below, place a **tick next to EVERY statement that represents your experience** with persons with a severe mental illness.

_____ I have watched a movie or television show in which a character depicted a person with a mental illness.

_____ My job involves providing services or treatment for persons with a severe mental illness.

_____ I have observed, in passing, a person I believe may have had a severe mental illness.

_____ I have observed persons with a severe mental illness on a frequent basis.

_____ I have a severe mental illness.

_____ I have worked with a person who had a severe mental illness at my place of employment.

_____ I have never observed a person that I was aware had a severe mental illness.

_____ A friend of the family has a severe mental illness.

_____ I have a relative who has a severe mental illness.

_____ I have watched a documentary on television about severe mental illness.

_____ I live with a person who has a severe mental illness.

Section 5

Imagine that you hear the following about an acquaintance with whom you occasionally spend your leisure time.

Within the past months, your acquaintance appears to have changed. More and more, he retreated from his friends and colleagues, up to the point of avoiding them. If someone managed to involve him in a conversation, he would address only one single topic: the question as to whether some people had the natural gift of reading other people's thoughts. This question became his sole concern.

In contrast with his previous habits, he stopped taking care of his appearance and looked increasingly untidy. At work, he seemed absent-minded and frequently made mistakes. As a consequence, he has already been summoned to his boss. Finally, your acquaintance stayed away from work for an entire week without an excuse. Upon his return, he seemed anxious and harassed. He reports that he is now absolutely certain that people cannot only read other people's thoughts, but that they also directly influence them. He was however unsure who would steer his thoughts.

He also said that, when thinking, he was continually interrupted. Frequently, he would even hear those people talk to him, and they would give him instructions. Sometimes, they would also talk to each other and make fun of whatever he was doing at the time. The situation was particularly bad at his apartment, he claimed. At home, he would really feel threatened, and would be terribly scared. Hence, he had not spent the night at his place for the past week, but rather he had hidden in hotel rooms and hardly dared to go out.

How would you react? Please indicate by circling one number only on each of the 9 scales on the next page, how each of the 9 questions on the list applies to you.

1. The person scares me.

Applies completely

1

2

3

4

Does not apply at all

5

APPENDIX B: Letters of permission and scales

APPENDIX B1: Level of Contact Scale (LOC)

Level of Familiarity Questionnaire

Patrick W. Corrigan, Psy.D.

University of Chicago
Center for Psychiatric Rehabilitation
7230 Arbor Drive
Tinley Park, IL 60477 USA

708 614-4770

www.stigmaresearch.org

Measures:

- LOC – Level of Contact Questionnaire
- LOC- Scoring Guide

Articles:

- Corrigan, P.W., Edwards, A.B., Green, A., Diwan, S.L., & Penn, D.L. (2001). Prejudice, social distance, and familiarity with mental illness. *Schizophrenia Bulletin*, 27(2), 219-225.
- Corrigan, P.W., Green, A., Lundin, R., Kubiak, M.A., & Penn, D.L. (2001). Familiarity with and social distance from people who have serious mental illness. *Psychiatric Services*, 52(7), 953-958.
- Holmes, E.P., Corrigan, P.W., Williams, P., Canar, J., & Kubiak, M.A. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, 25(3), 447-456.

Scoring Guide:

LEVEL OF FAMILIARITY WITH MENTAL ILLNESS

Please note that each item is assigned a number: 11= most intimate contact with a person with mental illness, 7= medium intimacy, 1= little intimacy.

The index for this contact was the rank score of the most intimate situation indicated. If a person checks more than one item, rank their HIGHEST level of intimacy.

- 3 I have watched a movie or television show in which a character depicted a person with mental illness.
- 7 My job involves providing services/treatment for persons with a severe mental illness.
- 2 I have observed, in passing, a person I believe may have had a severe mental illness.
- 5 I have observed persons with a severe mental illness on a frequent basis.
- 11 I have a severe mental illness.
- 6 I have worked with a person who had a severe mental illness at my place of employment.
- 1 I have never observed a person that I was aware had a severe mental illness.
- 8 A friend of the family has a severe mental illness.
- 9 I have a relative who has a severe mental illness.
- 4 I have watched a documentary on television about severe mental illness.
- 10 I live with a person who has a severe mental illness.

APPENDIX B2: Emotional Reaction to Mental Illness scale (ERMIS)

Dear Ms Smith,

attached I'm sending you the instrument for the assessment of emotional reactions to people with mental illness. In our studies a vignette depicting a case of mental disorder (for instance schizophrenia) has been used as stimulus. Subscale "Fear" comprises the items 1,2, 5; subscale "Pity" items 4, 7, 9; subscale "Anger" items 3,6,8.

The internal consistency of the three scales, measured by means of Cronbachs alpha, was found to be good (fear: 0.79; pity: 0.74; anger: 0.77). Confirmatory factor analysis yielded a fairly good fit for the three dimensions as indicated by a CFI of 0.953 and a TLI of 0.930 (see Angermeyer MC & Matschinger H: The stigma of mental illness: effects of labelling on public attitudes towards people with mental disorder. *Acta Psychiatr Scand* 2003; 108:304-309).

Best regards,

Matthias Angermeyer

Prof. Dr. Matthias C. Angermeyer

Center for Public Mental Health

Untere Zeile 13

A-3482 Gössing am Wagram

Austria

Phone: 43-2738-20036/ 43-664-4353199 (mobile) [aonFlex](#): Mit mobilem Breitband-Internet unlimitiert surfen um nur EUR 7,90* pro Monat. Alle Infos [hier](#).

ERMIS

(Angermeyer & Matschinger 2003; English version by Rüsck & Brück 2007, unpublished)

Imagine that you hear the following about an acquaintance with whom you occasionally spend your leisure time. Within the past months, your acquaintance appears to have changed. More and more, he retreated from his friends and colleagues, up to the point of avoiding them. If someone managed to involve him in a conversation, he would address only one single topic: the question as to whether some people had the natural gift of reading other people's thoughts. This question became his sole concern. In contrast with his previous habits, he stopped taking care of his appearance and looked increasingly untidy. At work, he seemed absent-minded and frequently made mistakes. As a

consequence, he has already been summoned to his boss. Finally, your acquaintance stayed away from work for an entire week without an excuse. Upon his return, he seemed anxious and harassed. He reports that he is now absolutely certain that people cannot only read other people's thoughts, but that they also directly influence them. He was however unsure who would steer his thoughts. He also said that, when thinking, he was continually interrupted. Frequently, he would even hear those people talk to him, and they would give him instructions. Sometimes, they would also talk to each other and make fun of whatever he was doing at the time. The situation was particularly bad at his apartment, he claimed. At home, he would really feel threatened, and would be terribly scared. Hence, he had not spent the night at his place for the past week, but rather he had hidden in hotel rooms and hardly dared to go out.

How would you react?

Please tell me how each item on the list applies to you.

1. The person scares me.

Applies completely Doesn't apply at all
1 2 3 4 5

2. I feel uncomfortable.

Applies completely Doesn't apply at all
1 2 3 4 5

3. I react angrily.

Applies completely Doesn't apply at all
1 2 3 4 5

4. I feel compassionate towards the person.

Applies completely Doesn't apply at all
1 2 3 4 5

5. The person makes me feel insecure.

Applies completely Doesn't apply at all
1 2 3 4 5

6. I feel amused by something like that.

Applies completely

1 2 3 4

Doesn't apply at all

5

7. I feel with him.

Applies completely

1 2 3 4

Doesn't apply at all

5

8. I feel annoyed by him.

Applies completely

1 2 3 4

Doesn't apply at all

5

9. I feel the need to help the person.

Applies completely

1 2 3 4

Doesn't apply at all

5

APPENDIX C: Information and consent sheet

Information and Consent Sheet

The purpose of this study is to investigate thoughts and perceptions as they relate to serious mental illness in potential employers in Durban eThekweni District KwaZulu-Natal.

Ethical Clearance No: HSS/0721/08

A quantitative non-experimental cross sectional survey relational research design is used. The study is based on the stigma conceptual framework by Link and Phelan (2001, 2004).

The data will be collected using a self report questionnaire.

Please Note:

1. There will be no reference to names of participants, the companies they work for or the academic institutions where data is being collected. Coding will be used to group data to allow for analysis.
2. The researcher will keep all information in strict confidence.
3. The published report and any published article that may occur from the study will make no reference to academic institutions, participant's names, or the companies participants work for.
4. Data will be stored for 5 years in a locked steel cupboard in the researcher's office.

The completion of the questionnaire will take approximately 15 minutes. Before completing the questionnaire you will be given an opportunity to ask questions. The researcher will explain the instructions for completion of the various sections of the questionnaire before you begin. She will also remain available to clarify how to answer the various sections throughout the data collection process.

The answers you give will have no personal consequences for you as your anonymity is assured. The researcher is completely neutral and has no investment in obtaining specific answers to questions. The researcher is

merely attempting to record your current thoughts and perceptions about serious mental illness.

A copy of the report will be given to the University of Kwa Zulu Natal

An article will be submitted for publication within 1 year of the written report.

The findings of this study will be used to raise awareness of stigma as it relates to the seriously mentally ill and inform existing anti-stigma policy and interventions.

Should you wish you may have access to the findings of this study through the Department of Nursing UKZN.

Should you have any questions or concerns you are most welcome to contact myself or my supervisor. Please see contact details below.

