DECODING SCHIZOPHRENIA ACROSS CULTURES:

CLINICAL, EPIDEMIOLOGICAL AND AETIOLOGICAL ISSUES

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By

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ABSTRACT

There is accumulating epidemiological evidence of cross-ethnic differences in relation to schizophrenia's incidence and prevalence. However, there is a dearth of information about the manifestations of cultural differences in schizophrenia's symptoms. This thesis aims to bridge the gap in our knowledge about the relationship between cross-cultural differences and schizophrenia. Throughout this thesis, I explore the similarities and dissimilarities of the content of clinical manifestation across cultures. I also examine and further develop epidemiological and clinical issues utilizing the ecological theory model. First, I perform a qualitative systematic review which includes 26 publications. I then discuss findings from a statistical analysis of a mental health population of 860 patients in Brent, North London. Lastly, I report results from a semi-structured mental health questionnaire that was devised and disseminated to 48 mental health professionals in London. Results indicate that ethnic groups which experience a higher incidence of schizophrenia also tend to display more positive or first rank symptoms. These ethnic groups that experience a higher incidence of schizophrenia also belong to cultures that culturally legitimise an externalization of their distress. On the other hand, it was found that cultures that internalize their distress experience lower incidence of schizophrenia. *My research further demonstrates that schizophrenia's interpretations are heavily dependent on the diagnosers' own cultural background, and on the degree to which the externalization of a symptom is tolerable in that context. Furthermore, evidence of intra-cultural diversity in clinical settings underscores the importance of achieving higher cultural competence.*

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ACKNOWLEDGEMENTS

I have learned from undertaking this piece of work that independence and interdependence are achieved simultaneously. Doing research and writing on the same topic for over three years certainly overburdened my social life and sometimes my state of mind. Without the support of the many colleagues, friends, and family I realise that it would not have been possible to complete this thesis. They allowed me to harmonize the different aspects in my life in a multitude of ways.

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INTRODUCTION

We are now led to believe that we have mastered schizophrenia's definition and have claimed certainty of our knowledge of what it is and what it is not. Yet with all our endeavours, we are actually very far from understanding it. Patient demographic shifts have unquestionably challenged this notion and revolutionized our conceptions over the last decade and a half, especially in European and North American countries. Schizophrenia has now become referred to as the "Black Disease" (Metzl, 2009, p. xxi). The heart of this thesis lies in taking this etiological dilemma a step further, through a deeper cross-sectioning of cultural discourses and the content of the presentation of schizophrenia symptoms.

The primary objective of this thesis is to generate a more profound and holistic understanding of the clinical, epidemiological and socio-environmental differences of schizophrenia's incidence across ethnic groups. I aim at exploring how mental health professionals report on and understand cross-cultural differences with a specific focus on the content of manifestations and the clinical interactions. The analysis goes beyond the symptoms to also probe on the current estimates of case loads of new immigrants to the UK.

Throughout the chapters, I cite previous studies and works on the topic to elaborate on the socio-cultural inception of schizophrenia as a mental illness. One should expect to delve into understanding schizophrenia's symptoms, epidemiological dilemmas, and cross-cultural interactions from a cultural perspective. I have dissected

schizophrenia from two main angles in the literature review and in the field work; one of which is epidemiological findings, and second through ethnographic and clinical interpretations.

The first chapter provides the reader with a historical and definitional recount of schizophrenia. Apart from learning how schizophrenia was developed and coined, schizophrenia's clinical definition is also covered within the context of culture. The chapter delves into the notion of the subjective weighting of clinical interactions and how and where cultural signifiers are factored in. The second chapter is a literature review of outcome studies in relation to schizophrenia and ethnicity performed over the last seventy years. Aetiological theories which include biological, psychosocial and geographical predictors are then discussed.

Following the literature review, chapter three justifies the main aims and objectives of this piece of work and outlines the methods and rationale behind each study that has been performed. The chapter also uncovers and explains the theoretical backbone of the thesis. Bronfenbrenner's ecological theory is explained and developed further by touching on the macro level societal functions to the micro level, of the self. Schizophrenia's aetiology is explained using a holistic approach and will serve to function as a theoretical discourse of the remainder of the chapters.

Chapter four commences with a qualitative systematic review (Study I), or meta-narrative, one which has not been previously carried out, which elucidates at the qualitative symptomatic differences of schizophrenia's manifestations across cultures. Schizophrenia has traditionally been understood in relation to the patient. The meta-

narrative not only manifestations of in symptoms across cultures, but also brings attention to the diagnoser or the mental health professional and explores how culture interplays in the dyadic interaction. I explore patients', family members', and carers' perspectives on the meaning of schizophrenia because they are the porters of cultural signifiers. Ultimately, family members and carers are viewed as the cultural mirror of the patient. This means that they allow for a more profound elucidation of one's culture, leading to a better perception of where and how culture interacts with symptomatic displays of schizophrenia.

I next turn to socio-demographic trends, specifically with a focus on the ethnic variations of mental health schizophrenia patients in Brent, Northwest London (Study II). Study II is a descriptive section of the demographic population of schizophrenia by ethnicity. On the whole, chapter five situates the reader within the current reality of who is diagnosed with schizophrenia but then statistically tests the theory of ethnic density (Study III). The theory of ethnic density maintains that the higher the concentration of people from one's ethnic group, the less likely one is to be diagnosed with a mental illness within that geographic region. Fundamentally, the theory of ethnic density is a new concept that does not have sufficient scientific substantiation. I test whether the ethnic density theory applies to Asian, Black and White groups diagnosed with schizophrenia in Brent, Northwest London, in 2007.

In study IV, which is discussed in chapter six, I report on findings from a mental health semi-structured questionnaire that was disseminated in London in 2008. Throughout the chapter, I estimate the current patient cohorts who are first generation migrants from Central and Eastern Europe, the Middle East, and the African Diasporas. I

also expand on etiological explanations, but this time made by mental health professionals. Culture as a concept is also explored in relation to the content and displays of schizophrenia's symptoms. Mental health professionals report on some real life examples of cross-cultural differences in terms of the content of the manifestations of symptoms of patients diagnosed with schizophrenia in London.

Chapter seven provides a summative overview of the thesis's contributions; a new paradigm in ethno-psychiatric research. The first set of findings in relation to culture emphasize that cross-cultural differences are most reported on in terms of positive symptoms. I have also argued that unless we start looking at schizophrenia's symptoms, displays, clinical interactions, and interpretations and by including the Other (clinician in the dyadic interaction), we cannot understand neither its etiological nor its epidemiological cross-cultural patterns.

In chapter eight, I provide recommendations based on a re-evaluation of the data collections system in the National Health Services. The chapter portrays that the mental health data analysed brought us to what we currently know and for that reason it is no surprise that studies in the UK have been very similar in their findings and their conclusions. I maintain the issue that the centralisation of information is essential, but not at the expense of losing valuable demographic information about patients.

The thesis's chapters are extensive but not exhaustive. I have developed a theoretical framework by uncovering what entails an interaction between a schizophrenia patient and a clinician. It is a model that needs to be recognized in psychiatry in multi-cultural workplaces because it adds on a holistic approach and one

which recognizes that culture may no longer be seen as a separate entity in our scientific study of schizophrenia.

I anticipate that the cross-culturalisation of the mental health systems will only complicate matters even further in the future. Manifestations of psychotic or depressive schizophrenia symptoms will become highly solidified as cultural signifiers. For that reason, with the great respect I have to the medical advances in psychiatry and neuroscience, I maintain that schizophrenia needs to achieve a higher degree of anthropological and ethnographic reflective practice.

CHAPTER ONE

A CROSS- CULTURAL HISTORY OF SCHIZOPHRENIA

1.1 Introduction

In this chapter, I outline the history of schizophrenia and its diagnostic interpretations in order to provide an account of how the disease unfolded into what it is known as today. I also discuss current legislation relating to ethnicity and diagnosis affecting mental health professionals in the mental health field in the United Kingdom. I then critically evaluate the literature on the incidence and prevalence of schizophrenia by ethnicity. Finally, I explore the previously known etiological theories on why immigrant groups have been experiencing the highest rates of schizophrenia in comparison to their host populations.

1.2 So, What is Schizophrenia?

Schizophrenia is a mental disorder with psychotic symptoms as its defining feature, according to the DSM- IV (American Psychiatric Association, 1994). The DSM IV-Revised version and the ICD-10 are currently the most widely used criteria for diagnosing patients with mental disorders. Labelling a patient with schizophrenia follows certain medical diagnostic criteria: First of all, common symptoms must be apparent that should last for at least six months and at least one month of active phase symptoms. It must

include any two of the following manifestations: delusions, hallucinations, disorganized speech or grossly disorganized or catatonic behaviour[1] according to the criteria set by the American Psychiatric Association (1994).

Psychotic symptoms are otherwise known as positive or first rank symptoms (Royal College of Psychiatrists, 2009). Schizophrenia's symptoms are also identified when there is loss of interest, inappropriate or blunted affect and alogia which constitute the negative symptoms of the illness (World Health Organisation, 2007). Cognitive impairment is also seen as a third feature of a person suffering from schizophrenia by the National Institute of Mental Health (2009) in the United States.

Schizophrenia also includes subtypes (American Psychiatric Association, 1994) which are disorganised, catatonic, paranoid, schizophreniform, residual, and schizoaffective disorder. The World Health Organisation (2007) includes paranoid, hebephrenic, catatonic, undifferentiated, post-schizophrenic depression, residual schizophrenia, simple, other and schizotypal[2]. People diagnosed with schizophrenia usually develop a chronic illness which lasts over a lifetime in the developed world. Nearly 80% of those who have a first episode recover, but 70% will have another episode within five to seven years (NHS, 2009).

[1] For in depth definitions on criteria of the definition of schizophrenia from the DSM, ICD and the NHS refer to the appendix.

[2] Refer to the appendix for more detailed definitions of the subtypes.

1.3 Clinical Interpretations

According to the Oxford Dictionary the definition of a diagnosis is “a statement of the nature of a disease or other condition made after observing its signs and symptoms” (Ehrlich, Flexner, Carruth & Hawkins, 1980, p. 176). A mental health patient usually seeks assistance from a clinic or hospital as a result of suffering from a symptom (or a multiple of symptoms); whether it is an emotional, psychosocial or physical complaint. The clinician’s role is to decipher from the patient what the verbal and non-verbal manifestations may medically translate into. With the medical expertise of a psychiatrist and with the assistance of nurses and other mental health professionals, a patient is observed over a certain period of time (3 to 6 months as recommended for a diagnosis of schizophrenia) in order to clinically diagnose and start treatment. Mental health professionals look for symptoms such as changes in the appearance, mood, thoughts and behaviour of a patient. Other manifestations relevant to schizophrenia are thought distortions, hallucinations and other psychotic symptoms as summarized in table 1 (p.19).

In the process of diagnosing schizophrenia, examining symptoms relies on observational skills and an accurate interpretative ability on the part of the clinician. As Tilbury (2002) affirms in his book about working with mental illnesses, diagnosis is an art. The role of the clinician is to assess whether the patient’s appearance, beliefs, speech, cognition and insight are normal or abnormal to signify a symptom of a mental disorder. One would need to discern ‘abnormal’ patterns of speech, distortions, hallucinations and behaviour to make the most objective medical interpretation.

Other than the observations made by the psychiatrist to diagnose, there are clinical diagnostic tools one may use to systematically assist in the diagnosis of patients. There seems to be variations in the use of the assessment tools worldwide, but generally the DSM-IV uses the Structured Clinical Interview for DSM Disorders (SCID). There are research and clinical versions that ask questions on all mental illnesses found in the DSM, and one of which is schizophrenia and its subtypes. SCID is ultimately dependent on the interview questions that take place between the patient and clinician. SCID has been translated into 14 different languages[3], which means it may be used in many countries around the world.

Table 1. Common Symptoms of the Mental State Examination

Appearance
Behaviour
Mood
Speech and thought
Formal distortions of thought
Abnormal beliefs (delusions)
Abnormal perceptions (hallucinations, passivity)
Phobic Symptoms
Obsessive Compulsive symptoms
Suicidal ideas
Homicidal ideas
Cognitive testing
Insight (patient's own ideas of self)

Source: Summarized from Poole, 2004, p. 139.

[3] Languages include Chinese (Mandarin), Danish, Dutch, French, German, Greek, Hebrew, Italian, Portuguese, Romanian, Spanish, Swedish, and Turkish.

Questions related to the validity and reliability of techniques for assessing schizophrenia have been raised over the last decade. Newer versions of the DSM were expected to result in higher reliability.

For schizophrenia, reliability tests were done for the DSM III-Revised version which came up with a 0.94 reliability score (Skre, Onstad, Torgersen, & Kringlen, 1991) whilst Williams et al. (1992) came up with 0.65. First, Spitzer, Gibbon, and Williams (1997), who have devised the clinical version of SCID, emphasize that the validity of a diagnostic assessment technique is generally measured by determining the agreement between the diagnoses made by the assessment technique and some hypothetical 'gold standard.' Unfortunately, a gold standard for psychiatric diagnoses remains elusive. There is an obvious difficulty in using ordinary clinical diagnoses as the standard because structured interviews have been specifically designed to improve on the inherent limitations of an unstructured clinical interview (Biometrics Research Group, 2009).

There are also other widely used tools for assessing schizophrenia patients. On is the Brief Psychiatric Rating Scale (BPRS), which consists of a series of 18 items that ask on a Likert scale the severity of symptoms (non-present to severe). The BPRS is used in diagnosing patients with schizophrenia or other major psychotic disorders, such as bipolar disorder.

Another recognized assessment tool is the Positive and Negative Syndrome Scale (PANSS), which is a scale of 30 items. Each assessment tool has advantages and disadvantages.

In comparing these three interview tools, SCID I (used for schizophrenia) takes the longest (1 to 2 hours); PANSS takes less time (30 to 40 minutes); and the BPRS (15 to 30 minutes) is the shortest.

The reliability and validity of each of these assessment tools are of some concern to psychiatrists. The PANSS has one advantage, which is that it asks the patient questions which are based on his or her subjective experiences, requiring fewer interpretations by the clinician. The BPRS and SCID, on the other hand, are based on the interpretations of the clinician or psychiatrist, which in turn are based on their subjective and clinical experience in making sense of observations of the patients. All of the diagnostic tools require a degree of training in interview techniques in order to administer them. The people who are able to utilize them are usually psychiatrists, psychologists, and other mental health professionals.

Other known psychiatric assessment tools in relation to schizophrenia are the Research Diagnostic Criteria (RDC), the Present State Examination (PSE), and Computer Assisted Diagnosis (CAD); these last three are mainly utilized for epidemiological and medical research purposes, and not in the clinical setting (Spitzer, Endicott, & Robins, 1975; 1989).

1.4 Objectivity, Subjectivity and Schizophrenia

The words “objectivity” and “subjectivity” are thorny to write about in a few sentences.

The understandings of normality and abnormality differ from one society to another and even from one individual to another within a society, resulting in a higher likelihood of subjectivity in interpreting symptoms. In order to investigate the process of diagnosis two medical cases are presented, each leading to a diagnostic decision; one which concludes with a diagnosis of HIV (case A) and another with a diagnosis of schizophrenia (case B). The two examples highlight the main differences between two medical systems; one marked by high subjectivity, and another, which is more reliable and structured, based on objectively observed or medically tangible results.

A medical diagnosis is usually initiated by the patient divulging symptoms to the clinician (whether overtly or covertly). In the case of a psychiatric illness, a patient's symptoms are indicated by his behaviour, and it is up to the psychiatrist to decide whether a patient's behaviours constitute symptoms of a mental illness.

The diagnosis of a patient with AIDS, on the other hand, solely requires the doctor to observe the physical symptoms, blood results and scans that will inevitably provide with highest level of certainty of an accurate diagnosis, unlike the diagnosis of schizophrenia which is ultimately based on observation and an interpretative evaluation of a patient.

As figure 1 shows (p.24), in case A the diagnosis of a patient who has active Acquired Immuno-Deficiency Syndrome would be certain once physical testing, scans and blood samples are performed. The doctor meets with the patient noting his or her medical history while analyzing changes that have been occurring over a designated time period. Once the results of the blood tests and the observation of physical tests take

place, then the doctor is able to diagnose the patient as HIV positive with almost one hundred percent certainty.

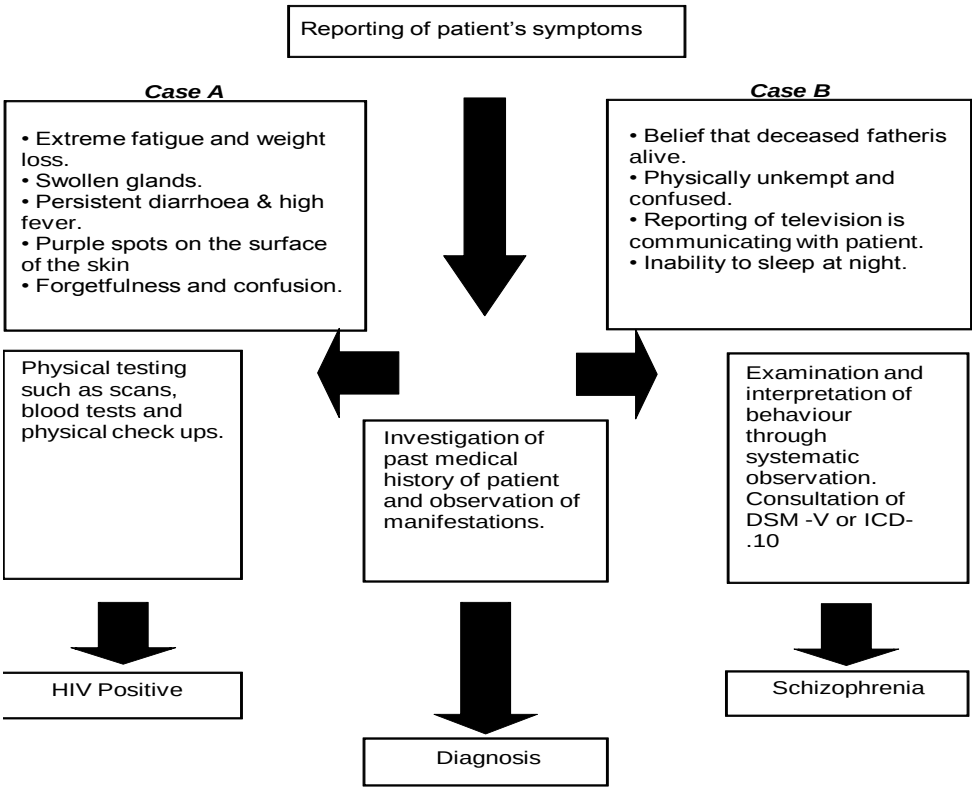
In case B, the patient meets with the psychiatrist and active observation of the patient's behaviour, moods and thoughts takes place. The patients' prior history of mental illness will also have been looked at. After ruling out any physiological explanations through medical testing, the psychiatrist will take on the role of collecting as many verbal and bodily clues as possible. She will also assess the patient's medical background and family history. Then, through systematic assessments and over a period of several months of observation, the psychiatrist uses his or her medical knowledge to match the behaviours to the criteria of a mental illness. Through the use of a psychiatric diagnostic manual such as the DSM VI or ICD-10, the symptoms are matched with the criteria of a schizophrenia diagnosis or another type of psychotic illness. As Green (2003, p. 17) iterates, "even diagnosis by interview is not straightforward because there is no one symptom that is specific to schizophrenia; nor is there any symptom that 'rules out' schizophrenia".

Patients' verbal and somatic symptoms are highly influenced by their culture and world view (Jenkins & Barrett, 2004). By the same token, psychiatrist's interpretations are created based on their medical training and education, upbringing, and life experiences (Sadler, 2004).

The definitions of sanity and insanity vary across different cultures. The way in which a psychiatrist translates his understanding of a patient divulging his deceased father to be alive, for instance, ultimately depends on the psychiatrist's own personal

understanding of what it means to be sane or insane prior to referring to his or her medical repertoire (Szasz, 1974).

Figure 1. A Comparison of Two Diagnostic Processes



Hence, the psychiatrist's own beliefs and cultural rounding will be intertwined with the use of his or her medical expertise in order to come up with a schizophrenia diagnosis. Although psychiatry claims to be a "materialistic" (Poole, 2004, p. 135) science which only assumes those beliefs in the real world while rejecting the metaphysical realities, it undoubtedly cannot claim ultimate certainty with respect to its understanding of the deviations of expressed psychological manifestations.

The reputed Rosenhan (1973) study highlights the mental health system's deficiencies in diagnosing psychosis, highlighting the fragility of the diagnostic process in psychiatric diagnosis. Eight sane people gained admission to twelve different mental

wards in the United States. All the 'acting' patients were diagnosed by the mental health staff as exhibiting from symptoms of a mental illness, even though they reported not previously having experienced mental illness or having had a family member with a prior history of mental illness (Rosenhan, 1973). Those who acted as patients to gain admission to psychiatric wards in the study were researchers, doctors and what society would label as 'ordinary and sane citizens'. Although in this study there was no research on the participants' cultural backgrounds, it does provide evidence that mental health diagnosis is a complex task that is filled with ambiguity. Therefore, if a patient does not in deciphering a patient's symptoms, especially when the psychiatrist's own cultural beliefs are not congruent to the patient's (Moodley & Palmer, 2006, p. 252).

Nevertheless, it must also be recognized that complications in psychiatric diagnoses are not always linked to cross-cultural differences. Even when the patient and psychiatrist share the same culture, communication problems may arise. For instance, if there is high stigma in relation to mental illness in one's culture, the patient may not be at ease divulging any of his feelings to the psychiatrist. In such a situation, it may be better to interact with a psychiatrist who is from a different background.

The starting point and rationale of this study is that communication between the patient and the clinician is an interactive process that contains more intricate elements than a mere symptom display versus interpretation dialogue. Other interactions simultaneously take place: the psychiatrist's cultural beliefs, pre-conceived notions of the world, medical experience and education, and cross-cultural experience could affect the diagnostic outcome with a foreign born patient. Accordingly, when the patient's symptoms are displayed (symptoms being a mixture of one's cultural beliefs and

psychotic thought) and those symptoms reflect the psychiatrist's own cultural beliefs, then the diagnostic process becomes manageable and less challenging to make sense of. But when the dyad's cultures are incongruent, then diagnosis proves to be a challenging task that may lead to misinterpretations or inaccuracies.

One must always bear in mind that the clinician's judgment of the patients' apparent symptoms is the primary determinant of diagnosis. There is the interplay between the psychiatrist's conception of schizophrenia and the subject's characteristics. The patient's behaviour and reactions that are based on cultural experiences will portray to the clinician certain observed symptoms. Then, factors such as patient's ethnicity, religion, social status, and gender also inescapably intervene once the final diagnostic decisions are made (Hollingshead, 1961).

As is well known, the diagnosis of schizophrenia has always been dependent on a subjective interpretation of the bodies of knowledge set by mental health practitioners and their reliance on diagnostic criteria[4]. When cultural belief displays become intertwined with these fragile categorical constructions of diagnosis, differentiating between a schizophrenic manifestation and a cultural belief can prove to be difficult (Horwitz, 2002; Kleinman, 1991). An NHS psychiatric nurse who I met with in May 2008 recounted his feelings about a female Nigerian patient whom he cares for at a psychiatric ward in a London hospital. The nurse mentioned that at times 'the patients make them

[4] Such as the Diagnostic and Statistical Manual (DSM IV) and the International Classification of Diseases (ICD-10).

doubt their own beliefs'. He was in a dilemma because the patient was diagnosed with schizophrenia while he claimed that in Nigeria, the patient would have been viewed as a Christian sane woman who has what they call in Nigeria, 'a gift'. But according to the White British psychiatrist who was treating her, she was a patient displaying religious delusions; a classic symptom of schizophrenia. The nurse mentioned that the patient was being coerced to take medication. He added that the patient he is speaking about was a particularly pious woman who was denying that there was anything wrong with her and was praying to Jesus for salvation. He claimed that the patient herself seemed like a very convincing and logical woman and he did not understand how she was actually placed under psychiatric care in the ward. This story makes one ponder upon the different interpretative dilemmas of the content of psychotic manifestations that are encountered by mental health professionals in an attempt to make sense of superstitious or religious beliefs belonging to a non-Western culture in a Western-centric setting.

The DSM manual emphasizes at least four times in its definition and explanation of schizophrenia that mental health practitioners need to ensure that they do not misinterpret cultural norms of behaviour as symptoms of psychosis or schizophrenia (American Psychiatric Association, 1994). Therefore, if a cultural belief and a display of a psychotic illness can be easily misconstrued, it becomes a scientifically justifiable cause to explore patient and doctor relationships in terms of cultural interpretations and to match patients with doctors of their own backgrounds.

1.5 Symptoms from a Cross-Cultural Perspective

In an attempt to decode the manifestations of symptoms of schizophrenia, one would need to make sense of a patient's symptoms by interpreting his or her experience in psychiatric medical terms. For example, a European psychiatrist could interpret a patient as being delusional if the patient complained that his ancestors told him that they are angry at him and that, as a result, he is unable to sleep. He might also interpret a patient who believes he has a sixth sense and is a natural born healer as having grandiose delusions. And a British clinician might view a patient unable to express himself in a systematic and organized manner in English as having disorganized speech. The psychiatrist would be making valid interpretation if the content of the manifestations is identified in a UK born patient. But if the patient is from The Republic of Congo, and in his Congolese culture these claims are part of his value systems and beliefs, then it will not necessarily be valid to interpret those behaviours as symptoms such as delusions or hallucinations.

For psychiatry to call itself a science, it needs to ensure proper validity and reliability. Validity is explained by Kleinman (1991, p. 10) as "a verification of observations", which is easily established in a diagnosis. For instance, if a patient repeatedly states that he feels he has a sixth sense and that he was a religious healer, there is no other way of reading it. This statement can be verified and heard by more than one professional and cannot be misinterpreted. Reliability on the other hand, or what is called the "verification of presumptions" (Kleinman, 1991, p. 10), is where a diagnosis becomes a more delicate process and a fallible one. Arriving at a *reliable* diagnosis demands an understanding of one's cultural background; otherwise invalid

medical interpretations could take place (Horwitz, 2002). Clinical observation and interpretation play a crucial role in the understanding of the state of mind of the patient, and are seen as the only ways to decipher a patient's language of distress.

In an attempt to test the original influential study by Manfred Bleuler in 1972 on schizophrenia diagnosis, a team of researchers in 2003 took on the task of retesting the diagnosis of the 208 patients using DSM IV, DSM III-R, ICD-10, RDC (Research Diagnostic Criteria), Schneider's criteria and an operationalised version of the criteria of Eugene Bleuler. Their results confirmed that 69 to 92 % of the respondents who were previously diagnosed with schizophrenia were reconfirmed with the same diagnosis but not confirmed in approximately 30 % of the original sample (Modestein, Huber, Satirli, Malti, & Hell, 2003). They took on a task of re-diagnosing the patients and then came up with the conclusion that the remaining 30 % were suffering from schizoaffective disorder. The implication of Bleuler's study is that interpretation of a diagnosis is highly unstable. The subjectivity of interpreting symptoms has confirmed that it is a highly difficult task in the clinical setting. This means that 3 out of 10 patients could have been misdiagnosed using Bleuler's criteria.

Epidemiological psychiatric research over the years has not sufficiently emphasized cross-cultural differences in the content of the symptoms of the different diagnostic criteria. Therefore, cross-cultural psychiatric interpretations of symptoms in immigrant patients may result in even lower than predicted reliability, i.e., in more misinterpretations.

1.6 The Age of Anti-Psychiatry

The anti-psychiatry movement was created by a group of scholarly sociologists and psychoanalysts who opposed the biological model of psychiatry, considering it as an abuse in the name of science (Rissmiller & Rissmiller, 2006). The term anti-psychiatry was first coined in 1967 by a South African psychoanalyst named David Cooper (1967), and was inspired by the ideas of Michel Foucault (1967) on madness and social control. Other prominent scholars such as Thomas Szasz (1974) and Arthur Kleinman (1991) in the United States, R.D Laing (1960) in Great Britain, and Franco Basaglia (Scheper-Hughes, 1987) in Italy further contributed to the surge in revolutionary ideas within the fight against psychiatric biogenetic models.

The anti-psychiatry movement pushed the medical field to doubt its claimed competence to diagnose mental illnesses by stressing the social and cultural differences in the portrayal of distress and symptoms. Questioning the objectivity of the schizophrenia diagnosis also became recognized as the "vanishing consensus effect" as Bentall (2004, p.64) explains in his book, *Madness Explained*. According to Bentall (2004) the rise in the number of the diagnostic criteria over time makes it clear that the apparent consensus created by the psychiatric labels, is simply illusory. The Diagnostic and Statistical Manual (DSM), for instance, only had a few categories of mental illnesses when it was first created in 1952 by the American Psychiatric Association (APA), whilst in

the last four decades the labels and diagnostic criteria have incrementally and swiftly increased (with the introduction of each revised version[5]).

The progression of anti-psychiatry is also evident nowadays in social movements aimed at abolishing the term "schizophrenia". The Campaign for the Abolition of the Schizophrenia Label (2008) is one such campaign in the UK that has been working towards discontinuing the use of the term "schizophrenia". Their reasoning is that the label itself jeopardizes patient treatment as labelling makes it more difficult for one to take responsibility and improve one's condition.

As Foucault's studies on medical socio-linguistics boomed, there became more emphasis on the salience of language use in medicine (Marsella & White, 1982). Hypothetical assumptions were made about the nature of a disease or illness in relation to its mode of communication.

Thomas Szasz (1974) also pioneered studies on language communication specifically in relation to Freudian case studies on hysteria. Szasz (1974, p. 108) believed in what he called the "language game" consisting of the structure of the language that we use, such as our social customs, symbolic representations and language rules. If language consists of symbolic forms that are expressed in both linguistic and bodily forms, then all ill persons could express their agony through what he calls the "language of illness" (Szasz, 1974, p. 111). Just as a hysterical woman could communicate her inner

[5] Currently the DSM is version IV Revised. The next version will published in 2012.

turmoil through a bodily or emotional manifestation of paralysis, for instance, a person suffering from schizophrenia can also display a linguistically shaped claim that would hint at a mental disorder. Boyle (1990) also pinpoints how a person in distress could also display an emotional manifestation through language bound with indirect subconscious wishes, such as help, victim, and sick.

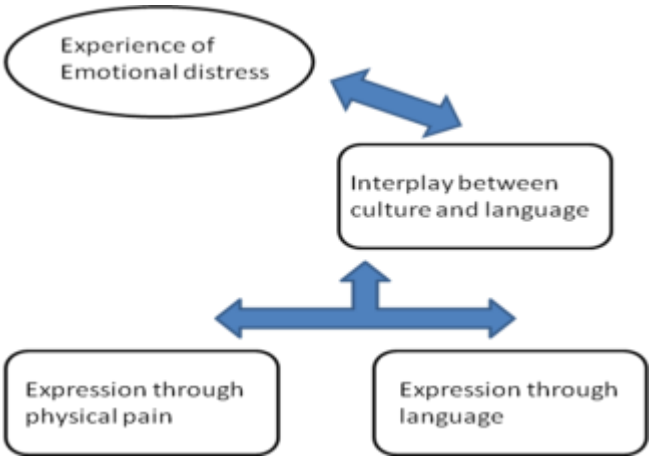
When a person does not possess the ability to express a sorrow due to the intensity or verbal inexplicability of the emotion, a switch to a protolanguage such as weeping becomes evident (Szasz, 1974). Similarly, a person experiencing a hallucination in the form of a supernatural power could also be considered a form of protolanguage. This is not to say that a biological predisposition to having these delusions does not exist, but rather that the cultural conditions and environment of a human being lead to uniquely expressed manifestations when psychological malaise takes place.

Recognizing the culture and structure of the language of a patient can result in clearing many of the confusions that sometimes clinically manifest once a person is endeavouring to communicate her thoughts; hence, the patient's protolanguage becomes easier to identify and decode.

People who immigrate to the UK naturally need to adapt to learning and speaking English. Studies in language communication in the field of psychiatry have not been fully researched up to this date. From the negligible amount of research found correlating language and schizophrenia, linguistic communication itself has proven to be a great stress factor to many immigrants (Losi, 2006). Ramon (1996) reported that some studies found a relationship between the language spoken and mental illness rates in one's host

country, although it was not clearly expressed as to what exactly the direction or strength of the relationship is. I summarize the relationship between culture and emotional distress in the table displayed below.

Figure 2. Stages of Communicating Psychological Malaise



Additionally, the relationship between emotions and language is certainly a culture specific experience. Anna Wierzbicka (1999, p. 240) in her book *Emotions across Languages and Cultures* depicts this juxtaposition as follows: "people's emotional lives are shaped, to a considerable extent, by their culture. Every culture offers not only a linguistically embodied grid for the conceptualization of emotions, but also a set of 'scripts' suggesting to people how to feel, how to express their feelings, how to think about their own people's feelings, and so on". Thus, if emotion has diverse meanings across cultures, the transformation of emotions into symptoms through the use of language can be said to also be different across cultures.

1.7 A Brief Cross-Cultural History of Schizophrenia

Although experiences of delusions, psychotic manifestations and hallucinations amongst human beings have been described since the beginning of recorded history, the formalization and labelling of those experiencing it only began in the post-industrialized period (Ohayon, 2000). In 1893, the German psychiatrist Emil Kraepelin coined the term "Dementia Praecox" as a medical label for psychotic disorders. With the blooming of observational labelling in the early 1900's, Bleuler further advanced the label, "Dementia Praecox", by linking the Greek meanings of "split" and "mind" and later adapting it to the medical term currently universally utilized: "schizophrenia" (Birchwood, Hallett, & Preston, 1988, p. 16).

Once the medical labelling of schizophrenia materialized, a surge of case over estimation in American psychiatric asylums took place until the 1970s. At least 80 % of patients in the psychiatric wards in the United States were being diagnosed with schizophrenia, which led to the overcrowding of the psychiatric patient cohorts (Pilgrim & Rogers, 1999). In the United Kingdom similar events were taking place with the advent of the asylums (Poole, 2004). The rise of the Victorian psychiatric ward was viewed as a positive humanitarian deal that would assist the mentally ill as a benevolent alternative to their terminal condition. More patients were being treated for mental illness and the wards were becoming over-flooded with patients. As mental institutions boomed in the mid 1900s, outside forces such as funding, overcrowding and the specialization of the medical field directly led to the decrease in hospital cases of schizophrenia.

In the late 1940s, schizophrenia was starting to become the most widely researched mental illness in psychiatry and doctors initiated using a biogenetic explanation in treating its symptoms. In 1952, the Diagnostic and Statistical Manual was created by the American Psychiatric Association, formalizing schizophrenia as a substantially incapacitating mental illness. The World Health Organization also realized the need for a more consistent and unilateral understanding of this prevalent mental disorder, and took on the task of researching its prevalence worldwide.

Beginning in 1967, the WHO commenced with the International Pilot Study of Schizophrenia (IPSS) by investigating 1,202 patients in nine countries around the world including China, Columbia, Czechoslovakia[6], Denmark, India, Nigeria, the USSR[7], the United Kingdom and the United States (Leff, 1981). By the year 2000, the International Pilot Study of Schizophrenia confirmed the incidence of schizophrenia to be between 0.2 to 1% at any given time around the world (The British Psychological Society, 2000).

The history of schizophrenia only narrates how it was developed over time, but it does not permit a scrutiny of how its labelling took shape or who its patients were, nor does it reveal how schizophrenia was diagnosed. As the main concern in this thesis is the

[6] Currently divided into the Czech Republic and Slovakia.

[7] Prior to the collapse of the Soviet Union in 1991, the following countries were included: Russia, Estonia, Lithuania, Latvia, Belarus, Moldova, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan,. Uzbekistan, Azerbaijan, Armenia and Georgia

diagnosis of schizophrenia across cultures and ethnicities, it is vital to uncover the events by first elaborating on the geographical setting of schizophrenia's historical development.

The origin of the psychiatric classification system began at the heart of Europe in the late 1800s, and was developed further by the North Americans in the 1900s[8] (Bentall, 2004; Gaines, 1992). By the same token, those patients that were treated and labelled were of the same ethnic background as their medical practitioners. The founders of psychiatry and mental health did not develop their understandings of illnesses and diagnosis by studying ethnic diversities as it was not necessary at the time because Europe was relatively a homogenous population. Most patients in Austria, for example, were Austrian.

We can trace back to Emil Kraepelin who visited Java to test the universality of mental illnesses across culture although he did not assess patients living in Europe who were immigrants (Bentall, 2004). Needless to say, migration patterns had not fully developed and mass industrialization, globalization and urbanization had not hit their peak when psychiatry was thriving. In other words, the populations of European countries tended to be homogeneous and predominantly Caucasian, an ethnicity shared by both psychiatric patients and their doctors shared.

[8] All major initial labelling and discovery within the field of psychiatry had been undertaken by Europeans and North Americans. Kraepelin was German and Bleuler was Swiss. The transparency of non-European influences in the field is evident as this research will show.

Adebimpe (1984) reported that in the United States there were immigrants such as the African slaves who were being increasingly diagnosed with psychiatric diagnoses. Hospital statistics reported that the rates of psychosis and Dementia Praecox were often twice than that of Whites in the years between 1922 and 1954 in New England, for instance (Adebimpe, 1984). Psychiatrists who were diagnosing patients at the time were from the higher class of society and were usually Caucasian middle class Americans. Europe was also experiencing similar patterns with their ethnic minority populations (Sewell, 1995).

A significant turning point in studies relevant to ethnic minority populations however, initiated with Ödegaard's research in the United States. Ödegaard (1932) studied a Norwegian migrant population in the United States where he found the migrant population to be double the rate of the schizophrenia population in Norway. The study was first ignored, but after some decades it became the starting point of the baffling phenomenon related to minorities and immigrants, which is that they are diagnosed with schizophrenia more often than people who originate from their host country. Only when Europe's and North America's surge of inward migration kicked off did this information become invaluable to medical epidemiologists and social scientists.

With the technological advancement of transportation after the mid 1900s, mass urbanization and industrialization led to further intercultural barters resulting in the increase of creolization of societies in the Western world (Losi, 2006). Psychologists, psychiatrists and anthropologists began realizing the dire need to initiate ethno-cultural research with the newly arrived immigrants in order to promote better healthcare equality. Universities started founding departments with a spotlight on cross-cultural

psychology, social psychiatry and medical anthropology, all partly aiming at understanding differences in the portrayal of psychiatric symptoms across cultures (Moodley & Palmer, 2006). Others discerned the possibility of focusing on ethno psychiatric treatment, especially in France, with ethno psychiatric pioneers such as Tobie Nathan (1986; 1994; 2001) and George Devereux (1967; 1978). Nevertheless, migrant treatment and ethno psychiatry are still seen as disciplines that are yet to be developed. The first attempts at explaining such ethnic differences at the time pointed to a genetic explanation of the inferiority of Blacks (Fanon, 1986) although nowadays such a paradigm is not seen as an acceptable etiological explanation as will be explored in more detail in chapter three.

1.8 A Spotlight on the UK's Socio-Political Context

Schizophrenia has always existed throughout history although it was not always understood and shaped the way it currently is. It was only in the 1700s that mental illness became a scientifically and legally established field. In Great Britain, the Lunacy Act was later created in 1845 and a year later the field of psychiatry began to emerge (Pilgrim & Rogers, 1999).

The aetiology of schizophrenia's incidence and prevalence first evolved by using biological models of explanation. The 20th century shifted towards more environmental and sociological theories. For example, poverty and social class were seen as linked to mental illness. Upon analysis of cohorts of patients suffering from schizophrenia, it was

noticed that certain ethnic groups and lower social classes were more prone to developing mental illness than others (Kleinman, 1991).

The vast amount of research that took place on schizophrenia started to reveal that African Caribbean communities in the UK were the most prone to schizophrenia in comparison to the local population, and even compared to other minority groups (Jarvis, 1998). The recognition of this finding became more pronounced especially when the media initiated blaming the National Health Services (NHS). The BBC News (2007) for instance, reported that there is a need for an official inquiry to finding the reasons behind high inception rates in Black communities. The main explanation for such disparities was taken to be institutional racism. Black leaders and mental health activists also came together in an attempt to overturn the Mental Health Bill, asserting that the nature of the NHS is institutionally biased, thus draining the needs of Black communities and creating distressing life circumstances for them (Sasidharan & Francis, 1993).

Although there was some action taken by leaders and mental health lobbyists to ameliorate the situation of Black and Minority Ethnicity (BME) groups in the UK, up to this date there has not been much progress in terms of understanding the schizophrenia diagnosis or its prevalence and incidence amongst BME groups. Not only that, but other ethnic minorities in the UK have been disregarded although mental health statistics should already have alerted policy makers and leaders of the need for more investigation and research within this domain.

Nevertheless, there has been some action taken by the Healthcare Commission that addresses race relations and equality over the last decade or so. The Commission for

Healthcare Audit and Inspection (2008) has iterated the importance of delivering race equality in mental health care; an action plan to tackle such dilemmas. The *Count me in Census* that obtains figures of mental health patients with regards to BME monitoring was also created, as a result. Although such efforts are applauded, they have not shed light on the reasons for schizophrenia's ethnic predilection in a systematic manner.

1.9 Conclusion

In essence, I have attempted in this chapter to provide a historical recount of schizophrenia but with a focus on ethnic minority and BME populations. I then moved to the epidemiological context of schizophrenia by ethnicity and explored the common theme across comparative mental health disparities where schizophrenia is most common amongst Black groups in the US and the UK. Similar findings have been constructed in other parts of Europe. It should be noted that culture has been absent from the equation in the literature, so far. The next chapter critically addresses etiological explanations and variations in more depth to situate the reader within the context of the current state of knowledge of schizophrenia.

CHAPTER TWO

THE EPIDEMIOLOGY AND ETIOLOGY OF SCHIZOPHRENIA

2.1 Introduction

In this chapter, I explore clinical and epidemiological issues in relation to schizophrenia, across culture. I critically evaluate the literature on the incidence and prevalence of schizophrenia by ethnicity. Finally, I explore the previously known etiological theories on why immigrant groups have been experiencing the highest rates of schizophrenia in comparison to their host population.

2.2 The Epidemiology of Schizophrenia

The investigation into schizophrenia's incidence and prevalence in Europe and North America are currently scientifically grounded findings that highlight vast ethnic differences in the diagnosis of schizophrenia. Schizophrenia is more common in African-Caribbean populations in the United Kingdom and African Americans in The United States, while depression is more pronounced amongst Caucasian groups (Bhugra & Bhui, 2001; Morgan et al., 2006; Neighbors, Trierweiler, Ford, & Murroff, 2003). Although there has been some practical and yet scholarly research done on uncovering the aetiology of schizophrenia, cross-cultural differences in diagnosis are still only partially understood. Since the early 1970s, studies have been performed to describe the current population with schizophrenia while at least two rigorous meta-analyses have thus far

been performed (Cantor-Graae & Selten, 2005; McGrath, Saha, Welham, El Saade, MacCauley, & Chant, 2004;) in Europe on schizophrenia's incidence among migrant populations. The reported findings of the quantitative systematic studies have confirmed the following: (1) The risk of developing schizophrenia for second generation immigrants is almost double the risk of the host population (Cantor-Graae & Selten, 2005; McGrath et al., 2004); (2) Blacks stand a higher chance of developing schizophrenia than any other minority group in Europe (Cantor-Graae & Selten, 2005); (3) Urban areas encounter the highest incidence of schizophrenia (McGrath et al., 2004); (4) Lastly, there are inconsistent findings on gender differences throughout the literature (Jablensky & Cole, 1996). After controlling for age, McGrath found that males experience higher rates of schizophrenia, while Cantor-Graae and Selten (2005) did not report any significant gender differences (significance level 0.72 where there was a slightly higher figure for males).

It is important to note that none of the studies in table 3 have included certain Black and minority ethnicity groups (henceforth, BME groups) which represent the current UK population, although minorities now make up a considerable proportion of the British population. Chinese and other ethnic groups have been disregarded while African, Central and Eastern European and Middle Eastern populations have also been transparent (see "other ethnic groups" in table 2). The main reason for such a lack of epidemiological information is that the methods used for categorizing individuals depend on the ethnic minority categorization schemes that are traditionally used in the UK mental health system. For example, Eastern Europeans are usually lumped into the category of "White or White British" while Middle Eastern people may fit in with either

"White or White British" or "Other", therefore leading to nebulous categories that do not allow the researcher to compare different population groups by country of origin.

A study by Hitch and Rack in the late 1970s was one of the few research reports published that focused on exploring Eastern and Central European immigrants diagnosed with schizophrenia in the UK. They found that the rate of mental illness among Polish, Russian and Bulgarian immigrants was higher than that of the British population (Hitch & Rack, 1980).

Table 2. UK Population by Ethnic Group (April, 2001)

	Total population		Non-White population
	(Numbers)	(Percentages)	(Percentages)
White	**54,153,898**	**92.1**	.
Mixed	**677,117**	**1.2**	**14.6**
Indian	1,053,411	1.8	22.7
Pakistani	747,285	1.3	16.1
Bangladeshi	283,063	0.5	6.1
Other Asian	247,664	0.4	5.3
All Asian or Asian British	**2,331,423**	**4.0**	**50.3**
Black Caribbean	565,876	1.0	12.2
Black African	485,277	0.8	10.5
Black Other	97,585	0.2	2.1
All Black or Black British	**1,148,738**	**2.0**	**24.8**
Chinese	**247,403**	**0.4**	**5.3**
Other ethnic groups	**230,615**	**0.4**	**5.0**
All minority ethnic population	**4,635,296**	**7.9**	**100.0**
All population	**58,789,194**	**100**	.

Source: National Statistics Online (2007), http://www.statistics.gov.uk/cci/nugget.asp?id=455

In Sweden, a similar research undertaking was accomplished by Blomstedt, Johansson, and Subdquist (2007) which revealed that the self reported mental health of Eastern European immigrants (specifically from Polish people from the former Soviet Union) was a twofold higher odds than the Swedish born population.

Losi (2006), who worked as a cross-cultural therapist with Eastern European patients in Switzerland, came up with the same conclusions as Hitch and Rack (1980). Eastern European immigrants had very high levels of trauma and emotional instability, hence requiring more therapeutic treatment than other groups. Blomstedt and colleagues (2007, p.1) have added that "since poor mental health may hinder acculturation, the mental health of immigrants from Poland or other East European countries should be acknowledged, particularly with the expansion of the European Union and inclusion of nine former Soviet Bloc countries by 2007".

Evidently, current research on BME groups requires an expansion so that accurate generalizations can be made for future research. Moreover, by studying all groups we may also find associations between certain ethnic minorities and come to understand why Black Caribbeans, for instance, are at a higher risk for developing schizophrenia than other minority groups in the UK.

Researchers have correlated factors such as social inequality and ethnicity with schizophrenia, claiming that people whose skin colour is black in the Western world live in less affluent conditions than local or even other immigrant populations. Wilson (1987), for example, describes the living conditions of the African Americans in the United States and argues that the reluctance of White Americans to reside in ethnically dense Black neighbourhoods contributes to the state of poverty and the emergence of ghettos in the urban centres which have generated social and emotional malaise. This underprivileged society that Wilson describes (1987) is the one affected by the highest rates of mental illness, crime and illegitimate poverty.

Hospital records have also indicated that there is an overrepresentation of Black Caribbeans diagnosed with schizophrenia in the United Kingdom (Bhui, Stansfeld, Hull, & Priebe, 2003; Burnett, Mallett, Bhugra, Hutchinson, Der, & Leff, 1999; Castle, Wessley, Morgan et al., 2006; Van Os, & Murray, 1998). A well known explanation for this is that Black patients are usually compulsorily admitted to hospitals, especially by police, making them more likely to end up in a hospital (Commission for Healthcare Audit and Inspection, 2008; Littlewood, 1992; Mind, 2007). Some have argued that high schizophrenia figures for Black Caribbean populations are elevated because of the high admission rates. But this does not seem to be the case because the studies that have evidenced high rates of schizophrenia amongst Black Caribbeans have not gathered their data solely from hospital records. Much of the research has actually pulled their samples from censuses and case control studies for those patients outside a hospital setting, eliminating the factor of selection bias. Whether it was in a hospital setting or in an outside mental health trust, rates of schizophrenia amongst Black Caribbeans is undeniably at a staggering high.

Table 3. Review of Major Epidemiological Studies on Schizophrenia by Ethnicity (2007)

Year	Author & Year of Publication	Sample Size	Measure	Method	Location	Ethnic Groups	Results
2003	Bhui et al. (2003)	38 studies	Psychotic and non-psychotic mental illnesses	Systematic review	United Kingdom	Black, White and Asian	Black and Asian patients overrepresented in use of mental health facilities in the UK.
1991-1993	Burnett et al. (1999)	100	ICD- 9	Retrospective analysis	Ealing and Camberwell	White, Asian and African Caribbean	African Caribbeans more likely to be involuntarily admitted to hopsitals. Admission rates higher only for 2nd time admissions when comparing African-Caribbeans to White British patients.
1977-2003	Cantor-Graae & Selten (2005)	18 studies	ICD 8/9/10, RDC and DSM-IV	Meta- analysis	United Kingdom, Netherlands, Denmark and Sweden	White, Black African, Eastern European and Asian	The risk of developing schizophrenia in first generation migrants as 2.7.For black populations the relative risk is 4.8.
1971-1974	Carpenter & Brockington (1980)	141	Psychotic and Non-Psychotic mental illnesses	Case control study	Manchester	Sub- Saharan Africans, West Indians, Asians and White British	Schizophrenia is the most common condition diagnosed among the immigrants, 6 times as common as in the native born. Most common positive symptom was 'delusions of persecution amongst immigrants.
1985-1992	Castle et al. (1998)	110	Research Diagnostic Criteria and ICD	Case control study	Camberwell	African Caribbean, White and African	African Caribbeans have the most elevated risk of schizophrenia. Risk for African-Caribbeans has been steadily increasing from 1965 to 1980.
1968-1970	Hitch & Rack (1980)	978	Schizophrenia and Paranoia (unspecified)	Case control study	Bradford	Eastern European	Foreign born females (Polish origin) were the highest group to be diagnosed with schizophrenia.
1997-2000	Morgan et al. (2006)	1,004	ICD-10	Case control study	Sout-East London, Nottingham and Bristol	African Caribbean, White British and Black African	Schizophrenia 9 times higher in African Caribbean population. Over 50% of both African Caribbeans and Black Africans were admitted to hospital compulsorily, compared to only 24% of White British patients.
1993	National Centre for Social Research (2002)	4,281	Psychosis Screening Questionnaire (PSQ)	Statistical analysis	United Kingdom	White, Irish, Black Caribbean, Bangladeshi, Indian and Pakistani	Higher psychosis rates for immigrants who were in the UK prior to the age of 11. Black Caribbean highest PSQ rate, followed by Pakistanis and Indians. Urbanacity not reason for increase in psychosis.

One should bear in mind that the African- Caribbeans suffering from the symptoms of a schizophrenia diagnosis are in fact, those who are second or third generation migrants (Cantor-Graae & Selten, 2005). As is well known in the history of migration in the United Kingdom, many of the Black Caribbeans have actually immigrated in the 1950s and 1960s in search of better opportunities. In 2009, we find that many of the U.K.'s Black Caribbeans are second generation UK born citizens. Frantz Fanon (1986), a psychiatrist and philosopher, argued that colonial powers have become deeply entrenched in the minds of Blacks in White dominated countries, which as a result, has led to alienation. This, in turn, has led to a higher proneness to developing psychological disorders.

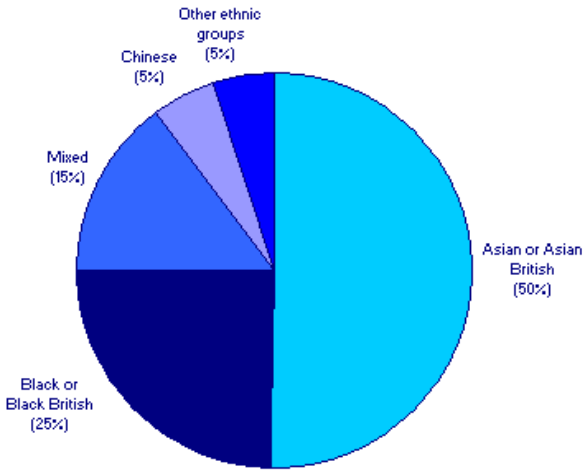
Ramon (1996) disagreed with the theories and interpretations of ethnicity and schizophrenia, arguing that findings up to this date do not corroborate to these hypotheses when class and educational level are controlled. It is also emphasized that proof of the invalidity of the correlation between schizophrenia and ethnicity is that the incidence of schizophrenia within the migrant Greek population is extremely low in their host countries (Ramon, 1996). One could argue that it is no surprise that Greeks have lower rates of schizophrenia in the United Kingdom, for three main reasons. First, Greeks in general have very high rates of social cohesion, resulting in a possibility of containment of mental illness either through underreporting, or through stigma pressures. In a forum on stigma and mental health, Stuart, Arboleda-Florez, and Sarotium (2005) reported that Greeks find mental illness shameful and consider it a sign of weak character. Second, because Greeks are still of European origin, they would not experience the same type of social adjustment and cultural adaptation to the UK as Jamaicans, for instance. Third,

Greeks have not experienced high levels of totalitarian regimes, persecution, poverty or wars prior to them having immigrated to the UK as some people from other countries might have experienced.

As figure 3 shows, the largest BME group in the United Kingdom is Asian or Asian British. The National Centre for Social Research (2002) performed an analysis by breaking down Asian groups by country of origin (Bangladeshi, Pakistani, Indian and African-Caribbean) but integrating the remaining European White population into one category (hence, one limitation of the study). The result of this project was that African-Caribbeans still experienced the highest rates of psychosis, followed by Pakistanis (National Centre for Social Research, 2002).

It is important to note that psychosis was measured using the Psychosis Screening Questionnaire, or the PSQ, as the main indicator. Therefore, the findings could have lent to different conclusions if their measure was based on diagnostic criteria followed by the DSM.

Figure 3. United Kingdom Ethnic Group Composition (2001)



Source: National Statistics Online (2001), http://www.statistics.gov.uk/cci/nugget.asp?id=455

Psychiatrists in the UK rely on diagnostic criteria such as SCID. Therefore the PSQ's validity as a measure for the categorizations of psychiatric symptoms does not accurately match schizophrenia prevalence in NHS cohorts. Also, psychosis was studied as a general category rather than schizophrenia specifically. Psychotic features of patients do not always result in a diagnosis of schizophrenia, but may include other mental illnesses such as bipolar disorder, severe psychosocial stress or depression (Ferran, 2002). Thus, retesting the same population while only using ICD- 10 or DSM- IV criteria schizophrenia as a diagnostic criterion may be necessary in order to establish more grounded findings.

