

Critically evaluate the diagnostic model of mental health, with specific reference to the concept of schizophrenia.

Fundamental to critically evaluating the diagnostic model of mental health, with specific reference to the concept of schizophrenia is the importance one must first place on its provenance. This is central to any diagnostic model evaluation for inferring schizophrenia because the earlier structural approaches continue to incorporate the basis for describing and diagnosing the disorder of today. This essay will therefore firstly begin by briefly discussing Kraepelin, Bleuler, and Schneider's work to the concept of schizophrenia then secondly argue how the implications of Kraepelin's idea of 'psychiatric classification' has resulted in much controversy surrounding issues of diagnostic reliability and validity.

Emil Kraepelin (1856-1926) assumed that there was a discrete and discoverable number of psychiatric disorders. His idea's of 'psychiatric classification' was published in a series of texts between 1896 and 1913 where assumed that mental illnesses fell into a small number of discoverable types which could be readily identified by studying symptoms on direct observation (Bentall, 2003). Upon recognising that some symptoms could occur in more than one disorder, Kraepelin began establishing exactly how many different types there were. Working with a large number of case studies, Kraepelin began grouping together illnesses which he observed to bare some resemblance to one another and concluded on the basis of this that catatonia, hebephrenia and dementia paranoides were manifestations of the same illness, therefore naming the illness *dementia praecox*.

The importance of Kraepelin's work here is not only because of his ideas on psychiatric classification but because it is in Kraepelin's work - Boyle (2000) notes - that marks the beginnings of the diagnostic issues following psychiatric classification. To illustrate this point, Boyle (2002) notes that in Kraepelin's work, he more than once changed his mind about the putative regularities which allows dementia praecox to be inferred (Boyle, 2002). The scale of the increase was seen by the fact that...

"In 1896 a discussion of the constructs of dementia praecox and catatonia took up about thirty-seven pages. In the 6th edition, dementia praecox occupied seventy-seven pages; by the 8th edition, the discussion had grown to 356 pages. This increase was almost wholly accounted for by the proliferation of behaviours said to be symptoms of dementia praecox" (Boyle, 2002; p.47).

Dementia praecox was later renamed 'schizophrenia' by psychiatrist Eugen Bleuler in 1911 as it became clear that Kraepelin's name was not an adequate description of the condition. He based this diagnosis on the signs and symptoms he considered common to a number of patients. Bleuler distinguished four primary symptoms, i.e. association disturbance, affective disturbance, ambivalence and autism. Bleuler viewed the splitting of mental functions as the main feature of patients with schizophrenia (Bentall, 2003). The psychiatrist Kurt Schneider (1887-1967) listed the particular forms of psychotic symptoms which he thought were particularly useful in distinguishing between schizophrenia and other disorders. These were called 'first rank symptoms' i.e. all forms of hallucinations, delusions, or passivity experienced.

Aside these obvious differences Kraepelin, Bleuler and Schneider attributes to be characteristic of schizophrenia, what is perhaps even more surprising is, as Boyle (2002) states...

"In spite of aligning themselves to a scientific framework, not one of them presented a single piece of data relevant to their assumption that they were justified in introducing and using the concepts of dementia praecox and schizophrenia. They presented instead their own beliefs, backed up by authority" (Boyle, 2002. p 80).

The work of Kraepelin, Bleuler, and Schneider represent a chronological order that illustrates (very briefly) not only the development of schizophrenia but also the differences each have placed as characteristic to the disorder. This early disagreement demonstrates one of such several similar debates that have continued to surface throughout the concepts years and is also one that has subsequently resulted in a continued redefinition of schizophrenic diagnosing. It was through such encountered confusion that advocated a taskforce in creating a standardised diagnostic system. The result, published in 1952, was the first of many editions of the APA's *Diagnostic and Statistical Manual of Mental Disorders* (DSM).

The legacy of Kraepelin's psychiatric classification paradigm remains almost unchallenged in the mental health profession of today (Bentall 2003). Bentall (2003) comments that this is evident from four observations: The first, Bentall (2003) recognises that in modern text books of psychopathology, organisation tends to represent a Kraepelinian style system whereby chapter headings for each disorder are independent from one another. The second, current official diagnostic systems from such advocates as the World Health Organisation (WHO) and the American Psychiatric Association (APA) are structured in a Kraepelinian fashion reflecting the assumptions he had about mental disorders. Third, most research is based on the Kraepelin's paradigm, and finally, when clinicians diagnose patients with a mental disorder they are doing so from Kraepelin's diagnostic concepts. The proliferation of this is most evident from Bentall's second observation; namely, within the official diagnostic classification manuals of mental health (DSM & ICD).