Mandy Smith

Ms A Smith
MA, Mental Health
University of KwaZulu Natal
Email: smitha1@ukzn.ac.za
Phone Number: 0829289296

Doctor L Middleton
Research Supervisor
University of KwaZulu-Natal
Email: Middletonl@ukzn.ac.za
Phone Number: 031 2601655

APPENDIX D: Ethical clearance



RESEARCH OFFICE (GOVAN MBEKI CENTRE)
WESTVILLE CAMPUS
TELEPHONE NO.: 031 - 2603587
EMAIL: ximbap@ukzn.ac.za

21 NOVEMBER 2008

MS. A SMITH (901307990)
SCHOOL OF NURSING

Dear Ms. Smith

ETHICAL CLEARANCE: "THE EFFECTS OF FAMILIARITY ON STIGMA COMPONENTS IN POTENTIAL EMPLOYERS TOWARDS PEOPLE WITH A SERIOUS MENTAL ILLNESS IN DURBAN KWAZULU-NATAL"

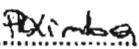
I wish to confirm that ethical clearance has been granted for the above project, subject to:

- Necessary gatekeeper permission being obtained from the Educational Institution involved in the study

This approval is granted provisionally and the final clearance for this project will be given once the above condition has been met. Your Ethical Clearance Number is HSS/0721/08

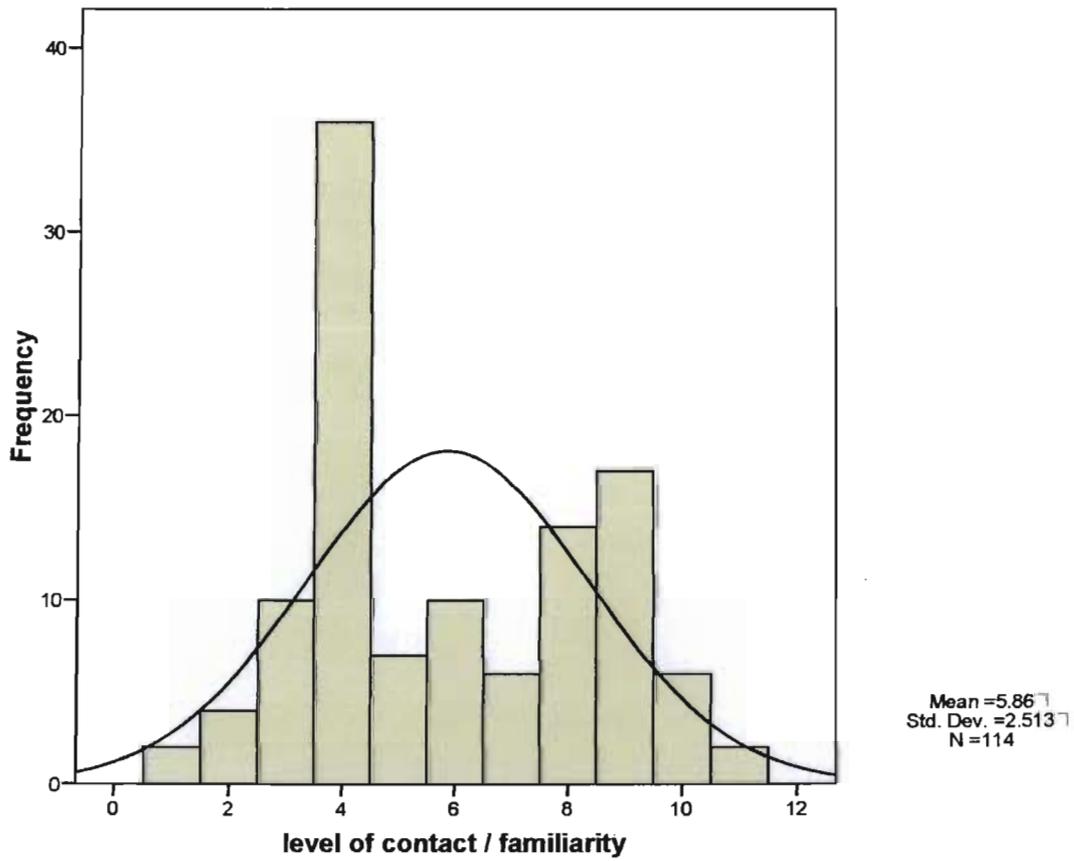
Kindly forward your response to the undersigned as soon as possible

Yours faithfully

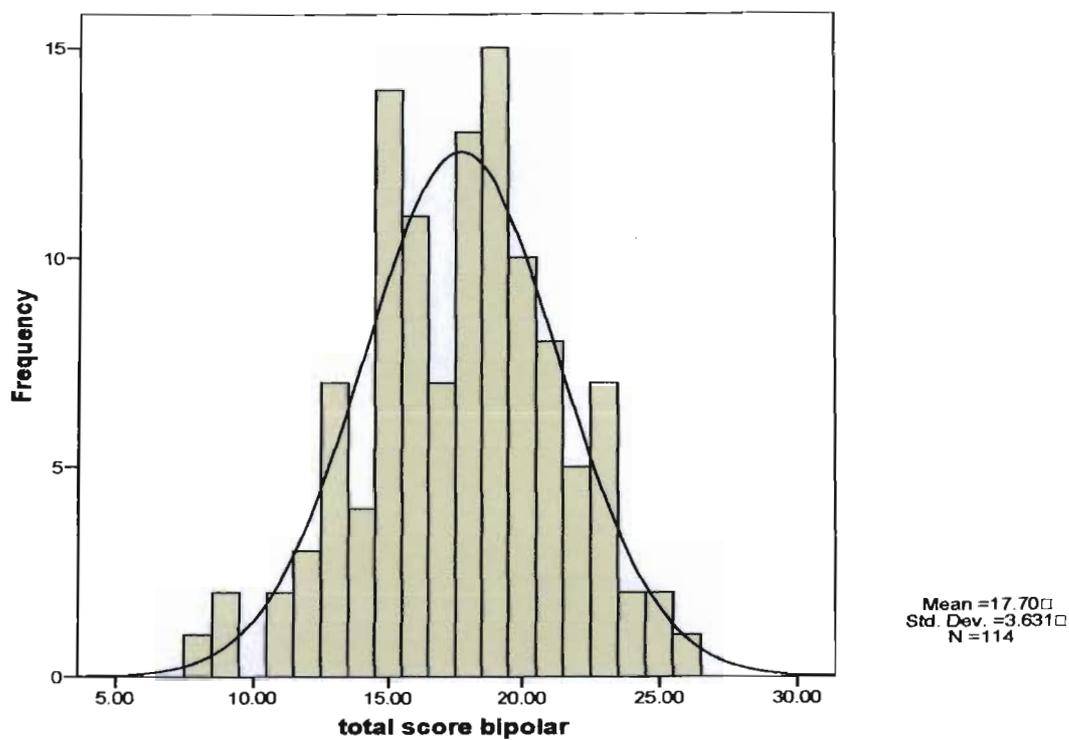

.....
MS. PHUMELELE XIMBA

cc. Supervisor (Dr. L Middleton)
cc. Mr. S Reddy

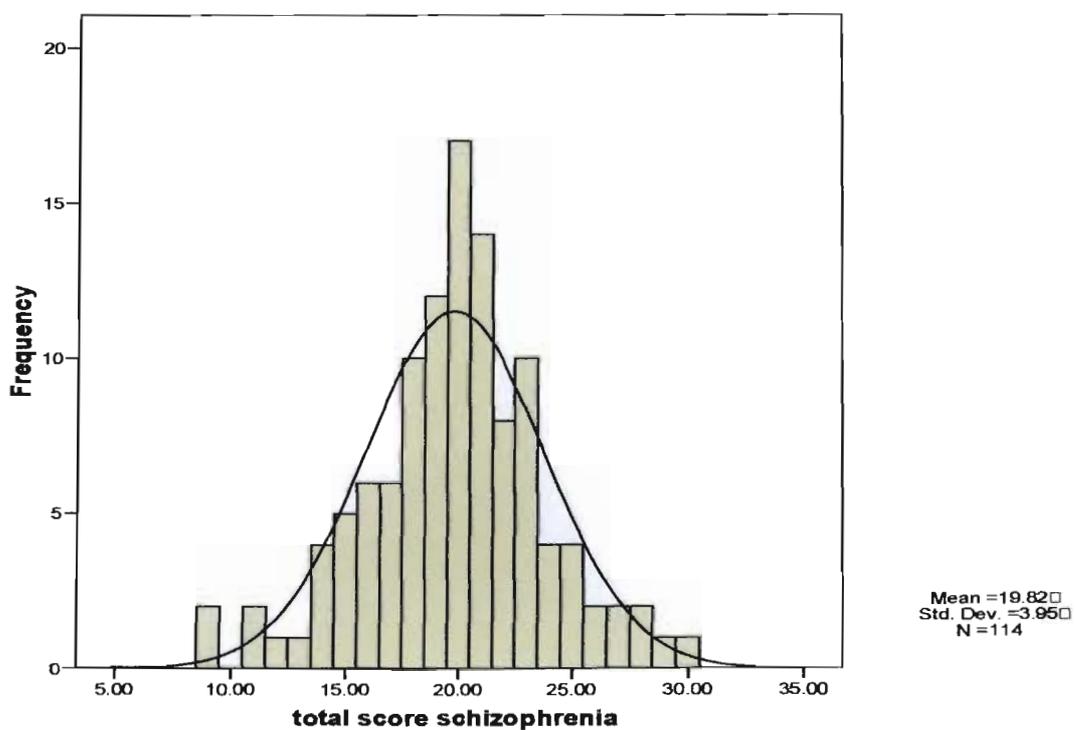
Appendix E1: Level of contact Scale (LOC)



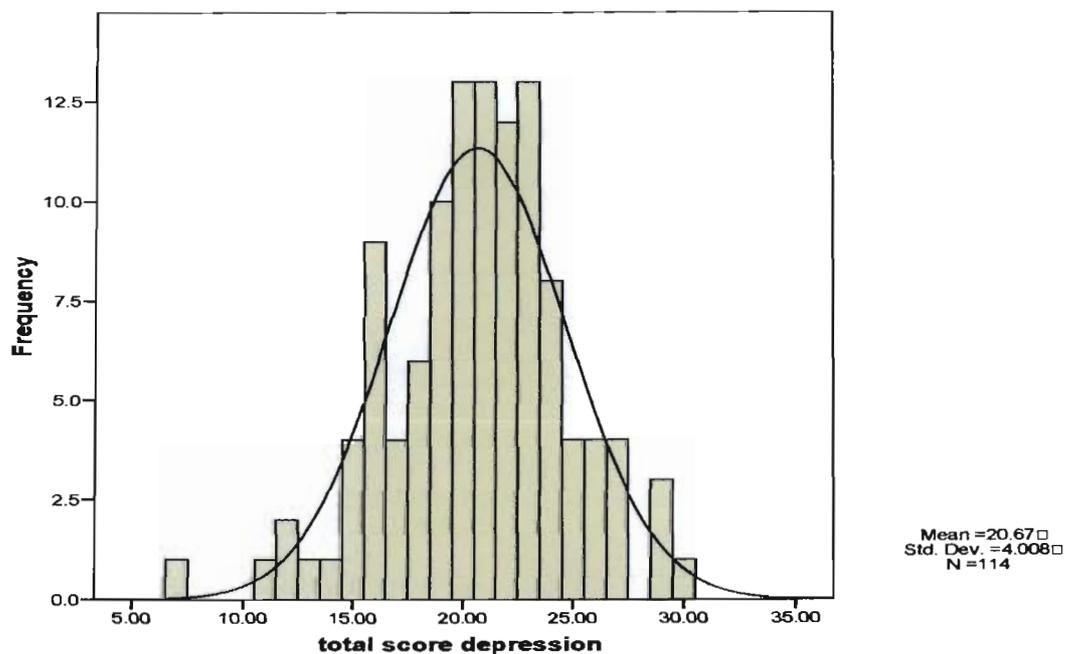
Appendix E2a: Somatic Differential Measure (SDM), bipolar mood disorder