Urbanacity

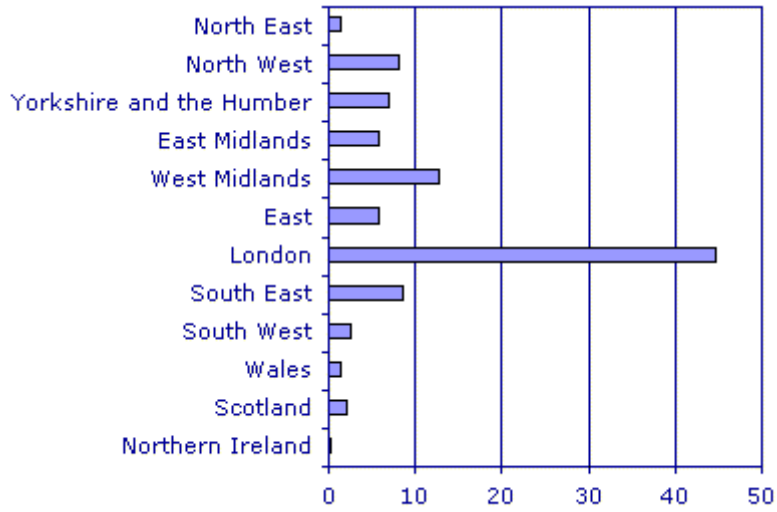
Another study done by the National Centre for Social Research (2002) in the UK concluded that urbanacity, or the extent of urbanization of one's location, is not associated with schizophrenia. Previous studies such as Giggs's (1973) study have looked at the distribution of patients with schizophrenia in Nottingham and found that the highest rates of schizophrenia did surge in the city's urban centres. Through performing factor analysis, the conclusion was that "ecological factors may form an important link to the causal chain of the distribution of schizophrenia" (Giggs, 1973, p.57). Giggs (1973) noted that the schizophrenia diagnosis is at its peak in urban centres, but also found that 99 % of foreign born patients that were admitted resided within a radius of 4 km from the city centre. In other words, foreign born patients mostly live in urban centres and for that reason one cannot assume that there is a direct correlation between urbanacity and schizophrenia. Therefore, the dilemma is whether the soaring rates of schizophrenia evidenced in the city centre are due to the level of urbanization, or to the high concentration of foreign born immigrants in urbanized neighbourhoods. The National

Centre for Statistics (2002) did not find an association between urbanacity and psychosis, so it could also mean that the cluster of all psychotic illnesses in one category may have led to skewed results that do not account for the real representation of the distribution of schizophrenia prevalence in urban areas.

Researchers have also examined the correlation between urbanization and poverty, arriving at the consensus that those populations who live in poor conditions usually reside in the city centre (The British Psychological Society, 2000). Ultimately, indicators such as unemployment, social isolation and living in public housing should quintessentially be contributing to higher admission rates for the diagnosis of schizophrenia (Burnett et al., 1999; Harvey et al., 1996).

The National Statistics have reported that 45 % of the BME populations in the UK reside in London (refer to figure 3), consequently adding to the finding that Giggs' report in 1973 that the rates of ethnic minorities in London have not drastically changed. If urbanization explains increased incidences of schizophrenia, then all studies should show that in cities, all groups who have developed schizophrenia should experience higher than normal rates, and not just immigrant or BME groups, but as we already seen, this has not been the case.

Table 4. United Kingdom Ethnic Minority Regional Distribution



Source: National Statistics Online (2001) http://www.statistics.gov.uk/cci/nugget.asp?id=263

Another interesting finding that came out of the literature is that BME groups who lived for a longer time in the UK essentially had a higher chance of developing a psychotic illness. Those who have immigrated to the UK before the age of eleven were more prone to developing a psychosis at a later stage in their lives (Bhui, Stansfeld, Hull, & Priebe, 2003; National Centre for Social Research, 2002). One possible explanation is that events or life changes such as acculturation, occurring between the time they move to the UK and in their time of adaptation, make them more likely to develop schizophrenia (Bhugra, 2004). Fanon's theory of racism and cultural alienation might also be seen as an interplaying factor.

2.3 Etiological Theories

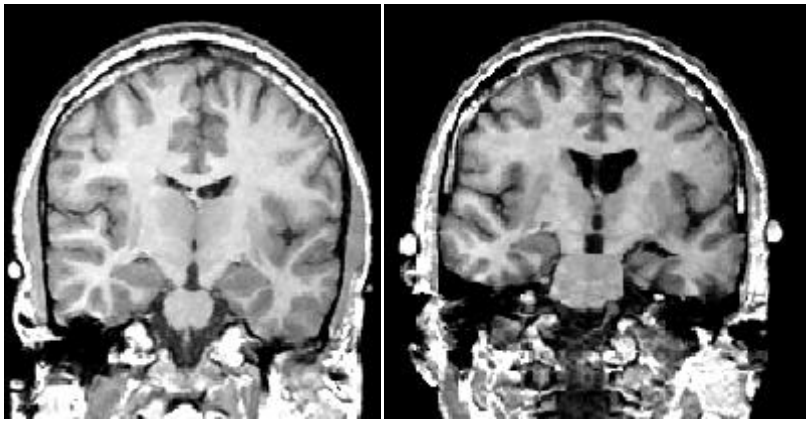
This section covers all etiological theories that have been laid out in relation to the cross-ethnic results in the epidemiology of schizophrenia. I begin with biological and hereditary genetic factors and then turn to psychosocial explanations.

2.3.1 Biological Explanations

Enlarged cerebral ventricles

A large number of pathophysiological studies have established through brain scans that schizophrenia is seen in the ventricle of the human brain.

Figure 4. Brain Scans of a Normally Functioning Patient and a Schizophrenia Patient



Note: As shown on a coronal MR brain scan, the right brain Coronal MR scans from a normal comparison subject (left), and chronic schizophrenic (right). Note increase in CSF in right amygdala- hippocampal complex (image taken from the Harvard University Schizophrenia Project).

Under an MRI scan, the size of the cerebral ventricle of a schizophrenia patient is much larger than a non-sufferer. It has also been suggested that there is a disruption in the

functional circuits in brain regions such as the prefrontal cortex of schizophrenia patients (Mueser & McGurk, 2004). These pieces of evidence led neuroimaging scientists to conclude that the larger the size of the ventricles, the higher the risk of schizophrenia (Castle, Wessely, Van Os, & Murray, 1998). Nevertheless, the presence of enlarged cerebral ventricles does not explain why immigrants and certain BME groups have a higher incidence of schizophrenia. Do they have larger cerebral ventricles? There has not been any evidence to suggest that the size of the ventricle changes by ethnicity or country of origin.

What neuro-imaging experiments also found is that there is a negligible difference between a normal patient and a psychotic patient under an MRI scan. If a child falls and harms itself while playing, the repercussion of the fall is the cut he receives, but it does not tell us how or why the fall happened. The same is true for the aetiology of schizophrenia: one can witness through the brain scan the changes that occurred as a result of an onset of schizophrenia, but it does not explain its nosological pattern.

Although the brain model is an observable and highly valid scientific model, it fails to address or explain why certain minorities experience schizophrenia at higher rates than indigenous populations. Littlewood (1992) also suggested that there has been no substantiation thus far for anyone to believe that African-Caribbeans share a common vulnerability to schizophrenia. Unless novel research is able to prove that African-Caribbeans, for instance, have larger cerebral ventricles than White British patients then this model is not worthy of being tested further.

The Dopamine Hypothesis

In a review by Davis, Kahn, and Davidson (1991), it has been suggested that dopamine activity is correlated with the onset of schizophrenia. Schizophrenia patients displaying positive symptoms were found to exhibit more dopamine receptors in their brains, while those exhibiting negative and cognitive symptoms had lower dopamine receptors (Abi-Dargham, 2004; Birchwood, Hallett, & Preston, 1988; Davis, Kahn, & Davidson, 1991). Similar to the enlarged cerebral ventricles in schizophrenia patients, this model only uncovers the differences in receptors but does not illuminate us on the reasons for the cross-ethnic disparities.

Genetic Predisposition

The third biological explanation that has been suggested over the years is that there is genetic predisposition to schizophrenia. Familial pre-morbid risk results in contracting to the offspring a schizophrenia recessive gene which, in turn, leads to a higher likelihood of developing schizophrenia (Hollingshead, 1961). Once the recessive gene for schizophrenia is combined with unfavourable life stressors or another schizophrenia recessive gene, the offspring is at an elevated risk of developing schizophrenia. There have been no suggestions in the last decades that correlate ethnicity or country of origin to genetic predisposition.

2.3.2 Psychosocial Explanations

Selection- Stress Hypothesis

The incidence of schizophrenia in Denmark is especially high for Surinamese immigrant populations. There is research that confirms that Surinamese migrants in Denmark experience up to 2.4 times higher rates in Denmark compared to the same ethnic population in Surinam (Selten et al., 2005). A similar study also confirmed that the rate at which Jamaicans living in the UK developed schizophrenia was far higher than that of those living in Jamaica (Hickling & Rodgers-Johnson, 1995). The selection-stress hypothesis maintains that people who immigrate are at the highest risk of developing schizophrenia (Felicity, 2006; Ng, 2006; Ödegaard, 1932; Westcott, 1984). In order to test this premise, one needs to distinguish between the time when the settler arrived at the host country, and the time of onset of the mental illness. This relationship would still be difficult to decipher because there are also the factors such as social, cultural and environmental adjustment that are added stress factors.

Immigrating to a new host country requires following stringent procedures and completing paperwork in order to establish plausible grounds to the immigration control bureau to be admitted. The process of migration is known to require "long term planning, the accumulation of capital, and the acquisition of skills" (Bagley, 1969, p. 296). In other words, in order to immigrate, a person must be able to invest time in the process and be knowledgeable and capable of planning. That is, he or she must be seriously committed, motivated, and determined. These qualities are precisely what the

schizophrenic personality lacks. Therefore, the demanding nature of the migration process indicates that the selection process of migration is an insufficient explanation.

Second, the highest numbers of immigrants are actually in the category of "work permit holders", requiring those who apply to emphasize their skills in the application process (National Statistics, 2007, p. 50). Immigrant categories vary according to the Home Office Control of Immigration Statistics Report (National Statistics, 2007): permit holders and asylum or refugee seekers. Work permit holders are those immigrants who will need to go through the rigorous procedures of providing immigration paperwork and need to prove their worthiness to be accepted by their host country. Therefore, they can be said to be at the least risk of developing schizophrenia.

The second immigrant category, the 'Refugees Seeking Asylum' consists of people who would have most likely suffered in their country of origin from persecution, wars, traumas and poverty. This group experiences a higher risk of onset if the theory of stress-selection is accurate. When one applies as a refugee and asylum seeker, the main criteria for selection are not based on one's qualifications but rather on whether one has been exposed to life threatening situations in one's home country. Hence, if this theory is adequate then those immigrants with a refugee status should have a substantial increase of schizophrenia.

The Control of Immigration Statistics (National Statistics, 2007) has confirmed that refugees and asylum seekers are the lowest group of migrants (in terms of percentage) in comparison to other categories to the UK. What does seem to be the case is that most of those who apply as refugees are from the African continent, with Eritrea

and Somalia having had the highest numbers of applications in 2006 (Border Control Immigration Statistics, 2006).

Additionally, theories of migration and stressful life events would be implausible in this instance precisely because African- Caribbeans who experiences the highest schizophrenia rates in the UK, for instance, are not first generation immigrants (but rather second or third generation). Their roots are West Indian, but they are supposed to have been integrated and born in the British society, sharing their way of life and the same cultural values and norms. Hence, this would directly challenge the idea of the stress of migration because if it was the burden of resettlement that had caused the staggering rates, then African-Caribbeans should experience the same incidence of schizophrenia as the British population.

Cantor-Graae and Selten (2005) ascertained that second generation Black migrants had a relative risk of 4.5 compared to 2.7 for first generation migrants; again a higher risk of schizophrenia for those who have lived in their host country for a longer period of time. These research results invalidate the theories of stress and migration, as findings have revealed that second generation Black group do actually experience elevated rates of schizophrenia in comparison to the Caucasian host population.

The Causation Model

Since the beginning of the 1980s, psychiatric research started connecting one's cultural upbringing, social milieu and parents' background to one's likelihood of developing schizophrenia. Generally, there is one theory explaining the relationship between socio-environmental factors and the onset of schizophrenia. According to the

Causation model, low social class and low socioeconomic status directly affect people and result in a higher likelihood of their developing schizophrenia (Eaton, 1980). Belonging to a lower social class concedes to having higher levels of stress in one's daily life, leading to a higher risk of becoming emotionally distressed or mentally ill (Eaton & Harrison, 2001).

A Danish study by Byrne, Agerbo and Eaton (2004) that tested the causation model looked at whether socio-economic status is related to the onset of schizophrenia. They found that the risk of schizophrenia was highly associated with unemployment, low educational attainment, being single, having a lower wealth status, having a lower income and being childless. What was interesting in this research is that they did not directly test one's country of origin in relation to socio-economic status. The relationship between not being born in Denmark and socio-economic status was looked at as two different variables without adjusting place of birth in relation to socio-economic status. As a result, the conclusions could not accurately indicate whether those with a lower socio-economic status are also those groups with a higher proneness to schizophrenia.

Carter, Schulsinger, Parnas, Cannon and Mednick (2002) performed another multivariate analysis to identify populations at a high risk for developing schizophrenia and came up with findings similar to those of Byrne, Agerbo and Eaton (2004). Poor parental support, low socio-economic status and disruptive behaviour in school were some of the predictors leading to the development of schizophrenia later on in life (Carter, Schulsinger, Parnas, Cannon, & Mednick, 2002). Although there was no attention paid to the ethnicity of the respondents in Carter and colleague's study (2002), it does

provide a more generalizable account of the importance of psychosocial stressors, from childhood to adulthood, that significantly increase the risk of developing schizophrenia.

A published article using the National Psychiatric Case Registry in Israel dissected the correlation between socio-economic status and schizophrenia's onset (Werner, Malaspina, & Rabinowitz, 2007). According to the study, there was a significant correlation between the chance of developing schizophrenia and low social deprivation (which was measured by the socio-economic status of parents at birth). Using both bivariate and multivariate statistical regression models, they found that ethnicity had no effect on the likelihood of developing schizophrenia thus encouraging them to omit it from their analysis (Werner et al., 2007). The Israeli sample's ethnic composition in this study was Ashkenazi or European (39%) and Jews from West Asia or North Africa (61%). Although the ethnicity of the Israeli sample cannot be assumed to match the UK population, it would be safe to say that further research is needed to be able to generalize on other populations on the accuracy of the social causation model. One can establish from the causation hypothesis that the onset of the illness is correlated with social class (which is usually measured by socio-economic status).

Also, related to the causation model is the Goal Striving Stress Theory, developed by Parker, Kleiner and Taylor (1960). It fundamentally suggests that populations who encounter the highest levels of stress are those who also have the lowest probability of achievement. When the expectations and achievements do not match, it results in a person's "alienation" or "deculturation" (Bhugra, 2004, p. 134). Therefore, those populations who are forced to live under conditions of poverty or overcrowding upon their migration to the UK could have high stress levels, leading to a lower likelihood of

goal achievement. Once stress levels are high and the probability of achieving one's goals are depreciated, then overall dissatisfaction with one's standard of life results which, in turn, increases the likelihood of developing schizophrenia (Eaton & Harrison, 2001).

Psychosocial factors and stress levels have also been shown to be inversely related to the onset of schizophrenia in a study performed in New York (Megna, Gupta, Ursino, & Dewan, 2005). Both males and females experienced less re-hospitalization when psychosocial stress level was low. This model demonstrates the importance of mundane psychosocial life stress and the increased risk of developing schizophrenia that such stress causes.

2.3.3 Culture and Schizophrenia

A finding summarized by Kinzie (2006) reported that patients whose cultural and social values were similar to the mainstream of their host country encountered a lower risk of mental disorder compared to the other migrant populations. In Sweden and in The Netherlands, for example, immigrants from Cape Verde, Surinam, the West-Antilles, (in Sweden) and East Africa (in the Netherlands) have been found to experience the highest incidence of schizophrenia (Kinzie, 2006; Schrier, Van de Wetering, Mulder, & Selten, 2001). This discovery stresses the significance of understanding cultural upbringing in relation to the epidemiological patterns of schizophrenia. Cultural differences cannot be underestimated in terms of their impact on diagnosis and onset, even if psychiatric medicine still overlooks its importance as an effort to understanding foreign born patient diagnosis. If we re-establish the findings by Cantor Graae and Selten (2005), where Black groups evidence the highest schizophrenia incidence, does that tell us that there are

higher cultural differences in comparison to host populations, thus leading to a higher chance of being diagnosed?

This also begs the question of how subjective a diagnosis is because it brings forth the cultural differences between diagnosed and diagnoser. Such questions have not yet been explored. The confounding relationship between culture and schizophrenia has only begun to be researched and requires further investigation.

2.3.4 Selection-Drift Hypothesis

William Eaton (1980) argues that the selection drift hypothesis best explains the reason for high rates of schizophrenia among ethnic minorities. According to this model, schizophrenia affects one's social class after the first onset, which in turn decreases one's chance of being able to participate in the workforce. Once schizophrenia manifests itself, the person affected will go through a difficult time forcing them to engage in paid employment, thus depriving him/her of the possibility to experience upward social mobility (Eaton, 1980). Eaton (1980) corroborates his theory by a statistical analysis comparing intergenerational differences, ethnic differences (White and Black), and differences between people with schizophrenia and people with no mental illness simultaneously. The results illustrate that there is a downward shift in social class for those families whose child developed schizophrenia (Eaton, 1980).

Another conclusion was that the combination of being Black and having schizophrenia tends to ensure that one will belong to the lowest social class (Eaton, 1980). But this conclusion fails to take into account the fact that ethnicity was not measured with other intervening variables. Race was included as the only causal factor

rather than dissecting the variable into further categories. Many other studies took place to rebut this idea by sanctioning that societal discrimination and institutional racism are to be blamed for the vast differences in the incidence between Blacks and Caucasians (Bhugra & Bhui, 2001; Jarvis, 1998; Lewis, Croft-Jeffreys, & David, 1990; Littlewood, 1992; Mind, 2007; Sashidhardan & Francis, 1993; Walsh, 2003).

Before delving into the theories of institutional racism in Western psychiatric settings, other studies have also corroborated the selection-drift hypothesis by concluding that it could be that lower socio-economic status itself had caused the increase in the risk of schizophrenia (Werner, Malaspina, & Rabinowitz, 2007). The study by Werner et al. (2007) measured parents' socio-economic status at the time of birth. If the study is replicated, the analysis will need to also include the offspring's socio-economic status. What is also not clear is whether the genetic predisposition was found on those parents whose socioeconomic status was low, which would suggest that selection leads to a downward drift into lower social classes.

A completely contradictory conclusion came out of a sample of a Finnish population Birth Cohort (Makikyro et al., 1997). Schizophrenia was found to be the highest amongst parents in the upper social class. By following the birth cohorts in North Finland until the age of 27, higher social class came to be directly correlated with the increased probability of developing schizophrenia later on in life. Bearing in mind that schizophrenia may start after the age of 27 (Mueser & McGurk, 2004) one can conclude that the sample was not followed up for long enough for the results to have been accurate; a longitudinal study that could follow its respondents at least until the age of 50 would have been ideal.

Furthermore, the other interesting finding was that the parents in the highest social class had alcohol related problems, thus confounding the conclusion that highest social class was the predictor of schizophrenia. It had not occurred to the researchers to control for alcoholism in parents or the offspring as it might have shed light on the conclusions in their findings. Also, the sample size (n=76) in this study was not sufficient enough to be generalizable to other studies (Makikyro et al., 1997).

2.3.5 Institutional Racism

Racism in psychiatry is a term that has become a cliché amongst scholars in the fields of sociology and anthropology. The term "racism" has a negative, blaming connotation (Miles & Brown, 2003). Those who have attached the idea of racism to schizophrenia incidence amongst Black citizens have argued that the European superiority and imperialism that have been led to the marginalization of Black people, have, in turn, led to psychiatric institutions in the West being blind to the needs of Black people (Bhurga & Bhui, 2001; Fanon, 1986; Jarvis, 1998; Littlewood, 1992; Sasidharan & Francis, 1993).

If we endeavour to look on a more profound level at the social construction of the term "racism", we realize that it stems from the lack of knowledge of the other who is experiencing the prejudice. As a study of sixty subjects, conducted by Cothern (2004) at Missouri State University, found that the higher one's education, the more knowledgeable one becomes of other cultures, thus leading to less prejudice and more openness towards other cultures.

Ferran (2002) contributes to the debate by adding that racism can affect not only a community with Black populations but any setting where there is cultural diversity. Cultural dominance has been suggested to create a communication barrier in both the diagnosis and treatment of psychoses.

Many have argued that cross-cultural interactions between patients and mental health professionals have been biased over the last three decades. They have held that the difference in backgrounds between a White doctor who diagnoses a patient and the Black patient whom the doctor diagnoses has a major effect on the patient-clinician interactions (Littlewood, 1992; Ruiz, 1982). As many have argued, cultural differences may result in communication barriers leading to misunderstandings of the content of schizophrenia manifestations.

This relationship between schizophrenia and racism can be re-established through an understanding of cultural lack of the other. Ruiz (1982) reported that when Black doctors diagnosed Black patients, the diagnosis of schizophrenia took place less often.

Two other observations have come out when it comes to BME groups and racism. The first is the idea that Black groups have the highest rates of schizophrenia but experience lower rates of depression (Delahanty et al., 2001). African Americans, and especially African American males, are diagnosed with the lowest prevalence of mood disorders. Whites were diagnosed to have 14 % depression rates while only 4.5 % depression for Black groups in the United States. Schizophrenia on the other hand, was shown to be 30 % for Caucasians but 45 % for Blacks amongst all those admitted to either

a State or a County Mental Health hospital in the United States (Ruiz, 1982). Explanatory models on this type of diagnostic category have been slanted towards an agreement that the actual differences are due to institutional racism and misdiagnosis of ethnic minorities. Expressions of distress do not always get portrayed in the same manner across different groups, and many have claimed that when psychiatrists and patients do not share the same cultural background, then intentional or unintentional racism may kick in.

The second most common finding is that African- Caribbeans experience the highest rates of compulsory admission to hospitals in Great Britain (Mind, 2007; Morgan et al., 2006). Mind (2007) has reported that African-Caribbean groups in the UK experience the highest rates of incarceration as the laws are not sufficient to protect them. They also affirm that they also suffer from the highest poverty rates, racism and forced entry to hospitals. Such juxtapositions may have invited the idea that once forced entry is controlled, the rates may become more dispersed amongst ethnic groups. Although it will not be discounted that there is high involuntary hospital admission for African Caribbeans, it does not account for the staggering schizophrenia rates amongst certain ethnicities. The studies that have been mentioned so far have not all been hospital record datasets (see the National Institute of Mental Health for a further demonstration). Most of the research has actually used national census data and government registers to come up with the conclusion that African-Caribbeans are at higher risk for schizophrenia, and not only from hospital records (see table 4 for more details). Therefore, compulsory admission alone cannot uncover the high rates of schizophrenia. Furthermore, one can assume that if institutional racism specifically

targets Black populations, then people from other African nations should also experience high rates of schizophrenia in the UK.

2.3.6 Ethnic Density

A theory that has gained academic recognition after the year 2004 has established the assumption that the mental health of immigrants varies by the ethnic density of a particular region. In other words, when one is living within a large community around people from one's own country of origin, then one's likelihood of becoming mentally ill is decreased. The problem surfaces, however, when immigrants are in the minority in the geographical area they live in. For groups who do not live in ethnically dense populations, their chance of developing a mental illness is higher. Bhugra (2004) suggests that the reason why, South Asians, for instance, do not experience high rates of schizophrenia in the UK is that they usually live in large and nuclear communities.

Another interesting study to corroborate this hypothesis was carried out in The Hague by following, over a seven year period, minority groups from Morocco, Suriname and Turkey. What they found was that there was increased psychosis in low-ethnic density regions for these three populations (Veling et al., 2007). Veling et al. (2007) claim that all immigrant groups achieved the same results and that, therefore, the hypothesis of ethnic density must be true.

Bhugra and Arya (2005) have nevertheless reported that African-Caribbeans are the only minority group in the UK that do not conform to this hypothesis but have not provided any insight on possible reasons for this inconsistency in the theory. Therefore, if not all ethnic minority populations actually conform to the hypothesis, there must be other factors at work that result in the increased likelihood of developing mental illness. Additionally, the ethnic density hypothesis seems to be linked not only to schizophrenia but to all types of mental illnesses (Bhugra, 2004; Bhugra & Arya, 2005; Veling et al., 2007).

2.3.7 Acculturation

Acculturation is the process by which one adopts the values and behaviours of the surrounding culture (Berry, 1980; Bhugra, 2004). The term was first coined by Redfield, Linton and Herskovits (1936). According to Konera and Weisman, (2006, p. 357), it refers to what occurs when "social and psychological exchanges take place due to continuous contact and interaction between individuals from different cultures".

Following acculturation, there are three other processes that may take place: assimilation, biculturalism or marginalization (Bhugra, 2004). Total assimilation occurs when cultural differences disappear between the host culture and one's culture and one adopts all the cultural values of one's host country. This would be more evident amongst second of third generation immigrants when complete assimilation and identification changes. Biculturalism occurs when a person adopts the host culture but also retains his or her own cultural identity and values. For, instance, if one was born in Peru but later moved to the United Kingdom one could adapt to both cultures and have traits and habits that are mixed between the two. Research has suggested that some people can be bicultural without suffering from the negative consequences of contact with the majority culture (LaFramboise, Coleman, & Gerton, 1993).

Marginalization is a situation whereby one feels isolated in both the host culture and one's own culture. This circumstance results from having diminished social supports, e.g., when someone is shunned by both cultures as a result of having committed some misdemeanour. However, a person can also become marginalized by his or her own choice. Marginalization is prevalent not only amongst second or third generation

immigrants; it also occurs amongst newly arrived immigrants. Not speaking English and living in a new country to which one has had to flee seeking political asylum increases the likelihood of becoming marginalized.

There have been mixed interpretations of the effect of acculturation processes on mental health (Koneru & Weisman, 2006). Only within the last five years has there been interest in finding out whether the processes of acculturation aid or hinder the development of mental illness (Blomstedt, Johansson, & Sundquist, 2007; Bhugra, 2004; Koneru & Weisman, 2006). In the United States, Koneru and Weisman (2006) were interested in exploring the relationship between acculturation and the onset of schizophrenia. Their hypothesis was that the more acculturated a person is, the more likely he or she is to suffer from depreciated symptoms of schizophrenia. Their findings confirmed that acculturation was a significant predictor of more severe symptoms. Also, the better the host language skills of the White immigrant groups, the higher the likelihood of schizophrenia (with the exception of Latino- Black populations).

Going back to the theory of ethnic density and tying it to acculturation, one would expect that the higher the ethnic density of a certain group the less likely one has assimilated with the dominant culture; an intervening factor that might be explaining the inconsistencies in the theory. If African-Caribbeans in the UK do not conform to the theory of ethnic density, it may be that they are the group most assimilated to the mainstream culture in turn leading them to be the group that evidences the highest rates of schizophrenia. Their assimilation could have taken place in some form of alienation, as Maharajh (2000) has argued. Assimilation throughout history has been seen as positive but Maharajh suggests that at times, it has a negative counter effect on the society, as

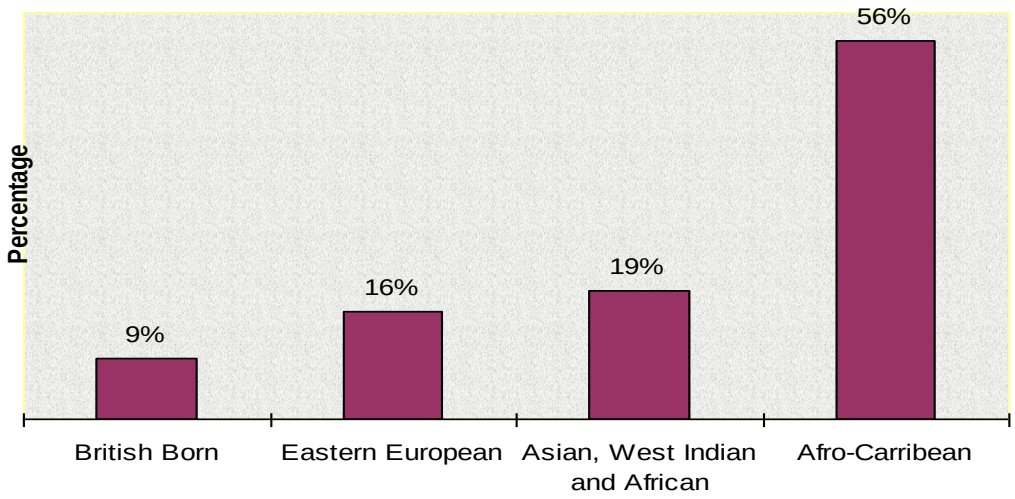
evidenced by the situation of the African-Caribbean community. One may therefore, call such an effect "assimilated marginalization".

Ferran (2002, p. 266) emphasizes that "issues of immigration status, acculturation, assimilation and the role of the family and social organization within an ethnic community should be considered in relation to treatment". Blomstedt, Johansson, and Sundquist (2007) also underline the importance of acculturation to mental health specifically amongst the Eastern European immigrants who are moving to the wealthier parts of Europe.

2.4 Conclusion

I have examined multiple theories explaining the epidemiology of schizophrenia. To summarize, I have combined studies in a small meta- analysis using findings of the same dataset (1971 census) in the United Kingdom taken from three published articles from Jarvis (1998), Hitch and Rack (1980), and Carpenter and Brockington (1980). Results have demonstrated that only 9 % of the who have been diagnosed with schizophrenia in the United Kingdom are British born, followed by Eastern Europeans (16%), Asians and West Indians (19%) and African-Caribbeans (56%).

Figure 5. Schizophrenia Diagnosis in the UK by Country of Birth (1971 Census)

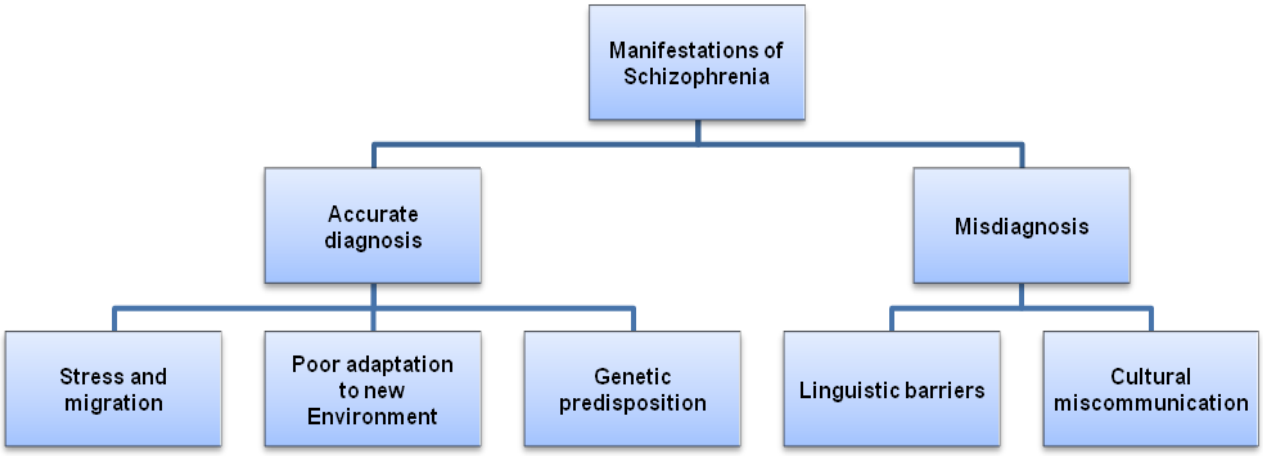


Sources: Jarvis (1998), Hitch and Rack (1980) & Carpenter and Brockington (1980).

At this point, one can conclude that all the etiological models endeavouring to explain schizophrenia's incidence and prevalence amongst ethnic minorities have deconstructed interpretations. But there are only two ways to interpret the process of diagnosing schizophrenia itself; simply put, the diagnosis could either be accurate or a misdiagnosis. I present an overview of the etiological findings in figure 6.

A patient who has been through war traumas and arrives to the UK as a refugee may be at higher risk for developing a mental illness (Losi, 2006). Similarly, an immigrant to the UK who has difficulties adapting to the societal pressures may be at higher risk for developing schizophrenia (Cantor-Graae & Selten, 2005). One can then say that the diagnosis could have been accurate, and the process of migration and adjusting to a new country might have contributed to negative life triggers that increased the likelihood of diagnosis of schizophrenia in the United Kingdom.

Figure 6. Etiological Summary of a Schizophrenia Diagnosis of Immigrant Patients



The intricacy of understanding the interplay between culture and the psyche in the display of schizophrenia's symptoms can solely be comprehended by holistically and critically evaluating the arguments and counter arguments of each of the theoretical models. Although it is simpler to generalize complex ideas, I argue that one cannot only break down the aetiology of schizophrenia into only one hypothesis because BME groups experience different migration patterns, experiences and cultural shifts. Fundamentally, what is being said is that we cannot assume that all migrants and ethnic minorities have had the same experiences. Second, everyone experiences different personal circumstances, even if one has gone through the same experiences. Not only do personality traits differ, but so do socio-cultural factors such as socio-economic status, level of education, social support systems and level of assimilation into the mainstream culture.

CHAPTER THREE

THEORETICAL UNDERPINNINGS, AIMS AND METHODOLOGY

3.1 Introduction

Following an in depth literature review, this chapter provides a theoretical rationale and strategy that summarizes the framework of the proposed studies. The theoretical underpinning of this thesis moves beyond understanding ecological systems from a human developmental perspective and ties it to the nosology and aetiology of schizophrenia. Using a holistic approach, Bronfenbrenner's ecological systems theory is dissected and applied to sub elements of the ecological structures of a schizophrenia sufferer's entourage.

The thesis's main goals are to bring together traditional methods of research, such as quantitative epidemiological findings and qualitative research under one umbrella, so that we can contribute to and advance the academic debates surrounding cross-cultural differences in schizophrenia. Utilizing a multi-dimensional approach to understanding the social and ecological structures of a schizophrenia sufferer, the thrust of the findings will highlight the salience of every arena of a schizophrenia sufferer's life; starting with the self, to the dyadic, triadic and multiple macro communications one experiences throughout one's lifetime.

The diagnosis of schizophrenia, according to current psychiatric diagnostic tools, has been demonstrated in numerous studies to often have a fluctuating reliability quotient (First, Spitzer, Gibbon, & Williams, 1997; Horwitz, 2002; Kleinman, 1991; Modestein, Huber, Satirli, Malti, & Hell, 2003; Skre, Onstad, Torgersen, & Kringlen, 1991; Williams et al., 1992). Additionally, the exploration of clinical exchanges between cultural signifiers and the display of symptoms is still untouched, with only a few scholars having explored this phenomenon (Boyle, 1990; Fernando, 2002; Marsella & White, 1982; Szasz, 1974; Tseng, 2003; Wierzbicka, 1999). I generate a theoretical ecological model based on the findings of the understanding symptomatic cross-cultural differences.

The literature review in chapters one and two found major gaps in our knowledge on schizophrenia across culture. First, that the inception rates of schizophrenia diagnoses amongst patients who are from the Middle East, North Africa and Central and Eastern Europe in London are currently unknown, although population statistics (National Statistics 2003, 2006) have traced a surge in the numbers of migrants to the UK over the last decade. This will be the first study of its kind to estimate the percentage of schizophrenia patients from the Middle East, North Africa, and Central and Eastern Europe in London in the last decade.

Second, there have been a multitude of theories that have been proposed to explain higher schizophrenia amongst BME groups but no definitive explanations (Adebimpe, 1984; Bagley, 1969; Bhugra, 2004; Byrne, Agerbo, & Eaton, 2004; Cantor-Graae & Selten, 2005; Carter et al., 2002; Castle, Wessely, Van Os, & Murray, 1998; Eaton, 1980; Eaton & Harrison, 2001; Hickling & Rodgers-Johnson, 1995; Hollingshead, 1961; Jarvis, 1998; Kinzie, 2006; Littlewood, 1992; Makikyro et al., 1997; Megna, Gupta,

Ursino, & Dewan, 2005; Morgan et al., 2006; Mulder, & Selten, 2001; Mueser & McGurk, 2004; Sasidharan & Francis, 1993; Schrier, Van de Wetering, Walsh, 2003; Selten et al., 2005; Werner, Malaspina, & Rabinowitz, 2007; Westcott, 1984). A recently developed theory to explain these differences, namely ethnic density, is still scantly researched and understood. Ethnic density's premise is that the more scattered the ethnic population, the higher the rates of mental illness in that group (Bhugra & Arya, 2005; Veling et al., 2007). I will test the theory of ethnic density in relation to schizophrenia, by comparing three groups geographically which are Asians, African-Caribbeans, and Whites. I will either affirm or deny that the theory of ethnic density can explain why certain groups are more protected from developing schizophrenia than others. Ethnic density has not been previously tested in the borough of Brent, and will be the first study of its kind in that area.

Before I delve into the study definitions, goals, and methodologies, I introduce the ecological systems theory which is the driving force of this thesis. I will also tie it in with the primary goals and objectives underlying this thesis.

3.2 Ecological Systems Theory

Ecological systems theory brings together phenomenological and social structures (Bronfenbrenner, 1979). As such, it has been described as a system that works like a "set of Russian dolls" (Bronfenbrenner, 1979, p.3) whereby structures are nested within one another and naturally co-exist. The strength of this ecological model is that it is able to

systematically describe and distinguish environmental and social factors, while still factoring in the salience of the interpersonal.

When first developed, ecological systems theory was used most often in relation to child developmental hypotheses. This theory was developed on the basis of Jean Piaget's child developmental theories and Margaret Mead's social structures in Anthropology. I am refining and moulding this theory further by attaching its meaning to the personal, social and environmental structures of a schizophrenia sufferer's world. Its significance in this context not only allows for a holistic development of our understanding of schizophrenia as it stands today but it also allows us to go beyond the epidemiological findings which have kept us at the tip of the iceberg in relation to our development of additional hypotheses on schizophrenia.

The more compelling characteristic of this theory is that it does not silence the term 'culture' neither does it see it as separate from the person. Culture is viewed as part of this comprehensive structure of systems which are enmeshed with one another and co-exist. We have also seen from the previous chapters that culture can no longer be ignored due to the shift from monocultural to multicultural mental health systems in the UK.

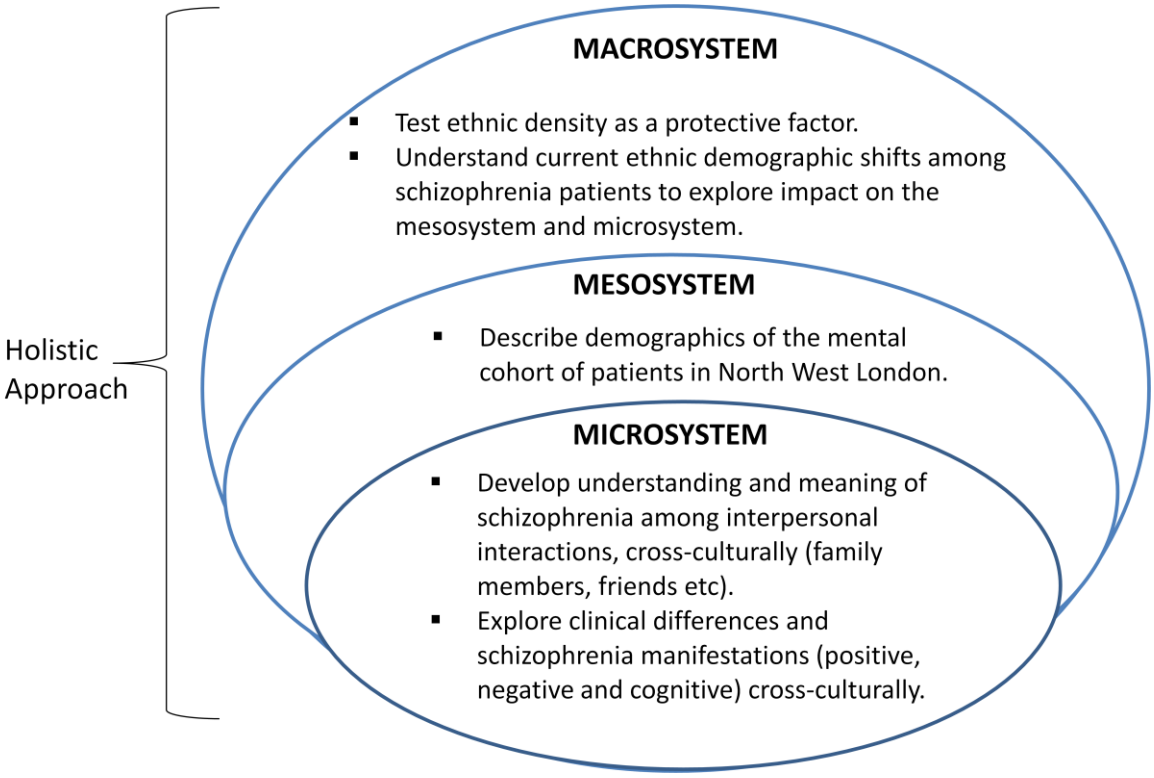
In simple terms, ecological systems theory has been defined as the theory of "environmental interconnections and their impact on the forces directly affecting psychological growth" (Bronfenbrenner, 1979, p.8). The main conjuncture is that behaviour is created through the interplay between the self and his or her environment.

There are three main features in the ecological model which start at the personal level and end at the belief systems, cultures and outer societal layers that, a person per se, has no control over. The microsystem is the element that involves the person's intimate relationships with the world, including one's direct relationship with family and friends. The microsystem is a layer which involves dyadic and triadic interactions that can mould the person's personality and psychological development. This layer is also understood as dependent on dynamic and permanent "experienced" (Bronfenbrenner, 1979, p.22) communication, and one which has a potent effect on our psychological development and state of mind. Such communication processes, therefore, relate to the schizophrenia sufferer's immediate surroundings. Herein, a person's schizophrenia manifestations would also fit under this bucket.

The mesosystem, or the second relational element in the ecological systems theory model, is about interrelations between two or more settings but a place where a person still dynamically participates in. A mental health ward or clinic, for example, would fit within the mesosytem of a schizophrenia service user. Perhaps the schizophrenia service user also attends church and also goes to weekly group healing sessions, all which would be a part of the mesosystem structure.

The last and most outer shell, the macrosystem or exosystem, is one which a person does not have direct communication with or awareness of. It is that layer that would ultimately affect the self but it does not directly feel that way. Let us take the theory of ethnic density as an example: A person from Pakistan may not be aware of the fact that he or she lives around people in a highly dense Pakistani area who are indirectly providing a psychosocial buffer to his or her mental health (ethnic density postulation).

Figure 7. Theoretical Underpinnings of Thesis: Ecological Systems Theory



Culture and symbolic interactions would all fit in the macrosystem as something we may not be aware of on a daily basis but which influence how we interact with our mental health professional in the macrorsystem, and even how we interact with our closest relationships in the microsystem. Below, I summarize the thesis's main goals:

1. *Microsystem*: To explore how mental health clinicians explain and understand schizophrenia diagnosis amongst their patients from other cultures (will be covered in chapter four).

2. *Microsystem*: To uncover the clinical differences of the manifestations of schizophrenia, cross-culturally (will be covered in chapters four and six).

3. *Macrosystem*: To describe demographic, clinical and socio-cultural variables in a cohort of schizophrenia patients in West London, by ethnicity (will be covered in chapter five).

4. *Macrosystem*: To determine whether the theory of ethnic density applies for Asians, African-Caribbeans and Whites in Brent, North West London (will be covered in chapter five).

5. *Mesosytem*: To estimate mental health practitioner's case loads of their patients diagnosed with schizophrenia specifically for people born in Central and Eastern Europe, North Africa, and the Middle East (will be covered in chapter six).

6. *Microsystem*: To conceptualize a model that would allow for a more profound understanding of how culture interacts with the dyadic interactions between a schizophrenia patient and clinician (will be covered in chapter seven).

7. *Macrosystem*: To provide recommendations to the UK mental health system based on findings in this thesis (will be covered in chapter eight).

3.3 Main Study Definitions

3.3.1 Schizophrenia

The main indicator, schizophrenia, is used in both the quantitative and qualitative analyses I will perform. Schizophrenia diagnosis is defined according to the ICD-10 criteria as "a psychotic disturbance that lasts for at least 6 months and includes at least 1 month active phase symptoms (i.e. : for two or more of the following: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behaviour, negative symptoms)"

(World Health Organisation, 2007, online). I examine schizophrenia and its subtypes which are paranoid, disorganized, catatonic, undifferentiated and residual. Generally in psychotic illnesses, a patient's diagnosis changes between subtypes in their lifetime (Chen, Swan, & Burt, 1996; Schwartz et al., 2000); therefore, I find that it would be better to keep the definition more broad rather than to focus only on one subtype. I utilize the World Health Organization's definition of schizophrenia because mental health professionals rely on this indicative label for diagnosing patients with schizophrenia in the National Health Services in the UK.

3.3.2 Ethnicity

In the United Kingdom, the term "ethnicity" is synonymous with the term "race" as it is used in the United States. Both categories signify a group that shares a common heritage or identity. Sewell (2009, p.17) defines ethnicity as possibly relating to a common "language, geographical origin, skin colour, religion or cultural practice" although this definition is not complete because in the UK, language is usually homogenous (English speaking). Geographic origin is also unfounded because White ethnicity, for example, may fit a person originating from Ireland or a person originating from South Africa, and obviously these two cultural groups do not share their language, geographic space, religious beliefs or cultural practices. The only common denominator is their skin colour. For that reason, I find that the way the term "ethnicity" is usually used in the UK is not any different from the way that the term "race" is used in the United States; the terms refer to the skin colour of a person. In the UK, five main ethnic groups are generally recognized, according to the National Statistics (2003, 2006). They are:

1- White;

2- Mixed;

3- Asian or Asian British (Indian, Pakistani, Bangladeshi, Other Asian);

4- Black or Black British (Black Caribbean, Black African and Black Other);

5- Chinese;

6- Other.

Ethnicity as such can be argued to significantly racialise groups by appearance while not accurately identifying people's heritages because in each category, there are many cultures or subcultures, as Bhugra (2004) has argued. A White person can be a Polish person, a Mexican or an Iraqi; sharing a common skin colour does not mean that they share common cultural identities. Similarly, a person from India is not necessarily the same as a person from Mauritius (Asian ethnic group). A Jamaican and a Senegalese also do not share a similar culture or a heritage (Black or Black British ethnic group).

Second, ethnicity does not account for the place of birth but instead lumps all groups into these six aforementioned categories, which is misleading in epidemiological research. I find that it is indispensible but not necessarily constructive, to use ethnicity in this research because of the NHS's reliance on this term. However, I do not solely rely on this term and rather expand on other definitions such as 'first generation immigrant', and culture. In an effort to generate a deeper understanding of cultural differences in schizophrenia, it would be impossible to reach any constructive conclusions using ethnicity as the sole indicator. Ethnicity, as a stand-alone variable, does not reveal

whether a person is a first, second or third generation migrant and I find it essential to keep a distinction in this research. I have also shied away from using the term 'minority ethnic group' as an indicator because it has been argued to convey a disadvantage, and often inferiority with respect to other groups (Bhopal, 1997).

3.3.3 First Generation Immigrant

A first generation immigrant is simply a person who was born outside of the United Kingdom. In the literature review, we have seen differences in schizophrenia incidence and prevalence between first, second and third generation migrants. Such evidence suggests that it is important to differentiate between ethnic groups and migrants. Within this category, the country of origin is divulged. This term, therefore, allows for more specific delineations between ethnicity, country of origin and culture, and this is my rationale for adding it to the list of main indicators in this thesis.

3.3.4 Cross-Cultural Differences

The term "culture" is ambiguous; it refers to habits, values or even collective beliefs. Although it is usually closely interrelated to race, culture is said to be based on "shared ideas, non-material structures, habits and rules that help to circumscribe membership of a group" (Sewell, 2009, p. 19). Sewell (2009) finds that culture alone as a predictor is nebulous and highly unreliable. For that reason, I use culture in a broader definitional context.

Cross-cultural differences are explored in terms of one's own culture and/or ethnicity and according to the studies that identify different groups as a way to distinguish them. Although culture is not easily identifiable, it still allows one to make

salient categorical distinctions between the different cultural groups. Cross-cultural differences are evident at both micro and macro levels, where immigrant groups and ethnicities within one country may have dissimilar habits and values. Bhui (2002) claims that in modern societies we see mixtures of many sub-cultures, even within one culture. Therefore, it is recognized that pockets of cultural differences not only occur across different countries but also within the same country. People also cannot be viewed as recipients of only one culture, since our mobility and the globalized world we currently live in challenges that notion (Corin, Thara, & Padmavati, 2005).

3.4 Methods

I will perform four studies as a contribution to the study of schizophrenia across cultures as shown in table 5. The first project (study 1) is a qualitative systematic review, or what is called a meta-narrative, that aims at describing the cross-cultural differences in schizophrenia as reported in studies worldwide. Second, I perform a statistical description of patient cohorts diagnosed with schizophrenia by using secondary NHS data, and then devise the same dataset to test the theory of ethnic density through a regression analysis (study 2). I then disseminate a semi-structured schizophrenia questionnaire to an estimated 50 clinicians working with schizophrenia patients in London (study 3). The questionnaire's overall aims are twofold: First, it allows mental health professionals to estimate rates of schizophrenia amongst their current caseloads of patients. Second, it examines current views of clinicians in relation to schizophrenia and culture.

Table 5. Summary of Research Methods

Study	Method	N	Location	Population	Research Goals & Objectives
1	Qualitative systematic review	*	Worldwide	*	Describe and interpret cross-cultural differences of the content of symptoms.
					Report on explanations of schizophrenia made by carers, clinicians and patients to explore culture's influence on care.
2	Descriptive statistics and regression analysis	860	Brent, UK	Patient cohorts	Describe demographic population of schizophrenia.
					Test the theory of ethnic density.
3	Semi structured questionnaire	48	London, UK	Mental health professionals	Estimate patient cohorts from Middle East, North Africa and Central and Eastern Europe.
					Examine views of mental health professionals in relation to schizophrenia and culture.

* Sample size and population for the qualitative systematic review are determined upon completion of the review; they cannot be determined earlier due to the nature of the methodology.

3.4.1 Qualitative Systematic Review

Up to this date, nothing has been reported on the concerns that are being faced by mental health professionals who deal with foreign born schizophrenia patients. Cultural differences in human behaviour affect the content of the manifestation of one's symptoms, and this, in turn, leads psychiatrists to have difficulty in recognizing certain symptoms as abnormal (Birchwood, Hallett, & Preston, 1988). Findings from a study by Koneru and Weisman (2006) in the United States confirm that the reported symptoms of schizophrenia differ depending on the ethnic group of the patient and clinician (comparison between Whites, Latinos and Blacks). White patients were reported to express more persecutory delusions than Latinos, auditory hallucinations are known to be more common amongst Western cultures, and visual hallucinations as more common amongst non-Western groups.

Whaley (2001) adds that patients with higher cultural distrust are more often diagnosed with paranoid schizophrenia. Wieser et al. (2007) also claim that schizoaffective disorder is highest amongst Ethiopians in their sample because this group's cultural differences are the most pronounced compared to their host population. These studies suggest that not only are symptoms expressed differently cross-culturally but also that such cultural differences may impact the diagnostic decision. This area of research is still very new and underdeveloped. I will attempt to fill the gap by laying out another significant but ignored area in the field by performing a qualitative systematic review, or a meta-synthesis, exploring the cross-cultural differences in the content of symptoms of schizophrenia.

Bhugra (2004) asserts that the only way to understand the reason for different prevalence rates of schizophrenia amongst certain immigrant groups is through testing the differences in the patient symptoms that led to the diagnosis. What this study will explore is how cross-cultural differences in what is considered symptomatic of schizophrenia affect diagnosis, an area of research which has been neglected.

The meta-ethnography, or what is called a qualitative systematic review, is performed to describe and analyse schizophrenia's symptoms, cross-culturally. Our understanding of cross-cultural differences in the manifestations of schizophrenia symptoms is limited, and especially at this critical period of unprecedented internal migration, it is imperative to extensively research these differences.

Based on grounded theory (Glaser, 1992), I search for literature that includes schizophrenia as the main indicator of illness but which also contains descriptive

(quantitative or qualitative) accounts of differences cross-culturally. I use two main search engines, MEDLINE and PsychINFO (no year limit) as they are considered the two main databases containing mental health descriptions and psychiatric assessments of schizophrenia. After having mapped the literature and selected the papers, an in depth synthesis and analysis of differences and similarities of symptoms are described, across countries and ethnicities. I also address cross-cultural explanations of schizophrenia in the meta-narrative, common diagnostic assessment tools worldwide, and, finally, I discuss the findings and address main gaps in the knowledge. This is considered the first qualitative systematic review done on the topic.

3.4.2 Descriptive Statistics

British and European studies on schizophrenia done by Giggs (1973) and the British Psychological Society (2000) have shown that the highest rates of schizophrenia occur mainly in urbanized city centres. Similarly, immigrant groups generally move to large cities upon their arrival to their host country (Giggs, 1973; National Statistics, 2006). Studies in Denmark have also corroborated those findings of 'urbanacity' affecting the rate of schizophrenia, specifically in second generation immigrant populations (Cantor-Graae & Selten, 2005). If the highest rates of schizophrenia occur in urbanized places and immigrants move to those city centres, then the previous studies showing high rates of schizophrenia amongst immigrants are due to factors that are correlated with the

process of urbanization[9]. For that reason, I do not compare urban and rural areas but only focus on an urbanized geographical setting, London.

The quantitative study takes place in the borough of Brent, Northwest London. First generation immigrants in Brent make up 46.5% in comparison with British born citizens totalling 53.5% (Brent Council, 2001). Brent is also one of the only two boroughs in England where BME groups outnumber the White population (Brent Brain Website, 2001). Although there are no current estimates (2003-2010) from figures of first generation immigrants who have moved to Brent, the expectation is to see an even higher percentage of first generation immigrants in schizophrenia patient cohorts. For this reason, Brent is an ideal setting to research schizophrenia as there should be a rich representative sample, by country of birth.

To describe the current rates of diagnosis of schizophrenia, patient record secondary data have been retrieved from the Brent Primary Care Trust. The data analysis is based on 860 patients (inpatient and outpatient) who have been diagnosed with a mental illness and seen a mental health professional in Brent between April, 2006 and March, 2007. The main variable is a diagnosis of schizophrenia disorder (ICD-10 codes F20-F29, see Appendix).

[9] Social isolation theory suggests that being isolated and poor is likely to trigger psychosis in vulnerable individuals (The British Psychological Society, 2000, p. 12).

The dataset contains basic patient information such as the ethnicity of the patients, age, and location of ward, address, deprivation level and the ICD-10 diagnosis of the patient. For the purpose of this project, I have chosen for analysis a comparison of non-schizophrenic diagnoses and another analysis of only those patients with an ICD-10 schizophrenia, schizotypal or delusional disorder (ICD codes F 20.0 to F.25.9, refer to the Appendix F for more details). The diagnoses that have been used were deciphered by NHS mental health professionals. To maintain confidentiality and anonymity, none of the names of practices, clinicians, or patients were identifiable at the time of the data analysis.

The nominal variables in this dataset are used to perform a chi-square (X^2) test of independence. The goal is to find out whether there is a statistical relationship between the variables (Carver & Nash, 2009). The X^2 test will allow us to explore whether there is a discrepancy between the observed and expected frequencies. The analysis starts under the assumption that there is no relationship between the variables tested (the null hypothesis). Therefore, using X^2 and in order to reject the null hypotheses, the indicators are analyzed using the program *Statistical Package for the Social Sciences* (SPSS).

I also examine the relationship between other mental illnesses (such as bipolar disorder, personality disorders and alcohol dependence) with gender, and deprivation level with ethnic background. One aim of the tests is to see whether the variables are generally correlated with any mental illness or whether they are specifically correlated to schizophrenia.