The purpose of these diagnostic manuals is to achieve a greater diagnostic agreement across clinicians and countries (Peralta and Cuesta, 2003). An objective with which was to bring an end to the chaos of classification. This statement however has been extensively challenged on the grounds of not meeting the accepted scientific requirements to justify that its purpose has been achieved (Boyle, 2002; Bentall, 2003). One reason proposed for this lack of progress is that schizophrenia is not an actual valid object of scientific inquiry (Bentall, Jackson & Pilgrim, 1987). However in defence of the DSM and ICD, since its first publication, both manuals have undergone massive changes... changes claimed to of improved diagnostic reliability and validity. The wealth of this change is most apparent in the APA's production of the third and most influential edition of the diagnostic and statistical manual (APA, 1980). The DSM-III was seen to herald a number of important methodological changes over its previous psychiatric classification systems, including:

“Explicit diagnostic criteria, a multiaxial system, and a descriptive approach that attempted to be neutral with respect to theories of etiology” (DSM-IV, p. xviii).

The new manual boasted of “extensive empirical work” which attempted to resolve issues of reliability and validity, and provide consistent medical nomenclature for both clinicians and researchers (DSM-IV, p. xviii). However, Kutchins and Kirk (1997) questioned the appropriateness of this claim by reviewing the appeared studies which were claiming this scientific acceptance. Their analysis of the entire literature of research found no significant improvement in reliability (Kutchins and Kirk, 1997). This apparent controversy surrounding the satisfactoriness of the current diagnostic model allows one to formally present here the critical evaluation of the diagnostic model of mental health with specific reference to the concept of schizophrenia by discussing issues of reliability and validity. I will focus mainly on DSM-IV, partly because the 1987 revisions to schizophrenia's diagnostic criteria were claimed to be minor (Kendler et al., 1989; Andreasen and Flaum, 1991; Andresen and Carpenter, 1993; as cited in Boyle, 2002: p122) and mainly because it is DSM-IV which is currently in use.

‘Reliability’ is referred to the extent to which clinicians can agree on the same diagnoses when independently assessing a series of patients; an issue which has frequently been an active topic of discussion in diagnosing schizophrenia. Even in the concepts earliest years, disagreement about the symptoms of schizophrenia is evident from the opinions of Bleuler and Schneider. For example, Bleuler (1911) classified the loosening of associations to be the essential feature of schizophrenia (Bentall, 2003) whereas Schneider (1959) associated delusions and hallucinations to be the primary characteristic of schizophrenia (Boyle, 2002). In acknowledgement of the numerous redefinitions throughout the concepts years, official guidelines as to what should be observed for schizophrenia to be inferred was produced and published in series of texts by the World Health Organisation (WHO) and the American Psychiatric Association (APA) by means of diagnostic clarity.

Prior the release of DSM-III, numerous reliability studies found almost consistently the poor reliability of diagnosing schizophrenia. The earliest reliability study, conducted by Masserman and Carmichael (1938) found that out of 100 patients, 40 per cent had been assigned diagnoses different from those they had been given on admission (Masserman and Carmichael, 1938). Rates of diagnosing schizophrenia have also been found to differ depending on locality. Karter (1961) compared the diagnostic rates between Great Britain and American and found that diagnosis was given more frequently in American than Great Britain. Although dramatic changes have been made since DSM-I, in a continued effort to improve reliability, recent research still demonstrates just how problematic a task it is to diagnose such a complex disorder according to a classification system.

In order to receive a diagnosis of schizophrenia using the DSM-IV (APA, 1994), you need two of the five ‘characteristic symptoms’ – hallucinations, delusions, disorganised speech, grossly disorganised or catatonic behaviour, and negative symptoms. Only one of these characteristic symptoms is required if delusions are bizarre. The problem with distinguishing between bizarre and a non-bizarre delusion lie not with the differential distinction, but with the absence of an agreed operational definition for diagnosis. This dilemma was investigated by Flaum, Arndt, and Andreasen (1991) by testing the inter-rater reliability of distinguishing between bizarre and non-bizarre delusions by compiling a sample of 40 delusional ideas and asking a group of psychiatrists to identify them. The interrater reliability of the 45 respondents was found to be consistently low as measured by the kappa statistic (kappa was less than 0.40). In a somewhat similar investigation, Mojtabai and Nicholson (1995) examined the inter-rater reliability ratings of bizarre delusions by asking fifty senior USA psychiatrists to rate bizarre delusions - according to the definitions of bizarre delusions in the DSM-III, DSM-III-R, and draft DSM-IV criteria for schizophrenia - in 30 brief literary descriptive cases. The inter-reliability kappa ratings of the bizarre delusions amongst the psychiatrists were only 0.38-0.43 which indicates an alarmingly low agreement between psychiatrists when differentiating between bizarre and non-bizarre. The apparentness of this reliability flaw becomes significantly highlighted when one questions how after four revisions, issues of reliability still remain at large.