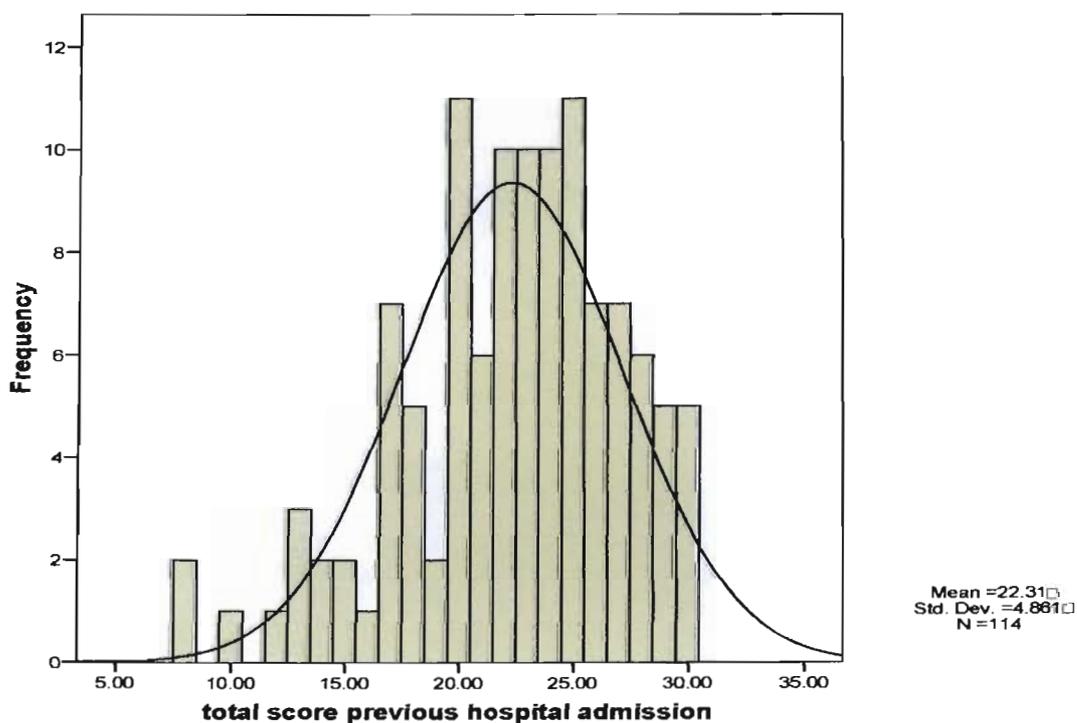
Appendix E2b: Somatic Differential Measure (SDM), Schizophrenia



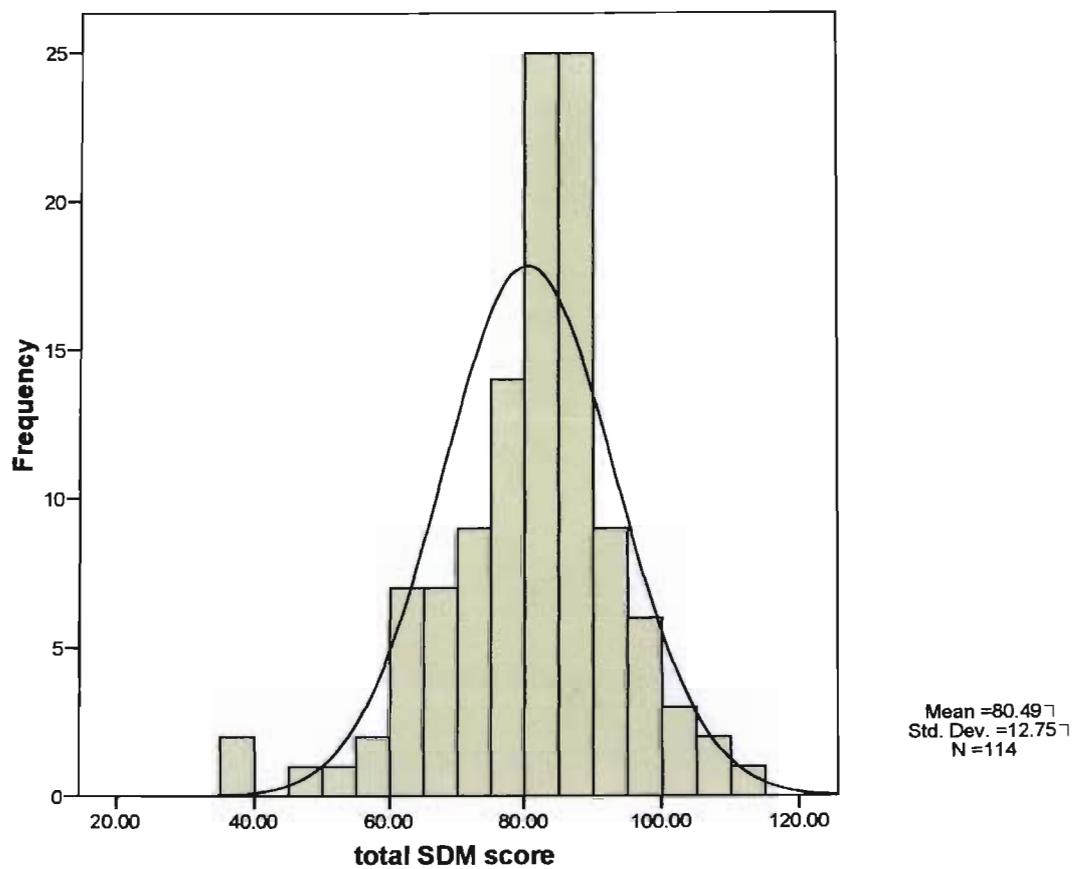
Appendix E2c: Somatic Differential Measure (SDM), major depressive disorder



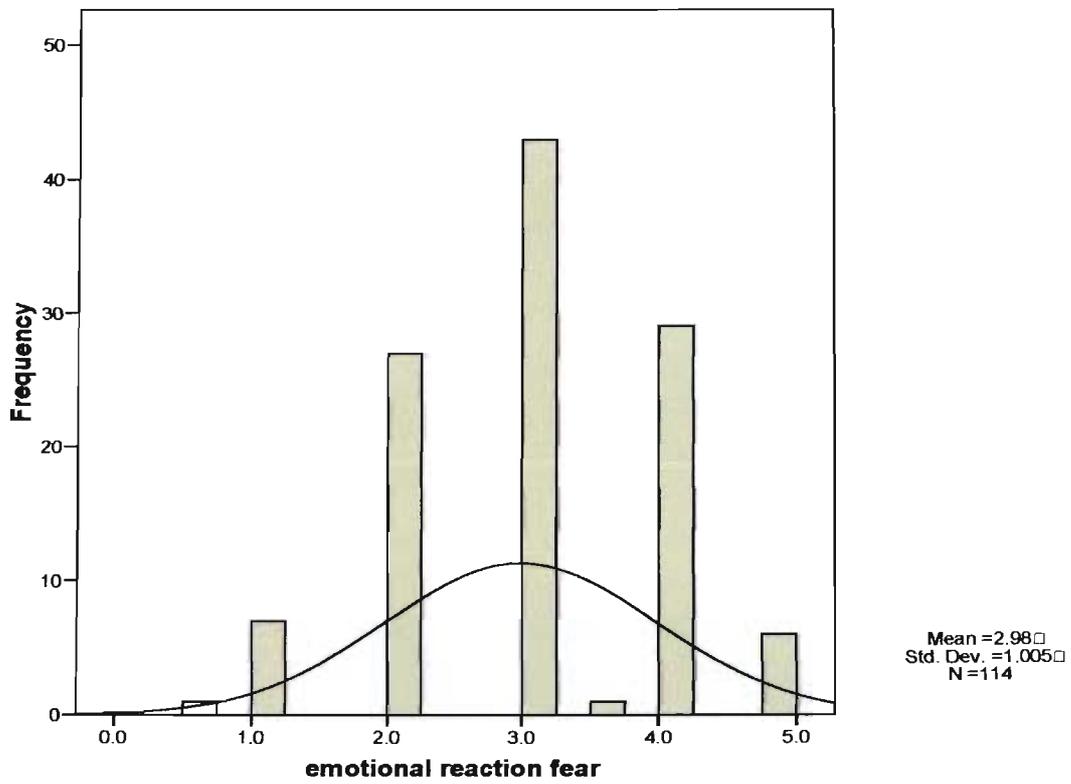
Appendix E2d: Somatic Differential Measure (SDM), previous admission to a psychiatric hospital



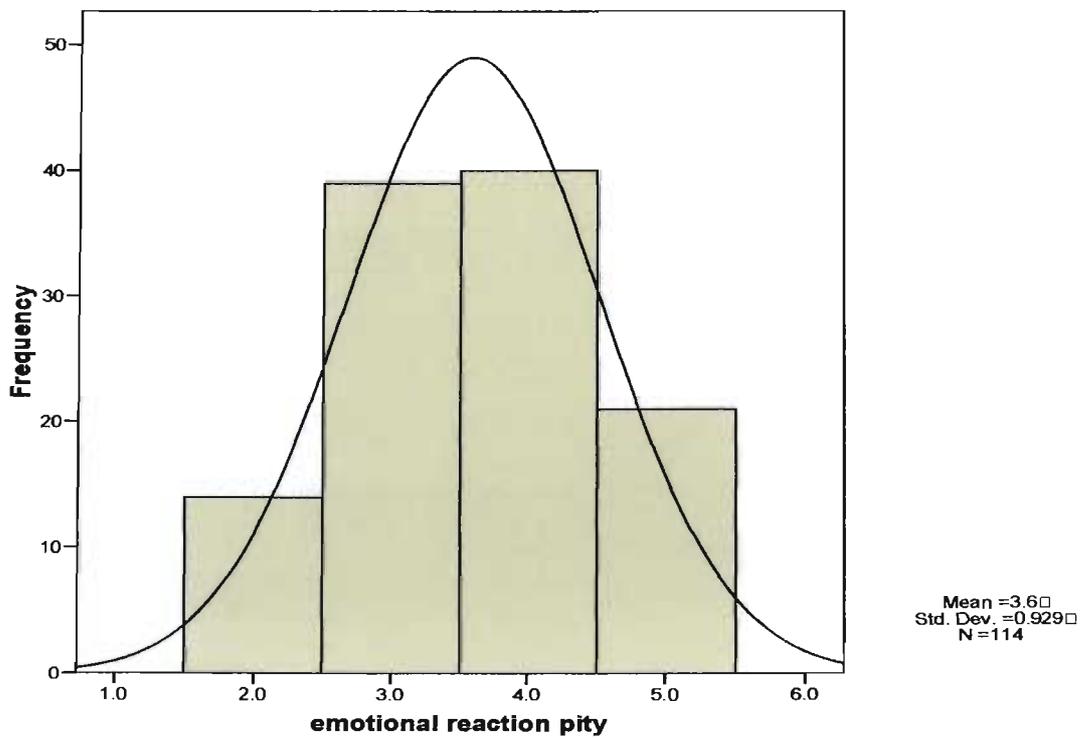
Appendix E2e: Total score, Somatic Differential Measure (SDM)