Then, regression and correlation tests are performed to see whether there is a relationship between the independent variables as a whole. The hypothesis is that there is a high correlation between the patient's ethnicity and a diagnosis of schizophrenia. I test whether there is any intervening variable that might be leading to a high correlation between ethnicity and schizophrenia.

Further step wise regression tests are performed to provide a more intricate delineation of how the variables interact with the dependent indicator schizophrenia. A multivariate correlation analysis is performed to view relationships between diagnoses of schizophrenia and in order to test whether there are any intervening indicators. For instance, level of deprivation and Black ethnicity could be highly correlated, while a correlation analysis may show that Back ethnicity is more significantly correlated to level of deprivation, and not to schizophrenia. This indicates multicolinearity, or a linear relationship between two independent variables. In other words, this means that there is no correlation between Black ethnicity and schizophrenia in this example.

3.4.3 Regression Analysis

In order to formulate a lucid picture specifically between schizophrenia and ethnic density in Brent, I also perform a binomial logistic regression analysis. Theories have suggested that when there is high ethnic density within one ethnic minority in a location, then the likelihood for them to develop a mental illness is decreased (Bhugra and Arya, 2005; Bhugra & Bhui, 2001; Boydell et al., 2001; Veling, Hoek, & Mackenbach, 2009).

Therefore, if patients with a residential address in Harlesden (where there is a high proportion of Africans), for instance, show a low incidence of schizophrenia, then we could reject the theory of ethnic density. In the patient dataset, addresses of patients have already been collected. Therefore, I look at interactions between ethnicity, geographic location of patient's address, schizophrenia and other mental illnesses. Both the descriptive statistics and regression analyses (study 2) are reported in chapter five.

3.4.4 Semi-Structured Questionnaire

Study four is an online semi-structure questionnaire (see Appendix) that is divided into closed and open ended questions. The first section of the study validates or rejects previous claims that ethnic minority groups experience higher rates of schizophrenia in comparison to the local population, while also exploring the current rates of schizophrenia amongst first generation immigrants in London, through the reporting of mental health professionals' case loads (Central and Eastern Europeans, North Africans and Middle Eastern populations). The next section provides a qualitative description of differences in the content of symptoms of patients across different cultural groups.

Since 2004, inward migration to England has seen a major shift especially because many of the Eastern-block countries have expanded into the EU region. Inward migration in UK has seen a sharp rise, but the highest inward migration is especially evident for people coming from the A8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia). For example, figures from the Office for National Statistics illustrate more than a 200% increase in migration to England from 2004 to 2010 just from the A8 countries (Office for National Statistics online, 2011).

If the UK's population is becoming increasingly multi-cultural, this trend will also inevitably affect the national healthcare system. As population trends are shifting, so will the demographic make-up of service users. This demonstrates that in order to clarify the differences, one would need to go beyond studying mental health demographic trends using ethnicity (Black, White and Asian categories).

This chapter, therefore, explores foreign born patient demographics diagnosed with schizophrenia, by country of birth. Over 70% of net-in-migration from the European Union has been accounted for from the eight Central and Eastern European countries having been accepted into the European Union in May 2004 (National Statistics, 2006). There has been an astonishing 303% increase in Polish residence in the UK alone, and a 67% increase in Lithuanian residence in 2005 (National Statistics, 2006). If these groups are migrating into the UK at such rates, we would expect to see higher incidence and prevalence rates amongst first generation immigrant schizophrenia patients. The one study done by Hitch and Rack in 1980 explored patients of Eastern European origin and found that rates of schizophrenia are higher than the local born population in Bradford, the UK. Since then, no other study has been replicated or known on Eastern European immigrant groups in the UK.

The second population trend has been a 9 % increase of inward migration from non-EEA countries to the UK in 2005. Citizens from Iran, Iraq, Afghanistan, Somalia and Eritrea seemed to have specifically increased in numbers over the last five years (National Statistics, 2006). Once again, there is a lack of data on the rates of schizophrenia onset amongst these migrant groups in the UK. Therefore, this gap in the

mental health knowledge on foreign born groups is also seen as a core component of the research.

The questionnaire is, moreover, used as a standardized measurement to capture the views of the respondents on their patients diagnosed with schizophrenia in practice and to list their reasoning behind its onset comparing UK born and foreign born patients (Fowler, 2002). This self administered questionnaire will be used to identify the mental health professionals' socio-demographics (age, reported ethnicity, country of origin, languages spoken and cultural affiliation), and their current views and experiences on schizophrenia in relation to their personal clinical or research experiences. The questions vary from matrix questions, ranking, and semantic differential scales.

Indicators to measure a certain concept have not been used because the questionnaire addresses a multitude of topics that are not necessarily exploring the same issue. Therefore, in this case it is not necessary to work on assessing a matrix of questions to measure socioeconomic status, for example. Measuring ethnicity, gender, sex and age are usually made up of only one question and cannot be used as indicators of a grouping of questions (De Vaus, 2002). The questions that follow ask about opinions on reasons for high schizophrenia amongst their foreign born patients (if they agreed to it) and current practice evidence of differences in symptoms amongst their patients.

The semi-structured questionnaire was disseminated via email and through snowball sampling. Fowler (2002) asserts that online questionnaires can be very practical tools to disseminate surveys and questionnaires as they are easy to access. They also allow the respondents to answer the questionnaire under their own conditions and time.

To encourage mental health professionals to take part, two £10 vouchers from M & S were used in a draw for participants to win, upon completion of the questionnaire.

Inclusion criteria

Care of schizophrenia patients is reported to take place not only in psychiatric settings but also in non psychiatric and alternative contexts (Gaines, 1992; Kleinman, 1991). For that reason, the questionnaire is addressed to any mental health professional who has had experience in working with schizophrenia patients in London in a private, NHS clinical or research setting. The age range of the respondents is between 18- 75. Mental health professionals who have not had direct contact with schizophrenia patients in the UK are excluded from the study.

Validity and Reliability

In any questionnaire administration, pilot testing ensures that the questions are more valid and reliable (Neuman, 2003). It also assists in eliminating irrelevant questions (De Vaus, 2002). The dataset has been pilot tested in February, 2008 and examined by 6 people including 3 mental health professionals and 3 researchers from different settings (university, hospital and research setting). The questionnaire was modified through revisions and feedback prior to dissemination and the initiation of the project. The first phase was disseminating the questionnaire as a pilot study. Feedback was collected from the respondents followed by a retest of the questionnaire before it was used in with the target respondents.

3.5 Ethical Concerns and Confidentiality

The studies have been approved by Brunel University's Ethics Committee board and the Harrow Research and Development NHS board, the NHS ethical review committee (see Appendix). I have ensured that all collected data was anonymized and used solely for the purpose of the study. All material that was stored on computer files is password protected and securely backed up.

Recruitment and participation processes occurred only when mental health professionals voluntarily agree to participate. The studies do not require the researcher to be involved with any high risk groups (such as people with disabilities or mental health problems). Data on patients will be based on pre-collected records and hence the study does not present any emotional or physical harm or effect on a specific group. The Ethical Principles that were adhered to are respect for persons (autonomy), non-malfeasance (do not harm), beneficence (do good), and justice (exclusion).

3.6 Summary

Ecological systems theory will provide a theoretical framework to this thesis. This will be accomplished by performing a qualitative systematic review; the strength of the meta-analysis is that it summarizes what is known already about cross-cultural differences but also provides a core and highly valid conclusions in relation to quantifying the main conclusions found. Such a study is the first of its kind to be performed in both its aims and objectives, and in the methods that have been used.

Chapter five's core objective is to statistically describe the current schizophrenia patient cohorts in the urbanized, highly multi-cultural borough (Brent), with a particular focus on patients' ethnicity. This will confirm or reject previous claims that BME groups are over-represented in NHS schizophrenia mental health cohorts. The hypothesis is that there are higher rates of schizophrenia amongst African-Caribbean and other Black ethnicities in the Brent patient cohort. The theory of ethnic density seems to be a novel idea that has not yet been sufficiently tested across populations and to my knowledge has not been analysed with BME groups in Brent. A logistic regression analysis will be performed to test this relationship.

Chapter six moves beyond statistics and reports on the results from the online semi-structured questionnaire where mental health professionals in London further signify the importance of their understanding of schizophrenia, cross-culturally. It is assumed that not only do we need to explore the demographics of patients, but that it is equally central to identify who the current mental health workforce is. In patient care, there are constant dyadic cross-cultural interchanges between mental health professionals and patients, which directly affect diagnostic decisions, care, and treatment.

CHAPTER FOUR

A META-ANALYSIS: CROSS-CULTURAL DIFFERENCES AND THE CONTENT OF SCHIZOPHRENIA'S SYMPTOMS

4.1 Introduction

This chapter goes beyond epidemiological findings and delves into the clinical characteristics of the manifestations of schizophrenia across cultures. A qualitative systematic review of the literature is performed to determine differences not only in the content of but also in the interpretation of symptoms. Medline, PsychINFO, Jstor, EBSCOHost and online search engines (Google Scholar and Schizophrenia Research Forum Database) were searched systematically between 1975 and 2011. Studies that were included were those that reported symptomatic details of schizophrenia sufferers across different ethnic or cultural groups. Using a protocol and a data extraction form using the Social Care Institute for Excellence (SCIE, 2004), the study's final selection process resulted in the inclusion of 26 studies. The meta-narrative includes published sources from psychiatric, psychological, anthropological and sociological literature.

The findings in this chapter elucidate some consistent differences found in the literature across ethnic and cultural groups. The findings also highlight the importance of the clinicians' own cultural milieu when reporting and interpreting symptoms across different groups. This study also calls for a need for more qualitative narratives of patient and doctor interactions in the UK.

Bhugra and Bentall (2004) assert that studying symptoms of schizophrenia may allow for a more profound understanding of the cross-ethnic differences in incidence and prevalence of schizophrenia. This is the first meta-analysis of its kind that aims at establishing more concrete findings on the differences in schizophrenia's symptoms across cultures. This chapter will answer one of the main research questions laid out in chapter three, which is to uncover clinical differences of the manifestations of schizophrenia, cross-culturally.

4.2 Background and Objective of the Review

The review of the literature in chapter two illuminated us to the fact that there is an imbalance in the diagnosis of schizophrenia across ethnic groups; this has been confirmed by at least four meta-analyses (Bhui, Stansfeld, Hull, & Priebe, 2003; Bourque, Van Der Ven, & Malla, 2011; Cantor-Graae, & Selten, 2005; Claasen, Ascoli, Berhe, Priebe, 2005). Analyses of social, environmental and biological factors have been attempted, but I have argued throughout this thesis that, as Sullivan, Allen and Nero (2007) have iterated, our knowledge of schizophrenia is still "at a descriptive stage" (p. 189).

Part of the reason why the research community has not been going beyond epidemiological descriptive findings is that in most of the studies that have taken place over the last two decades, researchers have been inferring conclusions using the same statistical techniques aimed at understanding cross-cultural differences. For example, using Poisson regression, Kirkbride and colleagues (2008) looked at age, gender and socioeconomic status in relation to psychosis and concluded that even when controlling

for socio-economic status, Black Caribbean and African groups remained at a stagnant high. Underlying reasons behind the disparities remain to be seen. Using descriptive statistics, Alexandre and Cardoso (2010) found that Black immigrants are over-represented in Portugal when a diagnosis of schizophrenia and acute or transient psychosis was to take place but with little evidence as to why. As we have seen in chapter two, ample published studies in the UK have used similar research methods but with no definitive answers beyond the epidemiological facts to the known cross-ethnic differences in schizophrenia's prevalence and incidence.

There has been a dearth of findings with reference to symptomatic variations across cultures. An emphasis on the similarities of hallucinations and cognitive deficits of schizophrenia has been highlighted as the same measures are used to identify them. The use of the DSM-IV and the ICD-10 have universalized labelling and simplified the process of diagnosis. I argue in this chapter that it also may have taken away the subjectivity of the way symptoms are interpreted, which ultimately is highly dependent on the diagnoser's own cultural background. I attempt to fill in the gap of research by exploring the similarities and differences of the reported manifestations of symptoms across cultures and ethnicities. For the purpose of this study, the words ethnicity and culture are used interchangeably as published articles have not distinguished these definitions in their narratives.

4.3 Theoretical Underpinnings

The study's main goals are to explore whether there are similarities between the reported symptoms of those ethnicities or cultures that have higher rates of schizophrenia compared to those groups who do not. In light of these findings, I will answer the following questions:

1. What are the reported clinical characteristics of symptoms of schizophrenia across different cultures and ethnic groups?

2. What are the reported differences in explanations of the development of schizophrenia across cultures and ethnic groups?

Pope and colleagues (2000) elaborate on the importance of distinguishing between the types of review being undertaken, as it may change the direction of research questions. This meta-analysis can be seen as a 'knowledge support review' rather than a 'decision support review' as it serves to synthesise and summarise what is known on the topic from previous peer reviewed literature. Especially when there is a lack of research on a topic, being broad in the review question makes it richer in quality than a qualitative piece of research, because it can explore in more depth and emphasize territories otherwise not captured by quantitative measures (NHS Centre for Reviews and Dissemination, 2008).

The method chosen for the research question is based on grounded theory that works like a 'tabula rasa' or the blank slate of John Locke's theory of the mind. The only similarity between the quantitative and qualitative reviews is that they both synthesize data through an aggregation of different works on the same topic. Grounded theory,

however, establishes a starting point that is free of any pre-determined theories and engages the development of the field work to lead to new theoretical undertakings. In other words, the power of a meta- synthesis essentially lies in its theoretical and critical discourse.

There are many reasons why a statistical meta-analysis is not performed to answer the research questions. First, conducting a meta-analysis requires a reliance on a hypothesis that is either rejected or supported by the data, using an understanding of fixed effects and random effects from the literature. Second, the nature of the research questions in this study is based on a heavy reliance on qualitative cases and reports as the goal is to explore the reporting of clinical manifestations. Generally, meta-analyses rely on published randomized controlled trials removing any case series or reports, which in this context would defeat the purpose of the primary goals of this research.

A qualitative meta-analysis allows for a deeper synthesis, while giving the chance for a development of new anthropological, sociological, psychological and psychiatric findings in exploring the differences in the display and manifestation of symptoms. In other words, numbers can statistically describe the problem but qualitative discourses allow for a deeper approach involving “interconnection and interaction among the different design components” (Maxwell, 2005, p. 3).

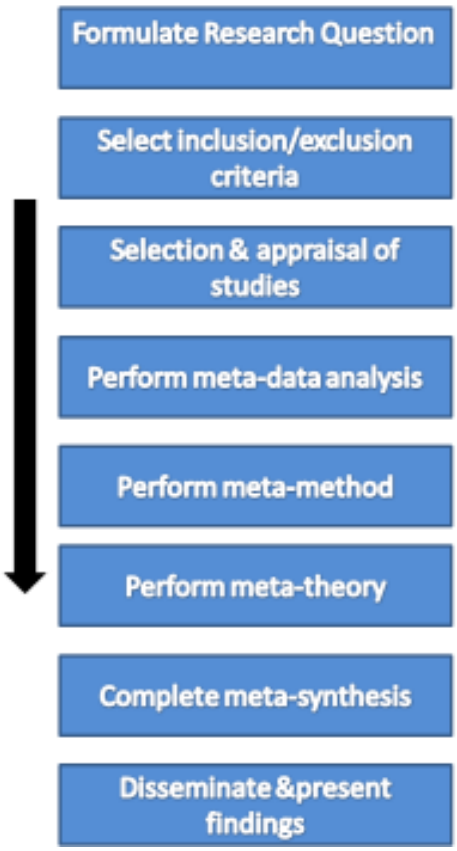
4.4 Methodology

Meta-narratives are powerful in identifying any theoretical gaps in the literature (Paterson, Thorne, Canam & Jillings, 2001). A quantitative meta-analysis can be seen as synonymous with a qualitative meta-analysis. Its main role is to provide a "comparative textual analysis of published field studies" (Noblit & Hare, 1988, p. 5). The main task of a meta-analysis is to synthesize and homogeneously interpret all studies on a specific topic. Hence, it is considered an interpretive rather than aggregative exercise that allows for a more profound critical examination of certain topics, with a systematic comparison of case studies through an engaged synthesis (Noblit & Hare, 1988). The NHS Centre for Reviews and Dissemination (2008, p. 228) have defined it as "a set of techniques for synthesizing qualitative studies. It involves the selection, comparison and analysis of studies to create new interpretations or concepts. Key stages include the reading and re-reading of studies; determining how the studies are related by listing key concepts and comparing and contrasting them; translating the studies into one another and synthesizing the translations to identify concepts which go beyond individual accounts and can be used to produce a new interpretation".

Meta- analyses are also ideal especially when there are many small scale studies that have gathered information on common themes but which do not have the ability to provide a reliable generalization. Another important function of the meta-analysis is that the research findings and interpretations are constructed through the lens of the researcher's own understanding of the literature. In this sense, it transforms into a study of an original piece of work about a topic.

The main strength of the research process in any meta-analysis according to the Social Care institute of Excellence (Walter, Nutley, Percy-Smith, McNeish, & Frost, 2004) is its transparency and rigour of process. It also allows for readers to follow through the steps of how conclusions were made in sufficient detail, increasing the inter-rater reliability of the study. In figure 8, I illustrate the steps that have been taken for the meta-analysis as recommended by Paterson, Thorne, Canam and Jillings (2001) and by Pope, Ziebland and Mays (2000), but with adaptations to fit the proposed research questions of this meta-analysis.

Figure 8. Phases of the Meta-Analysis



Protocol

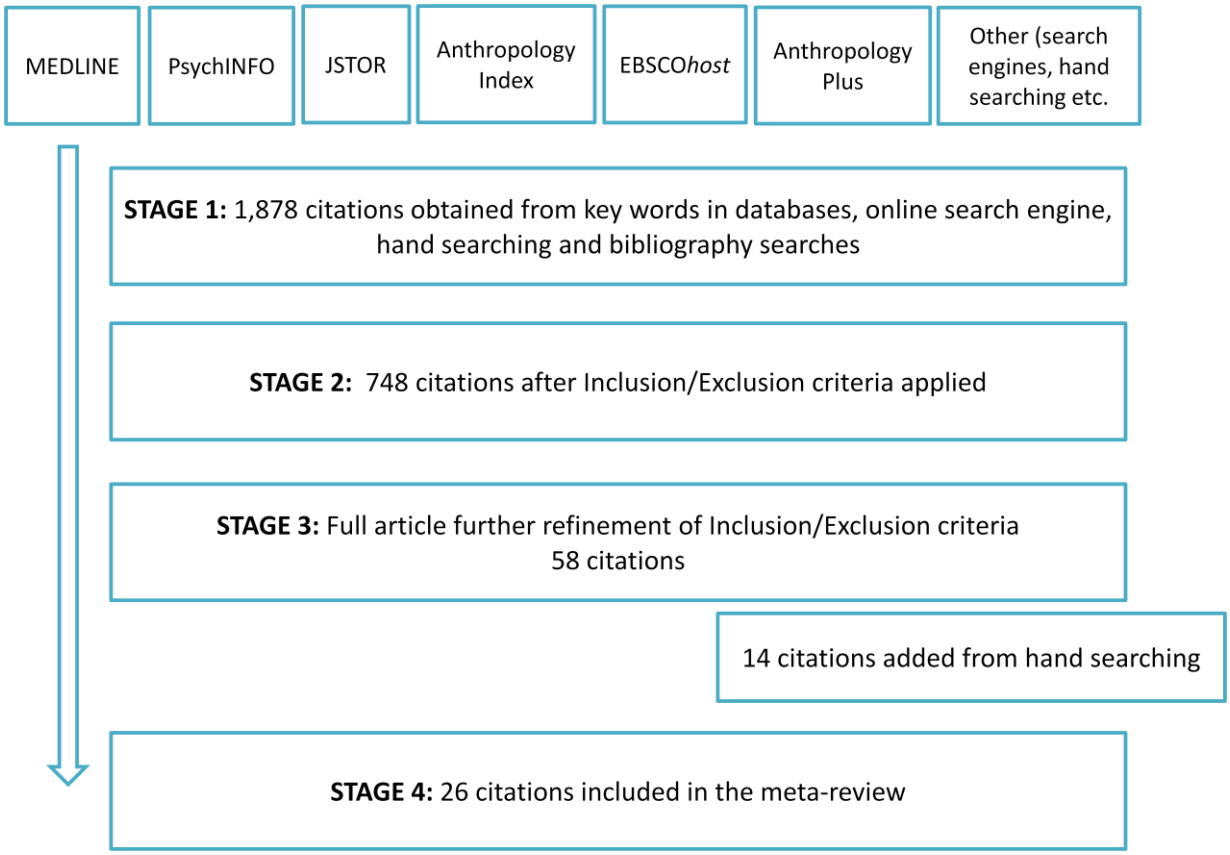
It is currently a widely accepted technique to initiate a qualitative systematic review by scoping what the Cochrane Collaboration and the Joanna Briggs Institute (2009) define as a protocol. The protocol is the starting point for the narrative review to take place. It is considered an essential piece of work for the research question and some background knowledge on the topic to be explored. The protocol generates the reviewers' thought process into asking accurate and achievable research questions. The protocol covers not only the research question, but also provides general background knowledge on the topic, the inclusion and exclusion criteria of the literature search, a search strategy, and a systematic method to control for quality. The protocol was created using the CREMS programme, which is a qualitative tool for systematic reviews developed by the Joanna Briggs Institute. The protocol is seen as the starting point of any systematic review as it clarifies and refines the main research questions and methodology (see protocol in the appendix).

Stage One

To identify the sources and to choose the keywords, I took expert librarian advice from the British library, Middlesex University Archway Library, Harvard University Tozzer Library (Anthropology) and the Harvard University Countway Library of Medicine. The preliminary search was performed using online search engines (Google Scholar and Schizophrenia Research Forum), medical, psychiatric, sociological and anthropological databases (MEDLINE, PsychINFO, Jstor and Academic Search Complete) and manual searching (known authors in the field, books and academic contacts, bibliographic

searches). Testing of a combination of words and themes took place prior to determining the final keywords which can be found in the protocol's search strategy.

Figure 9. Flowchart of Review Process



Note: Duplicate studies have been filtered to avoid misrepresentation of numbers of studies.

Upon agreement of the relevant keywords that identified citations within the topic, a total number of 1,878 abstracts were found using the protocol's search strategy from both databases.

Each citation was screened by reading through the abstracts to identify the relevant sources. To determine the types of studies to be included in the second stage of the review, the following criterion was applied: the source needs to contain a description

of symptoms, practices, feelings, or experiences of people diagnosed with schizophrenia. Access to the articles was possible either via the Brunel University library webpage, British Library or Harvard University library webpage.

All of the 1,878 abstracts were thoroughly read by the author to assess their relevance to the research questions. Some hits were related to pharmacological studies and were excluded from the review as they did not fit the inclusion criteria. Dual diagnoses and specific groups such as cohorts with alcohol or drug abuse, homelessness, or crime were also excluded from the sample as the condition may interfere with the findings. People who are homeless or who are alcoholics, for example, have extra stresses in their lives that may contribute to more pronounced symptoms which would not be valid descriptions of schizophrenia.

Only sources that reported their findings in English were used, even if the abstract was in English (French, Italian, Polish, and German articles were excluded). Searches were done until saturation took place (or when the same article appeared more than once). Some citations came up in both databases, and in such scenarios, only one copy was used. There are no previous systematic reviews on the topic and, therefore, there were no systematic reviews included in the abstracts at this stage. Citations that were literature reviews were excluded but were used for the synthesis of findings and background as additional resources. After the preliminary criteria were considered, 748 articles were selected for inclusion in stage two of the meta-narrative.

Stage Two

Stage two included reading through the articles while screening for relevance and further application of inclusion and exclusion criteria, as recommended by The Social Care Institute for Excellence (Corin & Fisher, 2006).

A data extraction form (see appendix) was used to identify the relevant studies and to perform the second screening stage. The data extraction form was devised using an example from SCIE (Corin & Fisher, 2006), but with some modifications to fit the study's research questions (see appendix for data extraction form). Specifically questions on ethnicity, culture or country of origin were added (see appendix). It is a prerequisite for the chosen publications that are included in the third stage of the review to contain information about ethnicity or country of origin of informants.

Therefore, the search strategy was widened and for those articles that were included in the study, their references were also searched to ensure topic saturation. The aim was to collect all of the pertinent articles, and when a source discussed patient symptoms from a cross-cultural comparative perspective, they were further screened for inclusion or exclusion. A total number of 58 citations were scrutinized, while an additional 14 were added through hand searching. The remaining articles were read in full to determine whether they fit the criteria, and duplicate studies were adjusted for.

There were two stages while sorting the articles as there was only one reviewer performing the meta-narrative. The citations that fit the criteria were read twice to ensure accurate inclusion and topic relevance, and further exclusion took place. For example, an article by Minsky, Vega, Miskimen, Gara and Escobar (2003) said in its

abstract that they found differences in symptoms, clinical severity and psychotic diagnosis amongst Latino, African American and European American patients. Once the full article was read, it was noticed that there were no accounts of the differences between the symptoms of patients and as a result, it had to be removed from the meta-narrative.

Many articles were not used in the review because the ethnicity or country of origin of the person with schizophrenia was not mentioned. The second most common reason for exclusion was that differences between symptoms of schizophrenia were not addressed, but rather the article focused on diagnosis or misdiagnosis of schizophrenia. Two of the excluded sources were literature reviews (not qualified) while the remainder simply did not fit with the inclusion and exclusion criteria (see studies not selected for inclusion in the appendix). Some addressed only certain populations such as the elderly, students or people taking medication. Others did not define schizophrenia according to the DSM-IV or ICD-10 and were therefore, ineligible. The publication dates of the excluded articles were from 1989 to 2008.

Stages Three and Four

From the 72 citations that remained for further scrutiny from stage two, systematic data extraction techniques left 26 sources to be included in the final stages of the review. The sources were sorted according to two main themes that are based on the research questions discussed as the background to the chapter. The first set of studies (n=19) that answer question one of this chapter are mostly quantitative in nature and related to explaining the differences in symptoms of people diagnosed with

schizophrenia. The second set of studies (n=7) was mostly qualitative and reported discourses on opinions made by clinicians, carers, family members or people suffering from schizophrenia on explanations of the manifestations of schizophrenia. The sources answering the second research question were more difficult to find as they were more anthropological in nature. Some of the sources were chapters in books while others did not clearly identify the mental illness being observed as schizophrenia. This is not surprising, however, because in many parts of the world the term "schizophrenia" is not always used. There are usually culture specific terms that express mental illness.

The preliminary synthesis of findings is shown in table 6 and displays the summary of methods and findings of the studies that have been included in the review. Relationships between the studies have been explored to describe the differences or similarities across different cultures. Although it is not contested that validity and reliability of studies need to be measured in performing a systematic review of any kind, it has been less stressed in qualitative reviews because of the nature of the work, which is more subjective (Pope, Ziebland, & Nicholas Mays, 2000). Although the limitations of each study are noted and discussed and a validity assessment has been made, they have not been excluded on that basis. All of the studies that have been selected for this review are from peer reviewed published journals or chapters in published books and for that reason one would expect each study to have undergone a minimum standard of scientific scrutiny prior to it being published.

4.5 Preliminary Overview of Studies

All of the studies incorporated into the review focus on a schizophrenia patient diagnosis. Schizophrenia types included paranoid, catatonic, undifferentiated, residual, hebephrenic, schizotypal, schizoaffective, and schizophrenoform disorder (refer to appendix A for in depth definitions). Generally, the symptoms are divided into three main subtypes, which are positive and negative symptoms, and cognitive deficiencies. Although there were no limitations on the dates in the search strategy, all studies that fit the inclusion criteria of question 1 were all reported or published between 1975 and 2010.

Positive symptoms, or what is referred to as type I or first rank symptoms include but are not limited to hallucinations and delusions. Negative symptoms, or type 2 symptoms, are displays that represent catatonic behaviour, flattened affect and depression, to name a few. The data is divided into two sections.

In the first set of included studies ,12 out of 19 published studies utilized quantitative methods and the other 4 used mixed methods (qualitative and quantitative). Statistical means were used to construct and measure cross-cultural differences amongst different ethnic groups. Factor analysis, regression and descriptive statistics were used to measure the power of generalizability and statistical significance of the differences in the symptoms. Although quantitative methods have benefits, they are unable to provide a rich narrative discourse of the symptoms. The results are mainly based on interpretations of the displays of symptoms of patients made by mental health professionals.

The diagnosers included psychiatrists, researchers, lecturers, psychologists, research assistants, or clinicians. Seven out of 10 of the studies addressing the first question were done in the United States (Arnold et al., 2004; Brekke & Barrio, 1997; Chang, Newman, D'Anotonio & Serper, 2010; Coelho, Lucia, Strauss & Jenkins, 1998; Neighbors, Trierweiler, Ford & Muroff, 2003; Strakowski et al. 1996; Weismann et al. 2000), 3 in the United Kingdom (Hutchinson et al., 1999; Littlewood & Lipsedge, 1981; Ndetei & Vadher, 1984, 1985), 1 in Belgium (Charalabaki, Bauwens, Stefos, Madianos, & Mendlewicz, 1995), 1 in Germany (Haasen, Yagdiran, Mass, & Krausz, 2001), 1 in Malaysia (Aisnah, Nurulwafa & Osman, 2008), 1 in Sri Lanka (Chandrasena & Rodrigo, 1979), 1 in India and Nigeria (Katz et al., 1988), 1 in Korea and China (Kim et al., 1993), and 1 in South Africa and Namibia (Maslowski & Mthoko, 1998).

The second set of included studies pertaining to the second research question was mostly qualitative in nature, with sample sizes varying between 1 and 109. The studies were mainly descriptive narratives and the main informants on the condition of the person suffering from schizophrenia were family members, researchers, caregivers or service users. Two studies were performed in the United States (Bergner et al., 2008; Jenkins, 1988), 1 in India (Padmavati, Thara, & Corin, 2005), 1 in Japan (Allen, Koichi, & Ishizu, 2004), 1 in the Philippines (Guthrie & Szanton, 1975), 1 in Nigeria (Umoren, 1990) and 1 in Canada (Tranulis, Corin, & Kirmayer, 2008). No studies that fit the inclusion criteria were done in the United Kingdom, indicating a lack of qualitative research in this area. The power of these studies lies in their descriptive account of schizophrenia discourses amongst families, patients and mental health professionals across different countries.

4.6 Findings

Before I delve into the detailed findings and the synthesis of the studies included in the meta-narrative, I provide an overview of diagnostic criteria and definitions. As has already been expressed in the literature review (chapter one), diagnostic clinical monitoring is assumed to follow certain criteria before a diagnosis is made. The person who is experiencing symptoms is assessed based on the display of symptoms and the interactions that take place between the mental health professional and patient dyad. The main mental health diagnostic systems, the DSM IV-Revised and the ICD-10 explain that the main features of schizophrenia are "characterized in general by fundamental and characteristic distortions of thinking and perception, and affects that are inappropriate or blunted. Clear consciousness and intellectual capacity are usually maintained although certain cognitive deficits may evolve in the course of time".

The most important psychopathological symptoms according to the World Health Organization (2007, online) include thought disturbances, thought disorders, delusional perceptions and delusions of control, influence or passivity, hallucinations, thought disorders and lastly, negative symptoms. The National Health Services (2008) in the UK describe schizophrenia as having the following symptoms in common: delusions, hallucinations, disordered thought and abnormal behaviour.

Table 6. Studies Included in Meta- Review Question 1

Author	Methods	Country	Location	Ethnic Group or Country of Origin	N	Diagnoser/s	Diagnostic Criteria	Findings
Ainsah, Nurulwafa & Osman (2008)	Quantitative	Malaysia	Urban	Malay, Chinese & Indian	97	Senior Consultant Psychiatrist	SCID & PANSS	No differences between the groups in terms of the severity of positive symptoms, but differences were apparent for negative symptoms. Emotional withdarawal highest among Indians. Differences explained as a result of cultural and constitutional dispositions. Ethnicity influenced symptom presentation.
Arnold et al. (2004)	Mixed Methods	USA	Urban	African & Euro-American	193	Psychiatrists (blinded)	SCID, DSM criteria	More first rank symptoms among African Americans.
Brekke & Barrio (1997)	Quantitative	USA	Urban	African American, Latino & White	184	Trained Clinicians	BPRS, Quality of Life Scale, Sociocentric Indicators	Cross-ethnic differences exist in symptoms of schizophrenia and schizoaffective disorder. Sociocentric indicators were significant mediators of the symptoms.
Chandrasena & Rodrigo (1979)	Quantitative	Sri Lanka			169	British trained Consultant Psychiatrist & Lecturer in Psychiatry	ICD-8 & PSE	25.4% experienced first rank symptoms. Most common symptoms were voices arguing and thought broadcasting. The low FRS symptoms explained as a cultural structural difference. Patients in this study experienced mostly catatonic symptoms.
Chang, Newman, D'Antonio, McKelvey & Serper (2010)	Quantitative	USA	Not mentioned	Chinese, African American, Euro-American	219	Not mentioned	PANSS, SCID & DSM-IV criteria	Chinese presented fewer psychotic and dysphoric symtpoms, African Americans presented the most negative symptoms.
Charalabaki et al. (1995)	Quantitative	Belgium	Urban	Greek, Iberian & Belgian born	342	Clinicians (no additional details provided)	DSM-III criteria	Immigrants (Greek and Iberian) displayed more somatic anxieties, loss of libido, delusions and hallucinations. Changes in diagnosis higher among immigrant groups
Coelho, Lucia, Strauss, & Jenkins (1998)	Quantitative	USA	Rural	Puerto Rican, Euro-American	79	Interviewer (no additional details provided)	Brief Symptom Inventory (BSI). Primary diagnosis via DSM-III	Differences in the experienced average intensity of the symptoms between Puerto-Ricans and Euro-Americans. No diagnostic differences found. Puerto Ricans more likely to acknowledge their symptoms.
Haasen et al. (2001)	Mixed Methods	Germany	Urban	Turkish & German	122	Psychiatrists in training	SCAN & PANSS	More depression and hostile behaviour among Turkish patients diagnosed with schizophrenia.
Hutchinson et al. (1999)	Quantitative	UK	Urban	Afro-Carribean and White ethnicity	160	*Not mentioned*	PSE & RDC	Afro-Caribbeans experience more mania-catatonia, incoherent speech and thought disorder.

Continued

Author	Methods	Country	Location	Ethnic Group or Country of Origin	N	Diagnoser/s	Diagnostic Criteria	Findings
Katz et al. (1988)	Mixed Methods	India & Nigeria	Both	Indian & Nigerian	1379	Psychiatrists (indegenous and Western) and families	PSE & CATEGO	Indians displayed more self centered orientation. Nigerians presented bizarre, highly suspiscious and anxious behaviour.
Kim et al. (1993)	Thematic analysis & quantitative	Korea & China	Urban & Rural	Korean, Korean-Chinese & Chinese	978	Researchers (no additional details provided)	DSM-III criteria	Family a common theme across the board, possibly due to the large family cultural structures in both countries. Family delusions most common among Koreans, as they are more nuclear. Korean patients encountered mostly persecutory and grandiose delusions and jealousy.Delusions of the family being killed most common among Chinese (5.7%). Delusions of being poisoned or pricked by a needle or being blood sucked or brain extracted, most common amongst Chinese (18.2%). Supernatural, and religious flavors high among Koreans (25.1%). Spying and hostility mostly reported by Korean-Chinese (24.7%).
Littlewood & Lipsedge (1981)	Mixed Methods	UK	Urban	UK born, West Indies, West African, European, Irish, Asian & Other	244	Authors	Glossary of Mental Disorders	Frequent changes in diagnosis for those who had a religious display in migrant groups. Increase in religious flavor among West Africans. Increased in paranoid features among West African and Black groups.
Maslowski & Mthoko (1998)	Quantitative	South Africa & Namibia	Not mentioned	Black and White	113	Senior author	PSE & Landmark's Manual for the Assessment of Schizophrenia	Content of positive symptoms influenced by culture, but core symptoms do not change. Qualitative differences between ethnic groups.
Neighbors, Trierweiler, Ford, & Muroff (2003)	Quantitative	USA	Urban	African American & White	665	Psychiatric team, including trainees from residency programs. Mix of ethnicities (3 African Amercian, 2 White,1 Latin America, 1 Southeast Asia, 1 West African psychiatric residents	DSM-III Symptom Checklist	Symptom attribution differed by ethnic group. Schizophrenia predicted by hallucinations with voice and inappropriate affect only for African Americans. Semi-structured diagnostic instruments do not eliminate diagnostic categories highlighting the importance of clinical judgment. Patient ethnicity did not change the patient/doctor diagnosis.

Continued

Author	Methods	Country	Location	Ethnic Group or Country of Origin	N	Diagnoser/s	Diagnostic Criteria	Findings
Ndetei & Vadher (1984, 1985) a, b, c	Quantitative	UK	Urban	English, African, Jamaican, Continental European, English-speaking non-European, Asian, Middle Eastern, Far Eastern and Caribbean	593	Not mentioned	Catego	A) Cultural differences in persecutory, grandoise and religious, and sexual and fantastic delusions between West Indian and African groups. Delusions of persecution were common among all groups. B) Cultural differences in the frequency and hallucinations. Higher frequency among African, West Indians and Asians. C) Religion most common grandiose delusion. Africans have higher religious delusions. Other types of content were reported royals, identity, and ability.
Strakowski et al. (1996)	Quantitative	USA	Both	African Americans & Caucasian Americans	330	Psychiatrists, Psychologists & Research Assistants	DSM-III criteria	First rank symptoms are more commong among African Americans. More somatic symptoms among Mexican Americans.
Weisman et al. (2000)	Quantitative	USA	Urban	Anglo-American & Mexican American	116	Experienced Raters	PSE	More somatic symptoms among Mexican Americans. Greater frequency of persecutory delusions, nervous tensions and blunted affect among Anglo-Americans.

Notes:

- The table above includes 19 published sources.
- Ndetei & Vadher (1984, 1985) include three published studies but which use the same data to report on the findings (see inclusion reference list in the appendix for full details of each study).
- Ethnic categories are reported as mentioned in the studies.

Although the Kraepelinian psychiatric model has been universalised, Bentall (2004) states that it is still erroneous in nature. He has argued that such categorizations do not assist people who experience positive and negative symptoms because they stigmatize them further into despair due to the set label. Nevertheless, because such criteria have already been universally accepted, my role is to use what is already known to describe the current context of the findings. Hence, what is of interest in this meta-synthesis is to explore the subjective and objective differences in the experiences and symptoms of people diagnosed with schizophrenia who are from different cultural milieus, without judging the validity or reliability of the diagnostic criteria in place.

A universally accepted diagnostic tool is Schneider's first rank criteria, which measures evidence of positive symptoms such as delusions of being controlled by an extra-terrestrial being or thought controls. Feighner criteria and Research Diagnostic criteria (RDC) are two other structured measures that have been used, although Feighner criteria have been replaced by the other criteria as they have proven to be more reliable. (First, Spitzer, Gibbon, & Williams, 1997; Spitzer, Endicott, & Robbins, 1975). Issues related to the reliability and validity of the diagnostic measures have been known to vary. The main concern with all of the measures has always been the assessment of their reliability in detecting schizophrenia (First, Spitzer, Gibbon, & Williams, 1997). Although there is a concern over inter-rater reliability and validity in the included studies, such factors were not considered with the results of the included studies. The findings seemed to present more concrete conclusions as if the display of psychopathological symptoms is a fact rather than an interpretation. One exception to the rule is the study done by Neighbors, Trierweiler, Ford and Muroff (2003). In this study of 665 African and White

psychiatric inpatients, they looked at symptom attribution differences by ethnicity, emphasizing the importance of clinical judgement when dealing with cross-ethnic settings.

Generally, in European countries, RDC and PSE are most commonly used while in the United States DSM criteria are more prevalent. Maslowski and Mthoko (1998) have stressed that a major disadvantage in cross-cultural research is the use of a multiple number of diagnostic criteria. From the included literature there were 6 identified measures that were used by clinicians or researchers to assess the content and symptoms of schizophrenia. Those included SCID (Structured Clinical Interview for DSM-III and DSM-IV Axis Disorders), BPRS (Brief Psychiatric Rating Scale, PSE (Present State Examination), RDC (Research Diagnostic Criteria), CATEGO (Computer Assisted Diagnosis and PANSS (Positive and Negative Syndrome Scale).

Table 7. Diagnostic Measures Used in Meta- Review

Diagnostic Measure	Number of Mentions	Country of Published Research
Brief Psychiatric Rating Scale (BPRS)	1	USA
Brief Symptom Inventory (BSI)	1	USA
Computer Assisted Diagnosis (CATEGO)	2	India, Nigeria & the UK
DSM- III or IV criteria, Symptom Checklist	5	USA, Belgium, Korea, China
Glossary of Mental Disorders	1	UK
Landmark's Manual for the Assessment of Schizophrenia	1	South Africa & Namibia
Positive and Negative Syndrome Scale (PANSS)	3	Malaysia, USA, Germany
ICD Present State Examination (PSE)	5	Sri Lanka, UK, India, Nigeria, South Africa
Quality of Life Scale	1	USA
Research Diagnostic Criteria (RDC)	1	UK
DSM-II or DSM-IV Structured Clinical Interview (SCID)	3	Malaysia, USA

The most commonly used measures found in the studies that were used to assist with identifying the symptoms of schizophrenia were the DSM-III or IV criteria (symptom

checklist) and the PSE criteria (ICD measure). PANSS and SCID were the second most common measures used. There did not seem to be any trend for specific countries or settings to use one or the other. The measures are used by engaging in a dialogue between the dyad (patient and healthcare professional). The symptoms are observed and a checklist or a qualitative debrief takes place, depending on the diagnostic tool used. For instance, when using the BPRS clinicians observe the evidence of symptoms such as elated mood, somatic concerns, blunted affect and bizarre behavior to name a few, and tick what applies to the patient.

Rarely was the socio-demographic information about the diagnosers noted in the studies. Only 3 studies reported this information: Strakowski and colleagues (1996), Katz and colleague (1988) and Neighbors, Trierweiler, Ford and Muroff (2003). It was also not clear how much training the healthcare professionals had had prior to the diagnosis. Additionally, there seemed to be a trend where the focus was on the patients' symptoms without any reflection on the effects of diagnosers' judgement. One exception, however, did apply: Neighbors, Trierweiler, Ford and Muroff (2003) reported on the ethnic background and title of each of their diagnosing team. At the other end of the spectrum, the studies by Ndetei and Vadher (1984, 1985), Chang, Newman, D'Antonio, McKelvey and Serper (2010), and Hutchinson et al. (1999) did not clarify who the diagnosers were.

In terms of the ethnic groups of the patients in the studies, there was a trend to describe Caucasian or White groups' symptoms less compared to other groups. One likely explanation may be that authors considered Whites or Caucasian as a baseline of what is 'normal' in most situations, without accounting for the fact that they are also part of a culture. In the anthropological literature for example, Gaines (1992) explains this idea by

stating that the West is a cultural entity and for that reason, when looking at cross-comparisons one must factor in such individual differences into the new ethno psychiatric studies. It may be, therefore, that this lack of reporting symptomatic information on Whites is an unintentional cultural bias of the authors or clinicians.

The reporting of cognitive dysfunction, which is a symptomatic definitional criterion of a schizophrenia diagnosis, was absent in the studies. The basic premise of schizophrenia is that symptoms are assessed to be positive, disorganized or negative (Jenkins & Barrett, 2004; Peralta & Cuesta, 2003b). Studies included in the narrative all differed in the type of assessment that was used to decide upon the symptom categorization.

Finally, it is worth pointing out that the findings presented are interpretations of symptoms of patients. Therefore, as one reads through the findings, one should be able to understand more, not just about the patients' symptoms, but also about their diagnosers' interpretations and their world views. In a psychiatric assessment, the expressions of symptoms are a conglomeration of the mental health professional's observations and the displays of symptoms. Therefore, one can assume that the results also uncover how mental health professionals view their patient, the Other's culture.

4.6.1 The Socio-Demographic Profile of Persons Diagnosed with Schizophrenia

People suffering from schizophrenia in the literature were reported to have a mean age of early to mid 30s, with the exception of the study by Katz et al. (1988) which reported a mean age of 26 years old. An over-representation of males in the study by Katz et al. (1988) may have contributed to explaining the differences in age, where previous literature has confirmed the onset to be earlier for males in comparison to females (Jablensky & Cole, 1996; Reeves, Stewart, & Howard, 2002). Other common profile characteristics of persons diagnosed with schizophrenia include being more likely to belong to minority or immigrant groups, no matter which country it was in. In the German study by Haasen, Yagdiran, Mass and Krausz (2001), there was an over-representation of Turkish patients. Similarly, in the United States, Strakowski and colleagues (1996) report on higher rates of schizophrenia among African Americans. Chinese, however, were one exception to the rule. When Chang and colleagues (2011) looked at Chinese as a minority ethnic group in the United States, they found that they had fewer symptoms and hospitalizations compared to the other groups.

When gender demographics were reported, there was a consistent finding of a higher ratio of males to females diagnosed with schizophrenia, with the exception of the study by Chandrasena and Rodrigo (1979) in Sri Lanka. The majority of the studies also reported that people with schizophrenia were typically unemployed, and either single or never married (Arnold et al., 2004; Bergner et al., 2008; Brekke & Barrio, 1997; Haasen, Yagdiran, Mass, & Krausz, 2001; Hutchinson et al., 1999; Jenkins, 1988; Maslowski & Mthoko., 1998; Strakowski et al., 1996) suggesting that schizophrenia sufferers are more likely to have fewer social buffers.

First generation immigrants, however, seemed to have a higher percentage of being married compared to indigenous populations, but still lower compared to those who are not diagnosed with schizophrenia (Littlewood & Lipsedge, 1981). Not all studies, however, reported generational differences in their samples. For example, the studies by Ndetei and Vadher (1984, 1985) only provide descriptive information on the ethnic categories but do not specify the country of birth. For the studies that have reported migrant status, those most likely to be diagnosed with schizophrenia were second generation migrants or those who were born in their host country, i.e. Turkish patients in Germany (Haasen, Yagdiran, Mass, & Krausz, 2001).

4.6.2 Symptomatic Differences across Culture

Six of the first group of sources that answer the first question have associated the differences in the content of symptoms with culture (Ainsah, Nurulwafa, & Osman, 2008; Dutta et al., 2007; Kim et al., 1993; Maslowski & Mthoko, 1998; Vega, Miskimen, Gara, & Escobar, 2003). None of the studies, however, clarified how they defined culture. Additionally, culture was always tied to the patient's culture; in most studies the healthcare professional, psychiatrist, researcher or psychologist reporting the symptoms categorized symptoms using one of the diagnostic tools they were familiar with. In other words, when symptoms were reported, there was reference to a diagnostic tool that was used to report the symptomatic differences, but rarely were there considerations or discussions of the interpretations of the diagnoser. The only study that did take the diagnoser's own background into account is the study by Neighbors, Trierweiler, Ford and Muroff (2003).

In a study performed in Korea and Northern China, Kim and colleagues (1993) present a narrative analysis of the content of schizophrenia patients compared across three groups: Koreans, Korean-Chinese and Chinese. This was the only study of its kind which used patient narratives rather than interpretations of diagnosers to report on symptomatic differences. They found variation in the themes between Korean and Chinese patients, tying the specific themes reported to the cultural cues and taboos of each of the societies. For example, family related themes were more pronounced among Koreans than the Chinese, which was explained as due to the enforcement of nuclear families in Korea. Chinese and Koreans reported delusions of being pricked by a needle, which was taken as evidence of the prevalence of acupuncture in both cultures.

An area that is underdeveloped in the literature is the reporting of transcultural differences in religious and spiritual displays of schizophrenia (Lowenthal & Cinnirella, 2003). Religious symptoms are valuable to study in relation to the content of schizophrenia because they can be seen as strong cultural markers. Ndetei and Vadher (1984) reported on emerging themes of grandiose delusions across ethnic groups in a London psychiatric hospital. They found that Jamaicans, followed by Africans, are observed to have the highest frequency of reporting of religious grandiose delusions. Littlewood and Lipsedge (1981) found that ethnic groups in the UK displayed a higher 'religious flavour' in their symptoms. Lowenthal and Cinnirella (2003) performed a review to delineate the relationship between religion, Afro-Caribbeans and schizophrenia. Their findings supported the suggestion that "mental health professionals regard a range of religious behaviours and beliefs by black people as symptomatic of mental illness" (Lowenthal and Cinnirella, 2003, p. 123).

Weisman et al. (2000) found that Mexican Americans and Anglo Americans did not demonstrate any differences in religious display in the United States. Kim and colleagues (1993) rated the most cited religious themes to be among Koreans when compared to Chinese and Korean-Chinese schizophrenia sufferers. In essence, the reporting of religious or spiritual displays appears to occur more often in ethnic minority groups. The findings support the claim that the symptoms of schizophrenia are manifestations of cultural and historical markers. In a culture where Islam is dominant, for instance, it would most likely be the case that the religious manifestation of the schizophrenia sufferer will be based on what the person knows, namely his or her culture, which encompasses his or her religious beliefs.

Another reported theme in relation to the first study goal was that immigrant groups and minorities expressed somatic anxieties, the loss of libido, delusions and hallucinations more often than their host groups (Charalabaki, Bauwens, Stefos, Madianos, & Mendlewicz, 1995; Coelho, Decnopp, Strauss & Hunter, 1998; Ndetei and Vadher, 1984;). However, there appears to have been two distinctions even between these two groups. Somatic, dysphoric and negative symptoms were presented more commonly among Latino cultures, Indians, Iberians, Middle Eastern, and Chinese when in a host country (Ainsah, Nurulwafa & Osman, 2008; Charalabaki, Bauwens, Stefos, Madianos, & Mendlewicz, 1995; Hutchinson et al., 1999).

Hallucinations and delusions on the other hand, were more often labelled onto Africans, African American and Caribbeans in their host country (Ndetei & Vadher, 1984; Neighbors, Trierweiler, Ford & Muroff, 2003). One exception to this finding was reported by Schooler and Caudill (1964) who performed a comparative quantitative study

examining differences in symptomatology between Japanese and American schizophrenia patients. They reported that Japanese patients experience more euphoria and aggression. However, there are limitations that need to be considered in this study. The comparisons that were made were done between a Japanese cohort of 88 patients in Japan with an American cohort of 1126 patients, which does not give a fair representation of numbers to compare both groups. Also, the diagnosers in this study were not the same; the group diagnosing the American population was in the United States, and the Japanese, in Japan. Third, the study was performed in the early 1960s. The DSM at the time was not weighted heavily and standardized as it is today, and therefore the symptomatic categories at the time may have lent to a much higher level of subjectivity.

In chapter five, we shall see that the findings confirmed at least a threefold odds ratio of Africans and Caribbeans in the UK to be diagnosed with schizophrenia. In light of this finding and what was reported earlier in this chapter, I argue that displays of positive symptoms, which include religious displays, are more likely associated with a schizophrenia diagnosis than a negative symptom or a cognitive deficit. Perhaps based on this finding there needs to be more rigour in understanding schizophrenia's symptoms as there appears to be a bias towards positive symptoms, especially with ethnic minority service users.

Studies emanating from the United States have done a cross comparison across three main minority groups (Latinos, Caucasians and African Americans) and have found that African Americans display more first rank or positive symptoms, such as auditory hallucinations, delusions of thought insertion, and delusional perceptions (Arnold et al.,

2004; Brekke & Barrio, 1997; Neighbors, Trierweiler, Ford & Muroff, 2003; Strakowski et al., 1996). African Americans were reported to present more anger, disorientation, and engagement in anti-social behaviour, and they exhibited more inconsistent delusions (Arnold et al., 2004).

Latinos or Mexican Americans in the United States were found to present increased social withdrawal and cognitive impairment in comparison to Whites and African Americans (Brekke & Barrio, 1997; Weisman et al., 2000). Puerto Rican Americans were reported to experience more intensity in anxiety symptoms as reported by Coelho, Lucia, Strauss and Jenkins (1998). It was also suggested that physical symptoms such as pain and somatic complaints were more common among these groups. Blunted affect and persecutory delusions were higher among Mexican Americans than among Anglo-Americans. There was, for example, a general concern over the possibility of death, disease or malfunction in their life (Weisman et al., 2000). Weisman et al. (2000) reported that one Mexican American woman diagnosed with schizophrenia complained of painfully sore feet, and that she was concerned that the pain would leave her “trapped inside” (Weisman et al., 2000, p. 821). Such an example of somatisation of the body to express psychological distress emerged also among Chinese and Korean schizophrenia patients (Kim et al., 1993).

A study done in Belgium by Charalabaki and colleagues (1995) reported on a cross-cultural comparison between Belgians, Greeks and Iberians (Portuguese and Spanish migrants). They found that there were more somatic complaints, loss of libido and higher delusions amongst the non-Belgians. Studies that have looked at British

populations did not report on differences in somatisation among the populations with schizophrenia. This is perhaps an area of research that is worth focusing on in the future.

Greeks and Iberians reported statistically significant differences in the likelihood of experiences of delusions, as assessed by clinicians using the DSM-IV criteria (Charalabaki, Bauwens, Stefos, Madianos, & Mendlewicz, 1995) suggesting that migrants and minorities are more likely to experience delusions or first rank symptoms of schizophrenia. A study done in Germany (Haasen, Yagdiran, Mass, & Krausz, 2001) comparing a Turkish to German patient cohort did not find any differences in the experience of delusions or hallucinations, but found that there was increased depression (negative symptoms) and more hostile excitement amongst Turkish patients. This finding directly challenges the notion of migrants having more first rank symptoms as it seems that other factors are at play that make up these differences. Another explanation may be the way that the interpretation and assessment takes place as schizophrenia is being diagnosed.

Caucasians in the United States were reported to experience more negative symptoms, nervous tensions, blunted affect and self neglect, all pointing to the fact that they exhibit higher negative symptoms (Weisman et al., 2000). Whites in South Africa and Namibia were also reported to express more negative symptoms by Maslowski & Mthoko (1998). In the United States, Neighbors, Trierweiler, Briggett, Ford and Muroff (2003) report a similar finding for white schizophrenia patients. When compared to African Americans, Whites also expressed more somatic complaints in the content of their symptoms but not as high when compared to Mexican Americans (Brekke & Barrio, 1997).

The content of auditory hallucinations in the studies appears to have been culture specific. For example, Whites heard Nelson Mandela's voice while Blacks heard threats from other tribes in Maslowski and Mthoko's (1998) research findings. Weisman et al. (2000, p. 821) describe Whites in their sample as experiencing more delusions that are science fiction in nature. This is exemplified by a claim by one informant that extra-terrestrials operate in her fallopian tube, which emphasizes the interplay between culture and the content of the display of symptoms in psychosis. Culture is seen as "critical in every aspect of schizophrenic illness experiences" according to Jenkins and Barrett (2004, p. 6).

Littlewood and Lipsedge (1981) reported on a study done in Hackney, London and found that there were higher expressions of paranoia amongst West Africans and West Indians. This group was also reported to have an over-representation of incoherent speech and inappropriate affect (Brekke & Barrio, 1997). African Caribbeans in the United Kingdom were found to experience more affective symptoms (Brekke & Barrio, 1997; Haasen, Yagdiran, Mass, & Krausz, 2001). The cross-cultural study by Katz and colleagues (1988) adds that, similarly, Nigerians were observed to have higher speech bizarreness, but actually had lower negative symptoms than Indians; anxiety, sleep troubles, restlessness and bad dreams were more prominent. Nigerians also experienced more hallucinatory voices, delusions of control, thought insertions and paranoid qualities of illness (Katz et al., 1988). Kenyans were similarly found to report more visual hallucinations (Haasen, Yagdiran, Mass, & Krausz, 2001). South Africans and Namibians from the study by Maslowski and Mthoko (1998) reported high rates of delusions of persecution and paranormal phenomena such as witchcraft. Bizarre appearance was also

another observed description of the patients with schizophrenia from Maslowski and Mthoko's (1998) study. It is worth noting that the word "bizarre" in relation to both appearance and speech was only used in African populations in the studies, but not with reference to any other group or culture. One should bear in mind that "bizarre" is a word that depends on the context it comes from, because it is a purely subjective and personal judgement made by the authors.