In respects to diagnostic validity, for a categorical system of diagnosis to work, Bentall (2003) states that diagnosis:

“Must be jointly exhaustive (there should be no psychiatric patients who fail to criteria for a diagnosis) and mutually exclusive (patients should not suffer from more than one disorder)” (Bentall, 2003; p69).

Bentall’s ‘mutually exclusive’ phrase here refers to the ‘construct validity’ in scientific research. It has been argued that there are not pathognomonic symptoms for schizophrenia (Carpenter, Strauss, and Muleh, 1973), that schizophrenic symptoms are non-specific and occur commonly in manic-depressive illnesses (Pope and Lipinski, 1978), Dissociative Identity Disorder (Ellason & Ross, 1995), bipolar disorder (Crow, 1990), and affective disorder (Winters & Neale, 1983). This observation became evident to Pope and Lipinski (1978) upon reviewing the studies on the phenomenology of manic-depressive illness, prognosis in acute psychotic disorders, and lithium treatment in psychotic disorders. The authors stated how the reviewed research tended to suggest that the symptoms regarded as occurring only in schizophrenia were instead non-specific; that schizophrenic symptoms occurred commonly in patients with cases of mania and depression, that they did not predict prognosis, and, in patients with manic symptoms, the presence of concomitant schizophrenic symptoms did not predict response to lithium (Pope & Lipinski, 1978). On the basis of this, Pope and Lipinski (1978) doubted the usefulness of the putative schizophrenic symptoms in diagnosing, suggesting how as a consequence, large numbers of manic patients were being misdiagnosed as schizophrenic.

Ellason and Ross (1995) supported the tendency for schizophrenia symptoms to overlap into other disorders by demonstrating how a substantial number of patients with ‘Dissociative Identity Disorder’ (DID) had a previous diagnosis of schizophrenia due to their presence of positive symptoms in schizophrenia. Through administering the Positive and Negative Syndrome Scale, it was found that the positive symptom scores were found to be significantly more severe in the dissociative identity group than the norms for schizophrenia, while the negative symptoms were significantly more severe in schizophrenia. They concluded that since patients with the dissociative identity disorder had reported more positive symptoms of schizophrenia than did actual schizophrenics, and that schizophrenics reported more negative symptoms, the question of emphasising the positive symptoms for inferring schizophrenia diagnosis may have implications in a false-positive diagnosis and a false-negative diagnoses of dissociative identity disorder.

Knowing the long-term outcomes of schizophrenia and stability of a schizophrenia diagnosis are important from a clinical standpoint as well as essential to future research on diagnostic classifications and outcome (Bentall, 2003). A number of long-term follow-up studies of schizophrenia patients show that the clinical prognosis of schizophrenia is an unfavourable disease process that runs an inexorably deteriorating course. For example, Stephens et al (1997) studied 484 patients with follow-ups of 5 or more years. On the follow-up, only 13% of the 484 were rated recovered. In a 10-year follow-up study, 75% of Thara and Eaton’s (1996) sample of 76 Madras patients were shown to have a steep decline at the end of 10 years. Again, Harrison et al (2001) study projected a different course and outcome of schizophrenia patients. Their study consisted of a 15 and 25 year international follow-up study in which only 50% of cases had had a favourable outcome. Torgalsboen (1999b) study reported longitudinal data on individuals who ten years ago were fully recovered from a previously diagnosed schizophrenia. Out of the six subjects, only three were still fully recovered; one had a deteriorating course and two had a fluctuating course of illness.