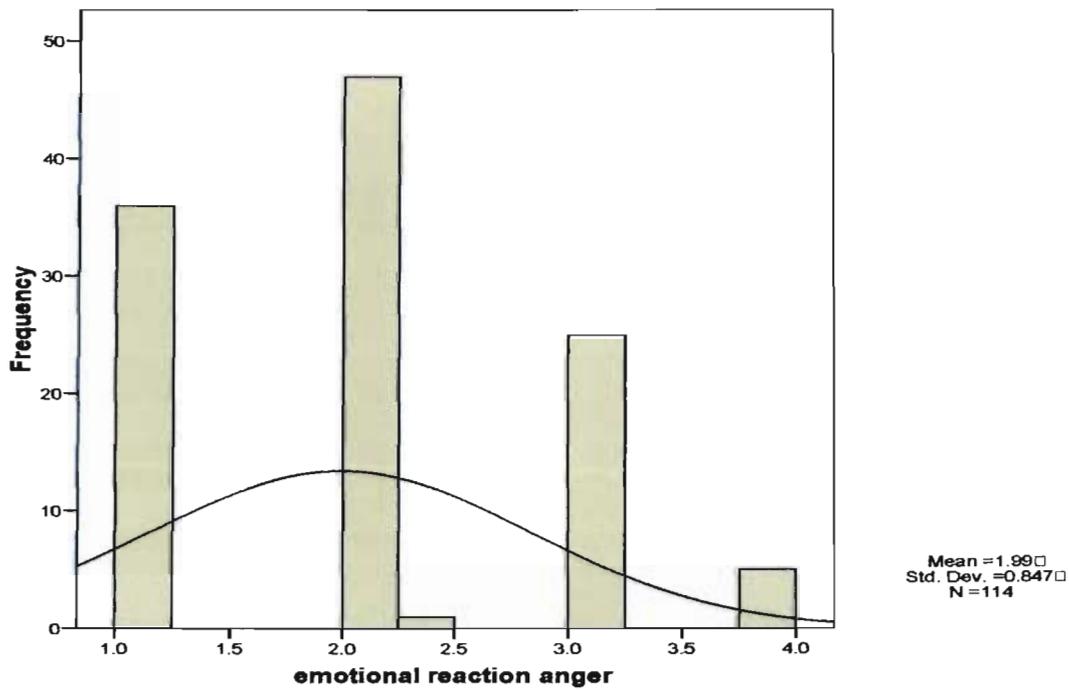
Appendix E3a: Emotional reaction to mental illness (ERMIS), fear



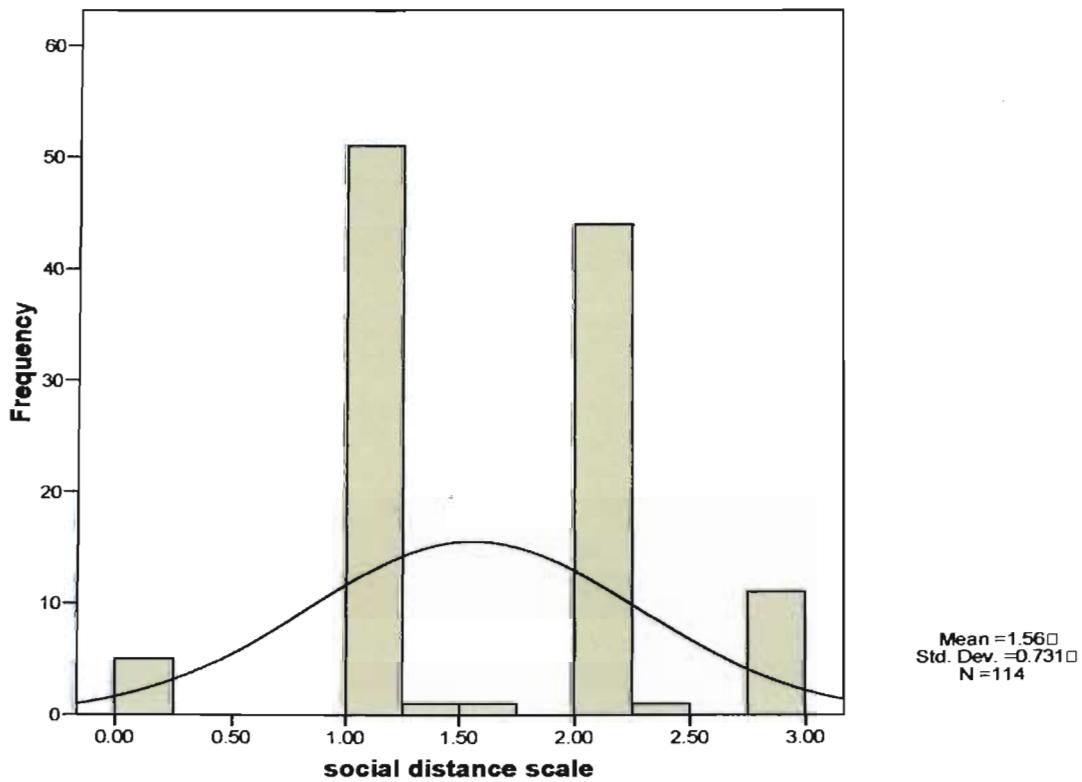
Appendix E3b: Emotional reaction to mental illness (ERMIS), pity



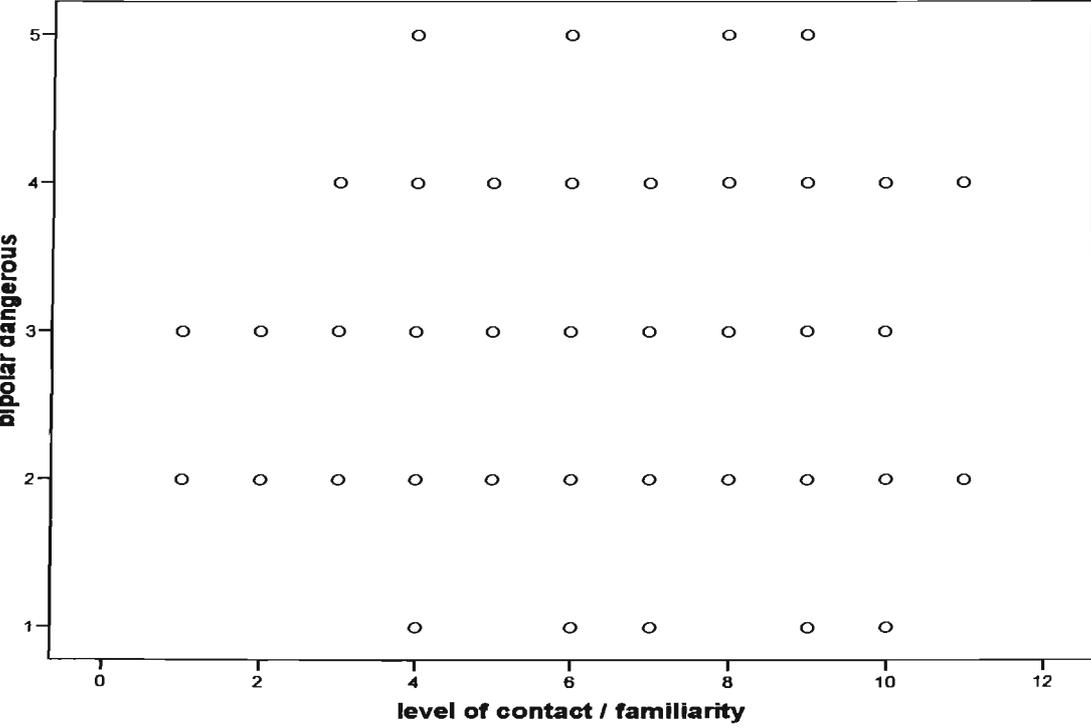
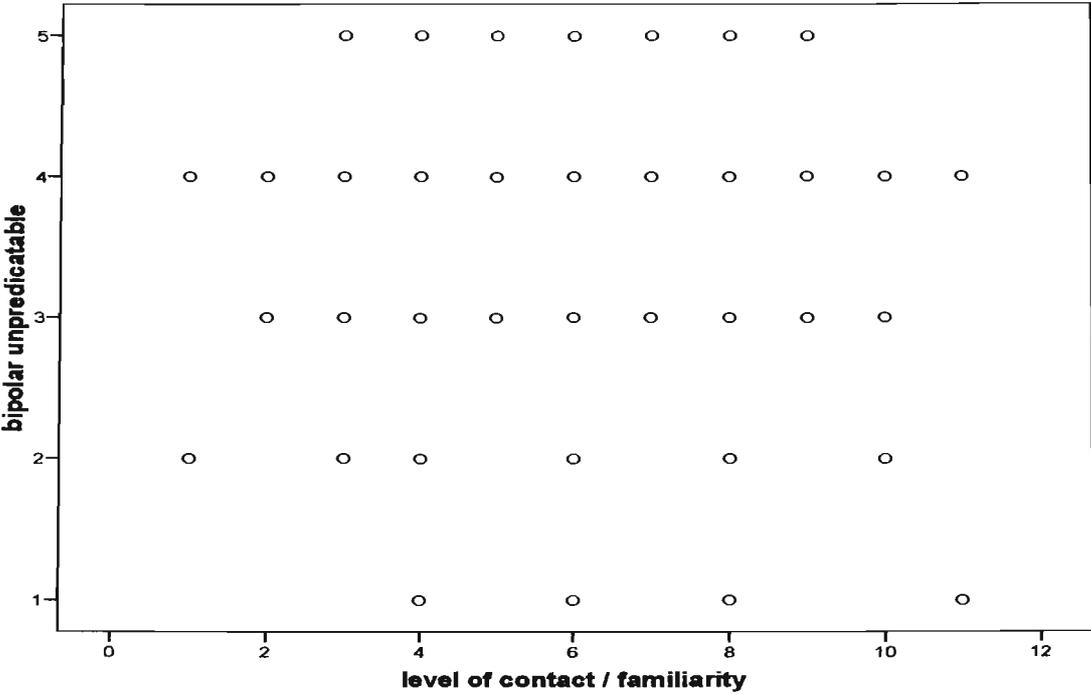
Appendix E3c: Emotional reaction to mental illness (ERMIS), anger