Katz and colleagues (1988) compared Nigerians to Indians based on the World Health Organisation's findings on the determinants of the outcome of severe mental illnesses. Their study can be viewed as more culturally sensitive than the other studies because the symptoms were observed by clinicians and family members who were from the same background as the patient. So for Indians suffering from schizophrenia, the symptoms reported were judged by their family members and Indian clinicians, thus minimizing cultural bias. In the other literature, most of the reported symptoms were based on the observations of psychiatrists', clinicians' and researchers' that did not necessarily belong to the same cultural milieu.

Using PSE and the Catego system in their analysis of variance, Katz et al. (1988) reported that Indian people diagnosed with schizophrenia were more hyperactive, helpless and nervous. They also had high affective symptoms such as depression and morbid jealousy (Katz et al., 1988). Family members also claimed that the Indian sufferers were more self-centred in their behaviour. They added that they only thought about themselves, needed a lot of attention, did not care about others, and stayed away from people. Ainsah, Nurulwafa and Osman (2008) compared Malay, Chinese and Indian patients with schizophrenia admitted to an inpatient ward in Malaysia. Emotional

withdrawal was found to be the highest among Indians (note that the Indians in Malaysia belong to an ethnic minority group). Chandrasena and Rodgiro (1979), on the other hand, reported on Sri-Lankan inpatient first rank symptoms and found that there was low prevalence of first rank symptoms among the Sri-Lankans diagnosed with schizophrenia.

Such findings cannot be understood without taking into account the values of the Indian society. Sinha and Kumar (2004) have described the Indian culture using three main themes: collectivist, hierarchal and spiritual. Within the realm of collectivistic behaviour, where a person is viewed in relation to the others in society and not as an individual self, it is understandable why family members felt discomfort when the person diagnosed with schizophrenia exhibited more individualistic behaviours, e.g., thinking only of himself. However, if the diagnoser was a person from Europe it would be highly unlikely that such behaviours would be viewed as a mental health problem as they make up the core of our individualistic values, where thinking of oneself is seen as favourable.

What this suggests, again, is that cultural explanations are always related to both the interpretations of symptoms and their display. The diagnoser includes a discourse of his/her own values and morals into the decisions they make, and the diagnosed also displays symptoms that hold his or her own cultural values. It leads me to argue that it is imperative to always look at both ends of the spectrum, namely the culture of both the diagnosed and the diagnoser in studying symptoms and interpretations of schizophrenia. They are both always inter-subjective realities and the dialogue between them is based on the individual cultural context to which they belong.

4.6.3 Cross-Cultural Explanations of Schizophrenia

The next set included 7 studies in the meta-narrative relating to the second research question, which explores how schizophrenia's symptoms are explained cross-culturally. The sources that have been included are mostly anthropological ethnographic discourses published between 1975 and 2008. The sources encompass perspectives from family members, researchers, clinicians, and schizophrenia sufferers. The studies include ethnographic and anecdotal vignettes from ethnic minorities in Canada (Tranulis, Corin, & Kirmayer, 2008), unacculturated Mexican Americans in the United States (Jenkins, 1988), rural Japanese women suffering from schizophrenia in Japan (Allen, Koichi, & Ishizu, 2004), folk diagnosis and narrative of treatment in the Philippines (Guthrie & Szanton, 196), a rural village case study in Nigeria (Umoren, 1990), a Tamil Indian population in a rural village in South India (Padmavati, Thara, & Corin, 2005) and in the United States (Bergner et al., 2008).

Table 8. Studies Included in Meta- Review Question 2

Author & Country	Methods	Country	Location	Ethnic Group or Country of Origin	Location	N	Informant	Findings
Allen, Koichi & Ishizu (2004)	Ethnographic narrative accounts	Japan	Rural	Japanese	Rural	3	Schizophrenia sufferer	Explanation of mental ilness is translated into cultural recognized illness "kami daari".
Bergner et al. (2008)	Narrative accounts and content analysis	USA	Urban	African American		12	Family members	Treatment initiates from positive symptoms and unusual or dangerous behaviour. Misatribution of symptoms as behavioral problems.
Guthrie & Szanton (1975)	Ethnographic case study	Philippines	Rural	Philippinos	Rural	1	Family members	Her condition not labelled as schizophrenia, but as "babaylan", defined as a gift of being a medium with the spirits. Explanations were that the spirits were angry at her mother for not responding to her calling as a "babaylan". Solution is to perform a ceremony.
Jenkins (1988)	Qualitative interviews	USA		Mexican American		109	Relatives	Explanation of schizophrenia translated into "nervios", suggesting cultural preference to reduce stigma.
Padmavati, Thara & Corin (2005)	Qualitative interviews and thematic analysis	India	Rural	Indian	Rural	26	Caregivers and patients	Illness explained by evil spirits, planetary positions or sins from the past. Cultural explanations made and religious themes to explain mental illness.
Tranulis, Corin & Kirmayer (2008)	Mixed methods and statistics	Canada	Urban	African, Caribbean born and Canadian born	Urban	36	Researchers	Level of insight among Canadian and non-Canadian born was the same. Psychiatrists less likely to discuss conditions when patients were immigrants. Socio-cultural factors affect clinician insight.
Umoren (1990)	Qualitative narrative case study	Nigeria	Rural	Nigerian (African Annang)	Rural	1	Village members	Reasons behind mental illness may be withcraft, overdose of aqcuired power, poison, attack by "juju", guilt from perjury, or spirit posession. The use of religio-therapeutic and physiologic technique.

Notes:

- The table above includes 7 published sources.
- Ethnic categories are reported in the table as mentioned in the studies.

The overarching finding in the included literature was that illnesses are always explained in terms of translatable cultural attributions. Rarely was schizophrenia used as a label to describe the manifestations, with the exception of the studies conducted in the United States (Jenkins, 1988) and Canada (Tranulis, Corin & Kirmayer). Allen, Koichi, & Ishizu (2004) and Olugbile et al. (2009) assert that symptoms reflect patients' concerns about their positions in the social universe and their world views.

We have also seen in the findings from the first research question that even though schizophrenia is ubiquitous, the content of schizophrenia is far from uniform. In this chapter, I have shown and argued thus far that when considering a cross-cultural perspective, the understanding of schizophrenia with a strict differentiation of its three categorical diagnostic symptoms is not possible to sustain, either epidemiologically or empirically.

Birchwood, Hallett and Preston (1988) address this cross-cultural dilemma by emphasizing that the language of the content of symptoms of schizophrenia may be accepted beliefs in some cultures, such as witchcraft as a cause of death, or the appearance of Jesus to a person. Hence, when immigration reshuffles the notion of culture and the world views become more intertwined due to inward migration, the patient suffering from schizophrenia along with the symptoms being experienced may be assessed by using two methods. The first is the consistency of the available evidence of the change in behaviour of the patient. Second, there needs to be a full understanding of the prevailing beliefs of one's cultural niche (Birchwood, Hallett, & Preston, 1988).

There is dearth in the literature in this area. For that reason, I combine anthropological and sociological discourses into psychiatric explanations to bring together cultural explanations of the manifestations of schizophrenia symptoms. Although mental illnesses have been explored by anthropologists and sociologists over the last century, there appears to be less information when attaching the label "schizophrenia" to the discourse.

According to Tranulis, Corin and Kirmayer's (2008) study of a comparison of insight across 18 triads including the patient, family members and clinicians, it was concluded that "the process of interpreting and attributing psychotic experiences reflected each person's cultural background, life experiences, and other social determinants" (Tranulis, Corin, & Kirmayer, 2008, p. 237). As they compared migrant and non-migrant groups (comparison groups: immigrants from Africa and the Caribbean Islands or Canadian born patients) in terms of insight into the illness, they found no differences in the level of insight, but an absence of insight from clinicians when dialoguing with the African or Caribbean immigrant patient or family. They explained it as a result of the lack of knowledge about specific cultural facts of the patient and family, referring to it as "cultural distance" in the assessment (Tranulis, Corin, & Kirmayer, 2008, p. 225). Cultural distance was explained as taking place as a result of the clinician's difficulty in dealing with cultural differences between them and the patients which consequently had an impact on the clinical encounter.

There was a clear distinction between rural and urban areas in terms of the illness explanations of the onset of schizophrenia. In rural areas such as the study reported by Allen and colleagues (2004) in Okinawa, Japan, there was a religious emphasis on the

manifested experiences of those who were delusional or depressed. Okinawa is a place where in the 1970s the mental health system did not exist. Mental illnesses were treated by local shamans (Yutas in Japanese) and only until the last 2 decades has there been a presence of more psychiatrists and mental health systems in that region of Japan. With the influence of the psychiatric system on Okinawa, the paper by Allen and colleagues (2004) reports case studies of Japanese Okinawans who were dually diagnosed with schizophrenia and an indigenous condition called 'kami daarii'. Kami daarri represents an illness that considerably overlaps with schizophrenia as a term, but with a cultural adaptation to the local beliefs. It is manifested in the form of an attack by spirits, ancestors or gods. It also incorporates displays of disorientation, the experiences of visual and auditory hallucinations and inappropriateness of speech and behaviour, although the differences are given a spiritual explanation. There seemed to have been a clash in Eastern and Western ideologies amongst the cases being reported and the patients. Some of the women whose cases were told in the narratives did not believe in kami daarri as they felt they were not religious enough, eventually turning to the use of Western psychiatric wards.

In rural Indi, a similar pattern was reported amongst the Tamil ethnic minority population: depression and psychosis were explained by evil spirits, karma, black magic and planetary positions or sins from the past by caregivers and their patients (Padmavati, Thara, & Corin, 2005). As one respondent iterated, she knew that her uncle did black magic on her. A caregiver additionally commented as follows: "I think it is karma that he has got schizophrenia. The actions of your previous birth make you suffer in the present birth. That is what we Hindus believe" (Padmavati, Thara, & Corin, 2005, p. 142).

Such socio-cultural explanatory factors were also evident amongst Mexicans immigrants to the United States who were still not assimilated to the American way of life and who only spoke Spanish. Amongst this group, as reported by Jenkins (1988), family members tended to attach the symptoms of schizophrenia to 'nervios' or nerves, which accounted for 48% of the responses of the 61 respondents. Other explanations were said to be related to a 'weak brain', being 'bewitched', 'brain is damaged', or "blood doesn't circulate to their head properly" (Jenkins, 1988, p. 311). Interestingly, however, Mexican explanations of the term "nervios" were completely devoid of psychotic, hallucinatory or delusional manifestations. The meaning of the term usually related to a person who is easily angered, an uptight person who is always worried and nervous, or a person who often feels sad and depressed (Jenkins, 1988). Here, we observe a similarity in the explanation and the content of symptoms as reported by the studies in question 1 of the meta-narrative, where it was found that Mexican Americans reported somatic symptoms more than other groups but not necessarily more delusions or hallucinations.

The Annang is a tribe that lives in the Cross River State of Nigeria. They hold traditional religious beliefs about explanations of mental illness as reported in the study by Umoren (1975). According to the Annang, there are two main explanations of someone reporting out of the ordinary behaviour, which in the West may be translated into schizophrenia; the symptoms are explained as due to possession or due to non-possession states. Such narratives are exemplified by the following statements: "due to a family spirit either demanding servicer" or "entering a person", "witchcraft", "overdose of power or wealth", "poison, guilt on taking false oath and punishment" or for "contravening village community laws". Note that none of the explanations set forth set

blame on the sufferer's brain, body or psyche. The explanation is externalised to either a spiritual explanation or to a weakness in character. The use of the term "schizophrenia" is unheard of.

Guthrie and Szanton (1976) report on a narrative of folk diagnosis and treatment of schizophrenia in the Philippines. The case study is about a female living in a fishing town who develops symptoms. Her family associates her symptoms to "babaylan" or mediums (Guthrie & Szanton, 1976). Similar to the Annang case, religious beliefs appear to dominate. The family explains that "babaylan" runs in the family and that the "ancestral spirits would be satisfied if they were promised a ceremony". The ceremony will assuage the anger that the ancestors have and after that experience, the sufferer will feel fine.

Tranulis, Corin and Kirmayer (2008) have found that Canadian born patients explained the symptoms in psychosocial terms, such as the result of stress or illegal drugs, while the African and Caribbean groups in Canada tended to connect schizophrenia either to traumatic events or spiritual forces such as possessions and spells.

The study by Bergner et al. (2008) performed in the United States reported on a qualitative study of family members' perspectives on psychosis amongst urban African Americans. Family members all attributed the condition of the person who is psychotic to a response to stress, depression, bad behaviour or drugs. Therefore, here we see both spectrums: one where there is an externalisation of the explanation to the outside world and another in terms of the person's psyche. In line with Tranulis, Corin, and Kirmayer's

(2008) conclusions in Canada, those who have lived in the United States or Canada and who are not first generation immigrants tended to have similar explanations as to why the symptoms developed.

In the set of studies that have reported on cross-cultural explanations for the development of schizophrenia or other mental illnesses, two themes that have been addressed are stigmas in relation to the label of mental illness and variances in the normal expressions of emotions across cultures. What can be effectively synthesized from these studies is the fact that the explanations of symptoms cross-culturally were anything but uniform, varying from urban to rural and from Western to Eastern ideologies reflecting cultural variety.

Family members "embody a more intimate emotional and symbolic meaning than is typically the case with members of the community" (Jenkins, 1988, p. 303). They are argued to share cultural symbolic meanings with the person who is suffering from schizophrenia. The explanations of clinicians varied considerably from the explanations of their patients and their family members as they did not always share the same symbolic meanings or culture.

4.7 Further Research

In terms of the literature included in the meta-analysis, there have been apparent gaps in the knowledge that should be noted. In many studies that have been included in the narrative, "ethnicity served as a proxy for culture" (Lopez & Guarnaccia, 2000, p.583). In studies in the United States, the UK and Canada, ethnicity was used to differentiate

between groups rather than culture or country of origin. This may create misunderstandings because ethnicity and culture are not always the same (Sewell, 2009). People from different ethnicities may have the same culture. For example, African Americans and Caucasians seemed to have shared cultural conceptions in terms of the explanations for the development of schizophrenia in their family members. The reasons they both cited related to stress, drugs and the personality type of the person. Culture, in such an instance, encompasses more than one ethnicity, creating the illusion that there are cross-cultural differences amongst these two groups, whereas in reality this is not the case. Researchers have fallen into the trap of comparing groups with White, Black, Minority, and migrant status rather than by culture. According to Bhopal (1997) and Fernando (1995), this is a great concern in research on mental illnesses, which makes it less scientific and more silently racist. There were also no studies reporting specific cultural groups such as Middle Eastern populations and Eastern Europeans. Research seems to have been concentrated on specific ethnic comparison groups (such as Black, White), whilst other groups lack quality research.

Diagnostic assessments to mark the different symptoms amongst the patients were not consistent. There was the use of 6 different measures (PSE, SCID, BPRS, RDC, CATEGO and PANSS), depending on the diagnostic measures used by the researchers or clinicians, thus also resulting in less comparable markers of difference in the symptoms. This raises the concern that there is no uniformity in the way diagnosis is assessed over the world. Nevertheless, although this may seem like a limitation, sometimes it might be more culturally friendly if the tools devised have taken that specific population into account while assessing the population. But this again reminds us why cross-cultural comparative

studies are always difficult to homogenize. Cultural specificity always challenges the notion of universalism when attempting to gauge the understanding of psychopathological symptomatology (Good, 1977; Helman, 2000).

One could add another important limitation in relation to the data collection methods in studies of the meta-narrative. The studies from the quantitative analyses have all been reported or rated through the eyes of a psychiatrist, researcher or another mental health professional. There has been no service user/patient involvement in any of the conclusions that have been drawn in each of the studies, and especially in the first set of quantitative studies, which should raise awareness of the fact that the conclusions that have come up are not impartial but rather seen only through the eyes of the diagnosers themselves. In other words, service user perspectives and opinions were weakly reported in all of the studies. Future studies need to specify in more detail the demographics of those who are diagnosing or interpreting because they are central to the explanations, for the main reason that has been highlighted many times in the chapter: the diagnoser is as central as the diagnosed because they also belong to a culture and might therefore understand the patient's symptoms from their ethnocentric perspective.

What was evidenced in the review is the lack of information, specifically within the United Kingdom, on studies of symptoms of schizophrenia cross-culturally. The United States seemed to have led on the amount of studies that were conducted whilst the UK's researchers seem to have been more concerned with quantitative findings. But generally, there have been more quantitative analyses of symptoms and almost no qualitative reports of symptoms, which means that there is a need for more qualitative research on how we currently understand symptoms, not only from the angle of the

diagnoser but also from the service user's perspective. Qualitative methods used in symptoms would allow for a profundity and strength that may not be accessed using quantitative techniques (Humberstone, 2002). Therefore, advocating for more qualitative studies is one main point to make as a result of this meta-narrative, especially in the UK, where quantitative studies seemed to have dominated the bulk of the research on schizophrenia.

4.8 Limitations

Despite this chapter's contributions to the understanding of the relationship between culture and psychopathology, the methods devised have limitations that must be highlighted. There are four points to make regarding the limitations of the chosen methodology. First, the research is based on both descriptive and quantitative accounts of psychopathological differences in symptoms of schizophrenia, and this may have limited the researcher with regards to the amount of detail that has been presented. Pope, Ziebland and Mays (2000) also report that the synthesis of each study may not be well presented in a meta-narrative because there is less emphasis on explaining the limitations found within each study and less room for analytical critique.

The strength of a meta-analysis lies in the researcher's "ability to articulate the research design and research findings" (Paterson, Thorne, Canam & Jillings, 2001, p.15). But generally it is recommended that any type of systematic review should include a team of reviewers to minimize researcher bias. Due to the fact that this piece was completed for a PhD. dissertation, no other reviewers have been involved in the

processes of data collection or synthesis. I went through a series of training sessions on how to undertake systematic reviews at the Social Care Institute for Excellence and Research in London and the Campbell Collaboration and Development Initiative conference in Toronto. As a result, I gained sufficient expertise in the application of the techniques and the process of performing rigorous systematic reviews. This, however, does not discount the fact that the analysis that has been presented in this review has been a thematic narrative based on my judgment and analytical thinking.

Another limitation worth noting is the fact that there may have been some sources that were not included in the study that may have been potentially valuable. This point particularly applies to the second research question in the chapter. To address the explanations of schizophrenia across cultures, most of the searches and sources were used from the anthropological literature. Across the world, the use of the label "schizophrenia" is not always prevalent. In many instances, forms of mental illnesses have a local idiom which may have resulted in having missed the source in the literature that was searched. Therefore, the second set of studies in the meta-narrative may have included more studies if the inclusion criterion of containing the word "schizophrenia" was replaced with "mental illness". However, this was not performed because the study goals are only relevant to schizophrenia.

4.9 Summary and Discussion

The aim of the meta-narrative was to explore clinical and societal discourses of symptoms of schizophrenia cross-culturally in order to generate a richer body of knowledge on the topic. Lopez and Guarnaccia (2000) have iterated that important contributions within the study of cultural psychopathology are made when there is triangulation between ethnography, epidemiology and clinical research; hence, this is what was achieved throughout the chapter.

There was a common theme that hinted at socio-cultural factors influencing the reporting of symptoms and explanations in the meta-narrative. The content of auditory hallucinations was tainted by conceptions of culture, while the forms and explanations of symptoms from either the diagnosed, diagnoser or carer have also stressed the salience of culture in their explanations.

Perhaps another major finding from the meta-analysis was the observation made by Tranulis, Corin and Kirmayer (2008) that cultural distance takes place when the clinician and the patient do not occupy the same cultural space. There was less insight reported in the illness when there was a cultural difference between the diagnoser and the diagnosed.

Another central theme was that there are pronounced cross-cultural differences both in the content of the manifestations of symptoms of schizophrenia and their explanations. There seemed to have been more pronounced positive or first rank symptoms in Black groups around the world, whether it was African Americans in the United States, Nigerians in Nigeria, or South Africans, Namibians and Kenyans in their

countries. There were more hallucinations, delusions and paranoia among these groups, whereas White migrants such as Greeks, Iberians, Turks, or Latinos or Indians displayed more negative or psychosomatic symptoms. African Caribbeans in the UK were found to have more affective symptoms, while West Africans and West Indians reported more often religious ideas, incoherent speech and inappropriate affect. Indians were reported to have more depression, nervousness, and morbid jealousy.

The Cartesian model argues that in essence we are our thoughts, while the body is just an extension of that reality. Therefore, within the context of a person experiencing psychotic or depressive symptoms, it can be argued that the manifestation embodies the reality that they live in from the perspective of their own thoughts and imagined reality. That in itself is also intertwined with his or her perceptions of the world and previous experiences, which include cultural influences and life situations. When a person experiences symptoms that, according to them, are real, other people's perceptions would depend on how the experience was verbalized and interpreted. Such an experience cannot be free of human subjectivity because we create our realities through our thoughts, whether that reality has been categorized as an illness or not. In short, the difference between reality and non reality ultimately depends on our beliefs. The findings in the chapter have certainly elucidated this fact.

Perhaps the most striking finding from the meta-narrative was that the studies did not reveal demographic details about the diagnosers, with a few exceptions. The diagnosers' own cultural perceptions, values, beliefs and knowledge ultimately affect the ways in which they were interpreted. Most of the studies failed to reveal the demographic and cultural background of the diagnosers, as though researchers had

assumed that a diagnosis only requires the manifestation of symptoms without realizing that the interpretations of it are actually as vital to decode as the symptoms. Hence, a major limitation of the studies in the review was that the literature has not controlled for the diagnosers' own belief systems, leading to possibilities of misinterpretations. One example of that is when Black patients were reported as bizarre in the study by Maslowski and Mthoko (1998), but no other explanations were provided on what "bizarre" meant.

One way to clarify cross-cultural interpretations in mental health is to introduce more cultural awareness amongst mental health professionals. To accomplish that, one can include anthropologists, sociologists and family members who are familiar with the patients' culture in treatment, care and diagnosis. Language barriers also need to be addressed, so introducing people who speak the patient's language is also essential. The fact that some studies have shown that there are frequent changes in diagnosis, especially amongst West Indians and Caribbeans, also demonstrates that symptoms are often difficult to decipher and that may lead to difficulty in the assessment process (Littlewood & Lipsedge, 1981).

We have seen from the meta-narrative that there have been very few studies that reported the socio-demographics of the diagnosers, while detailed information was found on the observed symptoms of the diagnosed. Underlying this notion is the very particular idea that psychiatric modernism valorises and cultivates inter-subjectivity although it is not aware of it (Wilce, 2004). There was one instance in which the psychiatrists were blinded from the study's objectives (Arnold et al., 2004) and in which their demographics were reported, but generally the remaining studies had not

controlled for this factor, thus limiting proper reliability in the conclusions. “When the clinician is unfamiliar with the beliefs characteristic of the patient’s culture or religious background, consultation with someone who is familiar with the patient’s culture may be required to avoid over diagnosis of delusions” (First, Spitzer, Gibbon, & Williams, 1997, p. 27). This is where family members were introduced to add to the clarity of cultural differences in the portrayal of symptoms.

A meta-narrative was first devised to answer the research questions instead of a quantitative analysis because the studies that are found on the topic are extremely heterogeneous, making it impossible to sum up as a quantitative analysis. Also, it has been argued that qualitative data are more powerful in terms of exploring and describing in- depth discourses (Humberstone, 2002). They allow one to decode the relationship between the social world and individual differences, namely one’s culture and its interaction with one’s illness manifestations.

The underpinnings of this narrative are based on the assumption that symptoms and displays are taken at face value and are expressed as they are described by the different authors in the literature. The main disadvantage to understanding symptoms and displays of patients with schizophrenia this way is that what is being looked at is a non tangible and a highly subjective interpretation of human experience. One must not be oblivious to the fact that schizophrenia’s symptoms, as felt by the person, can never be laid out and completely told as one experiences them. In other words, the expression of it would have already undergone various stages of communication before it had been laid out and precisely told by the patient to the clinician. It first goes through the hallucinations, for example. Next, the brain processes a way to communicate that. Then,

communication takes place but it ultimately will depend on the person's ability to express him or herself accurately. Throughout that interaction, not only do culture, language and personality interfere, but the external setting may also change the way schizophrenia is displayed and understood. Therefore, there is no true objectivity or accuracy in terms of understanding symptoms and displays of schizophrenia. Our striving for full comprehension and mastery can never be accomplished, but this does not mean that we should not endeavour to strive for it.

The only person who is able to understand the true experience is the person experiencing it. The mind is able to express its distress through the use of deviations of normality, such as hallucinations, delusions, illusions, and paranoid thoughts which are all verbal projections of feelings. To put it in lay terms, one might argue that the interpretations that have been made pertaining to the cross-cultural differences in the display of symptoms are a mere interpretation of an explanation of an internal process that only the person's mind has full control of.

What has been described is an experience that cannot be seen, heard or felt except by the person who is experiencing it. Our minds are unable to cope with or process objects unless we experience them. Hence, no matter how hard clinicians try to understand the experiences of the diagnosed, they will always remain as an Other and an object that lacks the ability to render complete comprehension. Yet, cross-cultural differences may also lead to even more alienation and miscomprehension between the person and the mental health professional (Tranulis, Corin, & Kirmayer, 2008).

What psychiatry in this day and age faces is the need to allow more subjectivity into the categorical constructions of schizophrenia in order to create more profound understandings of cross-cultural variability in the display and manifestation of symptoms (Bentall, 2004; Laing, 1960). Without allowing subjectivity in displays of symptoms across patients into diagnosis, we may never be able to fully account for understanding the relationship between culture, psychosis and distress. Perhaps some ways that can allow more subjectivity may be through less reliance on rigid diagnostic criteria that force psychiatrists and mental health professionals to categorize patients. Another way which will be discussed in more detail in chapter eight is to include in the diagnostic process trained medical anthropologists to be part of the psychiatric team.

CHAPTER FIVE

SOCIO-DEMOGRAPHIC TRENDS, SCHIZOPHRENIA & TESTING THE THEORY OF ETHNIC DENSITY IN BRENT

5.1 Introduction

The meta-narrative demarcated cultural differences in relation to the symptoms of schizophrenia and iterated that schizophrenia's manifestations invariably depend on one's culture. It also emphasized the importance of not only demystifying the culture of the schizophrenia sufferer, but also that one needs to recognize that clinicians belong to a culture as well. In light of these findings, I now move beyond the qualitative discourse and look at socio-demographic trends of schizophrenia in Brent, North West London. There are two primary goals that will be achieved in this chapter. The first objective is to describe the socio-demographic schizophrenia patient cohort of Brent. Then, it will be determined whether the theory of ethnic density is supported in the borough of Brent and its multi-cultural environment.

I initiate the chapter by describing the socio-demographic trends of schizophrenia across the nation. I then magnify the lens to 860 mental health patients in the borough of Brent and explore the characteristics of 226 patients diagnosed with schizophrenia (ICD-10 criteria) compared to service users who are diagnosed with another mental illness. The Brent mental health cohorts (2006-2007, 11 month period) are cross-sectioned to

examine the types of psychiatric diagnoses, ethnicity, levels of deprivation, gender, age and geographical location.

Recent studies have suggested an inverse correlation between ethnic density of a geographical area and the number of cases of people diagnosed with mental illnesses (Bhugra & Arya, 2005; Bhugra & Bhui, 2001; Boydell et al., 2001; Veling, Hoek, & Mackenbach, 2009). It has been found that when there is a high concentration of an ethnic group in a specific location one would find low prevalence of schizophrenia within that same cultural group. Whether ethnic density creates a protective factor against the development of schizophrenia is yet to be established. Cochrane & Bal (1988) have rejected the ethnic density theory indicating the need to retest its grounds. The theory of ethnic density is very current and not well researched in relation to schizophrenia diagnosis. Brent's neighbourhoods will be tested to either confirm or reject the theory of ethnic density.

5.2 Rationale for Study Location

The borough of Brent is chosen to test the ethnic density theory because it is considered Britain's most diverse borough in terms of migration and multi-culturalism. It is estimated that 54.7% of the Brent population comes from Black and Minority Ethnic groups (Brent Council, 2006; 2009). The London Health Observatory (2003) also confirmed that 38% of Brent residents in 2001 were born outside the EU region.

Brent's moderate population size also makes the comparisons across ethnic groups manageable and easily identifiable. If the whole of England was used, the

conclusions would have been difficult to test as there are at least 300 boroughs across the country (Castle, Wessely, Van Os, & Murray, 1998; Cochrane & Bal, 1988).

5.3 Datasets

Population data has been collected from multiple sources. When presenting nationwide findings, the UK Census, Hospital Episode Statistics and London Health Observatory data are used. For an in depth statistical analysis of Brent cohorts, the results presented are collected from the NHS Brent Primary Care Trust. I next provide a descriptive overview of each of the sources that have been used.

The UK Census (2001)

The UK census is a national effort aimed at collecting demographic information of citizens. Administered every decade, it is given to every household asking them questions about health, ethnicity, employment, and provision of care. One of the limitations of the census is that no data on country of birth is collected, leaving a gap in the knowledge on differences between first, second and third generation migrants. The next census taking place in 2011, however, will include country of birth as an indicator.

Hospital Episode Statistics (2009)

HES is the main hospital database hub for all NHS related care. It contains information from three main sources: inpatient, outpatient, and A&E (Accident and Emergency) records. HES data is open to the public. HES collects records that cover all NHS trusts in England, including acute hospitals, primary care trusts and mental health

trusts. From the public data that they provide one can obtain information about clinical diagnoses, medical procedures, basic patient demographics, dates of admission, times waited and lastly geographic information about the patients' locations. All data collected by HES is anonymised and all identifiers (patient NHS number, date of birth, and postal codes) are removed prior to their dissemination to the public.

The London Health Observatory (2009)

As a public health data warehouse, the London Health observatory mainly focuses on working in conjunction with healthcare agencies, researchers, and intelligence professionals to monitor healthcare inequalities, ethnicity, health and tobacco usage. The data is based and expands on NHS service user records. The LHO monitors and uses all data for audit, research and business support. The data collected for this chapter has mainly been produced using the Health Inequality section and are relevant to *Delivering Race Equality,* the action plan that was created by the Department of Health in England in 2003.

The Brent Mental Health Dataset (2006-2007)

The Brent Mental Health dataset was compiled by Dr. Foster Intelligence[10] as a result of the request made by me when I worked as an honorary contractor at the Brent NHS Primary Care Trust. I was awarded with an honorary contract as a Research Assistant with the Brent PCT Applied Research Unit between December, 2007 and December, 2008. Before I was able to access the data, I underwent NHS ethical approval from the Brent Primary Care Trust and the Harrow Research Ethics Committee (see appendix B).

The Brent dataset contains records of 860 mental health patients who have been admitted to an NHS mental health practice affiliated with Brent PCT from April 1st, 2006 to March 1st, 2007 (a period of 11 months). Locations affiliated with the Brent Primary Care Trust are A & E (Accident and Emergency) primary care services, hospitals, medical practices, or surgeries. The dataset contains patient information such as ethnicity, age, and location of ward, deprivation level and ICD-10 diagnosis. One of the disadvantages of relying on this dataset is that the indicators were already set by NHS standards and therefore, did not allow for testing and controlling for additional variables that are of interest. Patients' country of origin, family history, and descriptions of symptoms for example, were not found in the dataset.

[10] Dr. Foster Intelligence is a public-private partnership with the NHS that mainly aims at the management of data and health records for use and analysis.

The NHS relies on the ICD-10 (International Classification of Diseases) definition of schizophrenia as a diagnostic standard. The dependent indicator in the dataset is schizophrenia or a similar psychotic disorder, which is diagnosed using ICD-10 criteria (diagnoses F20-F25.9, see appendix A). Schizophrenia subtypes include delusional disorders, delusional psychotic disorders and schizoaffective disorders. The mental health diagnoses in the dataset were made by NHS mental health professionals either on the date that the patients were seen, or on prior visits. All subject level data that contained missing information in the dataset was excluded from the analysis. To adhere to the confidentiality and anonymity of the patients and staff, none of the names of locations of practices, hospitals or service users are divulged.

5.4 Research Questions

The experimental hypotheses summarized below are based on the consistent findings outlined in the literature review in chapter two. In all cases, I wish to reject the null hypothesis (H_0), which states that there is no relationship between the main dependent variable, schizophrenia, and the independent variables being tested.

- Hypothesis 1: The highest percentage of patients diagnosed with schizophrenia will be evident in Black ethnic groups, followed by Asians and will be least commonly observed in Whites in Brent (ethnicity and schizophrenia).

- Hypothesis 2: The higher the level of deprivation, the more likely a diagnosis of schizophrenia will take place (level of deprivation and schizophrenia).

- Hypothesis 3: For each ethnic group (Asian, Black, and White), higher same-group ethnic density in residence will be associated with lower prevalence of schizophrenia.

5.5 Data Analysis and Methods

The UK Census, LHO and HSE data warehouses are used to provide the findings with a broader context in the borough of Brent. These national level statistics were performed with some univariate and bivariate tables already tailor-made for the public as downloadable excel spreadsheets.

In the Brent Mental Health dataset the main indicators used for analysis are shown in table 9. The Brent dataset was analyzed using SPSS program version 14.0 (Statistical Package for the Social Sciences) and using Stata version 12.0. Cross tabulations, one way ANOVAs and logistic regression analyses were performed to describe the patient cohort's socio-demographic characteristics and to test the three hypotheses. Bonferoni corrections were also used to offset multiple comparisons. To assess the statistical significance of the findings acceptable significance values are $p<0.001$, $p<0.005$. A logistic model and function curve are also performed to test the theory of ethnic density.

Table 9. Brent NHS Dataset Indicators

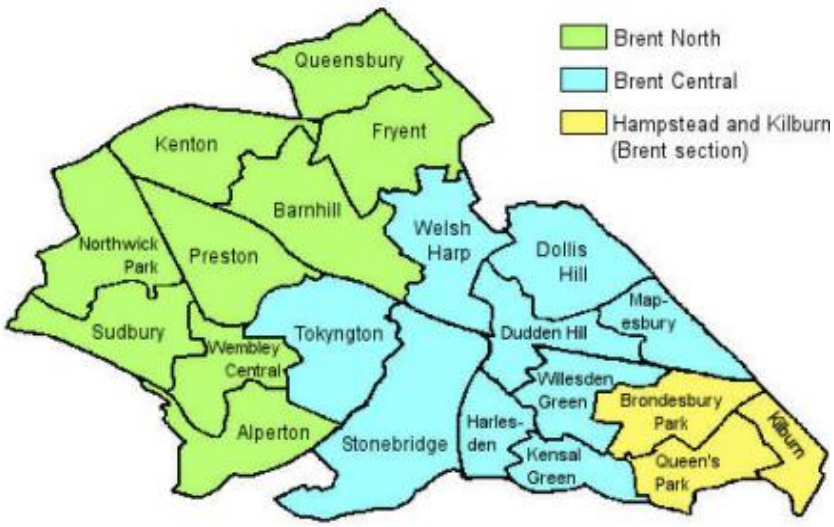
Variable	Descriptors
Diagnosis (DV)	Schizophrenia (ICD 10- criteria F 20.0-F25.9)
	Other mental illness
Ethnicity (IV)	White
	Black
	Indian subcontinent
	Other
Gender (IV)	Male
	Female
Deprivation level (IV)	Most deprived
	Deprived
	Average
	Least deprived
Age (IV)	0-18
	19-25
	26-35
	36- 45
	46-55
	56-65
	66-75
Patient's address (IV)	21 wards in Brent

Note: IV = Independent variable, DV = Dependent variable.

Ethnicity was recoded into Black, Asian, and White to establish a large enough number of subjects per group to use the data for statistical analysis. The original dataset separated Afro-Caribbean and Black other but for the current analysis, the two were combined to provide the findings with more statistically meaningful findings. Schizophrenia was condensed into one category falling under all subtypes from F20-F25.9 based on the ICD-10 criteria (see appendix A). It also makes more sense to combine all types of schizophrenia related disorders in such a manner because diagnosis is usually not permanent. The literature suggests that psychotic patients are likely to go through more than one diagnosis throughout their lifetime, especially in the cases of schizoaffective and atypical psychoses (Chen, Swann & Burt, 1996; Hollis, 2000).

According to Cochrane and Bal (1988), there are two methods that one can employ to test the theory of ethnic density. The first method is to compare mental health admission rates within one defined geographical area and to look at the demographic make-up in that region. The second approach is to match the ethnic group sizes in different areas and compare them with the mental health admission rates. For the purpose of this study, I utilized the first method. To test the ethnic density theory in this chapter, I created a variable which contained the ethnic make-up of that service user by his/her ethnicity based on their residence. For example, for a White service user who has schizophrenia and who lives in Dollis Hill in the dataset, I used the percentage of White (his ethnic group) residents in Dollis Hill, which is 48.1%. The ethnicity breakdown by ward data was replicated from the Brent website demographic analysis reports (http://www.brent.gov.uk/demographic). All 21 wards in Brent were used for further investigation as shown in the figure below.

Figure 10. Map of Wards in Brent



Source:http://www.brent.gov.uk/elections.nsf/0/79e615fed65cd04f8025721b005bc340?OpenDocument

5.6 Statistical Power

Power calculations were done using GPower version 3.0.10 to estimate the statistical power of the tests. With a sample size of 860, the effect size of the χ^2 tests is 0.25 (df=3), which is considered a medium effect. Therefore, there is a 99% chance to detect a medium effect in relation to the variables (w=0.25). Effectively, this suggests that performing the χ^2 tests would be appropriate as the dataset is sufficiently large to pick up on trends and to establish relationships between variables, but it will not recognize small effects. Ideally, the larger the dataset the more likely it will pick up even a very small effect (w= 0.1), but this was not possible in this dataset.

Effect size is dependent on the sample size, the alpha-level, and the statistical power in the dataset (Field, 2005). The level of statistical significance (p or α) for the chi square (χ^2) tests and regression analyses is 0.05. This means that the analyses are considered statistically significant if there is less than a 5% chance of detecting an effect, when in fact there is none (Type I error). In other words, a finding is considered to be significant at a 95% confidence level. Type II errors have been controlled in the logistic regression analysis by measuring r or Pearson's Correlation coefficient and which are reported throughout the chapter.

Table 10. Calculation of Power

χ^2 tests - Goodness-of-fit tests: Contingency tables		
	α err prob	= 0.05
	Power (1-β err prob)	= 0.999999
	Total sample size	= 860
	Df	= 3
Output:	Noncentrality parameter λ	= 53.791606
	Critical χ^2	= 7.814728
	Effect size w	= 0.250097

5.7 Results

5.7.1 Socio- Demographic Overview

Inpatient data from HES (2009) reveal that 28,715 patients nationwide were admitted with a diagnosis of schizophrenia, schizotypal and delusional disorder between 2006 and 2007 (see appendix F for a full detailed account of the findings in this section). The mental health patient mean age is 41 and the highest proportion of patients is between the ages 15 to 59. There was a decrease in the number of schizophrenia and psychotic related cases (from 28,715 to 27,876) between 2007 and 2008[11]. HES (2009) data also confirm that in Central and Northwest London in particular, the mean age for

[11] HES (2009) findings represent only inpatient data, excluding cases where patients were seen by outpatient surgeries and practices.

males is younger than for females (37 for males and 44 for females). The age of Brent's population more specifically is clustered around the younger range; between 25 and 39 years old (see appendix F). Additionally, there are almost the same numbers of males (134.8) and females (135.2), with the highest concentration of both males and females whose ages are between 25 and 39.

The mean length of stay and duration of hospitalization for male patients is slightly higher than that of females. This suggests that schizophrenia episodes may be more severe with males. This finding has been supported by Goldstein (1988) and Gur, Petty, Turetsky and Gurr (1996).

Overview of Brent

Brent's population was estimated to be 263,464 in the 2001 census. In 2006, Brent's population has been reported to have reached nearly 270,000. Since then, the population in Brent has been experiencing a steady population increase although the exact number is yet to be determined. The next 2010 census will allow for a more accurate estimate.

Table 11. Brent's Population by Country of Birth

Country of Birth	%	(N)
United Kingdom	53	140,756
Republic of Ireland	5	13,008
Other EU countries	3	9,157
Elsewhere	38	100,543
Total	100%	263,464

Source: London Health Observatory, 2003.

As table 11 illustrates, 53% of Brent's residents were born in the UK, 38% elsewhere (non EU regions), 5% in Ireland, and 3% in other EU countries. The London Health Observatory also found that in 2003, 47% of the population in Brent was comprised of first generation immigrants who were born either outside the EU, in the Republic of Ireland or in other EU countries. Essentially, the evidence points to the fact that Brent is a highly multi-cultural setting in the United Kingdom. According to the census, Asian populations make up more than a third (28%) of the population. Black populations (Caribbean, African, other Black) make up more than 20%, while White British, Irish and other White categories represent almost 45% (the remainder belong to other ethnic backgrounds).

Table 12. Brent's Population by Ethnicity

Ethnicity	Percentage %
White	45
Asian or Asian British	28
Black or Black British	20
Mixed	4
Chinese or other	3
Total	100%

Source: http://www.brent.gov.uk/demographic.nsf/0/2f92474dabbecec480256ef3003b951e?OpenDocument

Ethnicity and Geographical Residence

In the 1991 census, there were 31 wards in Brent. In 2001, twenty one (21) wards were formed instead. In terms of population size, Stonebridge has the highest population

in Brent based on the 2001 census with a population size of 15,943. The Brent Brain website (http://www.brentbrain.org.uk/) confirms that British and Minority Ethnic (BME) groups made up 54.7% of Brent's population in 2007. Many of the BME groups are second or third generation migrants and in 2006, and 5% of the BME groups were estimated to be refugees and asylum seekers (Brent Council, 2006).

The highest concentration of White ethnic groups is in Mapesbury (66.9%), Queens Park (65.4%) and Brondesbury Park (65.9%). Black populations are concentrated in Stonebridge (49.1%) followed by Kensal Green (29.4%). Citizens of Indian subcontinent make up more than half of the population of Wembley Central (55.7%) followed by Queensbury (50.7%) and Alperton (50.1%). Wembley Central also has the lowest proportion of residents who were born in the UK (41.7%), while Queens Park (62.7%) has the highest share. Wembley is known to be the Indian cultural hub (http://www.biauk.com/). 17.4% of the population in Wembley Central were born in India, with another 26.5% born in other South Asian countries (Total Asian born= 43.9%). This leads us to conclude that there is a very high ethnic density for Indian backgrounds in Wembley Central for first generation migrants, making it an ideal place to test the theory of ethnic density.

Those who were born in the Republic of Ireland are concentrated in Dollis Hill (8.7%). Chinese groups are mostly situated in Barnhill (6.1%) and other pockets scattered across the 21 wards. Table 13 shows the concentration of Black, Irish and Other populations in terms of their ethnic density in more detail.

In Kenton, 15.1% of the population was born in South and Eastern Africa and 5.6% Other South and Eastern African countries. People who were born in the Caribbean islands are concentrated in Harlesden (22.8%) indicating evidence of high ethnic density of Caribbean populations. The second largest ethnic concentration in Harlesden is people who were born in the African continent (16.3%).

Table 13. Ethnicity by Ward

		BLACK						WHITE	OTHER
Ward	**All people**	***C'bean***	***African***	***Other***	***Indian***	***P'stani***	***B'deshi***	***Irish***	***Asian***
Alperton	12,323	9.9	5.7	2.4	32.4	4.6	0.6	4.2	13.2
Barnhill	13,188	7.9	8.2	2.4	19.6	3.8	0.5	4.8	5.6
Brondesbury Park	11,643	6	6	2.9	7.5	2.9	0.3	6.7	4
Dollis Hill	12,102	8.3	7.8	3.1	15.7	6.3	0.3	13.2	5.1
Dudden Hill	13,350	9.7	7.3	3	11.1	5.4	0.5	9.3	4.4
Fryent	11,888	6.4	5.5	2.1	21.4	4.4	0.4	8.6	7.9
Harlesden	12,227	***22.8***	***16.3***	6.9	5	3.4	0.5	7.1	3.2
Kensal Green	10,668	16.7	7.5	5.1	8.8	1.9	0.1	7.8	2.8
Kenton	11,872	2.8	3.1	1.2	37.1	2.2	0.6	4.2	6
Kilburn	14,172	13	11.4	5	3.8	2.7	0.5	9.1	2.7
Mapesbury	13,242	6.1	5.6	2.4	5.8	4.2	0.5	10.6	3.5
Northwick Park	12,175	6.1	3.4	1.9	29.3	4.9	0.3	6.2	7
Preston	12,832	7.5	5.5	2.4	24.8	5	0.4	4.3	7.6
Queen's Park	12,400	10.6	5	3.7	7	1.5	0.6	6.2	2.1
Queensbury	13,175	4.4	5.1	2	***37.4***	4.5	0.4	5.7	7.9
Stonebridge	15,943	***22.1***	***19.9***	7.1	7	2.5	0.5	6	4.1
Sudbury	12,307	9	6.8	2.5	26.1	5.5	0.7	4.9	10.3
Tokyngton	11,836	16.5	7.1	2.9	27.3	5.9	0.5	5.7	5.7
Welsh Harp	12,405	10.7	8.7	2.9	18.3	3.3	0.3	8.8	5.7
Wembley Central	11,002	11.1	6.8	2.5	***39.6***	6	0.7	3.1	9.3
Willesden Green	12,714	10.2	7.7	3.2	10	4.1	0.3	9	3.9

Source: http://www.brent.gov.uk/demographic.nsf/0/2f92474d abbecec480256ef3003b9 51e?OpenDocument

Note: Highlighted entries are areas of high ethnic density per ward.

37.4% of people living in Stonebridge are of an Indian descent regardless of whether they were first, second or third generation born. From this population, however, only 10.3% are first generation immigrants born in India. Therefore, one can conclude that more than half of the Indian ethnicity residents in Stonebridge are at least second or third generation migrants.

The 2001 census confirms that there is a high concentration of White groups (65.4%) and people who were born in the UK (62.7%) in Queens Park. Deprivation level in Queens Park is ranked as medium (8, 1 being the most deprived and 20 the least deprived). This suggests that areas of high White ethnic concentration encounter less deprivation.

10.7% of Harlesden residents were born in the Caribbean while in Wembley Central 26.5% were born in South Asia (17.4% in India). In terms of ethnicity, Wembley Central is mainly Indian (39.6%) when including second and third generation migrants. 49.1% of Stonebridge's population is Black (including Caribbeans, Africans and Others). In light of these findings, the Brent ward would be an ideal place to test the theory of ethnic density.

Table 14. Brent's High Ethnic Density Wards (by country of birth and ethnicity)

Ward	***Country of Birth***
Queens Park	Born in the UK (62.7%)
Kenton	Born in Africa (22.5%)
Harlesden	Born in Caribbean and Jamaica (10.7%)
Wembley Central	Born in India (17.4%)
	Born in South Asia (26.5%)

Ward	***Ethnicity***
Queens Park	White (65.4%)
Kenton	Asian (45.8%)
Stonebridge	Black (49.1%) includes Caribbean, African and Other
Queensbury	Indian (37.4%)
Wembley Central	Indian (39.6%)

Table 15. Brent Mental Health Patients' Residence (21 wards)

Location	N	%
Alperton	25	3.50%
Barnhill	45	6.29%
Brondesbury	28	3.92%
Dollis Hill	30	4.20%
Dudden Hill	37	5.17%
Fryent	16	2.24%
Harlesden	61	8.53%
Kensal Green	40	5.59%
Kenton	12	1.68%
Kilburn	41	5.73%
Mapesbury	40	5.59%
Northwick	23	3.22%
Preston	32	4.48%
Queen's Park	37	5.17%
Queensbury	17	2.38%
Stonebridge	60	8.39%
Sudbury	39	5.45%
Tokyngton	21	2.94%
Welsh Harp	26	3.64%
Wembley Central	28	3.92%
Willesden	57	7.97%
Total	(715)	100%

Note: Missing data n=50 and "Other Locations" not included n=95

As displayed in the table above, the highest number of mental health patients between April 2006 and 2007 reside in Harlesden and Stonebridge, both of which have the highest number of Black populations (specifically Caribbean populations).

Indices of deprivation within Brent are important to consider. Brent Brain (2001) indicates that Harlesden and Stonebridge have the highest deprivation indices. Deprivation level is measured by social, housing, and economic constraints as explained by the Communities and Local Care Government (2009).

5.7.2 Brent Patients' Socio-Demographic Characteristics

London Health Observatory (2009) findings indicate that as the Brent population has been increasing in size, there has also been a steady rise in overall mental health diagnoses (136 to 255, CI 95%); diagnoses have almost doubled in size compared to less than a decade ago.

Table 16. Brent Patient ICD-10 diagnosis

Diagnosis	N	Percentage %
Affective disorder	143	16.6
Alcohol-related disorders	175	20.3
Anxiety	61	7.1
Headache	5	0.6
Mental retardation	7	0.8
Other mental disorders	125	14.5
Other nervous disorders	6	0.7
Other psychoses	34	4
Personal hygiene	4	0.5
Pre-adult other	2	0.2
Schizophrenia	226	26.3
Senility	54	6.3
Substance-abuse	18	2.1
Total	(860)	100%

The Brent mental health dataset confirms that 860 mental health patients were seen or admitted to an NHS affiliated health service in the 11 month time period (inpatient, outpatient and A & E admissions). Of the 860 patients, 226 (26.3%) were presented with a diagnosis of schizophrenia or a psychotic illness according to the ICD-10 criteria F20 to F25.9. The remaining 634 cases are patients diagnosed with other types of mental illness

There is a higher proportion of males (61%) to females (39%) in the dataset. The most common ages for patients seen by Brent services were between the ages of 26 and 45. We have seen earlier that Brent has a high proportion of people who are aged between 25 and 39 and therefore, it appears to be in line with the general population gender breakdown trends.

Table 17. Socio-Demographic Characteristics by Diagnosis

Variables	Category	Schizophrenia	Other mental illness	χ^2	df	p Value
Ethnicity	White	60 (26.9)	288 (49.5)	62.95	3	0.001*
	Black	115 (51.6)	135 (23.2)			
	Asian	14 (6.3)	49 (8.4)			
	Other	34 (15.2)	110 (18.9)			
Gender	Male	143 (63.3)	381 (60.3)	0.63	1	0.239
	Female	83 (36.7)	251 (39.7)			
Age	18 and younger	6 (2.7)	23 (3.6)	29.47	7	0.001*
	19-25	23 (10.2)	67 (10.6)			
	26-35	64 (28.3)	135 (21.3)			
	36-45	56 (24.8)	118 (18.6)			
	46-55	46 (20.4)	100 (15.8)			
	56-65	15 (6.6)	63 (10.0)			
	66-75	11 (4.9)	59 (9.3)			
	75 and over	5(2.2)	68(10.7)			
Deprivation	Most Deprived	148 (69.5)	391(65.6)	1.56	2	0.458
	Deprived	13(6.1)	50(8.4)			
	Not Deprived	52(24.4)	155(26.0)			

Note: Data above are shown in frequencies and percentages (%).
* Significant at p <0.01.

In terms of ethnicity, 40.5% of the Brent mental health patients are White and 29% Black. 7.3% are of South Asian descent and 16.7% belong to Other groups such as Irish and Middle Eastern. Table 17 summarizes the socio-demographic characteristics of the Brent patient cohort by diagnosis type. There is a statistically significant difference (χ^2=62.95, df=3, p<0.001) in diagnosis type by ethnicity. The highest prevalence of service

users diagnosed with schizophrenia are Blacks (51.6%), followed by Whites (26.9%), while the reverse trend happens for other mental illnesses.

There is a much higher proportion of Black patients diagnosed with schizophrenia in the sample than White patients (χ^2=62.95, df=3, p<0.01). This is in line with the literature laid out in chapter two (Bhui, Stansfeld, Hull, & Priebe, 2003; Burnett, Mallett, Bhugra, Hutchinson, Der, & Leff, 1999; Castle, Wessley, Van Os, & Murray, 1998; Morgan et al., 2006) which affirms that Black ethnicities are more likely to be diagnosed with schizophrenia in the UK and elsewhere than White ethnicities. Also, although Asians make up a fairly large percentage of the Brent population as we have already seen, the percentage of Asians diagnosed with schizophrenia is low compared to Black service users. Asian and Other groups appear to have an equal percentage of mental health diagnoses.

There is no statistically significant difference by gender when assessing diagnosis type. Across the sample males are over-represented whether it is schizophrenia, bipolar, dementia or a personality disorder. There was no significant difference between the two categories, suggesting that all mental illnesses in Brent cannot be distinguished by gender.

There is a significant association between age and diagnosis type (χ^2=29.47, df=7, p<0.01). The biggest difference between the groups is that a higher percentage is seen for older groups suffering from other mental illnesses. One reason for this finding may be that dementia is included with other mental illnesses, which typically affects the older

age group. Another reason may be that there are higher rates of depressive symptoms as age increases (Snowdon, 1990).

Table 17 also indicates that most mental health patients in the dataset reside in the highest deprivation areas; for schizophrenia and other mental illnesses, 69.5% and 65.5% of the mental health population lives in the most deprived areas as defined by the deprivation index of Brent. There is no statistically significant difference between level of deprivation by diagnosis type, thus allowing us to conclude that high deprivation is common within the whole cohort. However, it is vital to note that in this analysis one cannot determine whether deprivation initiated prior to the mental illness, or whether mental illness contributed to deprivation.

5.7.3 Results for Hypothesis 1: Ethnicity & Schizophrenia12

Period Prevalence, or the total number of cases in a population over a specific period[13], was calculated in the borough of Brent by ethnicity (Black, White and Asian population data[14]). It was found that 5 per 1,000 who suffer from schizophrenia in Brent are Black, versus White and Asian ethnicities who have a prevalence rate of 2 per 10,000.

[12] To review raw results for all three hypotheses, see appendix F: NHS Data Analysis.

[13] Period prevalence included the 11 month period that the data was collected in Brent for the mental health dataset. The prevalence calculation did not include any cases of schizophrenia in Brent who were not seen by an NHS affiliated health service during that time.

[14] Prevalence was calculated using the 2001 census data, not correcting for age (includes 0-18 year olds). It included all cases.

Cannon and Jones (1996) found the lifetime prevalence of schizophrenia to be 0.4 to 1.4 per 100. The National Survey of Psychiatric Morbidity in the UK have reported the estimated rate to be 5 per 1,000 for the age groups of 16 to 74 years old (Singleton et al., 2000). The Brent NHS website confirms that approximately 43% of the population of Brent is under 30. This suggests that if age was adjusted for, schizophrenia period prevalence may be even higher than what has been found in the current sample. The lower observed rate of schizophrenia in Brent (compared to the larger rate in the UK overall) may be due in part to the relatively low mean age in Brent.

To assess the first hypothesis, whether schizophrenia rates differ by ethnicity in Brent, I performed a one way ANOVA[15] (ethnicity versus diagnosis). The results found statistically significant differences between ethnicity and diagnosis ($F=22.65$; $p>0.01$). To distinguish between ethnicity, I performed a regression model analysis between dummy variables[16] and found statistically a significant difference between Black and White ($b=0.269$; $p>0.01$) but not with the Asian group.