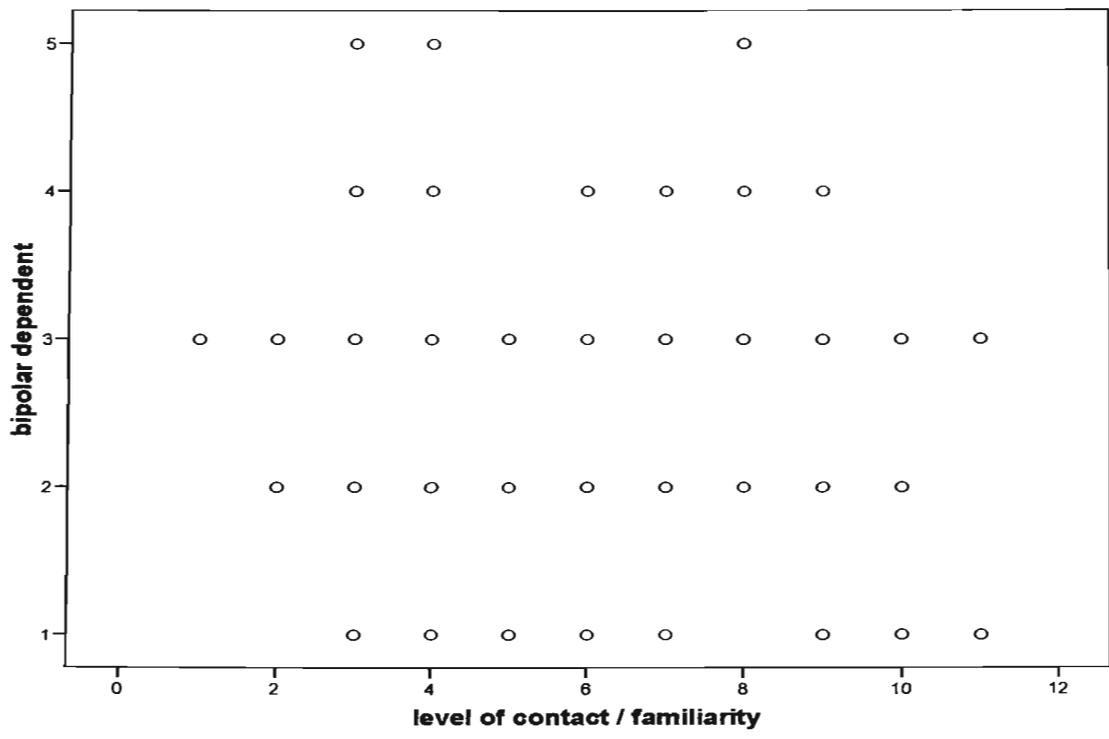
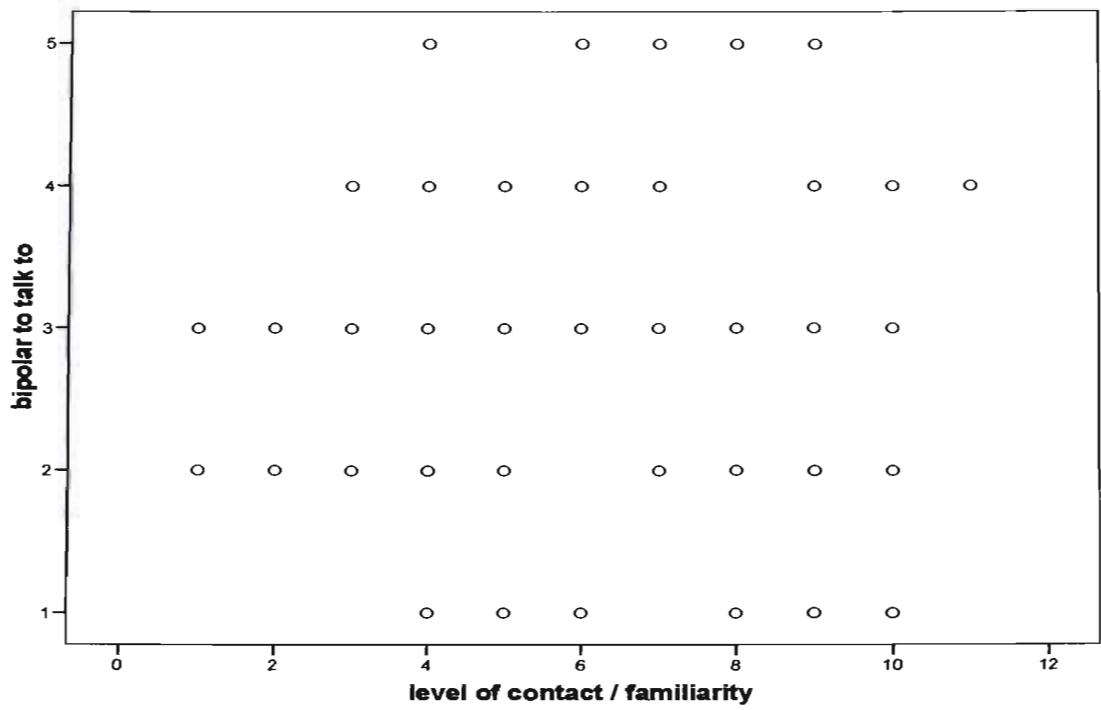


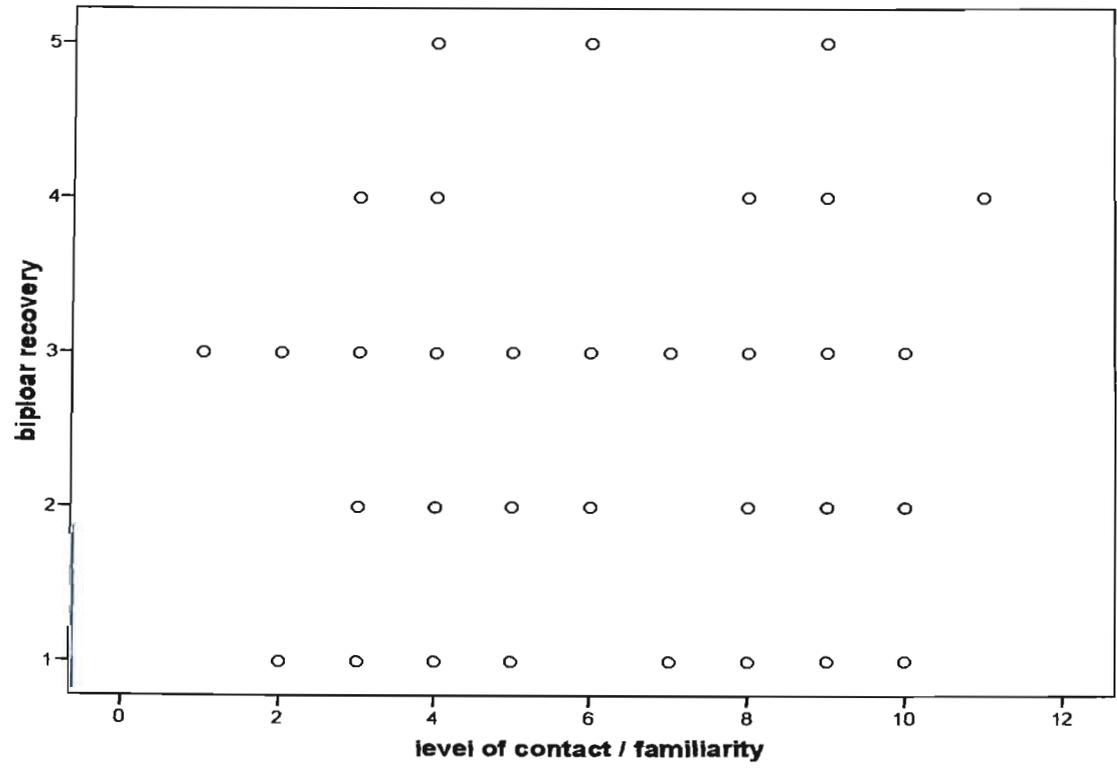
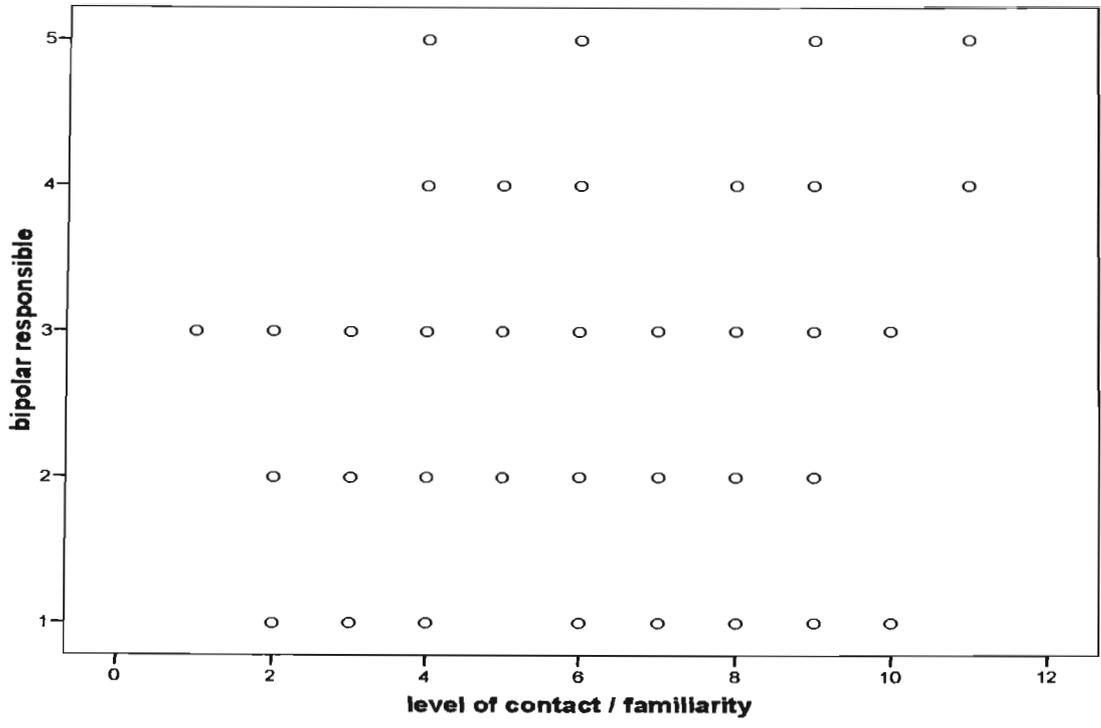
Appendix E4: Social Distance Scale (SDS)



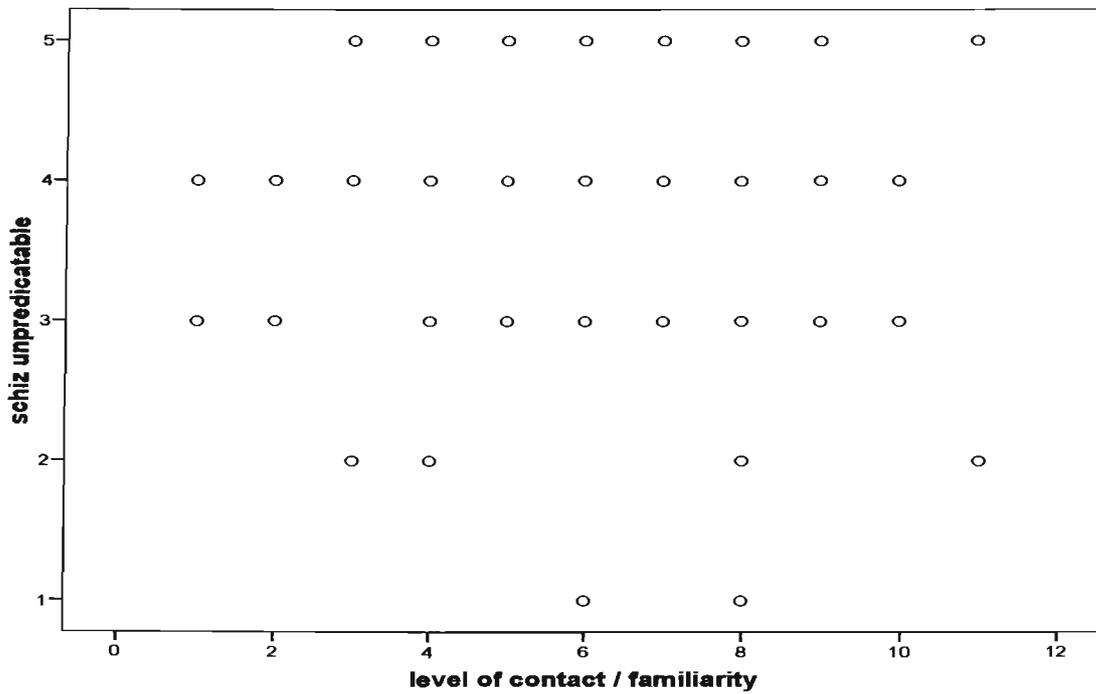
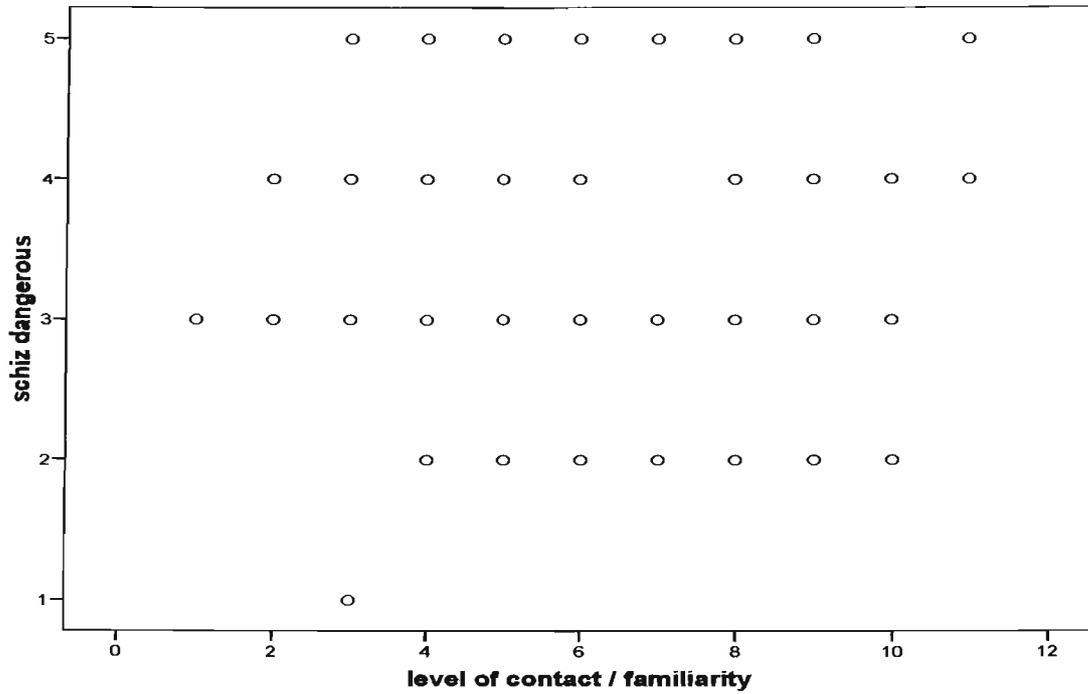
Appendix F1: Scatterplots Semantic Differential Measure (bipolar mood disorder) & Level of Contact / familiarity

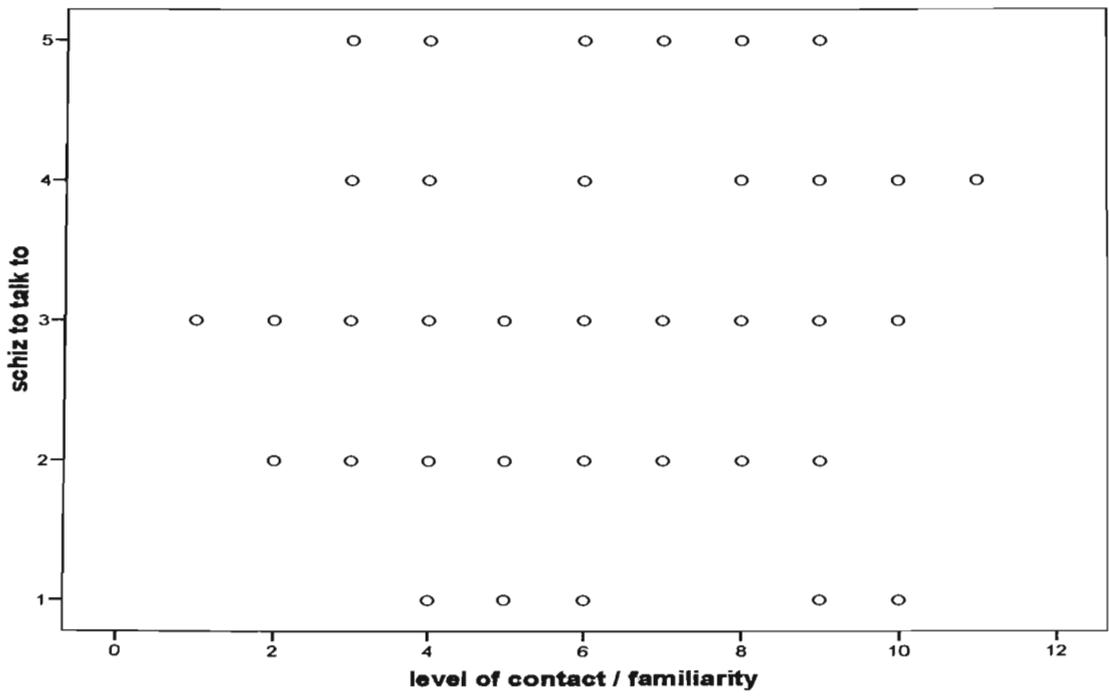
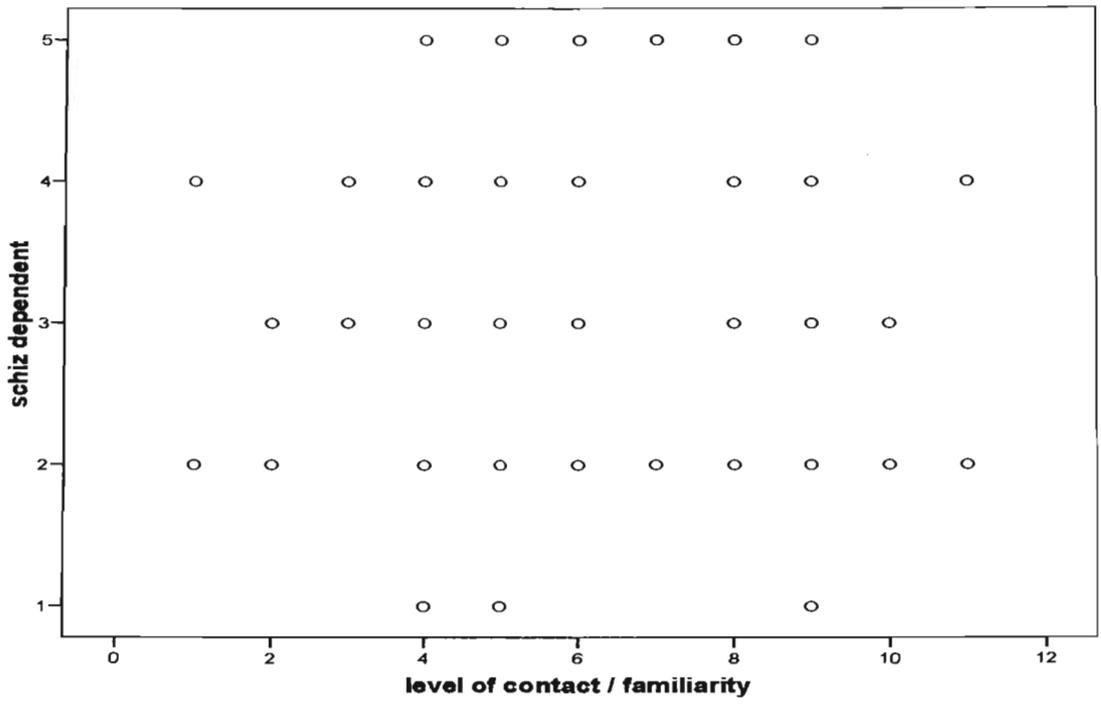