Post Hoc Test comparisons were also tested to determine whether there is a statistically significant difference in the rate of schizophrenia by ethnic group in Brent. Bonferroni corrections were performed to reduce the issue of multiple comparisons in

[15] I tested a series of multi-level logistic models and the intra-class correlation was low (group versus individual level residuals).

[16] Dummy variables were all coded 1-0. Asian, Black and White were the three ethnic minority groups coded for. For example, Asian was assigned to 1 and 0 for all other groups to create binary variables. The same applies to Black and White ethnicities.

the data. The result found statistically significant differences for Black and White ($p>0.01$) and Black and Asian ($p>0.01$), while differences between White and Asian were not meaningful. This confirms that the null hypothesis can be rejected and that the first hypothesis is accepted. In Brent, schizophrenia is more prevalent in Black individuals with mental illness than in White or Asian individuals.

5.7.4 Results for Hypothesis 2: Deprivation and Ethnicity

In 2007, Brent was considered the 53rd most deprived borough from 354 boroughs, putting it within the 15% most deprived boroughs (Brent Council, 2009). Of those unemployed, 24% of the population living in Brent are also considered long term unemployed. There has also been evidence of more health inequalities and limiting health conditions than other boroughs (London Borough of Brent, 2011). Deprivation has been measured in the Brent dataset using the Index of Multiple Deprivation[17], which compares each local authority means to social conditions. The IMD indicator factors in income, employment, health deprivation and disability, education skills and training, barriers to housing and services, crime the living environment (Communities and Local Government, 2008).

[17] Factor analysis is used to combine and understand and weigh inter-correlations between the indicators (Education, Skills and Training; Health Deprivation and Disability, and Crime. For more information, see http://www.communities.gov.uk/documents/communities/pdf/733520.pdf

To explore the conjecture that the higher the level of deprivation, the more likely a diagnosis of schizophrenia, I used cross tabulations, ANOVA and logistic regression[18] analyses. In the dataset, only one case was categorized least deprived; most cases from Brent had some degree of deprivation. I ran an ANOVA Post Hoc Test and found no significant differences in schizophrenia diagnosis between deprivation levels. Bonferroni corrections were also applied during the analysis. This establishes that the null hypothesis cannot be rejected and the second theory has not been confirmed in this dataset. Deprivation level is ubiquitous, no matter what the diagnosis is. The analysis was done within the patient cohort and not compared to the population as a whole.

5.7.5 Results for Hypothesis 3: Ethnic Density & Schizophrenia

Theories have suggested that when there is low ethnic density of a specific group within a geographical area, the likelihood of that population to develop a mental illness increases (Bhugra & Arya, 2005; Rabkin, 1979; Veling et al. 2007). Another dimension to the theory is specifically in relation to social factors in Bronfenbrenner's ecological theory. An explanation as to why ethnic density may serve as a protective factor has been found to be linked to social capital. Kirkbride and colleagues (2007) found that neighbourhoods with low social capital in South London had a higher risk of schizophrenia. Ethnic density was measured in this dataset as the proportion of residents belonging to that group according to the 2001 census data (0-100%). Ethnic density was

[18] Logistic regression is used when the outcome is binary and the predictor is continuous.

tested using the percent of own ethnic group within that ward. For example, for a Black service user living in Harlesden, their ethnic density was 46% (see table 18 below for ethnic density breakdown[19]).

Using multi-level logistic regression, the relationship between schizophrenia and ethnicity was explored. When deprivation level was factored in as a control, there was still a statistically significant result ($p<0.01$) which allows us to conclude that deprivation level does not impact this relationship. This finding is not surprising due to the fact that Brent's deprivation levels are high for all ethnicities as we saw earlier in the descriptive statistics section.

Table 18. Ethnicity by Ward

Ward	All people	White	Black	Asian	Chinese	Other
Alperton	12,323	27.8	17.9	50.7	2.8	0.8
Barnhill	13,188	44.9	18.6	29.5	6.1	0.9
Brondesbury Park	11,643	65.9	14.8	14.6	3.5	1.2
Dollis Hill	12,102	48.1	19.1	27.5	4.3	1
Dudden Hill	13,350	53.2	20	21.4	3.9	1.5
Fryent	11,888	47	14	34.1	3.8	1.2
Harlesden	12,227	38.1	46	12.2	2.8	1
Kensal Green	10,668	53.2	29.4	13.6	2.9	1
Kenton	11,872	42.9	7.1	45.8	3.5	0.7
Kilburn	14,172	56	29.4	9.7	3.8	1.1
Mapesbury	13,242	66.9	14.1	13.9	3.7	1.3
Northwick Park	12,175	42.1	11.4	41.6	3.9	1
Preston	12,832	41.5	15.3	37.7	4.4	1.1
Queen's Park	12,400	65.4	19.3	11.3	2.8	1.2
Queensbury	13,175	34.6	11.4	50.1	3.1	0.8
Stonebridge	15,943	33	49.1	14	2.7	1.2
Sudbury	12,307	35.7	18.3	42.6	2.6	0.9
Tokyngton	11,836	30.5	26.5	39.4	2.7	0.8
Welsh Harp	12,405	46.3	22.2	27.6	3	0.9
Wembley Central	11,002	21.3	20.4	55.7	1.7	0.9
Willesden Green	12,714	55.5	21.1	18.3	3.5	1.5

[19] Ethnic density was calculated using the categories Black, White and Asian. A more intricate breakdown using subgroups within each ethnicity (e.g. Caribbean, Pakistani etc) could not be accomplished due to lack of that level information in the Brent Mental Health Dataset used for analysis.

Source: 2001 Census http://www.brent.gov.uk/demographic.nsf/0/2f92474dabbece c480256ef3003b951e?OpenDocument
Note: White, Black, Asian, Chinese and Other columns presented as percentages.

As the hypothesis at the beginning of the chapter elaborates (hypothesis 3), I expect to see an inverse relationship between ethnic density and diagnosis type. In those areas where there is a high density of Asians, for instance, I anticipate a low prevalence rate of schizophrenia diagnosis among Asians; the same applies for White and Black service users.

A logistic regression model[20] was created to model the probability of developing schizophrenia over different levels of ethnic density. The findings illustrate that overall, the higher the own-ethnic density, the lower the probability of schizophrenia in this mental health cohort ($p>0.01$, $chi^2=37.26$). The finding implies that the probability of having schizophrenia is lower as ethnic density increases for all groups. Thus, the first finding supports the third research hypothesis in this dataset. In order to understand whether this effect (of ethnic density on probability of schizophrenia) differed across ethnic groups, we then modelled the logistic function separately for each group (refer to figure 11).

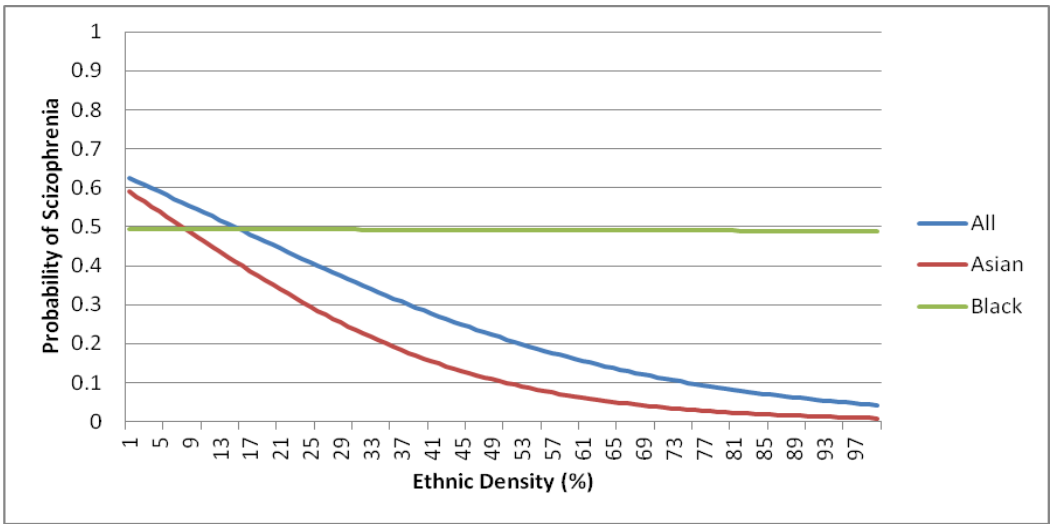
[20] The logistic regression model was tested using the following formula $1/1+e^{-}$(ß°- ß¹IIUBSAL).

Table 19. Logistic Regression

	Coefficient	p value	Model χ2	p value
All (n= 475)	-3.66	<0.001	37.26	<0.001**
Black	0.3280366	0.819	0.05	0.8189
Asian	-5.141926	0.039	4.97	0.0258*
White	-1.469336	0.265	1.23	0.2675

Note: * Significant at p <0.05, ** Significant at p<0.01.

Figure 11. Logistic Regression: Ethnic Density and Probability of Schizophrenia



The resulting logistic regression model demonstrates that Asian group's ethnic density findings were statistically significant (p>0.05, chi²=4.97). In other words, the data confirms that ethnic density acts as a protective factor for Asians in this mental health population. The hypothesis that ethnic density serves as a protective factor, therefore, has been partially accepted.

I considered the possibility that differential deprivation levels in wards of different majority ethnicity could be confounding the results seen here; that is, we considered that the apparent ethnic density effect might really be due to deprivation. To test this possibility, we included deprivation as a covariate in the logistic regression model, along with ethnic density. In the resulting model, the coefficient for deprivation was not statistically significant, but the coefficient for ethnic density remained statistically significant. Therefore, we conclude that the effect of ethnic density on probability of schizophrenia diagnosis seen here cannot be attributed to deprivation level ($p<0.001$ for ethnic density in both models).

5.8 Discussion of Findings

Notwithstanding all the epidemiological advances in relation to schizophrenia and ethnicity, there has been a lack of information, specifically in the last decade in the UK, about service users diagnosed with schizophrenia. The Count Me In Census report (Healthcare Commission, 2008) found that the likelihood of people who belong to ethnic minority backgrounds admitted to a hospital has been increasing since 2005. The London Health Observatory (2009) also saw a rise in first generation migrants to Brent, with 47% of the population in 2003 to have been born outside the UK. The findings in this chapter aimed understanding not only what the current mental health demographic make-up of Brent is, but also to develop and expand on etiological explanations of schizophrenia. More specifically, the chapter tests the theory of ethnic density in the borough of Brent.

From the Brent NHS patient cohort (n= 860), over a quarter (26.3%) of the mental health patients seen by NHS services in Brent were diagnosed with schizophrenia F20-F25 (n=226). The mean age of the patient cohort matched with Central and Northwest London's records was approximately 40 years old. There was a higher representation of males to females in the dataset, but there was not a statistically significant gender difference between a diagnosis of schizophrenia and other mental illnesses. Leung and Chue (2000) have suggested that one reason why males are more likely to have a diagnosis than females is because diagnosis as a term itself lends to inflexibility in deviating from the symptomology of mental illness. Men's symptoms are usually viewed to be more severe because they express less negative symptoms. Symptoms of males and females are reported to be different possibly accounting for the results in the literature that had been found (Haas et al., 1990; Hafner, 2003).

A study by Rodriguez et al. (2011) demonstrates that disorganized symptoms only explained 31% of the variance in explaining schizophrenia, while positive and disorganized symptoms explained 36% of the schizophrenia variance in men. Other studies found that males are more likely to display negative symptoms while females display more affective symptoms and auditory hallucinations (Leung & Chue, 2000; Ring et al., 1991). It is theorized that if the diagnostic criteria became less stringent, males and females would experience equal rates of mental illness diagnoses since their symptom displays are dissimilar.

Perhaps the most notable finding in the chapter is in relation to Black and Asian ethnic groups; the finding that Black ethnicities experience higher prevalence of schizophrenia. White, Asian and Other ethnicities did not have as high levels of diagnosis

as compared to Black ethnicities in Brent. White groups evidenced a higher diagnosis of other mental illnesses. The prevalence rate of Blacks suffering from schizophrenia in Brent was 2 per 1,000 while Whites experienced 5 per 10,000 and Asian groups 2 per 10,000 in Brent.

Asians were the least group to be diagnosed with schizophrenia in Brent. Only 6.3% of the Asian Brent mental health service users were diagnosed with schizophrenia versus 51.6% Black and 26.9% White. The results illustrate that, although there appears to be a high rate for Asians and Blacks in Brent, each group's vulnerability to schizophrenia and mental illnesses is dissimilar.

In this chapter, three research hypotheses were tested based on prior findings in the literature[21]. The first hypothesis which states that schizophrenia will be more prevalent among Black service users was confirmed, referencing the fact that Brent's health inequality patterns are similar to major findings in the UK and in other developed countries (Bhugra & Bhui, 2001; Morgan et al., 2006; Neighbors, Trierweiler, Ford, & Murroff, 2003).

To elucidate and expand further on the descriptive demographic findings, I explored deprivation levels in relation to the likelihood of developing schizophrenia. We found no statistically significant difference in terms of deprivation level and ethnicity, even when compared to diagnosis type. Brent has a high deprivation index, and this

[21] Refer to chapter two for more details.

appears to prevail across all service users. Therefore, deprivation cannot explain the ethnic predilection of schizophrenia to Black BME groups in this dataset. Previous literature has correlated poverty and schizophrenia suggesting that it leads to a higher vulnerability (Cohen, 1993; Read, 2010). Since I tested the hypotheses in an already highly deprived setting, one could also argue that this is a "restriction of range" issue (there is not enough variation in deprivation level in the dataset to detect an effect of deprivation on schizophrenia diagnosis).

Thus, deprivation levels do not predict a schizophrenia diagnosis. Perhaps this suggests that poverty is not specifically triggering schizophrenia, but may trigger poorer outcomes in mental health in general. This also allows us to conclude that there are likely other factors that may be contributing to its onset.

Hypothesis three, indicating less schizophrenia with higher ethnic density, was statistically supported specifically with the Asian mental health population in Brent. The higher the ethnic density, the less schizophrenia was prevalent in the Brent mental health dataset. To the knowledge of the author, this is a novel finding that deserves much attention. Ecological and social capital theory can be viewed as an extension to the explanations behind ethnic density and is defined as a term that describes social networks, relations, trust and power (Whitely & McKenzie, 2005). According to the stress-buffering theory, the more one is connected with their immediate and non-immediate surroundings, the better one's mental health (Cohen & McKay, 1984).

Ethnic density may be seen as a protective factor for Asian groups as it may seen to serve as an increase of one's social capital and social bonds thus, decreasing alienation

and the potential for worsening psychological outcomes. Bronfennbrenner's ecological theory in this context can be intertwined with the theory of ethnic density and schizophrenia. This ecological theory moves away from traditional understanding of only looking at the microsystem interactions, but goes in the outer layers of society to understand their effect on the person. In essence, a look at the mesosystem, exosystem and macrosystem become as important as the person's own direct exposure to their family and surroundings.

The Asian culture can be argued to be highly collectivist. Although the exact meaning of collectivism and individualism changes by in-group and culture (Rhee, Uleman & Lee, 1996), collectivism for Asian groups can be defined as interdependence and the feeling of community with their society. The individual goes beyond their understanding of the self and extends to their outer layers of Bronfenbrenner's ecological theory.

In light of these findings, one can conclude that Asian, Black and White ethnic groups experience dissimilar ecological and psychological experiences in Brent. Boydell and colleagues (2001) found that with non-White BME groups, the higher the ethnic density, the less the incidence of schizophrenia. Cochrane and Bal (1988) found that there is no relationship between the incidence of schizophrenia and ethnic density, except with Irish populations. Essentially, one must bear in mind that the results in the Cochrane and Ball study (1988) have at least a 20 year gap; ethnic groups have drastically changed since then in England (Office for National Statistics, 2009).

A review of the literature on social capital theory confirms that there is still a lack of conclusive evidence relating to the susceptibility to schizophrenia or other types of mental illnesses (De Silva, McKenzie, Harpham, & Huttly, 2005; Whitely, Prince, McKenzie, & Stewart, 2006;). Others have suggested that where there is high ethnic density, there is lower racism, in turn positively influencing the mental health of the population. Becares, Nazroo and Stafford (2008) found a weaker association between racism and health when ethnic density is high.

Ethnic density did not serve as a protective factor for Black or White communities in this study. Ethnic density measures the amount of people of a certain ethnic group in one area but it does not necessarily tell us whether they have successfully integrated. A qualitative study that took place in Gospel Oak, an inner-London electoral ward, found that the reason that ethnic density may have contributed to a higher mental illnesses is because of perceived exclusion, perceived risks and the damaging effects of racism (Whitely, Prince, McKenzie, & Stewart, 2006). The experience of alienation and racism among individuals from the West Indies in the UK has been supported by many authors and deserves to be explored in more depth in future studies (Karlsen, Nazroo, McKenzie, Bhui & Weich, 2005; Littlewood, 1992; Littlewood & Lipsedge, 2001).

5.9 Limitations

As with every methodology, drawbacks are unavoidable but need to be pointed out. The dataset was limited in terms of the indicators that were tested, thus constraining the amount of analyses that were possible. For example, country of birth, family history, level of education, income, and symptom presentation of the patients were not available in the dataset.

It was not possible to distinguish between White ethnicities by country of birth, nor for Black ethnicities of African place of birth. Additionally, it was not possible to make a distinction between Black African ethnic density and Black Caribbean groups. In a study by Bhugra and Bhui (2001), Caribbeans were found to be the only ethnic minority group that did not conform to the ethnic density theory. In this chapter, it was not possible to differentiate these groups and the findings would have likely presented fruitful results if there were these categories.

Eastern Europeans have increased in size in Brent, but they have not been captured in this chapter. North Africans such as Somalis, Eritreans and Sudanese also have increased in numbers in Brent over the last five years but such demographic changes could not be determined using the NHS mental health dataset. The last group, Arabs and other mixed ethnic groups were also transparent because they were bulked into one category of Other Mixed Ethnic Groups in the NHS dataset.

There were a few other constraints in this study. Deprivation level of each patient record was not assessed by their personal socio-economic status (which includes income and education) but was measured by the deprivation index score that is already set by

the Borough of Brent. Therefore, a reason why deprivation level was not strongly correlated with the diagnosis may be due to the way it was defined and coded. Lastly, in order to test for this theory with potentially more deprivation level comparisons, it would have been ideal to compare Brent's mental health service users to other wealthier boroughs such as the borough of Kensington and Chelsea. However, due to the ethical constraints of the NHS data retrieval process, this was not possible.

CHAPTER SIX

MENTAL HEALTH PROFESSIONALS' TAKE ON SCHIZOPHRENIA AND CULTURE

6.1 Introduction

This chapter reports on the views of mental health professionals of schizophrenia through mental health professionals' experiences with their patients in the UK. According to existential phenomenological thought a theoretical model becomes fruitful is when it looks through the lens of the observed rather than the observer; the researcher being the observer and the clinician and patient being the observed. This methodology, now named the Giorgi method, has been described as an "approach in psychology that claims the comprehension and understanding of the experience of the human being from the consciousness and standpoint of the human being who is having the experience" (De Castro, 2003, p. 47). The experience is understood by experts in their own understanding rather than from the onlookers' explanation.

Throughout the chapter I present findings from the Mental Health Professionals' questionnaire that I have created and devised[22]. This questionnaire is used as a tool to

[22] See appendix G to review the questionnaire.

discover the views of mental health professionals of their patients rather than using the perspective of the observer. The researcher is usually removed from the situation and the conclusions made may be criticized as being unrealistic and too theoretical.

Only two studies, by Cape, Antebi, Standen and Glazerbrook (1994) and Lewis, Croft-Jeffreys and David (1990) in the United Kingdom have been identified to have approached clinicians as the main informants in an attempt to decode diagnostic assessments of schizophrenia. Cape, Antebi, Standen and Glazerbrook (1994) report on a questionnaire they distributed to 119 psychiatrists in order to examine the diversity in thinking about diagnosis, aetiology and prognosis. They found that 85% of the respondents thought that schizophrenia was a heterogeneous group of disorders. Respondents were also asked to rate the usefulness of diagnostic tools such as Schneider's first rank symptoms and the DSM III, and they found that psychiatrists reported general clinical impressions to be the most useful tool in diagnosis and not the actual diagnostic measures. This finding deserves more attention because they raise vital questions about the significance of the diagnostic tools and gives more weight to researching clinical interactions between the patient and clinicians.

Lewis and colleagues (1990) studied a cohort of psychiatrists from the Royal College of Psychiatrists. They presented a vignette of a psychotic illness to their cohort, revealing the ethnicity of the patient to measure its effect on the judgement made for a diagnosis. What they found was that the 'race' of the patient affected the clinical predictions and attitude of practising clinicians (Lewis, Croft-Jeffreys & David, 1990). African- Caribbeans were more likely to be diagnosed with acute reactive psychosis and cannabis psychosis whilst Whites were more likely to be diagnosed with schizophrenia.

The results certainly challenge the common perception that Whites are usually the least likely to be diagnosed with schizophrenia (Adebimpe, 1984). Nevertheless, it is important to note that this study did not compare other types of psychoses. Therefore, research done on bipolar and schizophrenia cannot be compared in this instance as the symptoms presented in these two conditions are not the same. In light of these findings, I argue that mental health professionals' own background needs to be understood because their own attitudes, beliefs and cross-cultural understandings ultimately affect the clinical interactions and diagnoses that are made in clinical settings.

Aims and Objectives

One of the main goals of this chapter are to estimate mental health practitioners' case load of their patients diagnosed with schizophrenia especially for people born in Central and Eastern Europe, North Africa and the Middle East. Second, as mentioned in chapter three, the MHPV questionnaire aims at examining how mental health professionals explain and understand schizophrenia and its interaction with cultures.

There seems to be a long withstanding gap in the knowledge on both the current socio-demographic composition of London mental health professionals and their patients. The unprecedented migratory patterns that are currently taking place in the EU are shaping the UK's mental health system into new population groups but such patterns are yet to be discovered. It was estimated, for instance, that between 30 to 40% of NHS staff are from ethnic minority groups in England (Carnall, 1997). I also wish to examine this finding to find out whether multi-culturalism has had any consequences on schizophrenia patient treatment. Payer (1989) iterated that diagnosis is strongly

influenced by culture, not only through psychiatric differences in language but also through cross-cultural differences in understanding the world.

The crux of the argument in this thesis is that the secret to understanding clinical interpretations of a schizophrenia diagnosis not only lies in the sufferers themselves, who are vital to study, but also in the diagnosers. Diagnostic tools have been juxtaposed over and over again to be methods that lack a holistic understanding of the subjective interactional mechanisms. Cape, Antebi, Standen and Glazerbrook (1994) have suggested that what is most imperative to understand is the actual interactions between patient and mental health professional. Understanding this dyadic interaction entails discovering the demographics of each population group as a whole and qualitatively digging into their thought constructions, culture and preconceived notions. Such an endeavour, which combines anthropological, sociological and psychiatric methods under one umbrella, is seen as a tool that may disentangle our current state of knowledge into more thought provoking theories (Jenkins & Barrett, 2004).

Another objective of the chapter is to estimate the prevalence of schizophrenia in London by specifically measuring percentages of new immigrants from Eastern Europe, North Africa and the Middle East who are diagnosed with schizophrenia. As we have already seen in the previous chapters, the UK's demographic population is changing and becoming more multi-cultural. This multi-culturalism, however, is still misrepresented and poorly understood. At this point in time, the estimates are still unknown.

The relationship between language, culture and schizophrenia is also an area devoid of depth, although it is very pertinent to the current mental health population. In

the MHPV questionnaire, questions on linguistic capabilities of mental health staff, along with explanations in relation to language barriers are unravelled. Covington et al. (2005) have suggested that patients who display schizophrenia symptoms usually display unusual language impairments (thought disorder and schizophasia[23]) and this is even before factoring in cross-cultural differences. Therefore, when there are linguistic barriers in the clinical setting, even when the same languages are native to the dyad.

6.2 Methods

The semi-structured questionnaire has been used as a standardized measurement to capture the views of the mental health professionals and to list their reasoning behind the onset of the illness in a comparison of UK born and foreign born patients (Fowler, 2002). The questionnaire also covers the respondents' demographics such as age, ethnic background, place of practice, country of origin, languages spoken and cultural affiliation and it tied to their current views on schizophrenia diagnosis in relation to their personal workplace experiences. It also explores the thoughts on cross-cultural differences of the content of symptoms of schizophrenia. The questions can be viewed in detail in the appendix. There are three sections and 27 questions in total, varying from matrix questions, ranking, semantic differential scales and open ended questions.

[23] This refers to impairments in language communication such as clanging, neologisms, and unintelligible speech.

6.2.1 Statistical Power

Effect sizes in quantitative analyses are important to measure because they express the strength of measure between variables. Prior to the analysis being undertaken the effect size was measured using GPower to estimate the statistical power of the results. In order for the effect size to be medium (medium= 0.3) a sample of at least 111 respondents was needed. The sample size was not achieved and therefore, new calculations based on the actual sample size of 48 came up with an effect size of 0.4, which is considered between medium and large effect[24] . The statistical significance value of alpha or p is 0.05 with a power of 0.95; as a rule of thumb the lower the effect size, the higher the sample size.

The demographic results were analysed using SPSS (Statistical Package for the Social Sciences), with 35 variables that were included in the dataset, used for statistical analysis. All the results were stored on the website (Freeonlinesurveys) and were downloaded onto an excel spreadsheet for further analysis. The excel dataset was formatted and then transferred into SPSS.

6.2.2 Pilot Testing

In any questionnaire administration, pilot is seen as a tool that improves the validity and reliability but which would also assist in eliminating irrelevant questions (De Vaus, 2002). The questionnaire went through a phase of pilot testing in which six

[24] As a measure of the strength between the variables (independent and dependent variables).

professionals in mental health; PhD supervisor, 2 researchers, 1 psychiatrist, 1 social worker, 1 mental health research director) examined and scrutinized the questions, advising on the legibility and suitability of the questions.

Informants who answered the questionnaire in the second instance fell into the following inclusion criteria: Worked in London and/or its outskirts; aged between 18- 75; mental health professional in any of the following categories (nurse, psychiatrist, counsellor, psychoanalyst, psychologist, counsellor, researcher in mental health, social worker); has clinical or direct research experience with schizophrenia patients in London and/or its outskirts over the past five years.

6.2.3 Dissemination

The MHPV questionnaire was distributed via a linked email to respondents identified by snowball sampling in the period between March 2008 and July 2009. Fowler (2002) asserts that online questionnaires can be very practical tools to disseminate surveys and allow for confidentiality, thus leading to potentially more honest feedback.

The response rates were impossible to measure due to the nature of the dissemination method, but a total number of 49 respondents completed the questionnaire in full. One of the responses was removed from the analysis as it seemed to be a duplicate, leaving a final sample size of 48 mental health professionals who completed the questionnaire.

The online mental health questionnaire results are displayed under four major headings. First, the demographics of the informants are laid out to depict the cohort of the current mental health workforce socio-demographics in terms of culture, gender,

years of experience and languages spoken. Then, a numeration of the responses of the current caseloads is presented in the second section to estimate the percentage of patients from Africa, Central and Eastern Europe, and the Middle East and Afghanistan. In the last two sections, opinions of respondents on the relationship between diagnosis, culture, and ethnicity are all examined in relation to the content and qualitative differences of symptoms of schizophrenia.

6.3 Results

Demographics of Mental Health Professionals

Respondents of the MHPV questionnaire (n=48) all worked in mental health services in or around London and had experience with patients diagnosed with schizophrenia, but their experiences were varied as they occupied different roles. Most of the respondents were nurses or community psychiatric nurses (n=20), followed by psychiatrists (n=8), occupational and art therapists (n=8), academics n= (5), social workers (n=4), psychotherapists (n=1) a psychoanalyst (n=1), and lastly one psychologist (n=1).

Table 20. Employment Type

Occupation	N	%
Nurse or CPN	20	41.7
Psychiatrist	8	16.7
Psychologist	1	2.1
Psychotherapist or Psychoanalyst	1	2.1
Academic	5	10.4
Social Worker	4	8.3
Other (not specified)	9	18.8

Total	(48)	100%

Table 21. Years of Experience

Years	N	%
0	1	2.1
2-3	4	8.3
4-5	3	6.3
5-6	3	6.3
6 or more	37	77.1
Total	(48)	100%

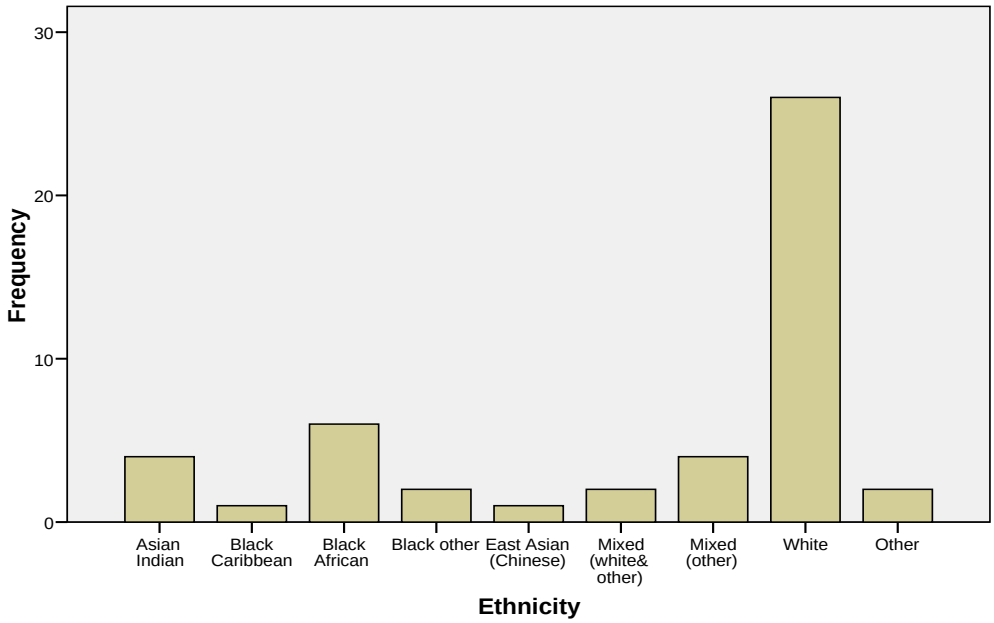
Seventy seven percent of the mental health professional cohort had 6 or more years of experience in their field. The settings in which respondents had treated or seen patients with schizophrenia mostly was in psychiatric consultations or follow ups (29%), while 28% provided nursing care and 17% reported having one to one counselling with patients. The others fell between social work and assessments, while some provided individual or group therapy, management, support and some administered medication injections to schizophrenia patients.

More than half of the mental health professionals worked in North West London (n=27) and specifically in Brent, while 6 reported working in South London, 5 in North London, 3 in Hertfordshire and 2 in Central London. Forty percent of the informants reported to be working in an NHS hospital, while 15% work in a mental health clinic. The remaining responses varied between working in more than one setting, outreach community integrated NHS services, a charity or in the social services.

Gender, Age & Ethnicity

Gender was almost equally distributed amongst the mental health professionals, with 25 male and 23 female mental health professionals. The mean age of the informants was between 36 and 45 (SD= 0.907). Forty one percent of the respondents were between the age of 46 and 55, 29% between the age of 36 and 45, 25% between 25 and 35. The distribution of ethnicity was 54% White, followed by Black African at 12.5%. The remaining belonged to other ethnic groups.

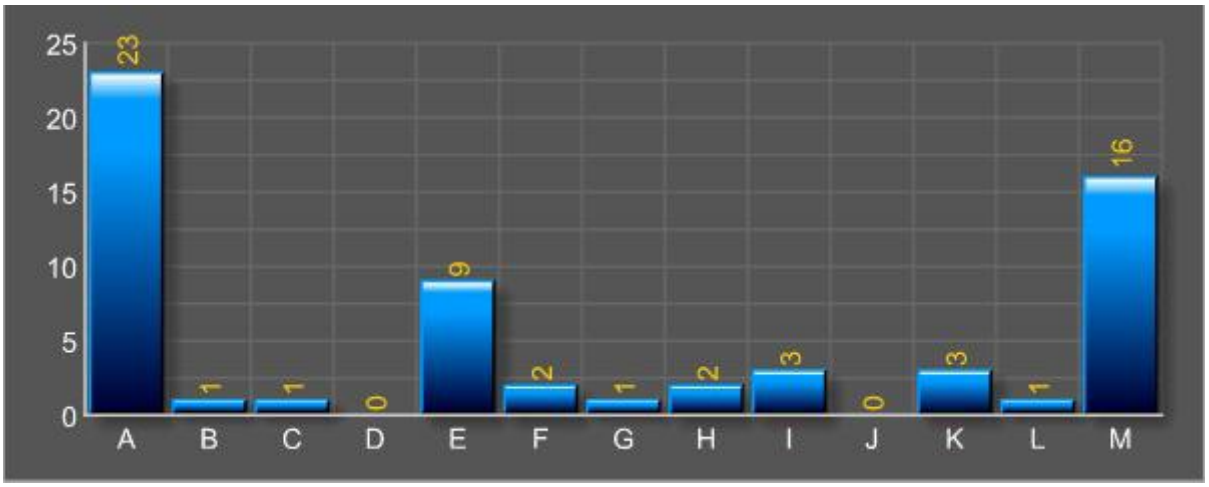
Table 22. Ethnicity of Mental Health Professionals



National Identity & Languages Spoken with Patients

Sixty seven percent of the mental health professionals who responded to the survey declared that they were from the United Kingdom and 31 % reported to be from elsewhere. The countries of origin that were named were Ghanaian, Ukrainian, Irish, Indian, American, Filipino, Nigerian, Lebanese, Irish, Malaysian, Zimbabwean, Irish, German, and Sierra Leonean.

Table 23. Foreign Languages Spoken



Note: A)None B)Arabic C)Chinese D)Farsi E)French F)Hindu G)Guajarati H)Italian I)German J)Punjabi K)Spanish L)Urdu M) Other (Akan, Ukrainian, Russian, Polish. Pastun, Turkish, Marathi, Kannada, American Sign Language, Igbo, Xhosa, Malay, Nigerian dialects, Tamil, Creole, Mende, Albanian).

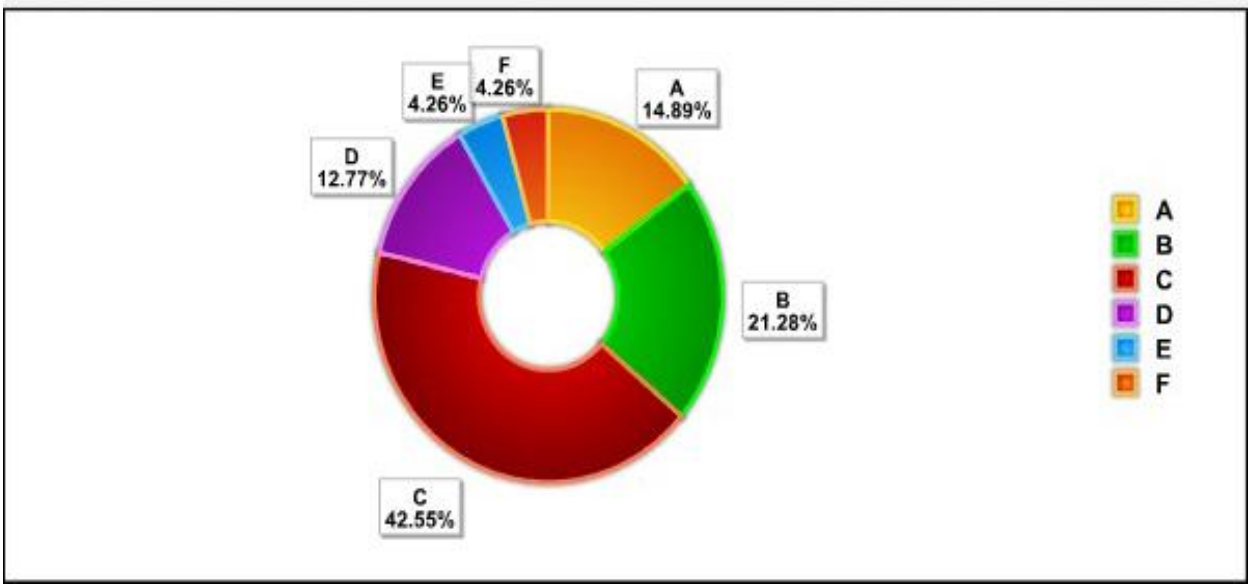
The finding highlights a highly multi-cultural cohort and the prevalence of a high number of first generation immigrants who are in London working in mental health. Not only was the mental health professional cohort diverse in terms of country of origin and national identity, but also the languages they spoke seemed to vary. Twenty three respondents only spoke English, but the rest spoke other languages with French (n=9) being the most common second language, and other languages distributed along as shown in the table above.

6.4 MHPs, Language, Culture, and Patients

This section describes results in relation to shifts in the nationalities and languages spoken amongst schizophrenia patient cohorts. The findings present a new area that has not been explored in previous studies highlighting the cross-cultural demographic shifts that have taken place within the last couple of years in London.

Respondents were asked whether they have used a language other than English with their patients within the last 5 years, in an effort to measure the shifts in language use in clinical settings. Forty eight percent of the respondents claimed they had used a language other than English with their patients, whilst the remaining 52.1% had not. The use of interpreters with some schizophrenia patients was also reported. The use of another language varied between the respondents, some reporting it to happen very rarely and others claiming that it took place 2 to 3 times a week.

Figure 12. Reported Rates of Speaking a Foreign Language with Patients



Key: A) Always (almost daily), B) Often (around 2 to 3 times a week), C) Sometimes (around 1 time a month), D) Rarely (around 1 time a year), E) Never, F) Unsure (no direct experience)

When asked how often patients diagnosed with schizophrenia had needed interpreters in clinical services, 42.55% confirmed that there was such a need around once a month, whilst 21.28% thought they required a translator around 2 to 3 times a week. This stresses a linguistic shift and suggests evidence for the need for mental health services to start adapting to the languages of first generation schizophrenia patients whose first language is not English.

Such findings should not be taken lightly for the same reason that has already been hinted at throughout the dissertation, namely that diagnosis is fully contingent on the quality of the interactions between a psychiatrist and the patient. Linguistic differences may lead to a barrier in clinical communication as it acts as a disruption in communication and thought processes. Chapter four illuminated us to the fact that language is intertwined with a person's world view which is part of one's cultural upbringing. In essence, language could make the interaction between the dyad more multifariously unintelligible. As we have seen in chapter four, cross-cultural differences related to the display of symptoms in schizophrenia are marked facts. If we add linguistic differences to the clinical dyadic relationship, this adds another cross-cultural concern that needs to be observed.

6.5 Estimates of Non-UK born Patients Diagnosed with Schizophrenia

The current reality is that the number of patients diagnosed with schizophrenia who are first generation migrants to the UK is obscure. There are no current estimates possibly because to the way that NHS data have been historically collected based on ethnic minority group rather than country of origin. As a result, there has been ample information on BME groups such as African-Caribbeans and White patients, but no reporting in relation to immigrants by nationality. We have seen from chapter five that a third of the NHS Brent mental health patients' ethnicity was Black between 2006 and 2007, which included people from Africa as well as the Caribbeans (both first, second or third generation). To fill this gap in the knowledge, mental health professionals were asked to report on the numbers of their current patients who have been treated for schizophrenia: This exercise was used to estimate the prevalence rates and demographic composition of these groups of patient cohorts in London.

Sixty two percent of the respondents reported having noticed shifts in the demographics of the population diagnosed over the last five years, while 28% had not noticed any changes (the rest had no direct experience and therefore reported to be 'unsure'). This finding is not surprising however, due to the rise in the numbers of migrants to the UK over the last decade (as has been reported in chapters two and five).

Table 24. Overall Estimates of Schizophrenia Patient Cohorts by Region

	Central & Eastern Europe	Middle East & Afghanistan	Africa	Total
%	4.53%	6.68%	22.43%	33.65%
N	19	28	94	(419)

Note: Countries included in results are Central and Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Slovakia, Slovenia, Serbia and Turkey; Middle East: Egypt, Syria, Israel, Lebanon, Jordan, Iraq, Saudi Arabia, Kuwait, Bahrain, and Qatar; Africa: Algeria, Democratic Republic of Congo, Egypt, Ghana, Libya, Morocco, Mozambique, Nigeria, Somalia, Sudan, Tanzania, Tunisia, Western Sahara.

From 29 respondents whose answers were eligible for analysis, a total of 419 patients were diagnosed with schizophrenia. When asked about the countries of origin of the patients, it was estimated that 4.52% were from Central and Eastern Europe (n= 19), 6.68% from the Middle East and Afghanistan (n= 28) and 22.43% from African nations (n= 94).

The prevalence estimates reflect patients diagnosed with schizophrenia who were not born in the UK. Approximately 34% of patients have been estimated to be non-UK born and from the three regions denoted. This finding also tells us that the other 66% are born in the UK or are people who have migrated from other countries of origin (as second, third, or fourth generation migrants). The focus was on these three regions in the questionnaire, as statistics had shown that these were the regions with the highest numbers of inward migration to the UK. Therefore, the number could, in fact, be slightly higher if we take into account other countries of origin that have not been focused on in the MHPV questionnaire.

In the Central and Eastern European group, Polish patients had the highest numbers of schizophrenia for patients from Central and Eastern Europe (n=4) although

the number is not large enough to be generalizable. None of the numbers of patients from the Middle East and Afghanistan had high schizophrenia prevalence rates. It is vital to note that in the estimation of the prevalence rates the total percentage is only based on the cohort of schizophrenia patients and not all mental health patients.

The largest subgroup of patients diagnosed with schizophrenia in North Africa was reported to be from Somalia (n= 12), whilst 11 were from Nigeria, followed by 6 from Morocco. The number of unspecified countries of origin in this group is 57 in total, also possibly leading to a change in the conclusions of country of origin.

Table 25. Estimates of Schizophrenia Patient Cohorts by Country of Origin

N	Central & Eastern Europe	N	Middle East & Afghanistan	N	Africa
12	Unspecified country	25	Unspecified country	57	Unspecified country
4	Poland	1	Syria	12	Somalia
2	Spain	1	Iraq	11	Nigeria
1	Bulgaria	1	Afghanistan	6	Morocco
				6	Other N. African nations
				2	Democratic Republic of Congo
(19)		(28)		(94)	

6.6 MHP's Take on Culture and Schizophrenia

Lewis, Croft-Jeffreys and David (1990) examined ethnic stereotypes amongst psychiatrists to find out whether stereotypes affected the management of patients. Self fulfilling prophecies or preconceived beliefs and notions of the diagnoser are essentially believed to be as important as the display of the symptoms. Expanding on this notion and to gauge shared understandings and beliefs of mental health professionals, I have asked

within the MHPV questionnaire about the opinions and beliefs of the clinicians with regards to culture, schizophrenia and differences in the displays of symptoms.

According to Corin, Thara, and Padmavati (2005) symbolic interaction is always essential in relation to the person experiencing schizophrenic symptoms. It is suggested that there is the double perspective where culture and personhood play a role in the diagnosed person's experience. This double perspective not only occurs to the sufferer of schizophrenia but also to the diagnoser. Jenkins and Barrett (2004, p. 114) have depicted it as such: "When examining the role of culture in articulating personal experience of psychosis, we situate ourselves within a double perspective: On the cultural side, we examine how symbols referred to by individual persons articulate a larger framework of meanings; and on a personal side, we try to understand how the use of these self-same symbols operates at a personal level".

Results demonstrate that 63.1% percent of the mental health professionals believed that there was a higher chance of being diagnosed with schizophrenia if the patient was a migrant, while the other 36.7 % did not believe so. Black Caribbeans, Black Africans and Mixed Black and White groups were seen to be the most likely to be diagnosed with schizophrenia. The least likely groups were Chinese Asians and Other Mixed groups. Such a finding is worth noting because it uncovers whether self fulfilling prophecies influence diagnosis and care. In other words, when a mental health professional believes that there are more diagnoses of schizophrenia patients amongst Black groups, might that lead to a higher likelihood to more readily diagnose them with schizophrenia in the future? To my knowledge, there are no studies to this date that have

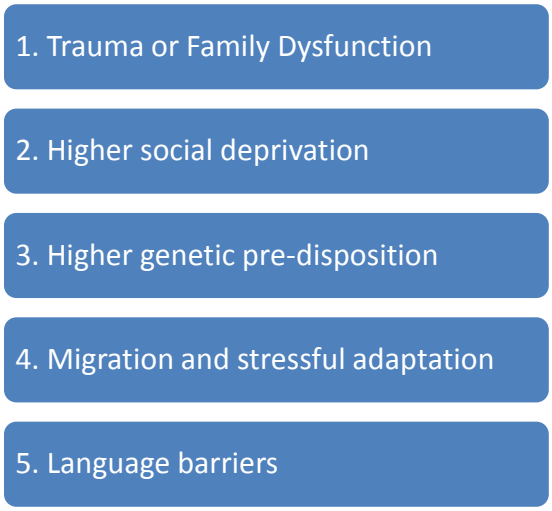
examined the relationship between mental health professionals' beliefs and the rate of schizophrenia diagnosis.

Differences were reported in terms of diagnosis across cultural groups but also in relation to the content of symptoms. 63.1% believed that the content of symptoms of schizophrenia differed amongst migrant and non migrant groups. Jenkins and Barrett (2004) have also reported on differences in the content of symptoms[25] across different cultures.

If non-UK born patients are seen to experience the most likely diagnosis of schizophrenia, there must be factors associated with this phenomenon. Respondents were asked to rate their opinion as to why they believe that migrants have a higher likelihood to develop schizophrenia in comparison to UK born patients (if they had agreed to that statement). Their responses were that the most likely reason is due to the experience of trauma or family dysfunction, which puts migrants at a higher risk to develop schizophrenia than others. In light of this finding, it is interesting that trauma and family dysfunction were seen to be the most likely factors in terms of a schizophrenia diagnosis because such factors have been more associated with post traumatic stress disorder in the psychiatric literature (Breslau, Chilcoat, Kessler, & Davis, 1999; Bruce et al., 2001). However, Scott, Chant, Andrews, Martin and McGrath (2007) found a highly significant association between PTSD and psychotic symptoms.

[25] The differences in the symptoms are covered in more detail in the next section.

Figure 13. Reported Reasons behind Higher Rates of Schizophrenia of Migrant Groups (1 most likely, 5 least likely)



The second most cited reason suggested was that there is higher social deprivation and poverty amongst non UK born patients thus leading to an increased vulnerability of a diagnosis of schizophrenia. We have already seen a relationship between deprivation levels and schizophrenia with African-Caribbeans, and therefore this claim is not far from the reality of the patient cohorts in Brent, UK. However, this is not dissimilar to what is known about all mental illnesses in general. It is currently well established that all mental illnesses are positively associated with socioeconomic deprivation (Byrne, Agerbo, & Eaton, 2004; Harvey et al., 1996).

The third reason reported in the MHPV questionnaire was explained as due to a higher predisposition of migrants. We have seen in the literature review in chapter two that some etiological factors were expressed as a result of the higher predisposition or

what is called selection stress hypothesis (Felicity, 2006). The fourth likely cause was in relation to migration and the stressful adaptation in one's host country. Environmental factors such as alienation, unemployment, and non- assimilation with the host country may have been at play.

The findings may imply that there are more biological explanations and migratory factors that are interrelated to the whole experience but they were not seen to be the most likely reasons for the development of schizophrenia. The least likely explanation reported was related to language barriers between the clinicians and the patient.

Mental health professionals' own cultural background may have an effect on the clinical interactions and notions about schizophrenia patients. Assuming that a practitioner's experiences and background affect thoughts about their patients, I tested whether there was any association between one's country of origin and observations of demographic shifts of schizophrenia patients. The results confirm that there is an association between the nationality of the respondent and whether they had observed any demographic shifts in their patients (χ^2= 12.56, df= 6, $p<0.05$). Mental health professionals who attached their identity to the United Kingdom were less likely to have noticed demographic shifts (53.1%) while non-British respondents (60%) noticed more shifts in the nationalities of their patients diagnosed with schizophrenia. This result leads us to the juxtaposition that people generally attribute more value or a shift of attention to trends when it is more personal to them. Those who are non-UK nationals are themselves migrants and therefore they would be more sensitive to non-UK born patients. Another factor explaining the differences in the responses may be that migrant mental health professionals work in more multi-cultural settings in comparison to the

non-British nationals. It was not possible to tell whether this applies within the context of this study.

In the next set of findings, respondents were asked their opinion of which ethnic groups in the UK they believe have the highest risk of developing schizophrenia. The answers generally reflected the reality of the situation as reported in the literature review. Highest reporting was for Black African Caribbean (2.64) followed by Black African (3.69), Mixed (Black and White) (4.71), Black other (4.64), Asian Pakistani (5.11), and lastly Asian Indian (5.97). The least likely categories reported to develop schizophrenia included White (6.62), Mixed Other (6.72), and East Asian Chinese (7.30) groups[26].

The data demonstrates that mental health professionals are aware of the current cross-cultural differences in schizophrenia diagnosis amongst different ethnic groups. What is difficult to decipher from this finding is how these preconceived beliefs affect treatment and diagnosis in the clinical setting. In all aspects of human interaction and no different from the clinical setting, people use generalizations as schemas to conclude certain learned daily situations in their life. Therefore, how one's belief that Black African-Caribbeans are at highest risk of schizophrenia would affect their interaction with the patient is a question worth investigating further in future research.

[26] On a scale from 1 to 10, 1 is most likely and 10 is least likely.

The findings so far have given us an account of the current demographic structure and etiological explanations of both a mental health professional cohort sample and their patients. Bhugra and Cochrane (2001) emphasize the importance of distinguishing between ethnic minorities and new migrants because they are seen as separate categories with different sets of needs and questions. Research in mental health and BME groups has not been very good at distinguishing such factors, but a distinction was made in the MHPV results. The next set of questions relates to the opinions of mental health professionals on differences, if any, in the content of symptoms by country of origin and/or ethnicity.

6.7 MHP's Take on Differences in the Content of Symptoms

The third section of the questionnaire looks at the reporting of the content of symptoms of schizophrenia. The main objective of the section was to answer some questions on the cross-cultural differences in content of the symptoms of schizophrenia from mental health professionals' perspectives. Chapter four also presented a qualitative meta-analysis that addresses the same research question but in a meta-review of the literature. Therefore, this set of findings serves as part of the triangulated method used to answer one of the main research questions of the thesis, which is to decipher the cross-cultural differences in the content of manifestations of schizophrenia. To answer this question, the informants were asked to look at the following symptoms in the MHPV questionnaire:

- Aggression and/or agitation

- Expression of religious delusions
- Expressions of delusions of persecution
- Hallucination types (auditory and/or visual)
- Disorganized speech frequency
- Disorganized behaviour- Catatonic displays
- Display of abnormal behaviour
- Negative symptoms (alogia, flattening or avolition)

For the eight symptoms mentioned above, respondents were asked to rate on a scale of 1 to 5 which symptoms they found to occur more, and which to occur less among non UK born patients[27]. The results also indicated that 19.7% of the participants found that expressions of religious delusions occur most often amongst non UK born patients. Expressions of delusion and persecution (17.1%) were second most common likely symptoms, and aggression and agitation (14.5%) third. 14.5% reported seeing no difference in the symptoms amongst non-UK born patients.

Thirty eight percent of the respondents reported no differences in the content of symptoms. The least likely factors to be different across groups were disorganized behaviour (13.8%), disorganized speech frequency (12.3%) and negative symptoms (12.3%).

[27] Scale: 1 as most likely and 5 as least likely.

The differences in the cultural signifiers of the display of symptoms are identified through the content of the manifestations of symptoms. By content, I mean the actual qualitative expression of symptoms of schizophrenia expressed by the sufferer. The content of schizophrenia is the step before the interpretation takes place where the patient's thoughts are still "intact". In other words, the content is not an interpretation. The content of the symptoms in pure form does not have any interference from the Other (the diagnoser in this context). The content of speech is usually translated into positive, negative or cognitive symptoms (National Institute of Mental Health, 2009) by the diagnoser.

In terms of whether there were any qualitative differences in the symptoms according to the same list, the three most cited differences found were expressions of religious delusions (19.2%), expressions of delusion and persecution (15.2%), aggression or agitation (11.9%) and display of abnormal behaviour (11.3%). The least likely differences in the content were reported to be negative symptoms (6%) among non UK born patients. This finding has been confirmed in the questionnaire as well.

The conglomeration of symptoms that makes up a diagnosis of schizophrenia requires an interpretation by the diagnoser. Therefore, to further decode the cross-cultural symptomatic differences, mental health professionals were asked to describe in more detail some examples of situations where non-UK born patients display symptoms that are qualitatively different.

Quote 1.

> "I believe that mental illness is closely associated with people's personal experience. For example, it appears that a person who has previous experience of torture in Iraq, particularly experiences thoughts of paranoia".

Quote 2.

> "Delusions are mostly expressed in what they believe in. For instance, a bloke (man) who was a soldier in Iraq believed secret services from his country were spying on him because he was Muslim".

In both quotes above, the mental health professionals have given examples of two patients diagnosed with schizophrenia who are from Iraq and who displayed thoughts of paranoia and delusions. They attest to the higher increase in paranoia due to the patients' personal experience of torture in the first instance, and to being a Muslim in the second. McKilmmons and Morisson (2005) and Morisson, Read, and Turkington (2005) have found that psychosis may be induced by traumatic experiences.

In the second example, the patient may have internalized the social problems that are facing Muslims nowadays in relation to terrorism, leading him to believe that he is being spied up on. Al-Issa and Tousignant (1997) report that, in France, the most common symptoms among North African patients are persecutory delusions, possible triggered by "racial prejudice and discrimination in France" (p. 140). Zonis and Joseph (1997) argue that although conspiracy thinking is ubiquitous across cultures, it is much more pronounced in Arab and Middle Eastern populations. They explain such variations

as due to differences in "child rearing practices, attitudes towards sexuality and the role of secrecy" (Zonis & Joseph, 1994, p. 443). A study done by Pasic, Poeschla, Boynton and Nejad (2010) in the United States gives an account of the Muslim patient and summarizes some of the clinical vignettes. In their paper, they mention that "culturally shared beliefs can be difficult to distinguish from delusions. For example, commonly-held ideas about the devil tempting human beings to wrongful ideas, feeling, and actions can be mistaken for first-rank symptoms of thought control or insertion, or passivity delusions" (Pasic, Poeschla, Boynton & Nejad, 2010, p. 40). The literature on Muslim populations and schizophrenia is scant. There appears to be very little work done on these populations.

The remainder of the responses from the MHPV questionnaire fits into two main themes. The first theme stands in relation to the cultural predilection of the content of patients' symptoms. Second, some attempts were made at explaining how language barriers may interplay in the clinical setting and ultimately affect the communication between the mental health professional and the patient. None of the two themes explored the differences in the content of symptoms but were opinions about the content of symptoms[28].

[28] Due to low response rates in the qualitative section of the questionnaire, no additional quotes could be synthesized.

6.8 Culture and the Content of Manifestations

Culture is an important factor to consider in the clinical setting as demonstrated in the MHPV questionnaire, but which I also confirm in chapter four. The content of symptoms that mental health professionals divulged in the questionnaire were all positive or first rank symptoms possibly because they do not see any large differences in negative symptom presentation. No illustration was given in relation to negative symptoms or cognitive deficits as a result of the illness.

One common theme in the mental health professional questionnaire was that the content of symptoms was an expression of patients' religious cultural beliefs. An interesting observation was that none of the examples that were shared had to do with White ethnic groups.