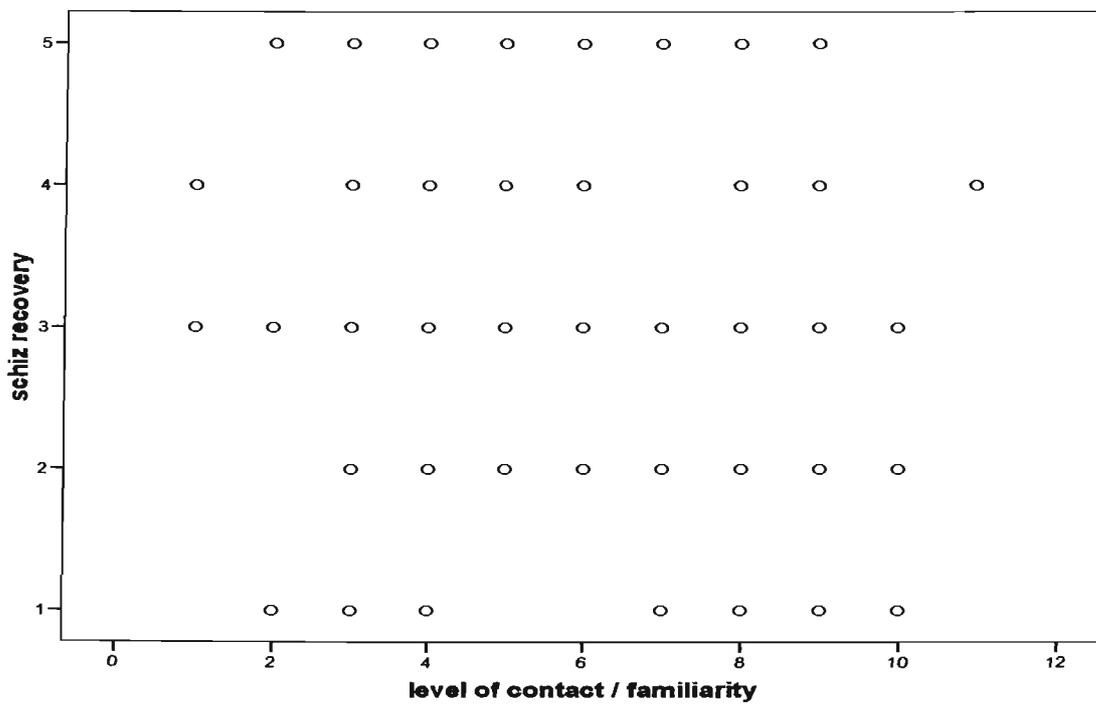
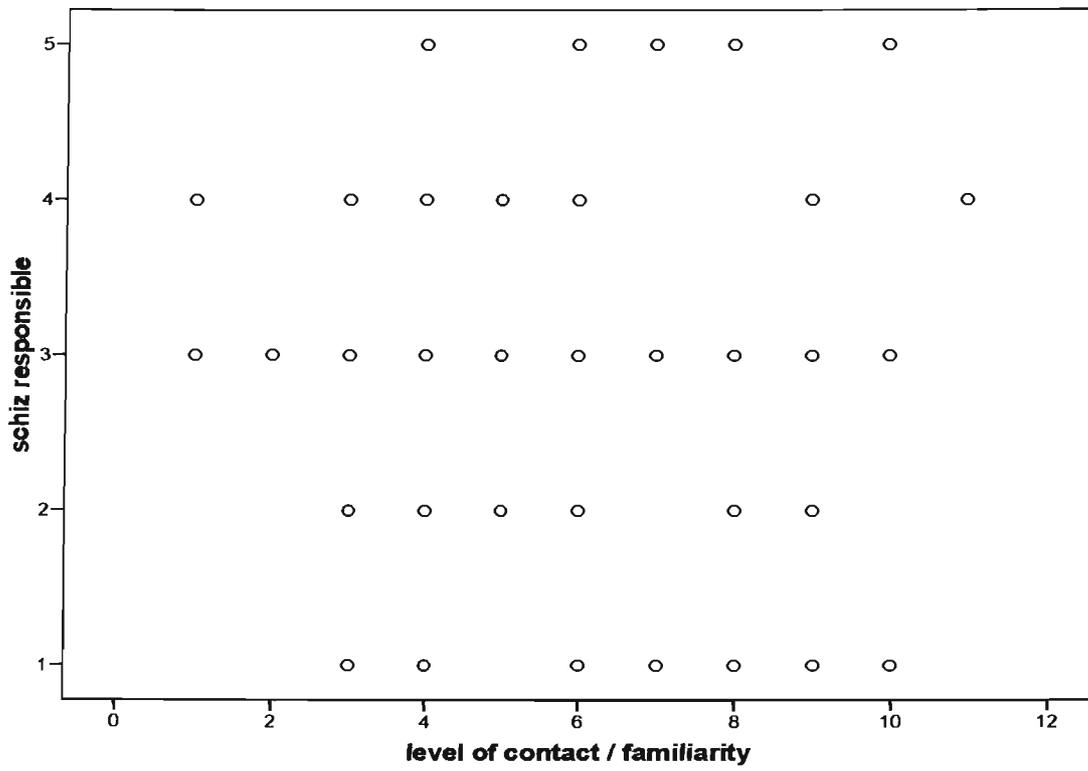




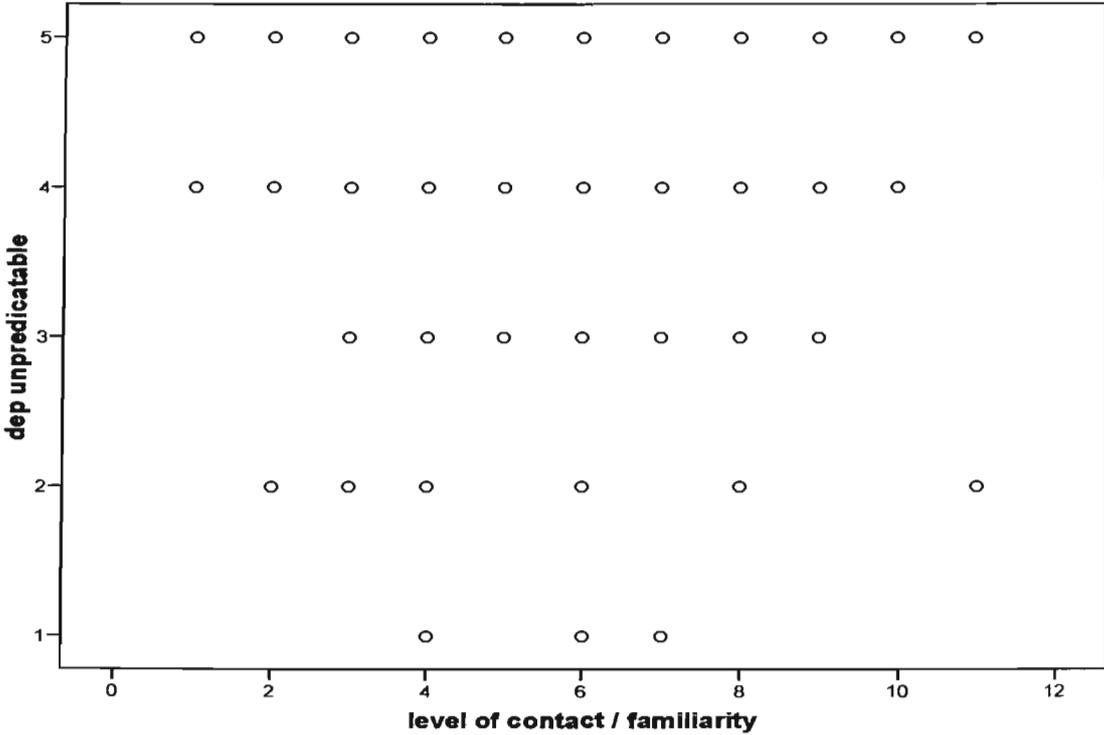
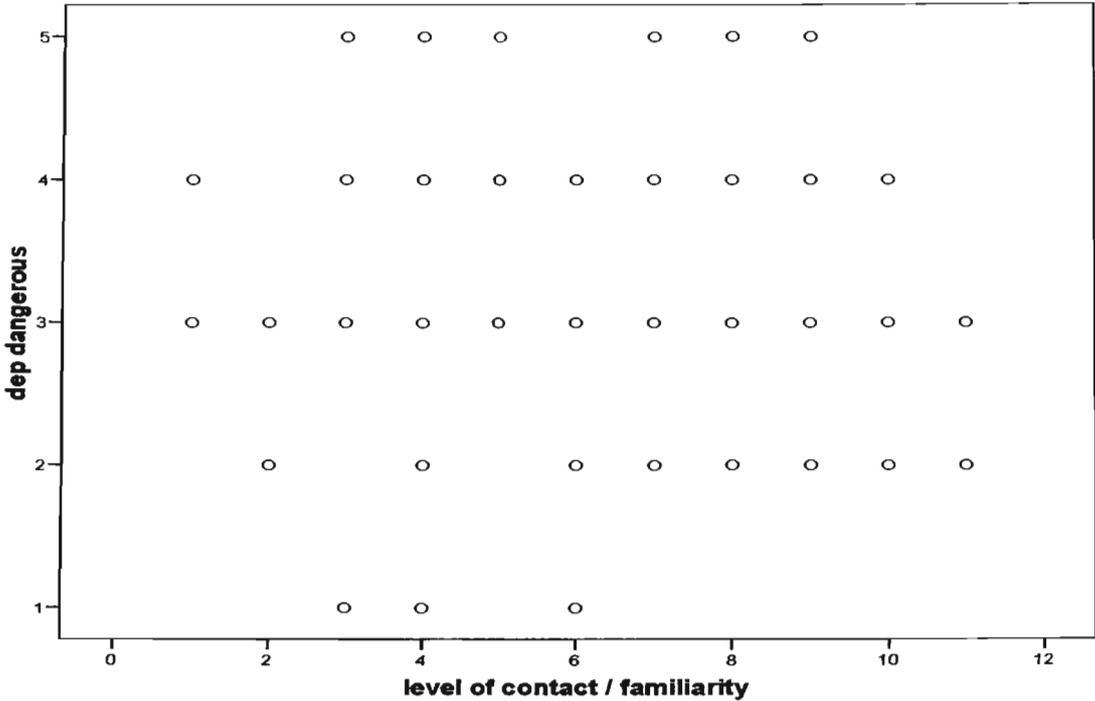
Appendix F2: Scatterplots Semantic differential measure (Schizophrenia) & level of contact / familiarity