Quote 3.

> "Patients often present with culturally congruent delusions e.g. West Indian patients who ascribe experiences to obia (a form of voodoo) or a Somali patient who believes he is persecuted by djinn".

Quote 4.

> "My client from Cameroon puts a lot of her paranoid and hallucinatory experiences down to witchcraft".

Generally, patients who came from African nations referred to "pastor diagnoses", "evil spirits", the "djinn" and "witchcraft" in the explanation of their illnesses. As the quote above also indicates, Somali patients refer to the djinn, which is a common

Muslim belief. Evil spirits and witchcraft, which are also Christian beliefs that are prevalent in African countries such as Nigeria were commonly reported. Pastor diagnoses and spiritual healers are widespread and integral parts of many folk treatment systems in African countries.

Africa is a large continent, and one cannot assume that all African nations share the same beliefs. However, there is some evidence to suggest that there are urban and rural differences in religious or Western centric belief systems. There are also differences in terms of religious belief types. Muslim, Christian or other African religions ultimately express different signifiers in the content of their symptoms.

Also, mental health professionals reported that Afro-Caribbeans and West Indians express higher feelings of persecution and religious symbolism. According to Loewenthal and Cinnirella (2003), Afro-Caribbeans in Britain are often labelled with paranoid and religious symptoms. We also know that the meta-review supports these findings.

Quote 5.

> "I think there are more religious countries (such as India) where religion plays a role in mental health. From personal experience of family members, I have heard how they were not taken to GPs/Hospitals because the belief was that the person was suffering from a voodoo/black magic spell. I have also found out that my Uncle did used to have religious hallucinations and I think this is because like many Indians, his background was very rooted in religion".

In essence, the claims of the respondents lead to a common ground which is that first rank symptoms of schizophrenia are not uniformly expressed across different

cultural and ethnic groups. Negative symptoms appear to be transparent when considering cross-cultural differences in the content of symptoms. Second, what has been demonstrated is that the manifestations themselves are usually congruent with one's cultural beliefs. Hence, if one is brought up in a culture where voodoo or black magic is prevalent their positive symptoms will be coloured with such thoughts. As human beings, we are limited by our experiences and understandings of the world and therefore our thoughts, whether real or imaginary, will ultimately be expressions of what we know and experience.

Language Barriers

Another common theme that was less emphasized but still mentioned by mental health professionals was related to linguistic barriers between the patient and clinician when dealing with non English speaking patients. From a sociolinguistic analytic perspective, Marshall (1988) retained that there needs to be an adequate degree of what he calls "conversational cooperation" for a clinical interpretation to take place. Such cooperation is affected by multiple factors, one of which is linguistic communication.

Respondents in the MHPV questionnaire reported that they have encountered situations where a patient's frustration and agitation may be heightened due to language barriers between a patient and clinician or psychiatrist. This, then, increases the potential for a higher level of aggression and a higher likelihood for the patient to be misdiagnosed.

Mental health professionals also expressed a concern that there is a limitation to fully understanding their non-English speaking patients because of cultural and linguistic

barriers. One respondent added that "verbal and idiomatic expressions" found in other cultures "for instance, are not understood by UK workers". We can attest that the structures of languages differ across countries and in dyadic clinical settings such linguistic barriers are put to the test (Covington et al., 2005; Wierzbicka, 1999). In a study by Robert Barrett (2004), variations in the linguistic interpretations and translations of diagnostic assessment tool (Present State Examination[29]) between the English and Iban languages[30] were uncovered. To emphasize the differences in understandings of subjective discourses, English speaking clinicians understood the term "talking nonsense" by the Iban patients as thought disorder, whereas the Iban idiomatically explained it as a speech rather than thought interpretation (Jenkins & Barrett, 2004). The clinicians saw it as an internal thought mechanism while the Iban described it as something outside one's mind, an idea that seems incomprehensible from a Western perspective. Barrett (Jenkins & Barrett, 2004) concluded that the subjective experiences of people are based on language symbols and explained that "it has to do with the social stance adopted by the interviewer in relation to the person being interviewed and how this is signified through language" (Jenkins & Barrett, 2004, p. 94). The conglomeration of both the language of the diagnosed and the diagnoser quintessentially creates a personal interpretation and ultimately a diagnostic decision.

[29] For more information on the Present State Examination (PSE) assessment tool, see chapter 4.

[30] Iban are an indigenous population living in Sarawak, Malaysia.

The qualitative findings from the mental health professionals' reporting of the content of symptoms in this section allow me to conclude that when studying schizophrenia from a cross-cultural perspective, the only presentations that matter are the first rank symptoms. Negative symptoms and cognitive deficits are overlooked. Whether they are missed or whether there is just not enough differentiation between different groups is yet to be seen.

6.9 Limitations

As in every approach, there are pros and cons to using a particular method when gathering data. Specifically with cross-sectional surveys, the most difficult part of the data collection process is recruiting a sufficient number of people who volunteer to fill it out (Campbell & Machin, 2004). The goal of the study was to recruit at least 100 respondents to make better quantitative generalizations. However, response rates were based on voluntary participation and an email follow up correspondence, which lead to lower than expected response rates.

Snowball sampling can also be disadvantageous because it may only portray the views of a small sample. Therefore, one drawback to the sampling method is that it may not have been fully representative of the whole of London mental health services staff. The MHPV questionnaire was originally intended to be used within Central and Northwest London Mental Health NHS services and was to be sent to all NHS mental health staff, but due to the West London Mental Health Trust's ethical committee

constraints I was not able to commence within the timescale to finish the field work. As a result, I relied on the original snowball sampling results.

External validity, which is defined as when a sample is truly representative of the population, additionally needs to be considered. Because this study relied on snowball sampling, it may have led to lower external validity in comparison to other sampling methods (such as random sampling).

The benefit of an online questionnaire is that it makes it easier for people to answer if they are computer literate, but it leaves out those who prefer to use paper format. The main disadvantage of the online MHPV questionnaire is that it did not allow for an accurate estimation of the response rates. Also, another limitation to the study, as evidenced by the pilot testing, is that those participants who are themselves immigrants may have been more likely to partake in the study. As a result, the non-British born participants' views may have been over-represented.

Although the questionnaire was completed by 48 respondents, only 29 responses were eligible for the estimation of prevalence rates due to the way the results had been reported. Prevalence rates can only be viewed as an estimate, because of the small sample size of mental health professionals who have accurately responded to the questions (n= 29). More epidemiological research on this area in future studies is needed.

Now, it is apparent that the way the questions were asked served as a limitation because they allowed for the entry of inaccurate information as open ended questions. Some respondents inputted percentages rather than raw numbers, which did not allow

for further analysis, and as a result those respondents' answers were excluded from the estimation.

What one must also remember is that the results illustrate prevalence rates, which are a cross-sectional snapshot of the illness at a certain period of time (2008-2009). Incidence, on the other hand, may have provided a better picture on the new numbers of cases, but this was not performed in this survey. However, to study incidence, longitudinal studies would have been more appropriate. One must take caution when estimating prevalence rates for the sole reason that in cross-sectional studies the prevalence rates can only be measured at the time of the survey and not in advance (Campbell & Machin, 2004). Therefore, one can consider the estimates of prevalence rates of schizophrenia to be only a snapshot of the patients the respondents encountered between October 2008 to February 2009; it is not necessarily evidence of true prevalence rates of the entire population in the UK.

Another drawback to the estimates is the fact that the data ultimately depended on the memory of the respondents and may, as a result, not be fully accurate.

Interestingly, there were many responses into the category of North Africa which did not belong, there insofar as respondents included African Caribbeans and Jamaicans. Such additions were adjusted for, but it is important to note as it shows how clinicians generally categorize all Black ethnic minorities into the same group without realizing it. This is exactly where the mental health system and research have failed to be neutral in terms of studies on BME groups, as Sewell (2009) has argued. Another drawback to the study is that there seemed to have been a weak geographical understanding of the divisions between North, West and Southern African countries amongst the mental

health professionals, which may have led to the inclusion of more countries and the branching of Africa into more than just the North as reported in the tables. These errors, however, were adjusted for in the data analysis stages.

Initially, the study design was to interview and accompany psychiatrists to their patient consultations but due to NHS ethical restrictions this was not possible, which resulted in the creation of this questionnaire as another means of data collection. Although it has not been ideal in terms of epidemiological data collection, it still constitutes a scientifically valid form of an estimation of the current patient cohorts. It would have also been valuable to have psychiatrist answers alone because they are usually the main diagnosers in a clinical setting.

In the book *Mental Health, Race and Culture* psychiatry is labelled as "colour blind, culture blind" (Fernando, 2002, p. 132). What was revealed from the MHPV questionnaire results is that there is an awareness of cross-cultural differences among the mental health cohort, but the respondents had different trainings. Nursing seemed to have dominated the responses. Also, one cannot generalise from the findings to a larger population because of the relatively small sample size (n= 48).

6.10 Discussion

The purpose of this chapter was to seek an answer to an ongoing etiological problem in schizophrenia in the light of the already known facts. Through the use of the Giorgi method, which entails using the observed population as the main informants, the MHPV questionnaire answered questions about both the demographic composition of

schizophrenia patients and mental health professionals. Both patients and mental health professionals are seen as pivotal signifiers in the clinical setting, and hence, the rationale for including them as main informants. The MHPV questionnaire also included a qualitative explanation of the differences in the symptoms of schizophrenia, cross-culturally from a mental health professional's perspective. The position of unassailable authority of mental health professionals in the clinical setting attests to the importance of also understanding their background and opinions because ultimately their decisions are argued to have an impact on a diagnosis.

The chapter posited many research questions which were mainly divided into four main sections. The first section of the results found that from the mental health professional cohort studied in the questionnaire that there is a highly multi-cultural mental health workforce in London and its outskirts. A third of the mental health professionals claimed that their national identity was not British, suggesting high diversity among the workforce. This finding has also been validated by other studies in England (Ingleby, 2006). Yar, Dixc and Bakegal (2006) for instance, found that 33 % of the workers in London are non-White. Being non-White however, may mean that you are UK born but from a BME group. What it means is that there is high diversity in terms of ethnic minority status, but it does not apply to the non-British born generation. Based on the 2001 census, Yar and colleagues (2006) also found that 13% of the healthcare sector is born outside the UK, with the largest proportion coming from Asia, Africa and other European nations. Such findings, however, include dentists and midwives possibly explaining why the results are dissimilar to what was found in the MHPV questionnaire. Another possibility may be due to selection bias of the MHPV study. It is possible that

there was an over-representation of migrant mental health professionals in the study. Additionally, there was a statistically significant correlation ($p<0.05$) between country of origin and demographic shifts evidenced over the last year. Those who were not UK nationals reported to have seen more demographic shifts in their schizophrenia patient cohorts in comparison to UK nationals.

The second most prevalent second language spoken among mental health professionals was French. This increased linguistic diversity may signal either a strength or a weakness in the mental health system, for two reasons. It may serve as a buffer when it comes to dealing with patients from the same background as there would be a better cross-cultural understanding of linguistic symbols, values and behaviours displayed in the illness. But it may also be a disadvantage when a clinician is encountered with a dissimilar culture and language, possibly leading to misunderstandings and misattributions in the symptoms displayed, as has been argued in the theoretical underpinnings of the thesis and as we saw in the meta-synthesis (chapter four).

The second theme in the results was aimed at estimating the prevalence of schizophrenia patients who are non UK born migrants from the following three regions: Central and Eastern Europe, Africa and the Middle East. With a total number of 419 identified patients diagnosed with schizophrenia, it was found that patients born in an African nation had the highest prevalence estimates in comparison to Middle Eastern and Central and Eastern Europeans. 22.43% were estimated to be African patients, followed by 6.68% from the Middle East and Afghanistan and 4.52% from Central and Eastern Europe. The findings deserve more attention, because what they seem to have in common from the findings in the chapter revealing Brent's schizophrenia patients is that

the highest diagnosis was found among all Black ethnicities, whether UK born or non-UK born. Somali groups in West London seem to have been the most reported country in North Africa.

Middle Eastern and Central and Eastern European populations have been transparent groups and the findings are presented as new knowledge in the literature. As far as I know, there have been no studies that have examined Middle Eastern populations diagnosed with schizophrenia. As for Central and Eastern Europeans, the only study known was in 1980 by Hitch and Rack. In their findings, it was found that there was a considerably high rate of schizophrenia diagnoses among Polish patients in Bradford, UK. The rates were higher than UK born patients, suggesting that a reason for this may be lower social cohesion among that group (Hitch & Rack, 1980).

The last section of the MHPV questionnaire revealed the opinions of mental health professionals in relation to the aetiology and differences in content of symptoms of schizophrenia from a cross-cultural perspective. Such vexed questions have been directed at the respondent cohort in an attempt to uncover the opinions and also to find out if there are any new themes that may emerge with reference to the new migrant populations. Generally, the mental health professionals in the sample confirmed that they have seen a change in the demographic composition of their schizophrenia patient cohorts. There was also general agreement that migrants are more likely to develop schizophrenia. This finding has been established by many studies over the last two decades (Bhui, Stansfield, Hull, & Priebe, 2003; Burnett, et al. 1999; Cantor-Graae & Selten, 2005; Carter, Schulsinger, Parnas, Cannon, & Mednick, 2002; Fearon & Morgan 2006; Hitch & Rack, 1980; Jarvis, 1998; Littlewood, 1992 Morgan et al., 2006; McGrath,

2004). As anticipated, respondents also added that Black Caribbean groups, Mixed Black and Black Africans were the most likely groups to be diagnosed with schizophrenia in the UK. The least likely groups were reported to be Chinese and Other Mixed groups. Teasing out the intricacies of this known but complex fact, this finding enables one to contemplate whether this belief affects the higher likelihood for a diagnosis and serves as a preconceived notion.

The most likely reason that was agreed upon among the cohort for higher schizophrenia prevalence and incidence among non- UK born patients was that they experience higher levels of trauma and family dysfunction and more social deprivation. The least likely reported reason was in relation to language barriers between patient and psychiatrist.

The last section of the questionnaire was more qualitative and discursive. The respondents were asked to measure and report on the cross-cultural differences of the content of symptoms of schizophrenia. More than half of the cohort (63%) confirmed that there is a qualitative difference across different cultural groups with the most pronounced differences to be first rank or positive symptoms. Religious delusions and persecutory thoughts were suggested to be the most salient cross-cultural differences in relation to the content of schizophrenia symptoms, with non UK born patients to be more likely to display such symptoms. The least likely differences were attributed to negative symptoms of schizophrenia. The results tell us that mental health professionals clearly see differences in psychotic manifestations but not in depressive symptoms or cognitive deficits. Another finding that is worth noting is that the only reported examples

in the differences of the content of symptoms were in relation to Black groups, whether from the Cameroon, Somalia or the West Indies.

CHAPTER SEVEN

DISCUSSION OF FINDINGS

7.1 Definitional Limitations: Race, Ethnicity or Culture?

It has already been demonstrated in the previous chapters that Britain today is a highly multi-cultural society. This multiculturalism highlights the importance of distinguishing between the terms ethnicity, race, and culture, which have been used as a tool to compare populations. Mental health data collection methods that the NHS relies on have customarily used ethnicity as an indicator to distinguish between the different groups in the UK. Effectively, it should be noted that the use of each term in itself leads to a set of methodological and conceptual problems that need to be addressed.

Sewell (2009) finds that race is a biogenetic divide that is no longer scientifically accepted as a category. Ethnicity or ethnic minority is characterised by one's group identity or origin of descent (Fernando, 2002; The University of Warwick, 2006). The term ethnic minority according to Bhopal (1997) reliably states a disadvantage over other populations and often, inferiority. Following the same lines of logic, Bhopal (1997) finds that White ethnicities are usually considered the gold standard that all other populations are assessed by, hence creating the belief that ethnic minorities are less healthy than the norm, i.e. Caucasians. For that reason, using ethnicity alone as an indicator cannot add any new knowledge, but only confirm preconceived health disparity stereotypes.

Multi-cultural Britain cannot be simply understood in such a fashion because ethnicities are dependent on the person's own fluid definition. The French government statistics bureau, for example, does not use ethnic categories while collecting health data from citizens, but as a substitute asks about the citizen's country of origin or place of birth. They find that it allows for a better identification of cultural differences via nationality (or nationalities) rather than the use of race, ethnicity or culture. In this dissertation, the same approach has been adopted to achieve better research findings. However, the attempt at fully shying away from using these terms is impossible because of the way that information about one's heritage or country of origin is traditionally collected by the NHS. It is therefore, accurate to say that as a limitation, ethnicity in the quantitative statistical analyses served as an alternative to culture.

To use ethnicity or race as categorical variables in the methodology lends to vague conclusions because it creates categorisations that are unable to explain or identify qualitative differences even among one ethnicity. Such black box epidemiology has caused a surge in confirming knowledge which has been shared in the quantitative data analysis of this dissertation. What psychiatric epidemiology needs to achieve at this point is to look beyond these 'racialised' research categories.

Ethnicity is also fraught with unreliability because its definition is based on lineage, which is not usually indicative of the same culture. Asian ethnic minorities, for instance, are comprised of many subcultures such as Indian, Bangladeshi, or Pakistani. Cross-cultural differences are thus apparent even within one ethnicity. For that reason, the term ethnicity was utilized at different stages in the research but without entirely relying on it.

Culture is an implicit and explicit term, according to Srivastava (2007), which comprises of two layers. The first layer is related to one's behaviour and representation seen by the outside world, while the second layer is related to one's values and core beliefs. Lopez and Guarnaccia (2000, p. 573) have defined culture as "values, beliefs, and practices that pertain to a given ethnocultural group" which is an ongoing process, or "a system of in flux". This suggests that it is almost impossible to measure culture with complete validity (Fernando, 2002). One can agree, therefore, that culture is a fluid concept that may be modified over time, making it an unreliable concept to rely on in and of itself (Kagawa- Singer & Kassim-Lakha, 2003; Kleinman & Benson, 2006).

7.1.1 Ethical Constraints

Due to NHS ethical concerns, the data collection methodology was limited. I originally set out to perform research by proposing to use anthropological observational techniques within the psychiatric wards in Central and Northwest London. I was convinced that the only way to develop further evidence based findings was by ethnographically observing dyadic interactions between the diagnosed and the diagnoser. It would have been ideal to shadow clinical consultations and to analyse the content of clinical case notes of schizophrenia patients to make sense of the interpretations that are made. By deconstructing patients' case notes and accompanying psychiatrists on patient consultations it would have further enriched our understanding of the relationship between culture, symptoms of schizophrenia and the interactions that take place between the clinician and the patient. I aimed at extracting cultural markers

within the clinical interactions that led to a diagnosis and to assess their relevance for meaning in the portrayal of symptoms. However, the NHS ethical review board did not recommend this strategy as it might threaten patients' and clinicians' confidentiality as a non-NHS employee. Therefore, I reviewed the strategy and used methodologies that were less intrusive, although I am aware that it served as a drawback to the research findings.

I came across some studies in non-Western countries in which anthropological research was conducted in psychiatric wards that presented more discursive richness in the observations because of the less rigorous ethical constraints. I have come to the conclusion that ethical review boards, as they stand today, may be severely limiting the types of studies one may perform in the UK. This also explains why the systematic review revealed similar methodological patterns of studies on schizophrenia which were very quantitative in nature.

It was reported by a study on international review boards (IRBs) that there was agreement amongst scientists that there is much "focus on participants' rights to the neglect of scientific merit" (Spiegel, Koocher, & Tabachnik, 2006, p. 67). Qualitative studies are usually seen as more intrusive as they require more contact with patients and clinicians, but if performed with ethical standards in mind, they should not be discouraged as they may generate a more profound body of evidence explaining the relationship between the nature of schizophrenia and culture.

This brings me to the conclusion that there is a lack of qualitative studies that observe interactions between schizophrenia patients, their carers and mental health

professionals. I suspect that the reasons for that are twofold. The first is that due to the dominance of the medical diagnostic system where, in essence, psychiatric knowledge serves as the bible of mental illnesses it has resulted in scant funding to be geared towards understanding schizophrenia qualitatively. Second, ethical committees in the last four decades have dramatically become more concerned with confidentiality and ethical adherence, limiting innovativeness in research strategies, as already mentioned.

7.1.2 Other Limitations

According to the latest revisions of the National Institute of Mental Health (2009), schizophrenia is defined in terms of three distinct features, which include positive, negative and cognitive symptoms. The thesis has produced an in depth analysis of cross-cultural differences comparing positive and negative symptoms, but has not delved into cognitive deficiencies. Cognitive symptoms are defined as a loss of focus, poor executive functioning and problems with memory (National Institute of Mental Health, 2009). These symptoms may manifest in a wide range of people suffering from mental illnesses which are not only apparent in a schizophrenia patient. Cognitive deficiencies are also prevalent in people suffering from symptoms of depression, for instance. It has not been found that there are cognitive functioning differences when comparing groups cross-culturally, and for that reason, it was not seen as worth investigating further. Moreover, it is essential to note that this thesis was based on revealing, decoding, and comparing symptoms across cultures. I did not aim at tackling the multitude of therapeutic techniques or medications which, in fact, requires a whole new set of theoretical assumptions.

The psychiatric diagnostic tools of schizophrenia in the meta-narrative and the quantitative data analysis were varied. The systematic review relied on diagnostic measures that are used worldwide (SCID, BPRS, PSE, RDC, CATEGO, PANS), while the quantitative analysis data did not look at which assessment tool was used with NHS patients as that data was not available. Although the aims were different in each of the studies, it attests to the multitude of diagnostic assessments in psychiatry which can be said to result in a lower reliability in the findings as schizophrenia was diagnosed by different sets of criteria. In other words, the danger of defining and studying schizophrenia cross-culturally is that there are many diagnostic assessment types, which may be factored in as a drawback.

7.2 Discussion of Findings

Throughout the thesis, I set out to explore the relationship between culture and schizophrenia from different avenues. Below I re-introduce the reader to the study goals and then I shift my attention to the conglomerated findings.

In chapter four, I explored how mental health clinicians explain and understand schizophrenia diagnosis amongst their patients from other cultures. In chapter four, I also discussed the findings from the meta-review on the clinical differences of the manifestations of schizophrenia, cross-culturally.

In chapter five, I described demographic, clinical and socio-cultural indicators in a cohort of schizophrenia patients in Brent by ethnicity to determine whether the theory of ethnic density is true for Asians, African-Caribbeans and Whites in Brent. I also estimated

mental health practitioners' patient case loads to estimate the prevalence of schizophrenia in patients born in Central and Eastern Europe, North Africa, and the Middle East in chapter six.

In this chapter, I first describe the main epidemiological and demographic findings. I then move to a synthesis of the findings to construct a more intricate discourse on the relationship between culture and schizophrenia. Finally, in the last chapter, I provide novel recommendations to the UK mental health system based on findings in this thesis.

7.2.1 Epidemiological Results

A- Schizophrenia is still statistically overrepresented in all Black groups, including first generation immigrants from the African Diasporas, even when compared to Eastern European and Middle Eastern patients. Whether Kenyan, Trinidadian, or British born, the findings have confirmed that Black ethnicities are most likely to be presented with a diagnosis of schizophrenia in London and its outskirts. 46% of the NHS mental health cohort diagnosed with schizophrenia was Black, with an overrepresentation of males to females. Epidemiologically, 2 per 1,000 Black minorities are diagnosed with schizophrenia in Brent while Whites experience 5 per 10,000 and Asians only 2 per 10,000.

In a systematic review by Leung and Chue (2000), it was suggested that gender differences in schizophrenia are explained by the earlier onset in males and by neuro-developmental differences. Females have also been reported to have a greater responsivity to medication, which means that they generally require less time being hospitalized than males (Leung & Chue, 2000).

The MHPV questionnaire results confirmed that first generation immigrants from Africa constituted 22% of the schizophrenia case load of mental health professionals at the time of the questionnaire dissemination in 2008. That was followed by 7% who were Middle Eastern and Afghani, and 5% who were Central or Eastern European. It was found that a third of schizophrenia patients were first generation migrants.

There was no evidence to suggest that Central and Eastern Europeans, Middle Eastern, or North African groups are more often presented with a diagnosis of schizophrenia. This does not mean that there was not an increase in the cohorts who have developed schizophrenia over the last decade, but in comparison to other immigrants, the percentage seems to have been most pronounced in African born patients. As the methodology used was a cross-sectional questionnaire, it was not possible to measure the changes of these groups over time, but it was only possible to compare groups[31] over the same period of time.

African-Caribbeans, who are not necessarily first generation immigrants, also outnumbered other ethnicities in terms of the percentage of schizophrenia diagnosis. This finding is already a landmark in cross-cultural psychiatry (Bhugra & Bhui, 2001; Cantor-Graae & Selten, 2005; Jarvis, 1998; Morgan et al., 2006; Neighbors, Trierweiler, Ford, & Muroff, 2003) but it has been reconfirmed in this research project. What is more

[31] In a longitudinal study, it would have been a better indicator of changes over time for the immigrant groups.

interesting is interlacing the two findings from the NHS cohorts amongst the groups most affected by schizophrenia.

Etiological explanations for first generation African immigrants and African Caribbeans in their experience of schizophrenia are multifaceted, each with their own set of concerns. Mental health professionals who took part in the study attributed the reason for immigrants to experience more schizophrenia than British born populations as due to trauma and migratory stress, poverty, and a higher biological predisposition. The effects of migratory stress and trauma are highly unlikely to explain these results because Middle Eastern populations and Afghanis may have also encountered tremendous trauma prior to them settling in the UK, as we have seen in chapter six. Low socio-economic status, on the other hand, is not only a phenomenon related to schizophrenia but is a ubiquitous feature that affects all mental illnesses, as was evidenced in Brent.

African Caribbeans diagnosed with a mental illness in Brent resided in the highest deprivation areas in the NHS cohorts. However, there was no way to establish whether Africans were more financially underprivileged than other first generation immigrants. Genetic predisposition as an explanation has already been refuted by previous findings which have shown that in one's country of origin, high risk groups did not actually have higher schizophrenia rates but is rather an occurrence that only takes place in their host country (Hickling & Rodgers-Johnson, 1995; Selten et al., 2005). This tells us that we need to juxtapose the question as to why the actual physical appearance, which is the only common denominator between African immigrants and African Caribbean British patients, foreshadows a high schizophrenia diagnosis.

***B- Schizophrenia's strong inception in second generation migrants*.** In distinguishing between first, second, and third generation schizophrenia patients, it was revealed that second and third generation migrants are the most likely group to be diagnosed with schizophrenia. Such a finding implies that there are processes taking place related to the adjustment and the lifestyles of people who immigrate to the UK and not in relation to the stress of migration. It brings forth two theories that have been scantly researched so far, which are racism and acculturation.

As previously mentioned, the argument that culture may have accounted for such a finding cannot explain the findings because one cannot possibly agree that all Black ethnic groups share the same culture. The explanations that remain to be seen are in relation to the experiences of Black ethnicities in the UK leading to a higher susceptibility to a diagnosis of schizophrenia. Such experiences could be the institutional racism, social alienation, or acculturation into the mainstream society (Berry, 1980; LaFramboise, Coleman, & Gerton, 1993). Although it was not possible to measure whether institutional racism was a factor, it has been claimed in a mental health report in Australia that there is a positive correlation between mental health and racial discrimination (VicHealth, 2009). In the UK, it was concluded by Karlsen, Nazroo, McKenzie, Bhui and Weich (2005) that African-Caribbeans experienced the highest racial harassment, followed by Pakistanis and Indians, Bangladeshi, and Irish groups. The problem in its identification is that it is a latent behaviour that is difficult to measure or observe. Fanon's (1986) theoretical standpoint behind racial discrimination also supports this idea that due to an imagined White superiority in European countries, Black groups have subconsciously

created a protective bubble around them which has led to higher levels of alienation, leading to a higher proneness to mental illnesses.

Bhugra (1999) has found that African Caribbeans in the UK have lower social supports, more isolation and poor confiding in others. They also encounter higher unemployment rates, which Bhugra (1999, p. 196) finds to be the "prime candidate to explain the excess incidence of schizophrenia" amongst this ethnic group. If that were the case, future studies should be comparing Black ethnic groups in terms of employment status and social isolation to find out whether there are any differences across the ethnicities, which may clarify the reason for schizophrenia's high incidence rates amongst these groups.

The most recent theories behind the onset of schizophrenia start with an exploration of the level of acculturation of migrants with the mainstream society, which are evidently justified in relation to environmental and psychosocial adaptation. According to this theory, the more acculturation takes place, the more likely one is to experience a higher rate of schizophrenia (Koneru & Weisman, 2006). In other words, the stresses of acculturation may effectively lead to a higher susceptibility to schizophrenia. Koneru and Weisman's (2006) study was done in the United States and may be seen as one of the first attempts at understanding the relationship between the level of integration and schizophrenia. In relation to the UK, the stresses of acculturation need to be examined further to test whether it might partly explain why Black groups encounter more schizophrenia than other groups.

Acculturation is also related to speaking the language of the mainstream society (Singelis et al., 2006). Folsom et al. (2007) found that English speaking Latinos had an increased onset of schizophrenia, while Spanish speaking Latinos suffered more depression. Acculturation and exposure to an indigenous culture may serve as a protective factor, as there is a higher chance of an insular lifestyle and increased social cohesion (Sharpley & Peters, 1999). Therefore, similar to African Caribbeans in the UK, once assimilation into the mainstream culture takes place, the more likely schizophrenia may develop.

A published case control study by Veling, Hoek and Mackenbach (2009) tested the association between schizophrenia and ethnic identity and found that schizophrenia patients had higher negative ethnic identities compared to a control group comprised of other hospital patients. The conclusions were that negative identification with one's ethnicity may exacerbate a higher risk of schizophrenia. If Moodley and Palmer's (2006) theory of covert racism amongst Black migrants leads to internal conflict and thus, a type of self deprecation, then it is not surprising that ethnic identity leads to distress and thus a higher risk of mental distress.

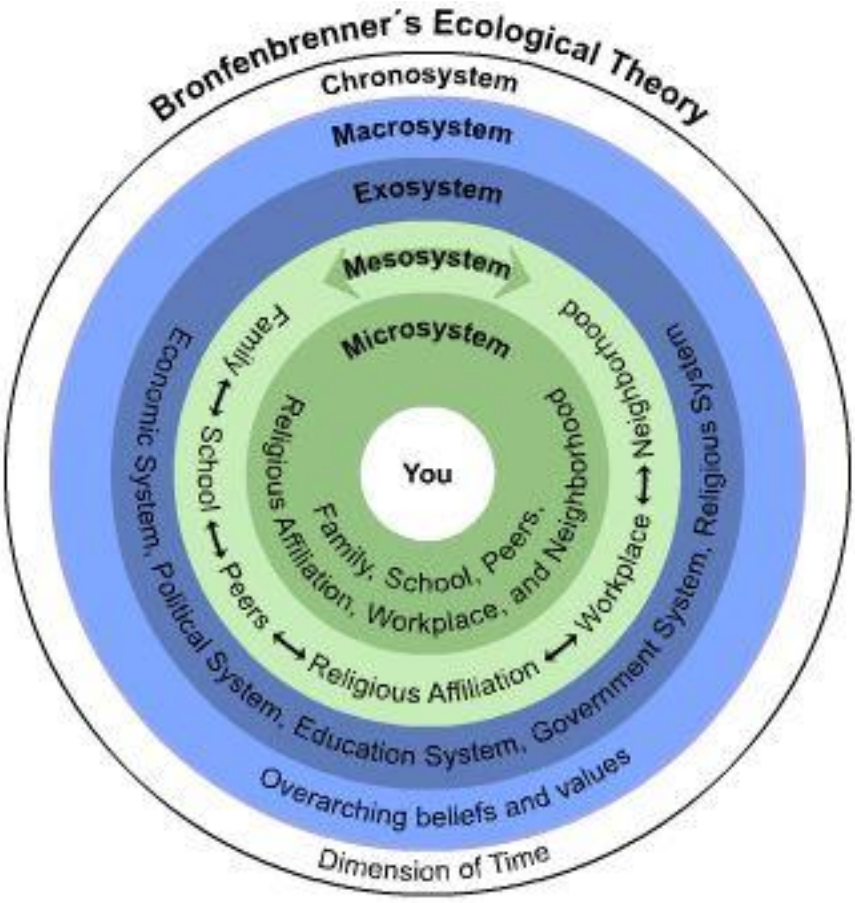
However, one should not fall into the trap of understanding schizophrenia's aetiology through only one theory because of its multifaceted nature. I call on future studies to investigate identity, acculturation, and schizophrenia to examine the nature of these relationships more profoundly.

C- Ethnic density was supported in Asian groups. The theory of ethnic density asserts that the higher the ethnic concentration of a group in a particular geographic setting, the

less likely its members are to develop schizophrenia. The reason ethnic density acts as a protective factor is because the ethnic concentration creates social supports and bonds within one's cultural milieu. Bronfenbrenner's (1990) ecological systems theory appears to complement ethnic density. Although this model has been traditionally used to explain children and their relationship with the outside world, I also connect it to a schizophrenia sufferer who effectively has the same stages, although each stage differs in its interactions. This model was achieved with the belief that all of the systems above have expected norms and relationships within each stage, and that each person will change these interactions based on the context.

According to the ecological systems theory (figure 14), social interactions are made up of a multitude of layers which are the microsystem, mesosystem, exosystem, macrosystem and the chronosystem. The microsystem is the layer in which a person communicates with one's immediate surroundings that includes interactions with one's close family and friends. The mesosystem is the layer of society where connections are made between one's immediate surroundings and the rest of the community, which could be for instance, the relationship between the carer of a schizophrenia patient and the carer's membership of the church. Exosystem refers to the larger social system which does not directly involve the person, but in which the forces of society indirectly influence one's life.

Figure 14. Bronfenbrenner's Ecological Model



Source: http://faculty.weber.edu/tlday/human.development/ecological.htm

The next layer, or the macrosystem, consists of one's culture, customs, and values in which the person shares or does not share with the rest of the community. Chronosystem is lastly more about the timing of major life events as it relates to the timing in one person's life (i.e.: death of a spouse).

In the medical model, some studies have suggested that contact between contact with close family and friends may predict the relapse of a psychotic episode in schizophrenia. Expressed emotion, or emotional over involvement, has been found to trigger relapse in schizophrenia. Studies on expressed emotion attest to such factors in

relation to schizophrenia, where it has been found that the higher the expressed emotion of close family or carers, the higher the likelihood of an onset (Bertando et al., 1992; Butzlaff & Hooley, 1998). In short, the more damaging one's relationships are within the microsystem, the more likely one risks developing a mental disorder.

In medicine, psychology, and psychiatry, attention has been paid to this layer of society that is called the microsystem, whilst the other structures have been poorly studied as socio-environmental concepts. The theory of ethnic density brings light to the argument that the outer layers of Bronfenbrenner's ecological systems theory are more indicative of the wellbeing of a person. The mesosystem, exosystem, and macrosystem are all bi-directional influences which also have a potent influence on one's mental wellbeing (Bronfenbrenner, 1990).

It was found that in areas where there is high ethnic density in Brent, there is a lower incidence of schizophrenia for Asian, Black and White ethnicities. Bhugra (1999) explains the findings by suggesting that Asians develop more family social bonds which is likely to have created for them higher social capital, which effectively decreases their chance of an onset of schizophrenia or serves as a protective factor.

Evidence from a study of Asian and White groups has found that generally Asian families (and mostly Pakistani Muslim families) have higher expressed emotion (EE) in comparison to White families (Hashemi & Cochrane, 1999). If EE is higher in Asians, then the interactions on the level of the microsystem cannot account for ethnic density as a buffer for schizophrenia. A study by Fiore, Becker and Coppel (1983) contradicts Bhugra by asserting that in fact, social interactions may be a stressful rather than a protective

factor. This suggests that only using the microsystem to explain ethnic density is insufficient. There must be other factors interplaying at the mesosystem, exosystem, and macrosystem layers that are more likely to explain schizophrenia's epidemiological ethnic differences.

In a meta-analysis performed by McKenzie, Whitely and Wiech (2002), it was suggested that there is no adequate evidence to explain the onset of a mental illness using social capital. De Silva, McKenzie, Harpham and Huttly (2005) add that the model of social capital does not always work in the same manner with all mental illnesses and therefore, it necessitates more research that looks at specific diagnoses. In this instance, one would propose for more research to be undertaken to test whether social capital may indeed serve as a buffer from the onset of schizophrenia.

African-Caribbeans were the only ethnic group in Brent that were not supported by the theory of ethnic density. There was evidence of a high rate of schizophrenia among NHS inpatient and outpatient settings even in geographical locations where there was a high proportion of African-Caribbeans living in the area (Harlesden). This is anticipated, however, because Bhugra (1999) found that African-Caribbeans have been suggested to experience more social isolation, less social supports, and more pronounced unemployment rates. This may indicate that there is lower social cohesion as a group, even when ethnic density is high. In that sense, this means that there are weak or unstable bonds being formed within the different outer layers of society (mesosystem, exosystem, and macrosystem) that are ultimately affecting one's wellbeing.

This brings me to the assertion that it is not sufficient to explain schizophrenia's incidence and prevalence only looking at the microsystem because in reality all of the components and structures of society influence each other, as the theory of ethnic density has confirmed. If a person has a supportive nuclear family (microsystem), but has weak bonds on the mesosystem and exosystem layers, it does not shield from developing schizophrenia. When societal and environmental triggers within the microsystem and macrosystem homogenize, they may lead to a susceptibility to an onset of schizophrenia.

Franz Fanon's (1986) work explores race relations from a historical and political standpoint, where he conjectures that because of the indirect historical effects of colonization and Eurocentric imagined superiority, Black immigrants have developed alienation and a subconscious low self worth, which all work at the outer layers of Bronfenbrenner's ecological systems theory. The outer layers therefore, give culpability to the interactions that take place within the community and society, where a social dysfunctionality may be taking place. This means that as social scientists, we may want to start borrowing sociological and anthropological theories. Answers will only be uncovered once more intricate webs of knowledge are established between the interlacing of social interactions and schizophrenia. Therefore, apart from looking at the microsystem of a schizophrenia patient, one must look through interactions that take place at the mesosystem, and exosystem. I next explore the relationship between culture and schizophrenia, which takes place on the macrosystem level of society.

7.2.2 Clarification of the Relationship between Culture and Schizophrenia

Perhaps the most novel findings of this thesis are found in the clarification of the relationship between schizophrenia and culture. The findings have all suggested that cultural conceptions of both patients and mental health professionals influence clinical interactions, which may lead to implications of unintentional bias in research and clinical practices. One should have come to the conclusion so far that cross-cultural epidemiological findings on schizophrenia are already well-known. What is lacking in profundity is an understanding of the relationship between culture and schizophrenia in intra-culturally diverse London. As such, this confirms the need for more consistent qualitative systematic research that bridges the gap in our understanding of the relationship between cross-cultural differences and schizophrenia (Neighbors, Jackson, Campbell, & Williams, 1989). In more detail, what is absent is a more insightful conceptual framework that enmeshes culture into the nosology and aetiology of schizophrenia. The anthropological and sociological presence in the interpretation and synthesis of findings in this thesis that have been used to explain and develop symptomatic differences are its main strengths. Such an approach has led to the generation of the dyadic interplay model that correlates not only the culture of the patient, but also the mental health professional's socio-demographic background into our understanding of the creation of schizophrenia. Mental health professionals are seen as integral to the understanding of schizophrenia's etiologically known theories, which I have affirmed in the findings. It has been suggested that triangulating ethnography, epidemiology, and clinical interpretations result in significant contributions. In other words, one may declare that "culture, as a subject matter is no longer solely within the

purview of cultural psychologists, psychiatrists, and anthropologists. It is now the subject matter of all users of DSM-IV and policy makers and mental health researchers worldwide" (Lopez & Guarnaccia, 2000, p. 578).

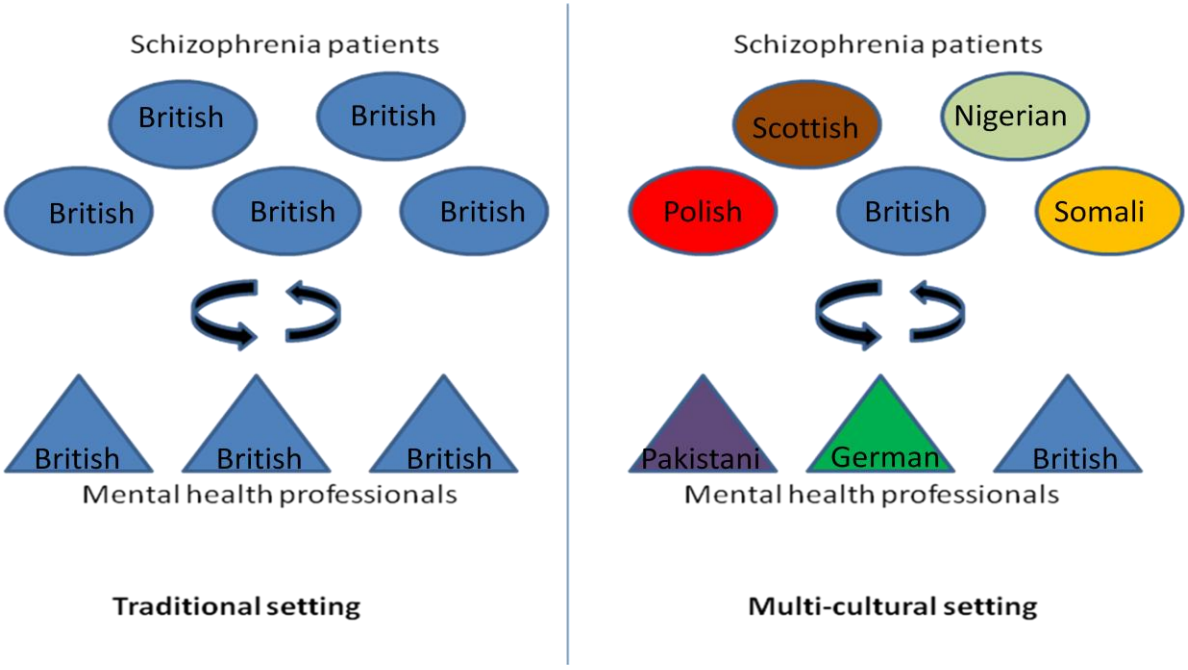
A- There is evidence of intra-cultural diversity in today's clinical setting. Culture is also central to schizophrenia's aetiology and nosology because globalization has become a main feature of societies in the developed world. A shift in the cultural composition of mental health professionals and patients has been identified in the MHPV questionnaire: 31% of mental health professionals identified themselves as non-British nationals. However, such information is not surprising as the Office for National Statistics (2009) has effectively demonstrated that there has been an overall surge of inward migration in the past nine years to the UK.

It was also confirmed that mental health professionals experienced a surge in first generation migrant patients diagnosed with schizophrenia in their practice over the past five years. This multi-cultural clinical setting has thus led to cross-cultural dyadic interactive processes that are entangled with cultural signifiers. In the traditional setting in the UK, schizophrenia patients and clinicians were from the same cultural background, but nowadays, the pattern seems to have shifted.

The salience of establishing cultural connections between mental health professionals and patients is reinforced by Cape, Antebi, Standen and Glazerbrook's (1994) study in which psychiatrists validated that clinical impressions are weighing more than the actual diagnostic assessments used for a schizophrenia diagnosis. This

fundamentally maintains that clinical impressions and interactions in treatment are considered an imperative component in the heterogeneity of schizophrenia, which has usually been overlooked and underweighted in mental health treatment and care.

Figure 15. Comparison of Traditional and Multi-Cultural Settings



The traditional clinical mental health location takes place in a setting where interactions between the patients and the mental health professionals use the same cultural symbols, the same language and a similar world view. Cultural similarities make interactions in such a setting easier to make sense of and relate to. Multi-cultural settings contain rich cross-cultural interactions because evidently there is a multi-culturalisation of the patient and clinician cohorts. A clinician from Mauritius might be treating a patient from Senegal, or a clinician from Jamaica might be treating a Caucasian English born patient.

Patients' symptoms are argued to represent themselves as a manifestation of one's concern of their world view (Bentall, 2004; Olugbile et al., 2009), one that has been inbuilt by one's cultural upbringing. Mental health professionals' world view in turn, also affects the way that they interpret, treat, and care for a patient (Moodley & Palmer, 2006). A paranoid expression, for instance, has been reported to represent "an exaggeration and distortion of the normal state" which may also seem to be "reflective of prominent themes or unresolved problems in that culture" (Katz et al., 1988, p.352). In that sense, suppression of the self in certain cultures may manifest through the display of psychopathology in schizophrenia.

The traditional setting is found in countries where there is a low influx of migration and a fairly homogenous society. In the traditional setting, mental health professionals and their patients fundamentally share the same world view whilst in a multi-cultural setting patients and mental health professionals are culturally diverse and thus, share dissimilar world views. The MHPV questionnaire confirmed that mental health professionals viewed the symptoms of patients ultimately to be rooted in the patient's cultural world view. The preponderance of the evidence from the meta-narrative also suggests that there are apparent cultural markers in schizophrenia's symptoms.

The qualitative systematic review also found that when clinicians were not of the same ethnicity of the patient, they were less likely to have insight into their patient's symptoms. Tranulis, Corin and Kirmayer (2008) have referred to this phenomenon as cultural distance. In a study by Maslowski and Mthoko (1998), Black patients were reported by clinicians to have 'bizarre' symptoms. If there was no cultural distance or

high cultural congruence, then one would juxtapose the question as to whether the term bizarre would be used as an identifier of an indication of a symptom of schizophrenia. Bizarre is relative to the experiencer, and relates to cultural or personal unfamiliarity. The higher the unfamiliarity, the more likely that behaviours, actions, or unfamiliar physical appearance might be interpreted as bizarre by the other (in this case, the mental health professional). Horwitz (2002), Kleinman (1991) and Payer (1989) have recognized that when culture is not understood, differentiating between a cultural belief and a schizophrenia symptom may be problematic in diagnosis and treatment.

Lewis, Croft-Jeffreys, and David (1990) moreover found that patient's ethnicity impinged on clinical predictions and attitudes of clinicians when given the task to diagnose patients displaying positive symptoms. African Caribbeans were more often diagnosed with reactive and cannabis psychosis whilst Whites were diagnosed more often with schizophrenia[32]. This ascertains that the creolization of the clinical setting should no longer be taken lightly. The conclusions made herein are additionally patterned by studies that have found differences in diagnoses across countries.

The weakness in the reliability and objectivity of a schizophrenia diagnosis that has been confirmed in the literature conjures up the same conclusion (First, Spitzer, Gibbon, & Williams, 1997; Skre, Onstad, Torgersen, & Kringlen, 1991; Williams et al.,

[32] Bipolar disorder was not tested as a choice of diagnosis, which may have skewed the results as research has suggested that it is usually more often diagnosed in White patients. However, the point is that there are differences in diagnoses across ethnicity and not what the diagnosis itself was.

1992). Fluctuations in the reliability of schizophrenia could be exacerbated by cross-cultural differences, which should be the focus of future studies on schizophrenia. In essence, the social reality of the current demographic shifts in London has led to the multi-culturalisation of clinical interactions, which should lead to substantial implications for the future of mental health in the UK and elsewhere. Not only will understanding these dyadic interactions (namely, the schizophrenia patient and mental health professional) be vital to uncovering how the effects of the creolized society are currently creating the clinical dynamics and interactions, but may also provide insight into achieving higher diagnostic reliability, better care, and treatment to immigrant and ethnic groups.

B- Schizophrenia's cultural signifiers are enmeshed in dyadic interactions. The obscurity of psychiatric epidemiology is the tendency for it "to treat various demographic, premorbid and post inclusion variables as if they are culture-free" (Edgerton & Cohen, 1994, p. 228). Conventionally, schizophrenia has been recognized as the patient's problem. It has not yet become the norm to see clinicians as emotive beings that understand the world through their own experiences. Clinicians' own cultural signifiers uniformly weigh the patient's own culture in patient treatment and diagnosis.

Psychiatrists are traditionally viewed as objective persons who interpret symptoms based on what they observe from the patient. In reality, it is not as simplistic because of the nature of displays of mental distress that are entangled with one's life experiences, culture, and symbolic interactions. It is not a unilateral process because it

relies on one's ability to best explain the manifestations by understanding the history, personality, and the culture of the dyad. Clinicians are validated as professionals who do not use their pre-existing beliefs or their own culture for that matter; they are viewed as a tabula rasa in terms of preconceived notions, but erudite when it comes to medical knowledge.

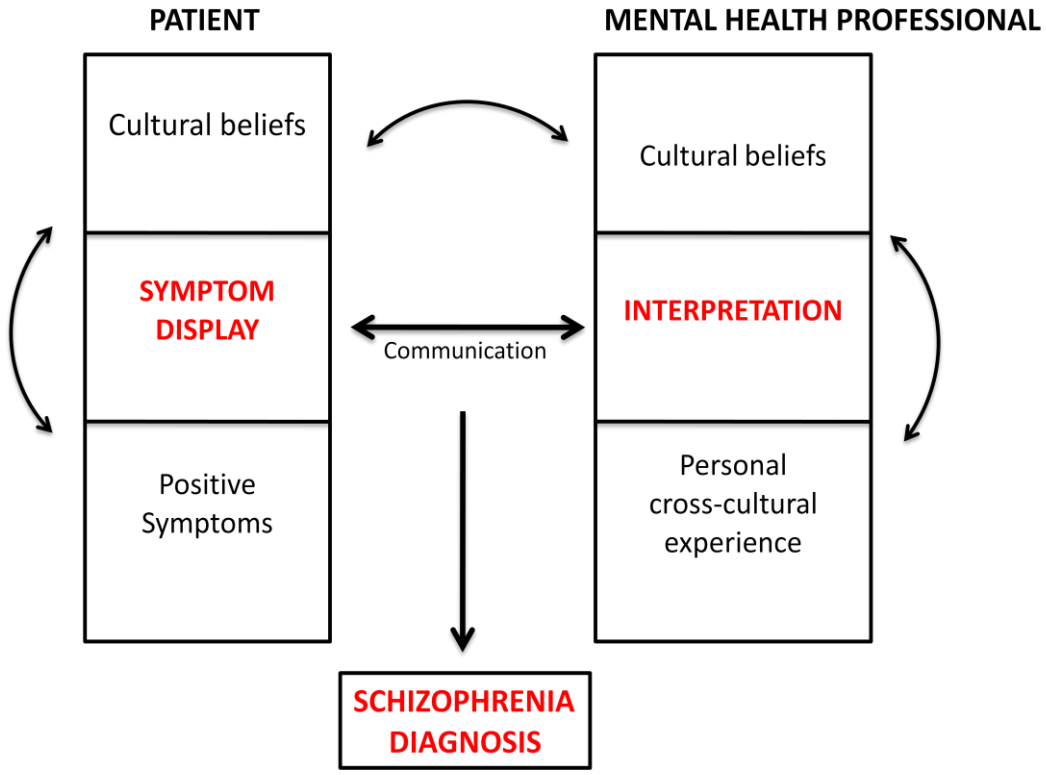
The findings of this research suggest that even though psychiatric treatment and diagnosis are based on measurable medical assessments, there is still a very high element of subjectivity. This element of subjectivity is partly exacerbated by differences in cultural signifiers in the dyadic interactions. As such, it is related to a spectrum that varies from cultural distance to cultural congruence between the dyad (patient and the clinician). Culturally normative experiences are assumed to improve accuracy in diagnosis and treatment. The more there is cultural distance between the dyad, the more likely that the innate nature of psychiatric subjectivity leads to lower reliability, imprecision, or poor treatment.

Tranulis, Corin and Kirmayer (2008) expand on this idea by asserting that "the process of interpreting and attributing psychotic experiences reflects each person's cultural background, life experiences, and other social determinants" (Tranulis, Corin, & Kirmayer, 2008, p. 225). Whether it is a clinician, carer, family member, or a patient, the way that the symptoms are perceived or expressed is attached to a person's culturally related signifiers. This suggests the salience of deconstructing the dyadic interactions in understanding schizophrenia because it takes both the subjective and objective realities to reach a diagnosis; and culture plays a significant part in these dyadic interactions.

Furnham and Chan (2004) have found that attitudes and beliefs about mental illnesses are linked to demographic factors such as age, education, ethnic background, gender, family history of mental disorder, previous psychiatric training, and the degree to which a person has had experience with mental health services. What has not been emphasized is that the clinician's experience with other cultures also factors in the dyadic interactions. In that sense, clinicians who have been exposed to cross-cultural experiences or those who have had cultural awareness training can be argued to be more likely to have improved patient treatment and care. The clinician's ethnocentricity also becomes less of an issue within the dyad.

The research also suggested that non-UK born mental health professionals were significantly more likely to notice shifts in schizophrenia patient demographics. It indicates that one's level of awareness towards other patients who are also from a different culture may be heightened when one is an immigrant. People see the world around them through the eyes of their own world view. If a clinician is from China, he or she is more likely to notice Chinese patients in comparison to a UK born clinician, which is an ethnocentric bias of our existence. Just like patients incorporate their culture into the manifestation of the symptoms, so will the clinicians use their own cultural repertoire and personal experiences to treat and diagnose.

Figure 16. The Dyadic Interplay Model



The dyadic model that I developed above decodes the factors that interplay in the communication process between patient and mental health professional based on the findings of this thesis. Positive symptoms are the carriers of the expression of one's cultural signifiers, which is also the most apparent to the eye. Interpretations on the other hand, are affected by mental health professionals' own beliefs and personal cross-cultural experience. However, cultural belief similarities and dissimilarities between the diagnosed and the diagnoser also are argued to be an important determining factor.

In the traditional setting, an interpretation is reliant on the quality and depth of the communication between the dyad. During this process of communication, interpretation of symptoms takes place but essentially borrows thought processes from

the clinician's medical expertise and education. Nowadays in the UK, such expertise is no longer sufficient because of the multi-culturalisation of the patient and workforce cohorts. Psychiatry's reliance on the observation and interpretation of manifestations necessitates a cross-cultural education that facilitates a deconstruction of cultural signifiers of the patient. It also requires a self reflective cultural awareness and an understanding of how one's own background affects the clinical decisions one makes.

Quintessentially, the meta-ethnography results corroborated the idea that patients' symptoms ultimately depend on the clinician's own cultural experience, cultural beliefs and medical expertise. Neighbors, Jackson, Campbell, and Williams (1989) claim that clinicians are unaware and insensitive to cultural differences. Cultural and clinical factors have been suggested to "hinder the process of diagnosis" specifically within the realm of the interpretation of symptoms (Egeland, Hostetter, & Eshelman, 1983). Bias has been seen to take place when there is cultural incompetence, language improficiency, and an imprecision in assigning diagnoses amongst clinicians (Minsky, Vega, Miskimen, Gara & Escobar, 2003; Tranulis, Corin, & Kirmayer, 2008). Blow and colleagues (2004) have also reiterated the lack of cultural sensitivity when interpreting patient symptoms.

Other research has also attributed this problem to the misdiagnosis of unfamiliar culturally determined patterns of behaviour (Hutchinson & Haasen, 2004; Selten & Hoek, 2008; Sharpley & Peters, 1999). It was found that mental health professionals are reluctant to disclose or share information with patients when they are uncertain of the diagnosis. Therefore, one can deduce that the higher the unfamiliarity with the Other's culture, the less communication may take place which in due course leads to higher

errors in the assessment of the symptoms. It is thus pivotal that patient and mental health professional communication is free of cultural distance so that appropriate diagnosis and care can take place.