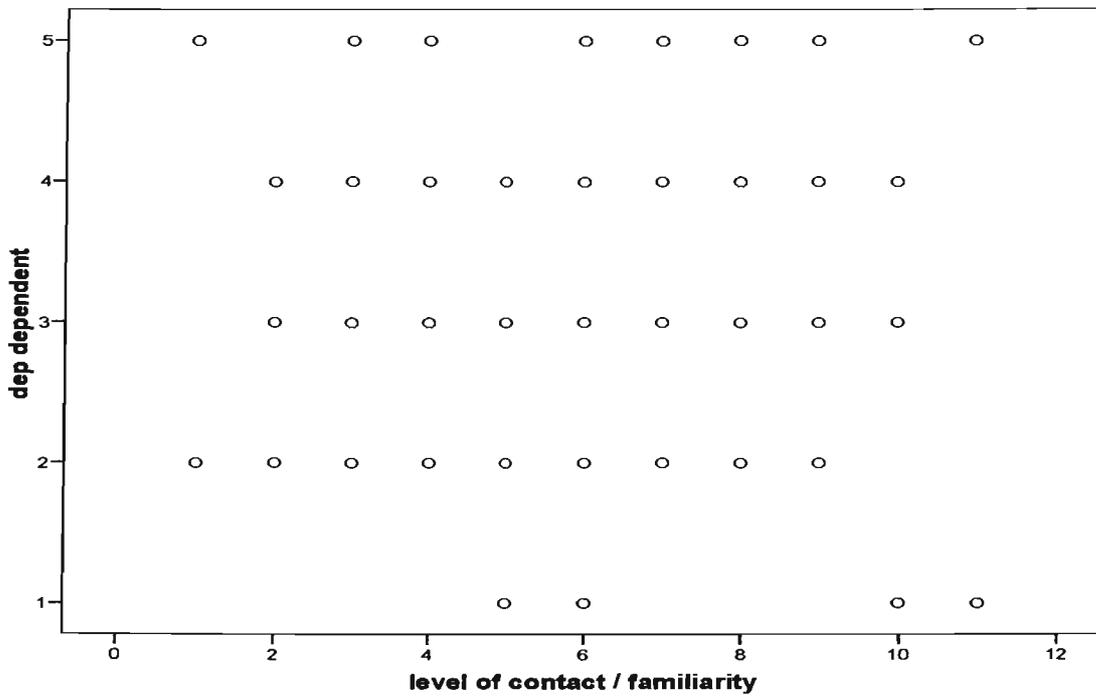
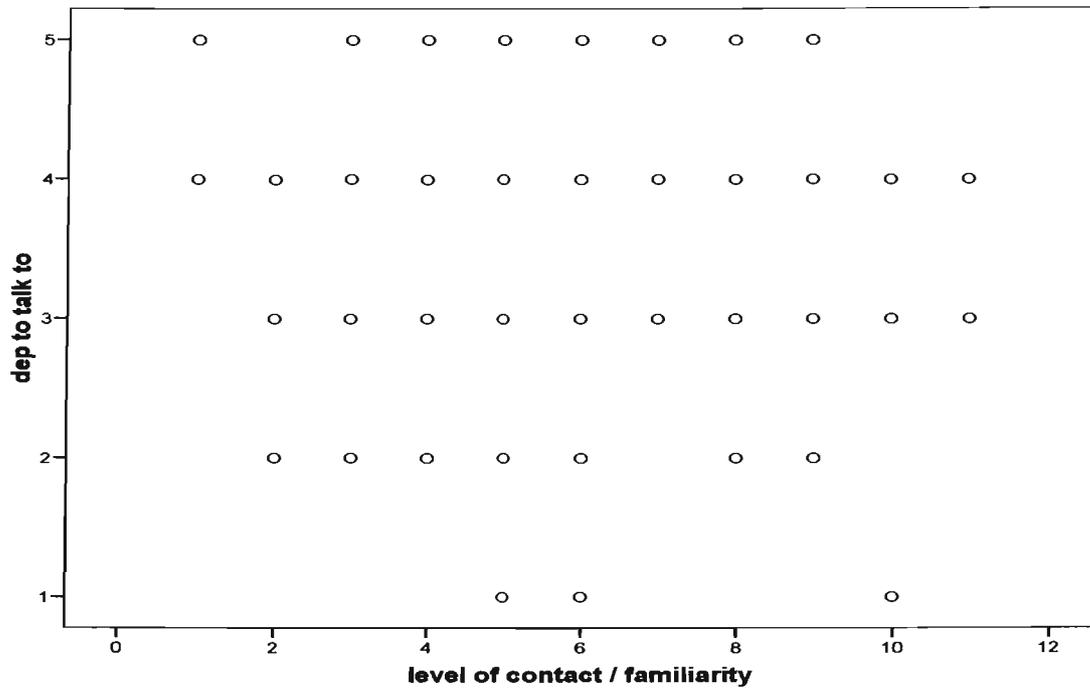


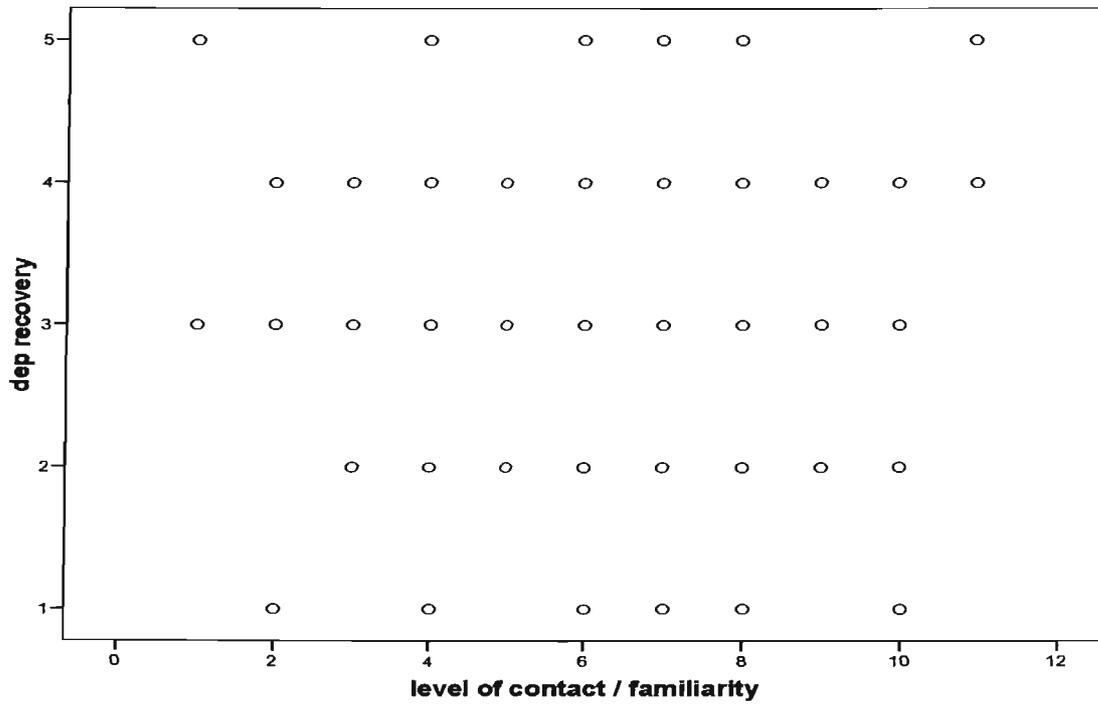
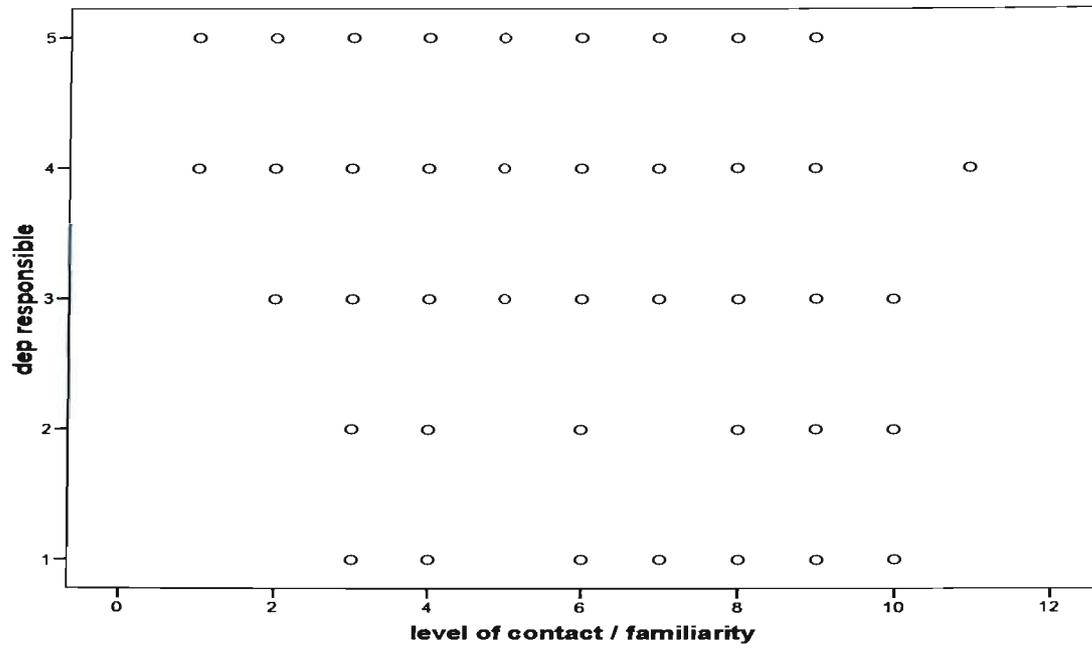




Appendix F3: Scatterplots Semantic Differential Measure (Major depressive disorder) & Level of Contact / familiarity







Appendix F: Scatterplots: Semantic Differential Measure (previous admission to a psychiatric hospital) & Level of Contact / familiarity