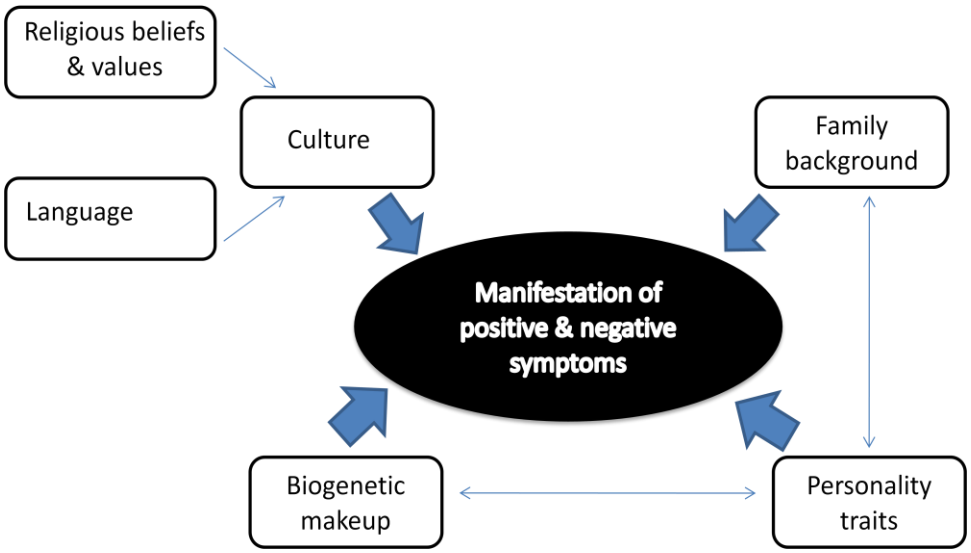
C- There is heterogeneity in the explanations of the onset of schizophrenia, across cultures. The notion of culture is patterned in the dyadic interactions but it was also evident in the explanations of the onset of schizophrenia. The meta-ethnography revealed that the explanations behind the onset of schizophrenia were culturally specific. These explanations are, in turn, correlated to the macrosystem of a schizophrenia sufferer.

Based on qualitative studies in India, Japan, the United States, and Canada, cultural relativity seemed to be a common theme. Clinicians, family members, carers, and sufferers of schizophrenia always attached the meaning of the development of schizophrenia in line with their local beliefs. In that instance, for example, Mexican Americans explained schizophrenia as Nervios or nerves. Rural Indians rationalized it in terms of an evil eye and black magic from another person or family member. Western patients and clinicians attached meaning to schizophrenia's onset to be from the experience of traumatic events and drugs. Western psychiatric thought essentially is viewed as a cultural category in itself just like any other culture (Gaines, 1992). Culture does not only sit in the realm of tribes, clans, or rural and agrarian societies but encompasses Western civilization and medicine.

D- The content of schizophrenia's symptoms is patterned by culture. So far we have come to the agreement that culture is endemic in all the interactions taking place in the clinical settings. Taking a closer look at the actual symptoms, schizophrenia's manifestations are also expressed in relation to the cultural repertoire of the person. Expressions of symptoms are culturally determined because culture influences one's perception of the world (Corin, Thara, & Padmavati, 2005; Dutta et al., 2007; Minsky, Vega, Miskimen, Gara & Escobar, 2003). Basically, the manifestation of symptoms is an amplification of the psyche which contains our biogenetic makeup, personality traits, family history and dynamics, and last but not least, our cultural values and beliefs. The essential components are intertwined, thus leading to the expression of a symptom. This suggests that the microsystem (family history and dynamics) coincides with the outer layers of society, or with Bronfenbrenner's macrosystem (culture).

The main premise is that there are pronounced differences in relation to the ways that people from different countries express their illness. It seems to fit into two broad categories matching first rank and negative symptoms of schizophrenia. As Yen and Wilbraham (2003, p. 551) have put it, "the thing about cultures is that they have different presentations, different illness behaviours if you know what I mean. They articulate it differently. It doesn't mean that the actual illness is different".

Figure 17. A Conglomeration of Schizophrenia's Symptoms



Emsley et al. (2001) came to the conclusion that the structure of negative symptoms is resistant to cultural influences because Xhosa tribes in South Africa did not seem to portray any negative cultural displays in comparison to other groups. I argue that negative symptoms in fact, have everything to do with culture. The way that African tribes might make sense of their distress is by using positive symptoms and therefore, their negative symptoms might be less pronounced, leading to the false impression that they are culture free but in reality, the mere fact that they are less apparent amongst the Xhosa tells us that it is a culturally relative phenomenon.

E- Positive symptoms are more apparent in cultures which legitimize the reason of the onset of schizophrenia as a result of an external factor. In the meta-narrative, it was found that certain cultures mainly expressed their emotional distress through the process of internalization. When the explanation of the distress is internalized, then its

manifestation is observed from the outside world as a negative or somatic symptom. The distress is contained within the body of the person experiencing it and thus to the diagnoser it may be observed as a negative symptom.

The explanations can be seen as a learned cultural adaptation to suffering. As a child, one is usually taught how to express one's anger, sadness or frustration within the context of cultural norms. In many countries, for instance, it is unacceptable to be overtly emotional, and thus as a result one finds a way to cope with it by internalizing the emotion into the self or directing it onto another channel, such as through psychosomatic pain. Subconscious manifestations paradoxically interplay in this type of inward expression, rather than on a conscious level. With the development of neurological changes in the body, coupled with environmental stressors, an onset of a mental illness may take place. Mexican Americans, Indians, or Caucasian British groups are exemplified by this, where they tend to be diagnosed more often with non-psychotic illnesses, but are more likely to be labelled as suffering from mood disorders or depressive symptoms. We saw this in the case of the Hispanic cultures which blame schizophrenia on "nervios" or nerves of that person, or in Indian cultures which fault the person as lazy or not behaving well according to their society.

Another way one may grapple with distress and which is also interlinked with culture is by the subconscious externalization of suffering; one which is connected and directed to the outside world and not to the object itself. In this cultural adaptation, what happens is that a person's distress is directed towards the outside by thoughts, visualizations, or olfactory manifestations. This means that rather than internalizing their distress, they initiate with the unconscious process of creating scenarios (whether visual,

auditory or olfactory) that are unconnected to the body but which include and mould their social world. This is illustrated by a South African psychotic patient who was certain he was Nelson Mandela (Maslowski & Mthoko, 1998).

There is no difference between externalized or internalized manifestations in terms of the meaning behind them. One's identification with Mandela as a healing figure first has been created from what the patient knows, and second it may be understood in terms of getting strength from connecting with a charismatic figure in society as a way to cope with distress. It is not uncommon for people diagnosed with schizophrenia and who are exhibiting first rank symptoms to identify themselves with holy saints, gods, revered ancestors, important political figures. These symptoms per se, however, are more observable to the mental health professional which thus leads to an over-representation of positive symptoms which belong to cultures that externalize their distress explanations.

As Larsen puts it, "delusions are equally derived from the cultural repertoire but are constructed as dogmatic explanations that are idiosyncratic to the individual who holds them" (Larsen, 2004, p. 447). The difference is only found in the recognition of the positive symptoms as yet another cultural adaptation to expressing distress. The meaning behind a hallucination or a delusion is indeed no different from a negative symptom; the only difference is in the cultural adaptation used to expressing one's suffering.

The ethnicities who seem to have a pattern of externalizing distress the most are Black populations. If we take a step back and revisit the epidemiological results from chapters five and six, one may find internalisation versus externalisation as a plausible

hypothesis that explains why Black ethnicities encounter the highest schizophrenia rates. Externalisation means that one is likely to express distress in relation to the outside world and thus somehow affecting the other, whilst internalisation is when a person directs one's suffering internally either by going through processes such as somatisation or depression. One must also substantiate that this is not to say that all Black ethnicities share the same culture, but they could share one aspect of their values or learned behaviours, which is either to externalise or internalize their distress. One must also factor in individual differences in terms of how one handles distress, setting culture aside.

The evidence so far suggests that symptoms of schizophrenia are observed and collected in the microsystem and the macrosystem of a person's world. The same individual usually experiences both positive and negative symptoms, but as Karl Jaspers would argue, symptoms which are most pronounced will usually lead to the label (Jaspers, 1963). Jaspers was one of the first psychiatrists and philosophers who emphasized that schizophrenia, or what was called dementia praecox in his time, is a pyramid like illness that is a continuum that ultimately runs from positive to negative symptoms (Jaspers, 1963). Positive symptoms which are also called Schneider's first rank symptoms, are in fact the most apparent symptoms, whilst negative symptoms are usually less pronounced and as a result, less paid attention to in psychiatry (Bentall, 2004 Peralta & Cuesta, 2003b). It is therefore, safe to argue that Black ethnicities may externalise their illness more often, and as a result are more likely to experience more diagnoses of schizophrenia.

When one hears the term schizophrenia, the first thoughts that come to mind are in relation to the positive symptoms, which are hallucinations or delusions. Mental health professionals in the MHPV questionnaire for instance, connected all cultural tags of schizophrenia's content to first rank symptoms and not to negative symptoms. Negative symptoms are usually more silent and less apparent, and for that reason those cultures where externalization of distress is more common there is a higher likelihood for a diagnosis of schizophrenia.

Clinicians, whom we must remember are emotive beings, would pay more attention and similarly solidify the manifestation as a symptom more likely with a patient who gives a speech to other patients in comparison to another patient who is quietly sitting in a corner. Therefore, it lends to the possibility of developing the illusion that schizophrenia is in fact, more common in cultures that often use mechanisms where distress is externalized.

On the other hand, one's lack of understanding the other (in this case the diagnosed) might also lead to similar reactions in the clinical setting. That is why we have seen that second generation Black ethnicities are the most prone to a diagnosis of schizophrenia. They present more positive symptoms, but they are also seen as British citizens. The clinician or psychiatrist in this instance would subconsciously define normal in terms of what a British person is like.

Encountering a patient who is Black British leads to more possibilities of extreme reactions from clinicians, because it directly challenges one's notions of morality, values, and beliefs of sanity (Szasz, 1974). The Black British person might have a different way of

expressing himself, and that may be through an externalized reaction to distress. For that reason, negative symptoms expressed in cultures whereby internalization is the norm do not lead to equal numbers of people diagnosed with schizophrenia.

One needs to understand that the human mind is limited in the way that it processes stimuli, and clinicians are by far no exception to this rule. When we do not understand an action, we tend to either ignore it (Tranulis, Corin, & Kirmayer, 2008) or we label it as 'bizarre', as Maslowski and Mthoko (1998) have expressed in their patient assessments. Therefore, the whole notion of the lack of understanding of the Other (or the diagnosed) can be a nomenclature and a possible creator of intra and inter ethnic differences in the psychopathology of schizophrenia (McCann & Clark, 2004).

CHAPTER EIGHT

RECOMMENDATIONS

"An ounce of action is worth a ton of theory" (Friedrich Engels).

8.1 Introduction

Although Engels' claim that action speaks louder than theory is true, I find that theory is necessary for the development of action, and thus, should not be under-estimated. By understanding schizophrenia's aetiology and nosology of immigrant and BME groups, one may ascertain that without the development of theories, advances to treatment and care would remain at a standstill. Theory backed up by empirical research needs to precede action, and following these lines of logic this chapter provides practical insights and recommendations for advancing our knowledge of schizophrenia, treatment and care. The chapter can be seen as concluding remarks to the preceding findings which highlighted the salience of social, cultural and environmental factors in relation to schizophrenia.

8.2 Cultural Relativism, Proficiency & Competence

Elaborating on the low reliability of diagnosis in schizophrenia, its ethnic predilection, and the cultural embodiments during clinical interactions all revealed the pertinence of developing culture friendly systems (Fernando, Ndwegwa and Wilson, 1998). The idiosyncratic experience of schizophrenia is shaped by cultural meanings. Culture is seen as an extension of the display of schizophrenia symptoms and one which needs to be mastered and understood.

Over the last 30 years many ethnocultural training and research efforts have been flowing and especially in the United States (Dana & Allen, 2008; Fernando, Ndegwa & Wilson, 1998), but a concrete recommendation for schizophrenia care is still to be determined. Cultural relativism refers to the idea that each person is understood from their own cultural milieu. Systems may be termed "culturally proficient" when they attempt to eliminate cross-cultural boundaries to understanding a person; systems eliminate such boundaries by viewing the person's own cultural milieu as the context in which his behaviour must be understood. Given that we are shaped by our own cultural biases, there have been some attempts at extrapolating ways to reducing ethnocentrism during treatment. Of the many ideas, Kohls and Knight (1998) have developed step by step strategies on how to develop intercultural awareness. These assumptions embody another very popular yet not fully embraced solution, namely, cultural competence. Although in the last five years efforts have been exerted to strengthen cultural competence, it seems that it is more widely recognized in North America (Qureshi & Collazos, 2005). A systematic review by Bhui, Warfa, Edonya, McKenzie and Bhugra (2007) maintains that although there is evidence to suggest that cultural competence is

indeed important to achieve, mental healthcare systems internationally, and especially in the UK, have been slow to implement practices that might promote such competence.

Leininger is identified as one of the first scholars to talk about cultural competence in the 1960s (Srivastava, 2007). Cultural competence is defined according to Meleis as "care that is sensitive to issues related to heritage, sexual orientation, socioeconomic situation, ethnicity, and cultural background, and is provided with an understanding of how these differences may inform the responses of the people and the care processes" (Meleis, 1999, p.12). Qureshi and Collazos (2005, p.307) emphasize that cultural competence in the clinical setting consists of "specific knowledge, skills, and attitudes that function together to provide an individualized, culturally sensitive and appropriate treatment". To develop such skills, one needs to be introduced to a multitude of cultural practices; a mandatory process of training in such practices should, therefore, be provided to all mental health professionals. Cultural competency training engages the clinician to develop cultural empathy, sensitivity and curiosity (Tseng, 2003). It reminds the clinician to look through the lens of the patient's culture and understand the multitude of different approaches and explanations, which is significantly important specifically with schizophrenia. It can thus be seen as a self reflective practice as well because it brings the clinician's culture into perspective (Sewell, 2009).

Cultural competence is a continuum of efforts that vary from culturally destructive to culturally proficient, according to Cross (2001). Dana and Allen (2008) affirm that there is as yet no consensus on how to best address cultural competency and services. Others make a strong case for the development of cultural competence by emphasizing its overall benefits during treatment (Sue, Zane, Hall & Berger, 2009). In a

systematic review by Bhui, Warfa, Edonya, McKenzie and Bhugra (2007, p.1), cultural competence was found to "have limited evidence on the effectiveness of cultural competency training and services delivery". The main argument made is that cultural competence cannot be a perfect solution because countries have different migration histories, managed care and discrimination patterns.

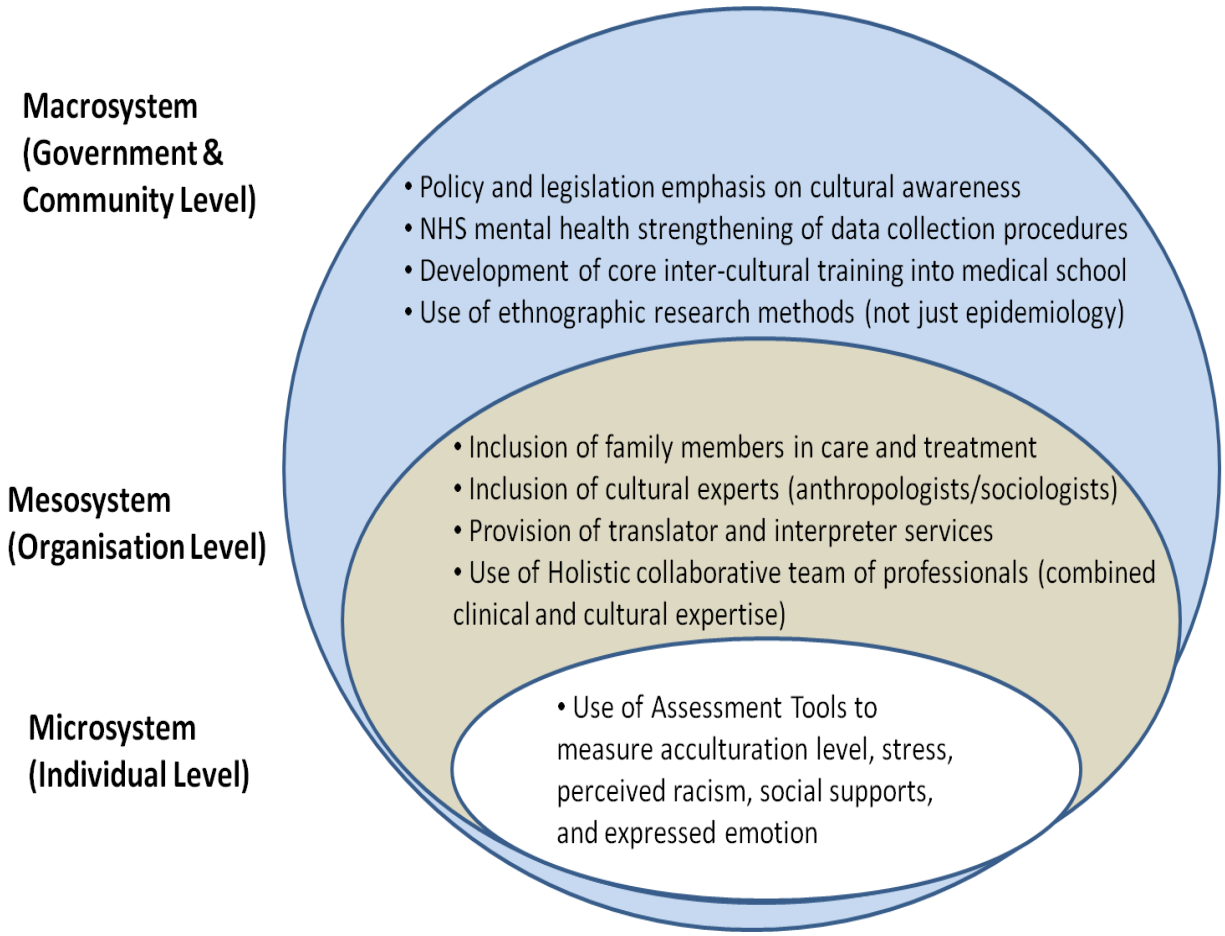
According to Sue, Zan, Hall and Berger (2009) cultural competence has not become a prevalent solution partly because both the words 'culture' and 'competence' are not concrete terms. Cultural competency assumes that mental health staff are not well-equipped to deal with service users, but the findings thus far do not suggest that this is the primary explanation for schizophrenia's nosological patterns. The issue appears to be crossing a multitude of factors which cross the macrosystem to the microsystem of the service user's sphere.

8.3 A Proposed Holistic Multi-Systems Recommendation Model

Recently, the Nice Guidelines (Bhugra, 2010) on core interventions in the treatment and management of schizophrenia in the UK have detailed and actionable recommendations to mental health affiliated personnel. They cover not only how to deal with race, culture and identity but also assessment issues, psychological and pharmacological interventions, and best practices in relation to treatment. The recommendations uncover and identify the importance of factors such as culture and identity, economic status, quality of life and social networks of a service user.

Branching out from Bhugra's guidelines (2010), I postulate in figure 18 unique recommendations based on the findings and the gaps in the knowledge that have been revealed throughout the chapters. The recommendations are in line with the main theoretical assumptions of this thesis, namely, the ecological theory model. The ecological theory sees repercussions to human interactions. It also sees interconnections between the self and its immediate surroundings and even its outer surroundings. In essence, the solution lies first in accepting a holistic view of a person when treatment and care are involved.

Figure 18. Holistic Multi-Systems Recommendation Model for Schizophrenia (Research, Treatment and Care)



8.3.1 Macrosystem Level Changes

At the mesosystem level, governmental and community level actions are sought for using a top -down approach, although all of the stages must work together holistically before more effective and meaningful actions can take place. The identification of key recommendations would be done by bearing responsibility on the government, community, organization and the service user. Working together in tandem, the key recommendations laid out can provide more effective key strategies that will address the many gaps in the knowledge on nosological patterns and identified weaknesses in cross-cultural treatments throughout the chapters.

Legislative practices over the past four decades have been introduced in the UK to ensure race equality. One such example is the introduction of the 'Delivering Race Equality in Mental Health' (The Guardian, 2006). More serious action needs to take place, and cross-cultural British mental health systems must also meet auditing schemes that are repeated and enforced through policy. This allows us to be not only reactive to any core cultural issues but also proactive to them. Since the ethnic structure of both service users and health professionals is becoming ever more highly multicultural as we have seen in chapter seven, the effects of such changes need to be further examined and highlighted more saliently.

Concurrently, another vital change that is highly recommended relates to mental health monitoring and service user data collection. Much remains to be clarified on the relationship between immigrant status and linguistic communication across cultures in relation to schizophrenia. The data collected from the NHS have revealed a significant gap in the knowledge. Data collection methods of the NHS do not reflect the patient

demographic cohorts accurately. Additional factors such as immigration status, languages and similar environmental factors need to be introduced so that future monitoring and research can initiate with new perspectives and find more meaningful connections. The only way we can start achieving more meaning behind these elusive questions is to start collecting the data. Ethnicity as an entity itself is no longer a sufficient tool with which to explore cross-cultural differences. The NHS ought to add more indicators as part of their patient data collection processes, such as the following:

- Country of Origin
- Nationality/nationalities
- Languages spoken
- Years lived in the UK (when applicable)
- Level of social supports

Cross-cultural awareness and training are also other core elements that can be further ratified and emphasized. This concept is not new; Lefley and Pederson introduced it in their book*, Cross-Cultural Training for Mental Health Professionals*. According to Lefly and Pederson (1986, p.5), "cross cultural training can accomplish the basic goal in two ways. First, training can increase awareness of one's own cultural biases and unexamined assumptions which determine, explain and define normal behaviour. Second, training can increase the awareness of culturally different alternatives so that counsellors can adapt their knowledge and skill to a variety of culturally different populations to enlarge their skill repertoire". What is useful about this explanation is that is does not fault the mental health professional, but merely points out the benefits of

such a training. Especially in medicine, little training is given to future psychiatrists on treating and dealing with culturally diverse settings. An important strategy therefore, is to produce a curriculum that prepares future mental health professionals for the mental health cohort environment they will work in. Mandatory courses and training must be applied to all clinicians and staff who deal with schizophrenia patients in the UK.

In the UK, 25% of postgraduates and 59% of GPs reported to have undergone some cultural training (BMA, 1995 cited in Bhugra & Cochrane, 2001). It is recommended that medical students, nurses, psychiatrists, psychologists and even administrative staff should undergo cultural awareness training. Such training assists in bridging the cultural gaps between mental health professionals and their patients and, thus, fosters patient-centred skills that enable the clinician to provide "effective clinical care to patients from a particular racial or ethnic group" (Like, Barrett, & Moon, 2008). With schizophrenia patients, it is even more complex because, as we have seen, diagnosing the disease is reliant on cultural signifiers and, therefore, necessitates mesyosystem levels of action that incorporate improved cultural knowledge. The general structure of such a course as an example of best practice is an overview of health disparities, a workshop on how to deal with language and cultural differences, how to work with cultural diversity, and an overview of what it means to provide patient centred care. In psychiatry, it would also be beneficial to delve into what symptoms and diagnosis may represent in different cultures and ethnicities.

The fourth recommendation concerns research methods strategies. Especially within the last decade, cross-cultural qualitative pieces on schizophrenia have been taken more seriously, and establishing a better understanding of what it means to have equitable

mental health systems has become a top priority (Royal College of Psychiatrists, 2009). However, there is still a dearth of research on what causes the difficulties faced by mental health professionals in their mundane clinical work with immigrant and BME schizophrenia patients.

Another scantly researched area relates to how schizophrenia sufferers perceive their treatment and understand the world around them from a cross-cultural standpoint. Especially in the UK, there is a dire need for more qualitative research involving direct observation or ethnographic strategies enabling us to better fathom how culture interplays in the dyadic interactions in the mesosystems (Kleinman & Benson, 2006; Bhui & Bhugra, 2007). As Edgerton and Cohen (1994, p.229) have put it, "if culturally sensitive psychiatric research is to succeed, it should not rely solely on self report, the reports of others, and psychiatric examinations. All of these forms of data collection are useful, even vital, but without frequent direct observation of the day-to-day adaptation of patients and those close to them, an adequate understanding of the course of their schizophrenia symptoms cannot be obtained".

This is not to say that clinicians are not sensitive enough to cultural differences. But because of ethnocentrism, which is a common sociological phenomenon that pervades every person's world view, they may unintentionally exhibit bias in their diagnosis and treatment of patients. (Like, Barrett, & Moon, 2008). Kagawa-Singer and Kassim-Lakha (2003) emphasize the need for a strategy to reduce cross-cultural miscommunication and to increase the likelihood of developing better mental health outcomes because "most clinicians lack the information to understand how culture

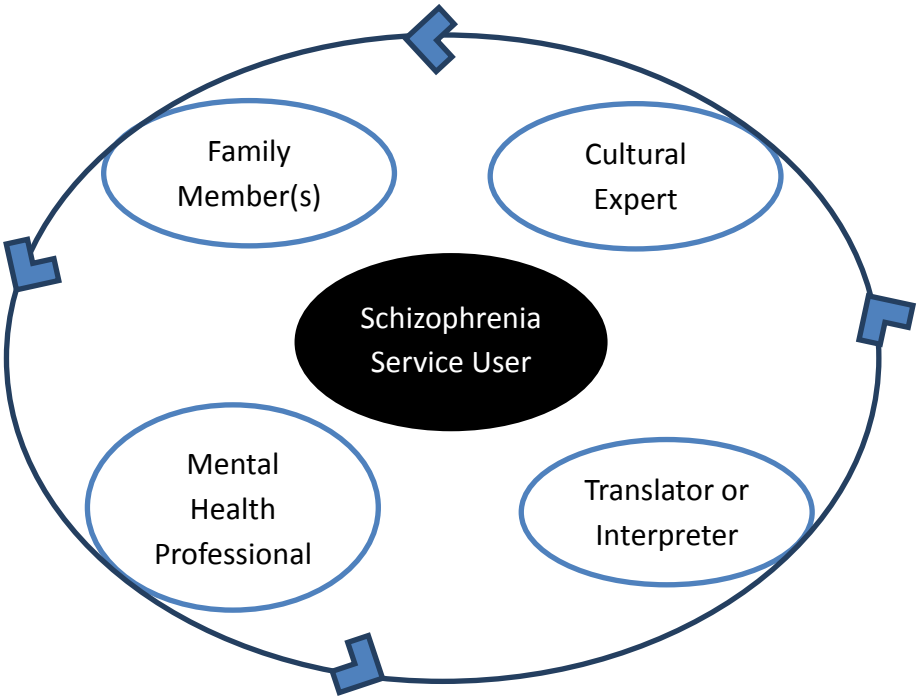
influences the clinical encounter and the skills to effectively bridge potential differences" (Kagawa-Singer & Kassim-Lakha, 2003, p.577).

Such methodological recommendations require an interdisciplinary approach that enmeshes anthropology and sociology with psychology and psychiatry. Schizophrenia should become a social, psychological, demographic and cultural concern. Otherwise we will keep going through the same epidemiological findings without arriving at a better understanding of the phenomenon.

8.3.2 Mesoystem Level Changes

Efforts at the institutional level that aim at strengthening interpersonal skills are also discussed to become better equipped in dealing with the demographic changes taking place. There does not seem to be any practical solutions aimed at making clinical assessments for schizophrenia patients more culturally sensitive in the UK, which may be contributing to the polarization and increased diagnosis of BME and other immigrant groups.

Figure 19. Holistic Treatment Model (Mesosystem)



At the organisational level, a commitment to endorsing the macrosystem level changes would first take place, followed by taking responsibility for a holistic clinical structure as outlined in the figure above. A holistic clinical structure is defined as a treatment system that includes the service user's entourage- family members or close friends, cultural experts, translators or interpreters (where necessary) and the mental health clinical team.

Chapter four found evidence of similarities of world views between family members who are close to the service user. They, therefore, can be seen as tools that are cultural and social barometers engaging the team with the world views and symbols that the service user utilizes. Another way to bridge the gap is to include cultural experts in the mental health team (Tseng, 2003; Bhui & Bhugra, 2007). Such professionals with a background in anthropology or sociology need to be introduced to psychiatric care

because they can provide cultural understandings and, thus, provide more informed explanations of the symptoms of patients with a more culturally sensitive eye. However, because they are removed from the emotional connection that a family might have, cultural experts can provide a more objective cultural mediator perspective to the team. Cultural experts, therefore, could establish profound connections between manifestations and symptom, first by relating them to the patient's culture, and then interpreting them into the medical language of distress with the other team members.

We have also seen from the meta-narrative that family members were also cultural experts when it came to their explanations of symptoms. Therefore, it is also necessary to build a treatment team that includes not only nurses, psychiatrists, psychologists and social workers but also cultural experts and family members or immediate friends as part of the treatment team.

Third, such effects of cross-cultural interactions within the clinical assessment point towards the salience of the use of the interpreters, where needed (Bhugra & Cochrane, 2001; Tseng, 2003). The introduction of interpreters and translators in mental health in the NHS needs to match the current patient demographic needs. Such practices need to be enforced and be readily available.

8.3.3 Microsystem Level Changes

The last recommendations are related to the individual level core of directly related interactions. First and foremost, the adoption of culture friendly assessment tools in diagnosis is seen as integral to the process. It is proposed to use cultural adjusted psychological measures which factor in cultural differences in symptomatic displays of

schizophrenia (Tseng, 2003, p.246). They also need to be translated and back translated in many instances where language poses a barrier for accuracy and minimization of bias (Singelis et al., 2006).

Other important assessment tools to be considered are measuring ecological effects on diagnosis and treatment. Of the literature and supported evidence, crucial factors to be integrated are acculturation level, stress, racism, social supports and expressed emotion. During clinical interactions, symptom based interviews are no longer sufficient indicators. Going beyond this dichotomy and measuring and assessing other factors will allow us to go beyond our current knowledge and perhaps take us to a new level of dialogue in relation to schizophrenia.

CONCLUSION

All the studies have pointed to one vital point which is that to cross-culturally deconstruct schizophrenia, one must engage in breaking down all the spheres of the sufferer's life, initiating with Bronfenbrenner's microsystem and ending in the outer layers of society, or the mesosystem. There is a need for dialectic interplays between anthropological, sociological, psychiatric and psychological theories to explain the ethnic predilection of the diagnosis of schizophrenia in the UK.

The findings also suggest that understanding schizophrenia's aetiology can only be explained biopsychosocially. This means that we cannot divorce interactions between the body, the mind, and the environment which includes our cultural upbringing. The creolization of the United Kingdom's society emphasizes the need for a better dialogue with culture as the symptoms of schizophrenia are highly intertwined with the microsystem and mesosystem.

We have seen that the marginalisation of immigrants and BME groups has not been uncommon in mental health care in the UK. Whether the incidence and prevalence of schizophrenia in immigrant populations and second or third generation ethnicities may be explained by acculturation, racism, or lack of social cohesion is still questionable. Only when there becomes further interaction between epidemiological and anthropological that some answers can be clarified. Anthropological means tell the story of how and why from a cultural perspective and without assuming superiority of one over another, whereas psychiatric medical research lacks the ability to render such an effort, as has been iterated over the last four centuries.

What has been robustly iterated is that the absence of biological markers in schizophrenia makes it a highly subjectively heterogeneous illness. Schizophrenia's clinical and etiological factors are individual psychopathological understandings that cannot be understood without factoring in culture. Essentially, what has been pointed out is that it is time for us to change the way we study schizophrenia. Rather than solely focusing on epidemiological trends, we need to start ethnographically looking at the clinical interactions in order to make progress in this debate. What I am emphasizing is that studying an object by an object is essentially problematic in every way. Epidemiology is an object which does not interact with the patient, the researcher being the object. We need to bring the first object, the schizophrenia experiencer, closer to the researcher; and that can only be done through direct observation.

Knowing this makes the gaps in our knowledge more valid in a sense that the reality as we know it can never be completely understood. Our minds are unable to cope with or process objects unless they are experienced by us. Hence, no matter how hard clinicians or researchers endeavour to understand the experiences of schizophrenia sufferers, they will always remain as an Other and an object that lacks the ability to render complete comprehension. We need to realize that cross-cultural differences matter in the clinical setting and thus, may influence treatment or diagnosis. The subjective human experience is basic to understanding life, and what psychiatry in this day and age faces is the need to allow more subjectivity into the categorical constructions of schizophrenia to create more profound understandings of cross-cultural differences. Without allowing subjectivity in displays of symptoms, we may never be able

to fully account for understanding the relationship between culture, ethnicity and schizophrenia.

People whose cultural upbringing has normalized their externalisation of distress manifest a higher likelihood to be diagnosed with positive symptoms, which in turn, leads to a higher likelihood for a diagnosis of schizophrenia. This assumes, therefore, that the learned cultural signifiers directly impact not only on how first rank and negative symptoms are expressed, but also on how they are interpreted in dyadic inter-cultural clinical interactions. Black ethnicities more often seem to have a shared social adaptation where distress is outwardly expressed and patterned with their world view. White or Asian ethnicities more often express their distress by inwardly associating their own patterns to self destruction patterns or psychosomatization rather than by engaging with the outward social spheres.

I will not claim that I have found all the answers to this long and withstanding debate but have certainly come to the conclusion that the only way that we can start understanding schizophrenia is when we start decoding cultural differences and by qualitatively exploring in more profundity, the relationship between patient and clinician. We need to start with observational techniques, ethnographic methodologies and a more profound analysis of the dyadic interactions between patients and practitioners.

It is time for anthropology and sociology to set foot in our definitions of schizophrenia both cross-culturally and inter-culturally because at this point in time, epidemiological studies have ceased to provide fruitful explanations. Let us approach it from a dual micro and macro perspective and start looking at dyadic cross-cultural interactions by focusing on the processes of communication between patients and

clinicians rather than reconfirming the already known statistics that have brought nothing new to the social sciences in the last three decades. It is time for schizophrenia to dominate in interdisciplinary studies in this highly multi-cultural globalized world we currently live in. Only then will we start heading in the right direction.

APPENDIX A: ICD-10 definition of schizophrenia and its subtypes

"The schizophrenic disorders are characterized in general by fundamental and characteristic distortions of thinking and perception, and affects that are inappropriate or blunted. Clear consciousness and intellectual capacity are usually maintained although certain cognitive deficits may evolve in the course of time. The most important psychopathological phenomena include thought echo; thought insertion or withdrawal; thought broadcasting; delusional perception and delusions of control; influence or passivity; hallucinatory voices commenting or discussing the patient in the third person; thought disorders and negative symptoms.

The course of schizophrenic disorders can be either continuous, or episodic with progressive or stable deficit, or there can be one or more episodes with complete or incomplete remission. The diagnosis of schizophrenia should not be made in the presence of extensive depressive or manic symptoms unless it is clear that schizophrenic symptoms antedate the affective disturbance. Nor should schizophrenia be diagnosed in the presence of overt brain disease or during states of drug intoxication or withdrawal. Similar disorders developing in the presence of epilepsy or other brain disease should be classified under F06.2, and those induced by psychoactive substances under F10-F19 with common fourth character".

Schizophrenia, schizotypal and delusional disorders

(F20-F29)

This block brings together schizophrenia, as the most important member of the group, schizotypal disorder, persistent delusional disorders, and a larger group of acute and transient psychotic disorders. Schizoaffective disorders have been retained here in spite of their controversial nature.

F20 Schizophrenia

The schizophrenic disorders are characterized in general by fundamental and characteristic distortions of thinking and perception, and affects that are inappropriate or blunted. Clear consciousness and intellectual capacity are usually maintained although certain cognitive deficits may evolve in the course of time. The most important psychopathological phenomena include thought echo; thought insertion or withdrawal; thought broadcasting; delusional perception and delusions of control; influence or passivity; hallucinatory voices commenting or discussing the patient in the third person; thought disorders and negative symptoms.

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Excludes: schizophrenia:

• acute (undifferentiated) (F23.2)

• cyclic (F25.2)

schizophrenic reaction (F23.2)

schizotypal disorder (F21)

F20.0 Paranoid schizophrenia

Paranoid schizophrenia is dominated by relatively stable, often paranoid delusions, usually accompanied by hallucinations, particularly of the auditory variety, and perceptual disturbances. Disturbances of affect, volition and speech, and catatonic symptoms, are either absent or relatively inconspicuous.

Paraphrenic schizophrenia

Excludes: involutional paranoid state (F22.8) paranoia (F22.0)

F20.1 Hebephrenic schizophrenia

A form of schizophrenia in which affective changes are prominent, delusions and hallucinations fleeting and fragmentary, behaviour irresponsible and unpredictable, and mannerisms common. The mood is shallow and inappropriate, thought is disorganized, and speech is incoherent. There is a tendency to social isolation. Usually the prognosis is poor because of the rapid development of "negative" symptoms, particularly flattening of affect and loss of volition. Hebephrenia should normally be diagnosed only in adolescents or young adults.

Disorganized schizophrenia Hebephrenia

F20.2 Catatonic schizophrenia

Catatonic schizophrenia is dominated by prominent psychomotor disturbances that may alternate between extremes such as hyperkinesis and stupor, or automatic obedience and negativism. Constrained attitudes and postures may be maintained for long periods. Episodes of violent excitement may be a striking feature of the condition. The catatonic phenomena may be combined with a dream-like (oneiroid) state with vivid scenic hallucinations.

Catatonic stupor Schizophrenic:

- catalepsy
- catatonia
- flexibilitas cerea

F20.3 Undifferentiated schizophrenia

Psychotic conditions meeting the general diagnostic criteria for schizophrenia but not conforming to any of the subtypes in F20.0-F20.2, or exhibiting the features of more than one of them without a clear predominance of a particular set of diagnostic characteristics.

Atypical schizophrenia

Excludes: acute schizophrenia-like psychotic disorder (F23.2)

chronic undifferentiated schizophrenia (F20.5)

post-schizophrenic depression (F20.4)

F20.4 Post-schizophrenic depression

A depressive episode, which may be prolonged, arising in the aftermath of a schizophrenic illness. Some schizophrenic symptoms, either "positive" or "negative", must still be present but they no longer dominate the clinical picture. These depressive states are associated with an increased risk of suicide. If the patient no longer has any schizophrenic symptoms, a depressive episode should be diagnosed (F32.-). If schizophrenic symptoms are still florid and prominent, the diagnosis should remain that of the appropriate schizophrenic subtype (F20.0-F20.3).

F20.5 Residual schizophrenia

A chronic stage in the development of a schizophrenic illness in which there has been a clear progression from an early stage to a later stage characterized by long- term, though not necessarily irreversible, "negative" symptoms, e.g. psychomotor slowing; underactivity; blunting of affect; passivity and lack of initiative; poverty of quantity or content of speech; poor nonverbal communication by facial expression, eye contact, voice modulation and posture; poor self-care and social performance.

Chronic undifferentiated schizophrenia

Restzustand (schizophrenic)

Schizophrenic residual state

F20.6 Simple schizophrenia

A disorder in which there is an insidious but progressive development of oddities of conduct, inability to meet the demands of society, and decline in total performance. The characteristic negative features of residual schizophrenia (e.g. blunting of affect and loss of volition) develop without being preceded by any overt psychotic symptoms.

F20.8 Other schizophrenia

Cenesthopathic schizophrenia

Schizophreniform:

• disorder NOS

• psychosis NOS

Excludes: brief schizophreniform disorders (F23.2)

F20.9 Schizophrenia, unspecified

F21 Schizotypal disorder

A disorder characterized by eccentric behaviour and anomalies of thinking and affect which resemble those seen in schizophrenia, though no definite and characteristic schizophrenic anomalies occur at any stage. The symptoms may include a cold or inappropriate affect; anhedonia; odd or eccentric behaviour; a tendency to social withdrawal; paranoid or bizarre ideas not amounting to true delusions; obsessive ruminations; thought disorder and perceptual disturbances; occasional transient quasi-psychotic episodes with intense illusions, auditory or other hallucinations, and delusion-like ideas, usually occurring without external provocation. There is no definite onset and evolution and course are usually those of a personality disorder.

Latent schizophrenic reaction Schizophrenia:

• borderline

• latent

• prepsychotic

• prodromal

• pseudoneurotic

• pseudopsychopathic

Schizotypal personality disorder

Excludes: Asperger's syndrome (F84.5)

schizoid personality disorder (F60.1)

F22 Persistent delusional disorders

Includes a variety of disorders in which long-standing delusions constitute the only, or the most conspicuous, clinical characteristic and which cannot be classified as organic, schizophrenic or affective. Delusional disorders that have lasted for less than a few months should be classified, at least temporarily, under F23.-.

F22.0 Delusional disorder

A disorder characterized by the development either of a single delusion or of a set of related delusions that are usually persistent and sometimes lifelong. The content of the delusion or delusions is very variable. Clear and persistent auditory hallucinations (voices), schizophrenic symptoms such as delusions of control and marked blunting of affect, and definite evidence of brain disease are all incompatible with this diagnosis. However, the presence of occasional or transitory auditory hallucinations, particularly in elderly patients, does not rule out this diagnosis, provided that they are not typically schizophrenic and form only a small part of the overall clinical picture.

Paranoia Paranoid:

• psychosis

• state

Paraphrenia (late)

Sensitiver Beziehungswahn

Excludes: paranoid:

• personality disorder (F60.0)

• psychosis, psychogenic (F23.3)

• reaction (F23.3)

• schizophrenia (F20.0)

F22.8 Other persistent delusional disorders

Disorders in which the delusion or delusions are accompanied by persistent hallucinatory voices or by schizophrenic symptoms that do not justify a diagnosis of schizophrenia (F20.-).

Delusional dysmorphophobia

Involutional paranoid state

Paranoia querulans

F22.9 Persistent delusional disorder, unspecified

F23 Acute and transient psychotic disorders

A heterogeneous group of disorders characterized by the acute onset of psychotic symptoms such as delusions, hallucinations, and perceptual disturbances, and by the severe disruption of ordinary behaviour. Acute onset is defined as a crescendo development of a clearly abnormal clinical picture in about two weeks or less. For these disorders there is no evidence of organic causation. Perplexity and puzzlement are often present but disorientation for time, place and person is not persistent or severe enough to justify a diagnosis of organically caused delirium (F05.-). Complete recovery usually occurs within a few months, often within a few weeks or even days. If the disorder persists, a change in classification will be necessary. The disorder may or may not be associated with acute stress, defined as usually stressful events preceding the onset by one to two weeks.

F23.0 Acute polymorphic psychotic disorder without symptoms of schizophrenia

An acute psychotic disorder in which hallucinations, delusions or perceptual disturbances are obvious but markedly variable, changing from day to day or

even from hour to hour. Emotional turmoil with intense transient feelings of happiness or ecstasy, or anxiety and irritability, is also frequently present. The polymorphism and instability are characteristic for the overall clinical picture and the psychotic features do not justify a diagnosis of schizophrenia (F20.-). These disorders often have an abrupt onset, developing rapidly within a few days, and they frequently show a rapid resolution of symptoms with no recurrence. If the symptoms persist the diagnosis should be changed to persistent delusional disorder (F22).

Bouffée délirante without symptoms of schizophrenia or unspecified

Cycloid psychosis without symptoms of schizophrenia or unspecified

F23.1 Acute polymorphic psychotic disorder with symptoms of schizophrenia

An acute psychotic disorder in which the polymorphic and unstable clinical picture is present, as described in F23.0; despite this instability, however, some symptoms typical of schizophrenia are also in evidence for the majority of the time. If the schizophrenic symptoms persist the diagnosis should be changed to schizophrenia (F20.-).

Bouffée délirante with symptoms of schizophrenia

Cycloid psychosis with symptoms of schizophrenia

F23.2 Acute schizophrenia-like psychotic disorder

An acute psychotic disorder in which the psychotic symptoms are comparatively stable and justify a diagnosis of schizophrenia, but have lasted for less than about one month; the polymorphic unstable features, as described in F23.0, are absent. If the schizophrenic symptoms persist the diagnosis should be changed to schizophrenia (F20.-).

Acute (undifferentiated) schizophrenia

Brief schizophreniform:

• disorder

• psychosis

Schizophrenic reaction excludes: organic delusional [schizophrenia-like] disorder (F06.2)

schizophreniform disorders NOS (F20.8)

F23.3 Other acute predominantly delusional psychotic disorders

Acute psychotic disorders in which comparatively stable delusions or hallucinations are the main clinical features, but do not justify a diagnosis of schizophrenia (F20.-). If the delusions persist the diagnosis should be changed to persistent delusional disorder (F22).

Paranoid reaction

Psychogenic paranoid psychosis

F23.8 Other acute and transient psychotic disorders

Any other specified acute psychotic disorders for which there is no evidence of organic causation and which do not justify classification to F23.0-F23.3.

F23.9 Acute and transient psychotic disorder, unspecified

Brief reactive psychosis NOS

Reactive psychosis

F24 Induced delusional disorder

A delusional disorder shared by two or more people with close emotional links. Only one of the people suffers from a genuine psychotic disorder; the delusions are induced in the other(s) and usually disappear when the people are separated.

Folie à deux Induced:

• paranoid disorder

• psychotic disorder

F25 Schizoaffective disorders

Episodic disorders in which both affective and schizophrenic symptoms are prominent but which do not justify a diagnosis of either schizophrenia or depressive or manic episodes. Other conditions in which affective symptoms are superimposed on a pre-existing schizophrenic illness, or co-exist or alternate with persistent delusional disorders of other kinds, are classified under F20-F29. Mood-incongruent psychotic symptoms in affective disorders do not justify a diagnosis of schizoaffective disorder.

F25.0 Schizoaffective disorder, manic type

A disorder in which both schizophrenic and manic symptoms are prominent so that the episode of illness does not justify a diagnosis of either schizophrenia or a manic episode. This category should be used for both a single episode and a recurrent disorder in which the majority of episodes are schizoaffective, manic type.

Schizoaffective psychosis, manic type

Schizophreniform psychosis, manic type

F25.1 Schizoaffective disorder, depressive type

A disorder in which both schizophrenic and depressive symptoms are prominent so that the episode of illness does not justify a diagnosis of either schizophrenia or a depressive episode. This category should be used for both a single episode and a recurrent disorder in which the majority of episodes are schizoaffective, depressive type.

Schizoaffective psychosis, depressive type

Schizophreniform psychosis, depressive type

F25.2 Schizoaffective disorder, mixed type

Cyclic schizophrenia

Mixed schizophrenic and affective psychosis

F25.8 Other schizoaffective disorders

F25.9 Schizoaffective disorder, unspecified

Schizoaffective psychosis NOS

F28 Other nonorganic psychotic disorders

Delusional or hallucinatory disorders that do not justify a diagnosis of schizophrenia (F20.-), persistent delusional disorders (F22), acute and transient psychotic disorders (F23), psychotic types of manic episode (F30.2), or severe depressive episode (F32.3).

Chronic hallucinatory psychosis

F29 Unspecified nonorganic psychosis

Psychosis NOS

Excludes: mental disorder NOS (F99) organic or symptomatic psychosis NOS (F09)

Source: http://www.who.int/classifications/apps/icd/icd10online/

APPENDIX B: Ethical approval

Brent NHS

Primary Care Trust

Working with our partners for a healthier Brent

Applied Research Unit

Wembley Centre for Health & Care

116 Chaplin Road

Wembley

Middlesex

HA0 4UZ

Tel: 020 8795 6730/5

Fax: 020 8795 6737

email: ricky.banarsee@brentpct.nhs.uk

16 May 2008

Ms Huda Shalhoub

PhD Candidate - Researcher

Brunel University

Topping Lane

Uxbridge

Middlesex

UB8 3PH

Dear Huda

Project Title	Describing current prevalence rates of schizophrenia and looking at

	cross-cultural differences in the manifestation of schizophrenic symptoms in Brent
REC Ref	07/HO717/73

Thank you for your assistance in providing the documentation for scrutiny of the proposal.

I am satisfied that your proposal meets with the requirements of the Research Governance Framework (RGF). Brent PCT Applied Research Unit has approved your proposal on the understanding that you adhere to the RGF conditions on the attached document. The end date of the project is listed as 1November 2008.

Please note permission to start the study is also dependent on your receipt of a letter of access from Brent PCT's HR Department confirming your right to conduct research through Brent PCT.

Approved Documents

The document received and approved were: -

	Date and version no.
Ethics approval letter from Harrow REC	13 May 2008
Provisional opinion letter from Harrow REC	16 Apr 2008
Ethics application form	17 Mar 2008
Final version of Participants Information Sheet (PIS) for interviewees on headed paper	17 Mar 2008
Final version of Participants Information Sheet (PIS) for focus group members on headed paper	18 Mar 2008
Final version of Consent Form for interviewees	17 Mar 2008
Final version of Consent Form for focus group members	18 Mar 2008

Letter from sponsor including indemnity arrangements (Brunel University)	17 Aug 2007
Response to request (by Harrow REC) for further information	18 April 2008
Protocol	18 Mar 2008
Peer Review (Prof Robin Goodwin)	29 Nov 2007
Peer Review (Michael J Wright)	30 Nov 2007
CV Huda Shalhoub	undated

2. Research Governance Requirement

From the information provided, the requirements of the Research Governance Framework have been satisfied in the following areas: -

Check list	**(Yes/No or N/A)**
The study has received independent peer review	Yes
The collection of information for the study will be in accordance with the Data Protection Act (DPA 1998)	Yes
Use of PCT resources	Yes
The researcher is trained in health and safety	Yes
CRB check requested	N/A

You must inform me, the approving Ethics Committee, and your Sponsor within 48 hours of any serious adverse event(s) and within seven days of any non-serious adverse event(s).

You must respond promptly to requests for updating information from Brent PCT or the Northwest London Research Governance Unit and on completion of the study submit a copy of the NRES 'Declaration of the end of a study' form and a summary of the final report to Brent Medical Ethics Committee and Brent PCT Applied Research Unit.

Please do not hesitate to contact the Applied Research Unit (contact Don Macleod, (don.macleod@brentpct.nhs.uk), tel. 020 8795 6732 if you require further assistance.

With kind regards

pp

Ricky Banarsee

Director WeLReN/Applied Research Unit at Brent PCT

North West London Research Management Governance Unit

Harrow Research Ethics Committee

Room 007, Level 5, L Block

Northwick Park Hospital

Watford Road

Harrow

Middlesex HA1 3UJ

Telephone: 020 8869 3805

Facsimile: 020 8869 5222

13 May 2008

Ms. Huda Shalhoub

PhD Candidate- Researcher

Brunel University

Topping Lane, MJ Bldg

Uxbridge

Middlesex UB8 3PH

Dear Ms. Shalhoub

Full title of study:	**Describing current prevalence rates of schizophrenia and looking at cross-cultural differences in the manifestation of schizophrenic symptoms in Brent**
REC reference number:	**08/H0719/23**

Thank you for your letter of 18 April 2008, responding to the Committee's request for further information on the above research and submitting revised documentation, subject to the conditions specified below.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites

The favourable opinion applies to the research sites listed on the attached form.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*

Application		12 August 2007
Investigator CV		18 March 2008
Protocol	1	06 January 2007
Covering Letter		18 March 2008
Summary/Synopsis		06 January 2007
Peer Review		30 November 2007
Participant Information Sheet: Interview PIS	2	17 March 2008
Participant Information Sheet: Focus group PIS	2	18 March 2008
Participant Consent Form: Interview Consent Form	2	17 March 2008
Participant Consent Form: Focus Group Consent Form	2	18 March 2008
Response to Request for Further Information	By letter	18 April 2008
Privacy Policy Statement for Online questionnaire		
Letter from R Banarsee		18 April 2008
Online questionnaire	2	
Opinion letter with answers to be reviewed		
Statement of Indemnity arrangement		17 August 2007
Summary CV for supervisor - Prof Dany Nobus		18 March 2008

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Website < After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

08/H0719/23	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

Dr Gwen Sayers

Chair

Email: alka.bhayani@nwlh.nhs.uk

Enclosures: "After ethical review – guidance for researchers" *SL- AR2 for other studies*

Site approval form

Copy to: Ms Patricia Mosquera

MJ Building

Psychology Department

Topping Lane

Uxbridge

Middx UB8 3PH

CONDITIONS RELATING TO RESEARCH GOVERNANCE APPROVAL

1. Amendments, extensions, discontinuation or temporary suspension of the project

No changes or extension can be made to the protocol without prior written approval from the relevant ethics committee. **This includes changing the person who is delegated to carry out the study**. The unit requires a copy of the ethics committee amendment form and approval letter. The unit should also be notified if the project is discontinued or suspended for six months or more.

2. Honorary Contract and CRB check for non-NHS researchers

It is a requirement of the NHS Research Governance Framework that all non-NHS researchers who have contact with patients or service users which has *a direct bearing on the quality of their care,* or access to identifiable patient data, tissues or organs with likely direct bearing on the quality of their care need to obtain honorary contracts with the relevant Trusts **before the study can proceed**. Researchers who have direct contact with patients, service users, children or vulnerable patients also require a CRB check. This should be undertaken by the employing organisation and a copy provided for the PCT in the form of a research passport.

3.Adverse events

Any unusual, unexpected or adverse clinical conditions, particularly if this directly involves patients, should be notified to the unit and ethics committee.

4. Misconduct and Fraud

It is the responsibility of the researchers to notify the unit if they suspect professional misconduct or scientific fraud is taking place during the study. All information will be treated confidentially.

5. Public participation in research

Patients, carers and voluntary sector representatives should be involved in the design, conduct and reporting of research.

6. Dissemination

Whilst it is understood that researchers strive to have their work accepted and published by a peer review journal, it is also important to inform PCTs about any general conclusions that would have an immediate effect on the PCT and ensure that the participants are informed of the general outcome of the study.

7. NHS National Research Register (NRR) database

Approval for the research is given on the understanding that the project will be registered on the NRR (unless it is a commercial trial or short student project).

8. Intellectual Property

In accordance with the Health and Social Care Act 2001 the Trust has a right to benefit from Intellectual Property arising during the study. If there is potential for IP interest the RM&G unit must be informed.

9. Funding

Research Governance approval by the PCT(s) does not imply that the PCT will provide funding for the project. All projects should be adequately funded and have a recognised sponsor. For 'unfunded' student projects, the funder and sponsor is considered to be the higher education institute where they are registered unless the RM&G unit has received prior notification of an alternative arrangement.

10. Duty of Care

In giving Research Governance approval to the study the Trust(s) accept the responsibilities of normal duty of care to patients and staff who participate in the study.

11. Monitoring

Approval is given on the understanding that the unit will monitor the project and visit a random sample of studies, to ensure they are compliant with the Research Governance Framework requirements.

12. Data Protection

It is essential that information to which the researcher(s) has access regarding both patients and staff should be treated in the strictest of confidence. While working on the research study you will be expected to become familiar with the Trust's confidentiality policies and procedures and agree to abide by them. Failure to observe confidentiality constitutes gross misconduct. This will be liable to disciplinary action. This is in accordance with the Data Protection Act, 1984 and the Health Records Act 1990.

Head of School of Social Sciences
Professor Dany Nobus

Brunel
UNIVERSITY
WEST LONDON

School of Social Sciences
Research Ethics Committee

Brunel University, Uxbridge,
Middlesex, UB8 3PH, UK
Telephone +44 (0)1895 274000
Fax +44 (0)1895 269724
Web www.brunel.ac.uk

17 August 2007

STATEMENT OF SPONSORSHIP/INDEMNITY

Title: **Decoding the diagnostic process: Describing and analyzing Schizophrenia by country of origin in the United Kingdom (H. Shalhoub)**

Our Reference: SSS/07/002

This is to confirm that the above named research project utilises human participants, their organs, tissue and/or data as defined under the sponsorship requirements of the Research Governance Framework for Health and Social Care 2005, incorporating the Medicines for Human Use (Clinical Trials) Regulations 2004.

On behalf of the School of Social Sciences, Brunel University, we undertake to act as the identified Research Sponsor for this project.

This letter confirms:

- The research proposal has been discussed, assessed and registered with the Research Ethics Committee of the School of Social Sciences, Brunel University and, following internal scrutiny and approval in accordance with Brunel University Research Ethics Standard Operating Procedures, provisional sponsor approval is granted.
- The Chief Investigator has undergone a process of scientific critique commensurate with the scale of the project.
- Indemnity and insurance arrangements have been put in place to cover the project
- Resources and support are available to the researcher(s) to aid delivery of the research as proposed.
- The School of Social Sciences will undertake and enforce those sponsor duties set out in the NHS Research Governance Framework for Health and Social Care.

Sponsorship is conditional on the project receiving applicable ethical and regulatory approval for all research-related aspects of its conduct. A copy of the ethics approval letter **must** be sent to the Chair of the School Research Ethics Committee prior to the study commencing.

(Where relevant) sponsorship is dependant on obtaining R& D Office approval for all NHS sites where the research is being conducted.

Yours sincerely,

Dr. P. M. Rodriguez Mosquera
Deputy Chair, Research Ethics Committee
School of Social Sciences

APPENDIX C: Review Protocol

Systematic Review Protocol

1. Title

A meta-narrative of the reported cross-cultural differences in the manifestations of symptoms of schizophrenia.

2. Background and objective

Previous literature has confirmed that schizophrenia ubiquitously affects all cultures. Nevertheless, certain populations such as migrants who are Black exhibit a higher percentage of diagnosis of schizophrenia. Etiological explanations thus far have been exhausted and results confirm that there is no definite answer to explain this phenomenon. Some have claimed that it is due to genetic differences, others have explained it as a result of migration and environmental stress while others have blamed it on the institutionally racist mental health systems. Studies up to this date that have endeavoured to tackle this phenomenon by using epidemiological data, but there have been no qualitative studies that examine schizophrenia's symptomatic displays from a cross-cultural perspective. It is imperative to view schizophrenia from a micro rather than macro standpoint at this point in time because only then can one be able to understand the cross-cultural differences of the symptoms amongst the various ethnic groups.

Studies have touched upon the fact that symptoms across different ethnic groups and cultures vary. Afro-Caribbeans, for instance, are usually more diagnosed with paranoid schizophrenia while Caucasians are more readily diagnosed with bi-polar disorder or depression. In light of these findings, one may argue that the culture of different ethnic groups may have contributed to the interpretation of symptoms leading to a diagnosis. Therefore, if culture interplays with the symptoms, then health scientists need to start understanding in more detail what exactly those differences are. In a creolized and highly multi-cultural era, mental health in the developed world needs to start developing more

intricate webs of understanding in terms of how manifestations of symptoms are cross-culturally understood.

In such circumstances, this meta-narrative attempts to describe symptoms and displays of schizophrenia across different ethnic groups. Its objectives are mainly to serve as a starting point to deconstruct the meanings of different symptoms in relation to one's cultural background, by using previous literature. The meta-narrative should assist in the development of a more coherent and comprehensive explanation as to why diagnosis of schizophrenia might be more prevalent across specific ethnic groups and not in others.

3. Define the population

Inclusion criteria: Quantitative and qualitative studies

The main informants are people diagnosed with schizophrenia (based on the DSM or ICD criteria); clinicians; carers or families describing their patients' symptoms. The literature that will be considered needs to have descriptive accounts of the symptoms of patients, their thoughts or ideas.

English speaking sources, population age range: 18-65, no limit for year, no limit for country.

(Note: Because the narrative is very specific in its research questions, it is important to widen the inclusion criteria and put fewer constraints on the search strategy).

Exclusion criteria: People diagnosed with schizophrenia and another type of illness/or stigmatized group. For example, if a study focuses on patients diagnosed with schizophrenia and are prison inmates, they are excluded.

Non-English sources; Sources that examine cross-cultural differences in terms of medication intake; sources that examine cross-cultural differences in relation to the experience of stigma; or studies that are based on interventions or Randomized Control Trials are excluded.

4. Define the intervention/s

The narrative is based on ideas, thoughts and symptoms displayed by people who were diagnosed with schizophrenia. The papers can be clustered around certain themes but requires a qualitative description of the symptoms.

(It is not based on interventions and will not include studies that measure their effects).

5. Methodology

Search strategy: Study identification will take place using the "Boolean method", and include the following search terms: (schizophrenia) and (ethnicity or ethnic* or culture or migrant or immigrant or refugee, cross culture*, psychiatrist) and (qualitative, narrative, dialogue, ethnography, diagnosis, language).

A 'search diary' document is used in order to keep track of all the searches, names of databases used and hits that come up. Title and abstracts are kept as a word copy, along with their reference details by using Refworks program.

Electronic Search Databases: MEDLINE, PsychINFO, Google Scholar, Schizophrenia Research Forum, Jstor and Academic Search Complete.

No year limit

Stage 1:

Using the search terms, all databases are searched and abstracts and titles are read. The decision to be considered for inclusion at this stage are applied but more broadly at this stage. The reviewer examines the studies using the inclusion criteria and excludes the studies that are apparently irrelevant.

Stage 2:

Using a data extraction form developed by SCIE (2006), studies are selected based on more specific questions relating to the exclusion and inclusion criteria. Here, the original article is retrieved and read for a more in depth evaluation. The use of Refworks for sourcing all citations at this stage also takes place.

Stage 3:

Relevant studies are scrutinized in terms of quality, and further inclusion and exclusion is applied. Hand searches are added on for articles that are identified as matching from the already found reference lists of the citations from stage 2.

Stage 4:

Synthesis of data from chosen studies. Reporting of initial stage of synthesis, namely the preliminary synthesis.

Stage 5:

Completion and production of meta-narrative.

APPENDIX D: Data extraction form

Data extraction form

Title of review: A meta-narrative of the reported cross-cultural differences in the manifestations of symptoms of schizophrenia.

1. Author(s):
2. Year:
3. Title of paper:
4. Journal name:
5. Year, Vol., Issue, Pages:
6. Reference number:

Publication details

7. Aims of the study:
8. Country in which the study was done:
9. Study site(s): describe setting (e.g. rural/urban):
10. Context and details of key characteristics (e.g. of organisation):
11. Target population (e.g. adults with learning disability, children in foster care):
12. Sampling/recruitment procedures (any info re: age, gender):
13. Ethnicity of target population:
14. Country of origin of target population:
15. Number of participants:
16. Details of any theory referred to or conceptual models used:
17. Characteristics of participants (e.g. practitioners, types of job roles, age, sex, gender, ethnicity, type of policy makers):
18. Study type and design:

Nature of the study

19. Study date and duration:
20. Methods of data collection and who collected by (e.g. researcher/ practitioner):
21. Any research tools used:
22. Analysis used:

23. Aim of intervention:
24. Country:
25. Location/setting:
26. Target population (any info re: age, ethnicity, gender):
27. Outcome measures used:
28. Details of outcomes/findings:
29. Any details of strengths/limitations of the study (including diversity of sample):
30. Author's conclusions:

APPENDIX E: Studies selected for inclusion/exclusion

Studies Selected for Inclusion

1. Aisnah, O., Nurulwafa, H., & Osman, C. (2008). Symptom presentation in patients with acute schizophrenia: Comparison in three major Malaysian ethnic groups. *Hong Kong Journal of Psychiatry*, *18,* 62–68.

2. Arnold, L., Keck, P., Collins, J., Wilson, R., Fleck, D., Corey, K., . . . & Strakowski, S. (2004). Ethnicity and first-rank symptoms in patients with psychosis. *Schizophrenia Research, 67,* 207–212.

3. Bergner, E., Leiner, A., Carterb, T., Franza, L., Thompson, N. & Comptona, M. (2008). The period of untreated psychosis before treatment initiation: A qualitative study of family members' perspectives. *Comprehensive Psychiatry*, *49,* 530–536.

4. Brekke, J., & Barrio, C. (1997). Cross-ethnic symptom differences in schizophrenia: The influence of culture and minority status. *Schizophrenia Bulletin, 23,* 305–316.

5. Chandrasena, R., & Rodrigo, A. (1979). Schneider's first-rank symptoms: Their prevalence and diagnostic implications in an Asian population. *The British Journal of Psychiatry*, *135,* 348–351.

6. Chang, N., Newman, J., D'Antonio, E., McKelvey, J., & Serper, M. (2011). Ethnicity and symptom expression in patients with acute schizophrenia. *Psychiatry Research*, *185,* 453–455.

7. Coelho, V., Strauss, M., & Jenkins, J. (1998). Expression of symptomatic distress by Puerto Rican and Euro-American patients with depression and schizophrenia. *Journal of Nervous & Mental Disease*, *8,* 477–483.

8. Guthrie, G., & Szanton, D. (1976). Folk diagnosis and treatment of schizophrenia: Bargaining with the spirits in the Philippines. In W. Lebra. *Culture Bound Syndromes, Ethnopsychiatry, and Alternative Therapies* (pp. 147–163). Honolulu: University Press of Hawaii.

9. Haasen, C., Yagdiran, O., Mass, R., & Krausz, M. (2001). Schizophrenia disorders among Turkish migrants in Germany. *Psychopathology*, *34,* 203–208.

10. Hutchinson, G., Takei, N., Sham, P., Harvey, I., & Murray, R. (1999). Factor analysis of symptoms in schizophrenia: Differences between white and Caribbean patients in Camberwell. *Psychological Medicine*, *29,* 607–612.

11. Jenkins, J. (1988). Conceptions of schizophrenic illness as a problem of nerves: A comparative analysis of Mexican-Americans and Anglo-Americans. *Social Science and Medicine*, *26,* 1233–1243.

12. Katz, M., Marsella, A., Dube, K., Olatawura, M., Takahashi, R., Nakane, Y., . . . & Jablensky, A. (2002). On the expression of psychosis in different cultures: Schizophrenia in an Indian and in a Nigerian community, Culture. *International Journal of Geriatric Psychiatry*, *17,* 473–479.

13. Kim, K., Li, D., Jiang, Z., Cui, X., Lin, L., Kang, J., . . . & Kim, C. (1993). Schizophrenia delusions among Koreans, Korean-Chinese and Chinese: A transcultural study. *The International Journal of Social Psychiatry, 39,* 190–199.

14. Maslowski, J., & Mthoko, R. (1998). A polydiagnostic approach to the differences in the symptoms of schizophrenia in different cultural and ethnic populations. *Acta Psychiatrica Scanidavica*, *98,* 41–46.

15. Ndetei, D., & Vadher, A. (1984). A comparative cross-cultural study of the frequencies of hallucinations. *Acta Psychiatrica Scandinavica, 70,* 545–549.

16. Ndetei, D., & Vadher, A. (1984). Frequency and clinical significance of delusions across cultures. *Acta Psychiatrica Scandinavica, 70,* 73–76.

17. Ndetei, D., & Vadher, A. (1985). Content and grandiose phenomenology across cultures. *Acta Psychiatrica Scandinavica, 72,* 38–39.

18. Neighbors, H., Trierweiler, S., Ford, B., & Muroff, J. (2003). Racial differences in DSM diagnosis using a semi-structured instrument: The importance of clinical judgment in the diagnosis of African Americans. *Journal of Health and Social Behavior*, *44,* 237–256.

19. Padmavati, R., Thara, R., & Corin, E. (2005). A qualitative study of religious practices by chronic mentally ill and their caregivers in South India. *International Journal of Social Psychiatry, 51,* 139–149.

20. Reeves, S., Stewart, R., & Howard, R. (1988). Service contact and psychopathology in very-late-onset schizophrenia-like psychosis: The effects of gender and ethnicity. *Medicine and Psychiatry*, *12,* 331–355.

21. Schooler, C., & Caudill, W. (1964). Symptomatology in Japanese and American schizophrenics. *Ethnology*, *3,* 172–177.

22. Sharpley, M., & Peters, E. (1999). Ethnicity, class and schizotopy. *Social Psychiatry and Psychiatric Epidemiology*, *34,* 507–512.

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25. Umoren, U. (1990). Religion and traditional medicine: An anthropological case study of a Nigerian treatment of mental illness. *Medical Anthropology*, *12,* 389–400.

26. Weisman, A., Lopez, S., Ventura, J., Nuechterlein, K., Goldstein, M., & Hwang, S. (2000). Comparison of psychiatric symptoms between Anglo-Americans and Mexican- Americans with schizophrenia. *Schizophrenia Bulletin*, *26,* 817–824.

Studies selected for Exclusion (Stage 3)

1. Alonso, L., & Jeffrey, W. (1988). Mental illness complicated by the Santeria belief in spirit possession. *Hospital Community Psychiatry, 39,* 1188–1191.

2. Altshuler, L., Wang, X., Qi, H., Hua, Q., Wang, W., & Xia, M. (1988). Who seeks mental health care in China? Diagnoses of Chinese outpatients according to DSM-III criteria and the Chinese classification system. *American Journal of Psychiatry*, *145,* 872–875.

3. Barrio, C. (2001). Culture and schizophrenia: A cross-ethnic growth curve analysis. *Journal of Nervous and Mental Disease*, *10,* 676–684.

4. Bhugra, D., Corridan, B., Rudge, S., Leff, J., & Mallett, R. (1999). Social factors and first onset schizophrenia among Asians and whites. *International Journal of Social Psychiatry*, *45,* 162–170.

5. Blow, F, Zeber, J., McCarthy, J., Valenstein, M., Gillon, L., & Bingham, C. (2004). Ethnicity and diagnostic patterns in veterans with psychoses. *Social Psychiatry & Psychiatric Epidemiology, 39*, 841–851.

6. Boydell, K., Stasiulis, E., Volpe, T., & Gladston, B. (2010). A descriptive review of qualitative studies in first episode psychosis. *Early Intervention in Psychiatry*, *4,* 7–24.

7. Brekke, J. S., Nakagami, E., Kee, K. S., & Green, M. F. (2005). Cross-ethnic differences in perception of emotion in schizophrenia. *Schizophrenia Research, 77*(2–3), 289–298.

8. Chadwick, P. (2007). Peer-professional first-person account: Schizophrenia from the inside—phenomenology and the integration of causes and meanings**.** *Schizophrenia Bulletin*, *33,* 166–173.

9. Compton, M., & Furman, A. (2005). No inverse correlations between symptom scores and spiritual well-being among African American patients with first-episode schizophrenia spectrum disorders. *Journal of Nervous and Mental Disease*. *5,* 346–349.

10. Corin, E., Thara, R., & Padmavati, R. (2005). Shadows of culture in psychosis in south India: A methodological exploration and illustration. *International Review of Psychiatry, 17*, 75–81.

11. Dutta, R., Greene, T., Addington, J., McKenzie, K., Phililips, M., & Murray, R. (2007). Biological life course, and cross-cultural studies all point toward the value of dimensional and developmental ratings in the classification of psychosis. *Schizophrenia Bulletin*, *33,* 868–876.

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14. Gruber, J., & Kring, A. (2008). Narrating emotional events in schizophrenia. *Journal of Abnormal Psychology, 117,* 520–533.

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16. Humberstone, V. (2002). The experiences of people with schizophrenia living in supported accommodation: a qualitative study using grounded theory methodology. *Australian & New Zealand Journal of Psychiatry, 36*, 367–372.

17. Ikeda, H., Ball, H., & Yamamura, D. (1962). Ethnocultural factors in schizophrenia the Japanese in Hawaii. *The American Journal of Sociology*, *68,* 242–248.

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32. Ndetei, D., & Muhangi, J. (1979). The prevalence and clinical presentation of psychiatric illness in a rural setting in Kenya. *British Journal of Psychiatry*, *135,* 269–272.

33. Ndetei, D., & Vadher, A. (1984). A cross-cultural study of the frequencies of Schneiders First Rank Symptoms of schizophrenia. *Acta Psychiatrica Scandinavica, 70,* 540–544.

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APPENDIX F: NHS Data analysis

Diagnosis of schizophrenia: categories

F20	Schizophrenia
F20.0	Paranoid schizophrenia
F20.1	Hebephrenic schizophrenia
F20.2	Catatonic schizophrenia
F20.3	Undifferentiated schizophrenia
F20.4	Post-schizophrenic depression
F20.5	Residual schizophrenia
F20.6	Simple schizophrenia
F20.8	Other schizophrenia
F20.9	Schizophrenia, unspecified
F21	Schizotypal disorder
F22	Persistent delusional disorders
F22.0	Delusional disorder
F22.8	Other persistent delusional disorders
F22.9	Persistent delusional disorder, unspecified
F23	Acute and transient psychotic disorders
F23.0	Acute polymorphic psychotic disorder without symptoms of schizophrenia
F23.1	Acute polymorphic psychotic disorder with symptoms of schizophrenia
F23.2	Acute schizophrenia-like psychotic disorder
F23.3	Other acute predominantly delusional psychotic disorder
F23.8	Other acute and transient psychotic disorders
F23.9	Acute and transient psychotic disorder, unspecified
F24	Induced delusional disorder
F25	Schizoaffective disorders
F25.0	Schizoaffective disorder, manic type
F25.1	Schizoaffective disorder, depressive type
F25.2	Schizoaffective disorder, mixed type
F25.8	Other schizoaffective disorders
F25.9	Schizoaffective disorder, unspecified

HES Inpatient data

INPATIENT DATA 2006/07

Primary diagnosis: summary	Admissions	Percent	Mean Age	Age 0-14	Age 15-59	Age 60-74	Age 75+
F10-F19 Mental and behavioural disorders	47,886	30.5	41	2,190	49,564	5,685	1,305
F20-F29 Schizophrenia, schizotypal and delusional disorders	28,715	18.3	41	135	29,165	3,159	1,519
F30-F39 Mood [affective] disorders	36,338	23.2	52	138	25,959	7,680	5,986
F40-F69 Neurotic, bahavioural & personality disorders	23,628	15.1	43	846	19,748	2,864	2,614
F70-F79 Mental retardation	9,889	6.3	25	2,916	6,646	177	41
F80-F99 Other mental and behavioural disorders	10,502	6.7	36	2,283	6,830	942	1,074
Total	156,958	100%	40	8,508	137,912	20,507	12,539

HES inpatient data

INPATIENT DATA 2007/08

Primary diagnosis: summary	Admissions	Percent	Mean Age	Age 0-14	Age 15-59	Age 60-74	Age 75+
F10-F19 Mental and behavioural disorders	48,583	31.5	41	2,004	51,127	6,064	1,343
F20-F29 Schizophrenia, schizotypal and delusional disorders	27,876	18.1	41	94	29,955	3,499	1,481
F30-F39 Mood [affective] disorders	35,118	22.8	51	218	25,769	7,509	6,206
F40-F69 Neurotic, bahavioural & personality disorders	24,653	16.0	43	1,027	20,732	3,396	2,674
F70-F79 Mental retardation	6,420	4.2	29	903	5,559	143	18
F80-F99 Other mental and behavioural disorders	6,698	4.3	31	2,033	4,145	474	553
Total	149,348	1.0	39	6,279	137,287	21,085	12,275

Gender	Age Group	Mean Waiting Time	Median Waiting Time	Mean Length of Stay	Median Spell Duration	Mean Age
Male	All Ages	13	5	120.4	60	37
Female	All Ages	10	5	89.9	55	44
Totals		12	5	110.9	56	39

Brent 2007 mid Year Population (thousands)

Persons All Ages	Persons 0-4	Persons 5-9	Persons 10-14	Persons 15-19	Persons 20-24	Persons 25-29	Persons 30-34	Persons 35-39	Persons 40-44	Persons 45-49	Persons 50-54	Persons 55-59	Persons 60-64	Persons 65-69	Persons 70-74	Persons 75-79	Persons 80-84	Persons 85+
270.0	19.9	14.0	13.7	15.8	20.9	27.9	25.6	23.0	21.3	18.2	14.5	12.6	10.2	9.4	8.6	6.5	3.9	3.7

Males All Ages	Males 0-4	Males 5-9	Males 10-14	Males 15-19	Males 20-24	Males 25-29	Males 30-34	Males 35-39	Males 40-44	Males 45-49	Males 50-54	Males 55-59	Males 60-64	Males 65-69	Males 70-74	Males 75-79	Males 80-84	Males 85+
135.2	10.3	7.1	7.0	8.1	10.4	14.4	14.2	11.9	11.0	8.7	7.0	6.0	4.7	4.4	4.2	3.0	1.6	1.3

Females All Ages	Females 0-4	Females 5-9	Females 10-14	Females 15-19	Females 20-24	Females 25-29	Females 30-34	Females 35-39	Females 40-44	Females 45-49	Females 50-54	Females 55-59	Females 60-64	Females 65-69	Females 70-74	Females 75-79	Females 80-84	Females 85+
134.8	9.7	6.9	6.7	7.8	10.6	13.5	11.5	11.1	10.3	9.5	7.5	6.6	5.5	5.0	4.4	3.5	2.4	2.4

Source: Office for National Statistics (2009)

Brent population by country of birth and ward

Ward	All people	Europe	United Kingdom	Northern Ireland	Republic of Ireland	Other Western Europe	EU Countries	Non EU countries in Western Europe	Eastern Europe	Africa	North Africa
Alperton	12,323	52.2	45.1	0.3	3.2	2.3	2.1	0.1	1.7	12.3	0.8
Barnhill	13,188	63.4	55.1	0.4	3.3	2.8	2.7	0.2	2.1	12.8	0.8
Brondesbury Park	11,643	72.0	57.6	0.8	4.7	**6.8**	**6.5**	**0.3**	2.6	9.0	**1.5**
Dollis Hill	12,102	66.5	51.6	0.7	**8.7**	3.4	3.2	0.2	2.5	10.7	**1.5**
Dudden Hill	13,350	65.8	50.6	0.6	6.6	5.4	5.2	0.1	3.2	10.0	1.0
Fryent	11,688	66.6	57.0	0.5	5.7	2.5	2.3	0.2	1.3	11.4	0.7
Harlesden	12,227	65.2	54.9	0.4	5.4	2.9	2.9	0.0	1.9	12.4	1.0
Kensal Green	10,668	70.0	57.3	0.8	5.6	5.4	5.3	0.1	1.6	8.7	0.8
Kenton	11,672	62.3	56.3	0.3	2.8	1.9	1.8	0.1	1.3	**16.9**	0.6
Kilburn	14,172	71.1	57.5	**1.0**	6.5	5.0	4.8	0.2	2.0	10.6	0.9
Mapesbury	13,242	71.9	54.4	**1.0**	8.1	6.0	5.8	0.2	**3.4**	7.9	0.7
Northwick Park	12,175	61.8	53.9	0.5	4.1	2.3	2.1	**0.3**	1.4	14.0	0.6
Preston	12,832	62.7	54.7	0.4	2.9	3.3	3.2	0.1	1.7	12.6	0.6
Queen's Park	12,400	**74.6**	**62.7**	0.7	4.5	5.6	5.4	**0.3**	1.5	6.7	1.0
Queensbury	13,175	59.6	52.6	0.4	3.9	2.0	1.8	0.2	1.0	15.5	0.5
Stonebridge	**15,943**	62.4	53.8	0.3	4.6	2.2	2.1	0.1	1.6	15.5	1.1
Sudbury	12,307	57.8	49.8	0.5	3.7	2.4	2.2	0.2	1.8	14.0	0.6
Tokyngton	11,836	56.0	47.5	0.4	4.2	2.2	2.1	0.1	2.2	12.9	0.5
Welsh Harp	12,405	66.8	55.8	0.5	5.9	3.1	3.1	0.1	1.9	12.2	1.0
Wembley Central	11,002	47.2	41.7	0.3	2.3	1.4	1.4	0.1	1.7	16.1	0.7
Willesden Green	12,714	65.6	51.3	0.9	6.3	5.3	5.1	0.1	2.7	10.1	0.9

Ward	Central & Western Africa	South & Eastern Africa	Other South & Eastern Africa	Asia	China	South Asia	Bangladesh	India	Pakistan	Caribbean & Jamaica	Jamaica
Alperton	1.7	9.9	5.5	29.0	0.2	25.6	**0.5**	14.0	2.3	4.6	2.9
Barnhill	2.8	9.1	4.9	18.9	0.4	11.8	0.3	7.6	1.6	3.2	2.0
Brondesbury Park	2.6	4.9	2.1	10.9	0.3	5.5	0.2	3.1	1.3	2.8	1.6
Dollis Hill	3.2	6.0	3.0	16.5	0.1	11.4	0.2	6.0	**3.0**	3.5	2.2
Dudden Hill	3.0	6.1	3.0	13.9	0.2	9.9	0.3	4.6	2.7	4.5	3.0
Fryent	2.1	8.6	4.3	17.9	0.3	13.0	0.2	7.3	1.8	2.3	1.3
Harlesden	6.3	5.1	3.9	8.4	0.1	5.7	0.3	2.4	1.6	**10.7**	**7.2**
Kensal Green	2.9	4.9	2.8	8.8	0.1	5.4	0.1	3.7	0.9	6.7	5.2
Kenton	1.2	**15.1**	5.6	18.0	0.2	13.4	0.4	9.5	1.3	1.2	0.7
Kilburn	4.3	5.4	3.8	8.4	0.4	4.3	0.2	1.9	1.2	5.7	3.2
Mapesbury	2.1	5.0	2.4	10.5	0.2	5.8	0.2	2.5	1.8	2.5	1.5
Northwick Park	0.9	12.6	5.3	19.5	**0.5**	14.4	0.2	9.0	2.0	2.6	1.7
Preston	2.0	10.0	4.7	19.7	0.3	14.2	0.2	8.2	2.2	2.5	1.4
Queen's Park	2.2	3.5	1.5	8.5	0.1	5.0	0.4	3.2	0.7	5.6	3.4
Queensbury	1.9	13.1	5.7	22.0	0.3	17.6	0.3	11.8	1.9	1.6	0.9
Stonebridge	**6.9**	7.4	6.1	9.7	0.1	6.6	0.3	2.9	1.2	10.0	7.1
Sudbury	2.6	10.8	5.8	22.2	0.1	19.1	0.3	10.3	2.4	3.9	2.3
Tokyngton	2.7	9.8	4.7	20.2	0.1	16.8	0.3	10.7	2.4	6.4	5.7
Welsh Harp	2.9	8.2	4.3	14.4	0.2	10.4	0.2	6.3	1.4	4.5	2.9
Wembley Central	2.2	13.2	**7.1**	**29.5**	0.1	**26.5**	0.4	**17.4**	2.8	5.2	2.9
Willesden Green	2.7	6.6	3.4	12.5	0.2	8.6	0.2	4.7	1.9	4.3	2.5

Hospital episodes for schizophrenia in Brent

(Directly age standardised rate per 100,000 population, 15-74 years)

			95% confidence interval		
Population (thousands)	**Hospital episodes**	**Rate**	**Lower limit**	**Upper limit**	**Year**
197	136	68.10	56.34	79.86	2000-2001
202	229	110.57	95.87	125.27	2001-2002
209	247	118.20	106.97	129.42	2002-2003
207	318	146.77	134.48	159.06	2003-2004
207	304	140.76	128.72	152.81	2004-2005
No data	327	152.22	135.28	169.16	2005-2006
No data	255	118.41	103.50	133.33	2006-2007

Source: London Health Observatory (2009)

Age

Age	N	Percent
0 to 18 years	29	3.7
19 to 25 years	90	11.5
26 to 35 years	199	25.3
36 to 45 years	174	22.1
46 to 55 years	146	18.6
56 to 65 years	78	9.9
66 to 75 years	70	8.9
Total	(786)	100%

Note: N=786 as the remaining cases had no age information

Deprivation level

Deprivation Level	N	Percent
Most deprived	539	66.5
Below average	63	7.8
Average	207	25.6
Least deprived	1	.1
Total	(810)	100%

Note: 50 records had no deprivation level information

Schizophrenia by Age

		Age								Total
		0- 18 years	19- 25 years	26- 35 years	36- 45 years	46- 55 years	56- 65 years	66- 75 years	76 +	
Other mental illness	Count	23	67	135	118	100	63	59	68	633
	%	79.3%	74.4%	67.8%	67.8%	68.5%	80.8%	84.3%	93.2%	73.7%
Schizophrenia	Count	6	23	64	56	46	15	11	5	226
	%	20.7%	25.6%	32.2%	32.2%	31.5%	19.2%	15.7%	6.8%	26.3%
Total	Count	29	90	199	174	146	78	70	73	859
	%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Chi-Square=29.47; df= 7; p< 0.001

Deprivation indices

ODPM Indices of Deprivation 2004 ***(Ward level figures)***								
Ward Name	**IMD Rank**	**Rank of Income**	**Rank of Employment**	**Rank of Health**	**Rank of Education**	**Rank of Housing**	**Rank of Crime**	**Rank of Living**
Alperton	12416	9046	16582	21619	17212	2539	15327	17098
Barnhill	14371	10942	16579	17611	22538	3024	13507	23256
Brondesury Park	12772	11650	14025	16489	25510	4065	7109	18142

Dollis Hill	12899	9024	14553	20129	18731	4104	15962	17636
Dudden Hill	12791	10532	14408	19566	21672	3934	9555	16698
Fryent	14706	10971	16499	20240	23624	4708	12843	15872
Harlesden	4089	2083	3849	10354	12764	3881	5702	12610
Kensal Green	8852	7534	9000	14626	19315	4968	8378	9834
Kenton	21567	19420	22680	23701	29313	5368	15927	19313
Kilburn	6312	5156	6397	9243	17028	4112	5377	16554
Mapesbury	11585	10031	11766	13904	24288	4821	9143	14884
Northwick Park	20070	17921	22460	23226	28333	3865	18161	20262
Preston	17282	12984	19279	21036	26374	4591	17907	19329
Queens Park	11518	10536	11522	15239	23013	5289	8839	11301
Queensbury	16652	12125	18695	21421	24726	4694	14805	20363
Stonebridge	3920	2115	5396	12528	11250	1698	8829	13042
Sudbury	11671	9312	15148	17486	22162	2285	11387	17735
Tokyngton	13109	10170	14522	20244	20934	3698	13336	18436
Welsh Harp	12020	9398	14648	20003	19233	3416	12767	12620
Wembley Central	9002	7052	11129	16146	17888	3746	7649	11216
Willesden Green	9244	6980	10168	14005	20878	3947	8902	13776

Hypothesis 1

Frequencies

Statistics

		ethnicityrec	Schizophrenia
N	Valid	805	860
	Missing	56	1
Mean		2.0037	.2628
Median		2.0000	.0000
Std. Deviation		1.10797	.44041

Frequency Table

ethnicityrec

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White	348	40.4	43.2	43.2
	Black	250	29.0	31.1	74.3
	Indian subcontinent	63	7.3	7.8	82.1
	Other	144	16.7	17.9	100.0
	Total	805	93.5	100.0	
Missing	System	56	6.5		
Total		861	100.0		

Schizophrenia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other mental illness	634	73.6	73.7	73.7
	Schizophrenia	226	26.2	26.3	100.0
	Total	860	99.9	100.0	
Missing	System	1	.1		
Total		861	100.0		

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Schizophrenia * ethnicityrec	805	93.5%	56	6.5%	861	100.0%

Schizophrenia * ethnicityrec Crosstabulation

Count

		ethnicityrec				
		White	Black	Indian subcontinent	Other	Total
Schizophrenia	Other mental illness	288	135	49	110	582
	Schizophrenia	60	115	14	34	223
Total		348	250	63	144	805

Oneway

ANOVA

Schizophrenia

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.609	3	4.203	22.652	.000
Within Groups	148.616	801	.186		
Total	161.225	804			

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Indiandummy, Blackdummy[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Schizophrenia

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.275[a]	.076	.073	.43107

a. Predictors: (Constant), Indiandummy, Blackdummy

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.195	2	6.098	32.814	.000[a]
	Residual	149.030	802	.186		
	Total	161.225	804			

a. Predictors: (Constant), Indiandummy, Blackdummy

b. Dependent Variable: Schizophrenia

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.191	.019		9.831	.000
	Blackdummy	.269	.033	.278	8.033	.000
	Indiandummy	.031	.058	.019	.540	.589

a. Dependent Variable: Schizophrenia

Oneway

ANOVA

Schizophrenia

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.609	3	4.203	22.652	.000
Within Groups	148.616	801	.186		
Total	161.225	804			

Dependent Variable: Schizophrenia
Bonferroni

(I) ethnicityrec	(J) ethnicityrec	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
White	Black	-.28759*	.03571	.000	-.3820	-.1931
	Indian subcontinent	-.04981	.05898	1.000	-.2058	.1062
	Other	-.06370	.04268	.816	-.1766	.0492
Black	White	.28759*	.03571	.000	.1931	.3820
	Indian subcontinent	.23778*	.06072	.001	.0772	.3984
	Other	.22389*	.04506	.000	.1047	.3431
Indian subcontinent	White	.04981	.05898	1.000	-.1062	.2058
	Black	-.23778*	.06072	.001	-.3984	-.0772
	Other	-.01389	.06507	1.000	-.1860	.1582
Other	White	.06370	.04268	.816	-.0492	.1766
	Black	-.22389*	.04506	.000	-.3431	-.1047
	Indian subcontinent	.01389	.06507	1.000	-.1582	.1860

*. The mean difference is significant at the .05 level.

Hypothesis 2

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Schizophrenia * Deprivationlevel	810	94.1%	51	5.9%	861	100.0%

Schizophrenia * Deprivationlevel Crosstabulation

Count

		Deprivationlevel				
		Most deprived	Below average	Average	Least deprived	Total
Schizophrenia	Other mental illness	391	50	155	1	597
	Schizophrenia	148	13	52	0	213
Total		539	63	207	1	810

Oneway

ANOVA

Schizophrenia

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.303	2	.152	.780	.459
Within Groups	156.616	806	.194		
Total	156.920	808			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Schizophrenia
Bonferroni

(I) Deprivationlevel	(J) Deprivationlevel	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Most deprived	Below average	.06823	.05869	.736	-.0726	.2090
	Average	.02337	.03604	1.000	-.0631	.1098
Below average	Most deprived	-.06823	.05869	.736	-.2090	.0726
	Average	-.04486	.06343	1.000	-.1970	.1073
Average	Most deprived	-.02337	.03604	1.000	-.1098	.0631
	Below average	.04486	.06343	1.000	-.1073	.1970

Hypothesis 3

```
. logistic schizo ethnicdens

Logistic regression                                     Number of obs   =        475
                                                        LR chi2(1)      =      37.26
                                                        Prob > chi2     =     0.0000
Log likelihood = -277.60683                             Pseudo R2       =     0.0629

------------------------------------------------------------------------------
schizophrenia | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
   ethnicdens |   .0256352   .0161066    -5.83   0.000     .0074821    .087831
        _cons |   1.728015   .4102573     2.30   0.021     1.085073    2.75192
------------------------------------------------------------------------------

. logistic schizo ethnicdens deprivation

Logistic regression                                     Number of obs   =        455
                                                        LR chi2(2)      =      36.87
                                                        Prob > chi2     =     0.0000
Log likelihood = -267.09371                             Pseudo R2       =     0.0646

------------------------------------------------------------------------------
schizophrenia | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
   ethnicdens |   .0263568   .0168508    -5.69   0.000     .0075281    .0922776
  deprivation |   .9013808   .1118142    -0.84   0.403     .7068362    1.149471
        _cons |   2.062436   .6220028     2.40   0.016     1.142009    3.724701
------------------------------------------------------------------------------

.
```

All					
				Number of obs	475
	chi2(1)		37.26		
	p-value for chi2		0		
	log likelihood		-277.60683		
schi2	Coef.	z			
ethnicdens2012	-3.66	0			
_cons	0.55	0.021			

Indian						
					Number	51
					chi2(1)	4.97
					p value forchi2	0.0258
			Log	likelihood	=	-26.4663
schi2	Coef.			P>z		
ethnicden	-5.14193			0.039		
_cons	0.414217			0.573		

Black						
					Number	181
					chi2(1)	0.05
					p value forchi2	0.8189
			Log	likelihood	=	-125.364
schi2	Coef.	P>z				
ethnicden	0.328037	0.819				
_cons	-0.02281	0.951				

White						
					Number	243
					chi2(1)	1.23
					p value forchi2	0.2675
			Log	likelihood	=	-114.327
schi2	Coef.	z				
ethnicden	-1.46934	0.265				
_cons	-0.78566	0.235				

APPENDIX G: Recruitment Email

Are you a psychologist, psychiatrist, psychologist, psychotherapist, nurse or researcher who has had direct experience with schizophrenic patients in the UK?

This email is to invite you to participate in an online questionnaire on the diagnosis of schizophrenia of non-UK born patients. The aim of this questionnaire is to get a better understanding of immigrant patient diagnoses of schizophrenia in mental health practices. At this point, studies on immigrant patients with schizophrenia have only been focused on incidence and prevalence rates without tackling the topic from a mental health professional's perspective. We wish to expand these studies through inputting your expertise in your practice!

IT SHOULD TAKE A MAXIMUM OF 20 MINUTES TO COMPLETE AND ALL INFORMATION WILL REMAIN ANONYMOUS AND CONFIDENTIAL.

Please follow the direct link to access the questionnaire:

http://FreeOnlineSurveys.com/rendersurvey.asp?sid=kgh9ijrzxvdpgab393050

If this is something that interests you, you can also become involved in:

1- Receiving the questionnaire results.

2- Participating in a focus group discussion at a later stage.

APPENDIX H: MHPV Questionnaire

Schizophrenia: Mental Health Professionals' Views

Brunel UNIVERSITY WEST LONDON

As part of a cross-cultural psychology PhD study, this study aims at gaining a better understanding of the current state of knowledge on patients who are non- UK born but suffering from schizophrenia. We are aware that mental health professionals would be the best experts on the subject matter and hence our rationale for this online questionnaire.

This questionnaire should not take more than 10- 20 minutes to complete. Thank you for taking part!

(This project was approved by The NHS Brent Research Ethics Committee and the Brunel University Ethics Board).

1) Pease enter your email address if you wish to be included in the draw for a chance to win a £10 gift card from Sainsbury's! (We will not contact you for any other purpose if you provide your details in this box).

PLEASE FILL OUT THIS QUESTIONNAIRE ONLY IF YOU EITHER HAVE CLINICAL EXPERIENCE OR ACADEMIC KNOWLEDGE ON SCHIZOPHRENIA.

Section 1: This will cover some demographic information about you and your practice details.

2) What is your current job title?	
Counsellor	
Nurse or Community Psychiatric Nurse	
Psychiatrist	
Psychologist	

Psychoanalyst or Psychotherapist	
Researcher in mental health	
Social Worker	
Other (Please Specify):	

3) In what location is your practice? (For example: Neasden) IF YOU ARE AN ACADEMIC, PLEASE LEAVE BLANK.

4) Approximately for how long have you had experience in mental health? (clinical or academic)	
1 year or less	
2-3 years	
4-5 years	
5-6 years	
6 years or more	

5) How old are you?	
18-25	
26-35	
36-45	
46-65	
66 or older	

6) Are you ... ?	
Male	
Female	

7) What is your marital status?	
Single	
Cohabiting	
Married	
Divorced	
Widowed	

8) What is your religious belief?	
Christian	
Jewish	
Buddhist	
Hindu	
Muslim	
Atheist	
Other (Please Specify):	

9) What is your ethnic background?	
Asian (Indian)	

Asian (Pakistani)	
Black (Caribbean)	
Black (African)	
Black (Other)	
East Asian (Chinese)	
Mixed (White and Asian)	
Mixed (White and Black)	
Mixed (Other)	
White	
Other (Please specify):	

10) In which country were you born? Please write

11) Which national identity do you consider yourself from?	
The United Kingdom	
Other (Please specify):	

12) What languages do you speak, other than English?	
None	
Arabic	

Chinese	
Farsi	
French	
Hindu	
Gujurati	
Italian	
German	
Punjabi	
Spanish	
Urdu	
Other (please specify):	

Section 2:
We will ask you to provide us with your personal experience and current case load on the diagnosis of schizophrenia in your practice.

IF YOU HAVE NO DIRECT EXPERIENCE WITH PATIENTS WHO HAVE BEEN DIAGNOSED WITH SCHIZOPHRENIA, PLEASE SKIP TO SECTION 3.

13) In what type of mental health setting do you currently work?	
National Health Services (NHS) hospital	
National Health Services (NHS) health clinic	
National Health Services (NHS) Trust management/research	
Social Services	
Private Clinic	

Other (Please Specify):

14) Have you used a foreign language with mental health patients in your practice over the last 5 years in the UK?	
No	
Yes, how often? (i.e:once a week)	

15) How often do you see patients diagnosed with schizophrenia (whose first language is not English) who might require a translator in the delivery of their mental health needs?	
Always (almost daily)	
Often (around 2 to 3 times a week)	
Sometimes (around 1 time a month)	
Rarely (around 1 time a year)	
Never	
Unsure (no direct experience)	

16) In what type of setting has your experience been with patients diagnosed with schizophrenia? Tick all that apply	
One-to-one counseling	
Nursing care	
Psychiatric consultation and/or follow-up	
Social work	
Other (Please Specify):	

17) Over the past 5 years in your practice, have you noticed any shifts in the nationalities of patients diagnosed with schizophrenia?	
No	
Unsure (no direct experience)	
Yes (please specify countries of origin with an increase in diagnosis):	

18) In your current caseload, how many patients do you treat who have been diagnosed with schizophrenia? IF NONE, type 0.

19) Amongst your current caseload of patients with schizophrenia, can you tell us how many are Central or Eastern European? (For example: 2 from Poland, 1 from Hungary etc) IF NONE, type 0.

20) Amongst your current caseload of patients with schizophrenia, can you tell us how many are Middle Eastern? (For example: 2 from Iraq and 1 from Afghanistan) IF NONE, type 0.

21) Amongst your current caseload of patients with schizophrenia, can you tell us how many are African? (For example: 1 from Nigeria, 2 from Somalia) IF NONE, type 0.

Section 3: **We will ask you in this section to provide us with your personal opinion on reasons for the development of schizophrenia.**

22) In your experience, do you think that certain non-UK born immigrants have a higher chance of being diagnosed with schizophrenia compared to the White/ Caucasian British population?	
No	
Yes, which nationalities as most common?(state country of birth)	

23) In your opinion, which ethnic groups are at the highest risk for developing schizophrenia? (1 as MOST LIKELY and 10 as LEAST LIKELY) SKIP IF NONE	
Asian (Indian)	
Asian (Pakistani)	
Black (Caribbean)	
Black (African)	
Black (Other)	
East Asian (Chinese)	
Mixed (White and Asian)	
Mixed (White and Black)	
Mixed (Other)	
White	

24) From your own experience, do you think that there are any differences in the **content** of psychotic symptoms between UK born and non- UK born patients diagnosed with schizophrenia?	
No	
Yes	

Unsure (no direct experience)	

25) How would you rank possible reasons for the development of schizophrenia amongst non-UK born patients in the UK? (1= MOST likely and 5= LEAST likely)	
Languages barriers	
Experience of trauma or family dysfunction	
Social deprivation (i.e: poverty)	
Genetic predisposition (family history)	
Migration and stressful adaptation in the UK	

26) Of those symptoms listed below, which psychotic manifestations do you think occur **SIGNIFICANTLY LESS** amongst non- UK born patients?	
Aggression and/or agitation	
Expression of religious delusions	
Expressions of delusions of persecution	
Hallucination types (auditory and/or visual)	
Disorganized speech frequency	
Disorganized behavior- Catatonic displays	
Display of abnormal behavior	
Negative symptoms (alogia, flattening or avolition)	
No difference	

27) Of those symptoms listed below, which psychotic manifestations do you think occur **SIGNIFICANTLY MORE** amongst non- UK born patients?

Aggression and/or agitation	
Expression of religious delusions	
Expressions of delusions of persecution	
Hallucination types (auditory and/or visual)	
Disorganized speech frequency	
Disorganized behavior- Catatonic displays	
Display of abnormal behavior	
Negative symptoms (alogia, flattening or avolition)	
No difference	

28)

Of the symptoms listed below, which (if any) do you think may be expressed in a **QUALITATIVELY DIFFERENT** way amongst patients who are non-UK born?

Aggression and/or agitation	
Expression of religious delusions	
Expressions of delusions of persecution	
Hallucination types (auditory and/or visual)	
Disorganized speech frequency	
Disorganized behavior- Catatonic displays	
Display of abnormal behavior	
Negative symptoms (alogia, flattening or avolition)	
No difference	

29) Of those symptoms indicated in the question above , how could the content of the manifestations of non-UK born

patients be **DIFFERENT** in content? (For example: A patient from Brazil could be expressing more Christian religious delusions and a strong belief in having been possessed by Jesus. A Congolese patient could be expressing a Voodoo spell being cast on him). Please explain with an example.

30) From your own experience, which group would you say is most likely to develop schizophrenia ? (1=MOST likely and 4= LEAST likely)	
Asylum seeker	_____
Highly skilled migrant worker	_____
Refugee	_____
Student	_____

31) **Are you a psychiatrist? Can I meet with you for a short interview?** This study is also interested in mapping out the process of diagnosis in practice in the UK. If you are a psychiatrist willing to share your knowledge in a one-to-one short interview (30 min) , please provide your details below or directly email me (Huda Shalhoub) at: huda.shalhoub@brunel.ac.uk	
Yes	_____
No	_____

32) **Are you interested in improving mental health services to immigrants? Would you be willing to take part in a (one time) FOCUS GROUP to take place at the end of January, 2009?** Your answers are very valuable to this study and for future research on immigrants with a diagnosis of schizophrenia. If you would like to take part in a Focus Group that should take place within the next 4 months to discuss ways to address needs of non-UK born schizophrenic patients, please provide your contact details below or email me (Huda Shalhoub) at huda.shalhoub@brunel.ac.uk	
Yes	_____
No	_____

33) **If you are interested in receiving a final copy of the questionnaire results, please**

provide your email below:
Email:

34) You only need to complete this section if you **agree** to be contacted for taking part in a focus group or an interview.	
Your full name (first and last name)	
Title (Ms.Mrs.Mr)	
Current Address	
Email address	
Contact Telephone number	

35) Any additional comments or recommendations about the study or questionnaire?

DONE! THANK YOU FOR FILLING OUT THE ONLINE QUESTIONNAIRE!

YOUR ANSWERS ARE VERY VALUABLE TO THE STUDY AND FUTURE KNOWLEDGE ON THE DIAGNOSIS OF SCHIZOPHRENIA....

APPENDIX I: Published Journal Article in Psychtalk, 2009

Understanding schizophrenia's symptoms across cultures: Time for anthropological research to make its presence[33]

Huda Shalhoub, Brunel University

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ABSTRACT

Many studies have shown that certain ethnic minorities in the United Kingdom are more likely to be diagnosed with schizophrenia than British born citizens. The most prominent research has focused on African-Caribbean and British white incidence rates while disregarding other immigrant groups. The United States and the United Kingdom are currently marked by a constant influx of international migration and thus research on cross-cultural differences in manifestations of schizophrenia must be seen as a crucial and inescapable step for adhering to culturally sensitive and competent psychiatric systems. This paper is based on field work that aimed at 1) estimating prevalence rates of schizophrenia diagnosis in London amongst newly arrived Eastern European, North African and Middle Eastern patient cohorts; 2) assessing and elaborating etiological explanations regarding the differences between schizophrenia manifestations in UK and non-UK born cohorts, from a mental health professional's perspective; 3) understanding the difficulties amongst that mental health professionals face in their day to day practices with a schizophrenia

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diagnosis in culturally diverse groups of patients. Drawing on these aspects of field work, I intend to demonstrate that clinical interpretations can only be accurately portrayed when there is a profound dyadic cross-cultural dialogue between practitioner and patient.

INTRODUCTION

Schizophrenia has been by far the most researched mental disorder throughout history. At this point in time we have surpassed the stages of identifying its symptoms and it is now undeniably accepted as a ubiquitous mental disorder around the world. Approximately 1 percent of adults of any given population are diagnosed with schizophrenia (National Institute of Mental Health, 2009). What we also know is that the person most likely to develop schizophrenia in The United Kingdom belongs to an African-Caribbean ethnic minority (Castle et al. 1998; Bhui et al. 2003; Burnett et al. 1999; Morgan et al. 2006; Littlewood & Lipsedge, 2001). In other countries whose population growth is driven by migration, similar patterns have been identified. In Denmark, Finland, Israel, and the United States, for example, the same elevated rates for schizophrenia amongst ethic minorities have been evident, whereby black ethnic minorities show staggering incidence and prevalence rates in comparison to the host population (Cantor- Graae & Selten, 2005). These findings have become the new baffling phenomenon across the disciplines of cultural psychiatry and medical anthropology. As such, this long and withstanding healthcare inequality started a cross-cultural international scientific debate, but we are still at a stage where we have no definitive answers for this differential favouring of schizophrenia. Is it related to poverty, genes, selective migration, cultural bias or the endemic institutional racism of our Western medical systems?

With the increase in migration and globalisation, the United Kingdom is currently experiencing an influx of migrants from Central and Eastern Europe, the Middle East and North Africa, but we do not know how these groups fare in comparison to black ethnic minorities. Bhugra (2004) has asserted that the only way to understand the reason for the different prevalence rates of schizophrenia is to explore the differences in patient's symptoms across cultures. This vital distinction between cross-cultural differences in the form and content of schizophrenic symptoms may in turn uncover gaps in our understanding. However, it seems to me that there is also a dire need to explore cross-cultural clinical interactions to uncover the

ethnically biased epidemiological trends of schizophrenia – and this exploration should be conducted through anthropological means. I will share with you the foundations of this theoretical approach, whilst demonstrating that a schizophrenia diagnosis can only be accurately understood once there is a profound dyadic cross-cultural observation of the interactions between practitioners and patients. I have called this the theory of cross-cultural dyadic interactions.

FINDINGS

With the collaboration of mental health professionals in London, I estimated the prevalence rates of schizophrenia patients by country of origin. With a total number of 419 identified patients diagnosed with schizophrenia in my sample, I found that patients who were first generation migrants from African nations had the highest prevalence estimates in comparison to Middle Eastern and Central and Eastern Europeans. 22% were estimated to be African non-UK born patients, followed by 7% percent from the Middle East, whereas only 5% percent were reported to have been from Central and Eastern Europe. The findings deserve more attention because what they seem to have in common with the results from the literature is that the highest diagnosis was again for black ethnicities, whether UK born or non UK born. Therefore, we can at this stage disregard the fact that migratory patterns might have affected the onset of schizophrenia. If migratory stress was the reason, then all of the new immigrants should have had a higher increase in schizophrenia and not only Africans, which was clearly not the case.

A systematic review also revealed that there are pronounced cross-cultural differences in the content of the display of symptoms of schizophrenia and the way they were explained by practitioners. It was found that there are more positive or first rank symptoms in Black groups. Black ethnicities were reported to experience more hallucinations, delusions and paranoid thoughts whether it was African Americans in the United States, Nigerians in Nigeria, South Africans in South Africa, or Kenyans in Kenya. African Caribbeans in the UK were found to have more affective symptoms, while West Africans and West Indians reported higher religious symptoms, incoherent speech and inappropriate affect. White migrant groups such as Greeks, Iberians, Turks, Latinos and Indians displayed the highest negative or psychosomatic symptoms.

In addition, my research revealed that there is an exceptionally multi-cultural mental health workforce in London and its outskirts. Almost a third of the mental health professionals felt that their national identity was not British. This increased diversity may signal either a strength or a weakness, for two reasons. It may serve as a cross-cultural bridge when it comes to dealing with patients from the same background as there would be a better cross-cultural understanding of values and behaviors displayed in the illness. But it may also be a disadvantage when a clinician is encountered with a dissimilar culture, hence possibly leading to misattributions in the symptoms displayed.

These three main findings all highlight the salience of the current population changes in our mental health systems. In a diagnosis of schizophrenia, one may see it as an interactive dyadic process which means that both the clinician and the patient are central to the communication process. Throughout that interaction, not only do culture, language and personality interfere but also the external setting may change the way it is displayed and understood. Therefore, there is no true objectivity in terms of understanding symptoms and displays of schizophrenia. Our striving to full comprehension of its symptoms and its predominance in Black ethnic minorities can basically never be accomplished if we keep using epidemiological and statistical means to finding the answers.

Underlying this notion is the very particular idea that psychiatric modernism valorizes and cultivates inter-subjectivity although it is not aware of it (Wilce, J., 2004). Both the culture of the practitioner and the patient are subjectively intertwined. The position of the unassailable authority of psychiatric practitioners in the clinical setting attests to the importance of also understanding them as professionals because ultimately their decisions impact the diagnosis. My findings led me to the conclusion that to understand schizophrenia not only do we need to decode the symptoms but also the diagnoser's interpretations. The diagnosers' cultural perception and own values, beliefs and knowledge ultimately affect the ways in which they are interpreted.

When a person experiences hallucinations or delusions, the diagnoser's perceptions would depend on how the experience was verbalized by the patient but also how it is interpreted by the diagnoser. Such an experience cannot thus be free of human subjectivity because we

create our realities through our thoughts, whether that reality has been categorized as an illness or not. The difference between reality and non reality ultimately takes place in our minds.

Cross-cultural differences in terms of how the symptoms of schizophrenia are both understood and explained have certainly proven this. There was a common theme that hinted at socio-cultural factors influencing the explanations in my findings. The content of auditory hallucinations was tainted by conceptions of culture, while the forms and explanations of symptoms from either the diagnosed, diagnoser or their carer have also stressed the salience of culture in their explanations. Perhaps another major finding from the systematic review was the finding by Tranulis and colleagues (2008) in which cultural distance took place when the clinician and the patient did not occupy the same cultural space.

CONCLUSION

Essentially, what I am trying to point out is that it is time for us to change the way we study schizophrenia. Rather than focusing only on epidemiological trends, we need to start ethnographically looking at the clinical interactions in order to make progress in this debate. What I am emphasizing is that studying an object by an object is essentially problematic in every way. Knowing this makes the gaps in our knowledge stronger in a sense that the reality as we know it can never be completely understood. Our minds are unable to cope with or process objects unless they are experienced by us. Hence, no matter how hard clinicians try to understand the experiences of schizophrenia sufferers, they will always remain as an other and an object that lacks the ability to render complete comprehension. We need to realize that cross-cultural differences matter in the clinical setting and thus may influence a diagnosis.

The subjective human experience is basic to understanding life, and what psychiatry in this day and age faces is the need to allow more subjectivity into the categorical constructions of schizophrenia to create more profound understandings of cross-cultural differences. Without allowing subjectivity in displays of symptoms, we may never be able to fully account for understanding the relationship between culture, ethnicity and schizophrenia.

I will not claim that I have found the answers to this long and withstanding debate but have certainly come to the conclusion with my research that the only way that we can start

understanding schizophrenia is when we start decoding cultural differences and by qualitatively exploring in more depth the relationship between patient and clinician. We need to start with observational techniques, ethnographic methodologies and a more profound analysis of the dyadic interactions between patients and practitioners.

It is time for anthropology to set foot in our definitions of schizophrenia both cross-culturally and inter-culturally because at this point in time epidemiological studies have ceased to provide fruitful explanations. Let us approach it from a micro perspective and start looking at dyadic cross-cultural interactions and focus on the processes of communication between patients and clinicians rather than focusing on the already known statistics that have brought nothing new to the social sciences in the last three decades. It is time for schizophrenia to dominate in anthropological studies in this highly multi-cultural globalized world we currently live in. Only then will we start getting heading in the right direction.

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