It seems apparent from both the past and recent evidence presented here that the prognosis of schizophrenia runs an apparently unpredictable course which thus undermines the validity of diagnosing schizophrenia. However this does not mean that prognosis is doomed to complete failure. Evidence seems to indicate that more favourable outcome for patients predictive course are better established in psycho-social factors. Leon (1989), reported in a 10-year follow-up study, positive prognostic indicators included being female, having less education, and having a “normal” childhood. Continuing the work of the IPSS, a multi-centre study in Lucknow, Vellore, and Madras found positive prognostic factors being short duration of illness, compliance with medications, rural background, and being agitated at intake (Verghese et al, 1989). Poor prognosis was associated with economic difficulties, decrease in religious activity, perceived dangerousness, and pre-morbid schizoid personality (Verghese et al, 1989). More recently, a 5-year outcome study of the original IPSS cross-cultural cohort found a more favourable outcome in wealthier, industrialised societies than poorer countries and also being female, having an acute or recent onset, and having negative life experiences before onset predicted better outcome (Leff et al, 1992).

To conclude, a critical evaluation of the diagnostic model of mental health, with specific reference to the concept of schizophrenia has been discussed. This discussion firstly began with briefly discussing Kraepelin, Bleuler, and Schneider’s work to the concept of schizophrenia, following on then by arguing how the implications of Kraepelin’s idea of ‘psychiatric classification’ has resulted in much controversy surrounding issues of diagnostic reliability and validity. In light of this lack of diagnostic reliability and validity, subsequent revisions of the official guidelines of what should be observed in order for schizophrenia to be inferred have been produced claiming to have resolved these issues however in light of the recent evidence, validity seems to be more of an issue than reliability. Kirk and Kutchins (1997) suggest that...

“when shifting the focus from the quagmire of validity to the technical and statistical difficulties of reliability, a major advantage is achieved; the issues of reliability appear now to be more solvable than the problems of validity” (Kirk & Kutchins, p. 35).

By focusing on a problem perceived as having a greater chance of success (reliability) issues of validity are therefore neglected. Alternative approaches have therefore been suggested. One of which considers the ‘degree’ of people experiences who suffer from psychiatric problems; namely; the dimensional approach. The argument here however is not whether the *disorder* is categorical or dimensional, but whether diagnosing schizophrenia should be categorical or dimensional in order to yield the best clinical and research result (Kraemer et al., 2003).

References:

American Psychiatric Association (1994) *Diagnostic and statistical manual of mental disorders* , (4th edn). Washington, DC: APA

Bentall, R. (2003) *Madness Explained*. London: Penguin

Bentall, R., Jackson, H., & Pilgrim, D (1988) Abandoning the concept of schizophrenia: Some implications of validity arguments for psychological research into psychotic phenomena, *British Journal of Clinical Psychology*, 27, 303-324

Boyle, M (2002) *Schizophrenia: A scientific delusion?* London: Routledge

Carpenter W. T, Jr., Strauss JS & Muleh S (1973) Are there pathognomonic symptoms in schizophrenia? An empiric investigation of Schneider's first-rank symptoms. *Archives of General Psychiatry* 28, 847-52

Crow, T. & Hwang, M (2000) Comorbidity in schizophrenia. *Psychiatric Annals* 30: 76-8

Ellason, JW, & Ross, CA (1995) Positive and negative symptoms in dissociative identity disorder and schizophrenia: A comparative analysis. *Journal of Nervous and Mental Disease* , 183, 236-241

Flaum, M., Arndt, S. & Andreasen, NC (1991) The reliability of bizarre delusions. *Comparative Psychiatry*, 32, 59-65

Harrison, G., Hopper, K., Craig, T., Laska, E., Siegel, C., Wanderling, J., Dube, K.C., Ganey, K., Giel, R., An der Heiden, W., Holmberg, S.K., Janca, A., Lee, P.W.H., Leon, C.A., Malhotra, S., Marsella, A.J., Nakane, Y., Sartorius, N., Shen, Y., Skoda, C. (Dec.), Thara, R., Tsirkin, S.J., Varma, V.K., Walsh, D. & Wiersma, D (2001) Recovery from psychotic illness: A 15- and 25-year international follow-up study. *The British Journal of Psychiatry*, 178, 506–517

Kirk, S.A., & Kutchins, H (1997) *Making us crazy: The psychiatric bible and the creation of mental disorders*. Free Press: New York

Leff J, Sartorius N, Jablensky A, Korten A, Ernberg G (1992) The international pilot study of schizophrenia: five-year follow-up findings. *Psychological Medicine*, 22(1):131–145

Leon C.A. (1989) Clinical course and outcome of schizophrenia in Cali, Colombia: a ten-year follow-up study. *Journal of Nervous and Mental Disease* , 177: 593-606

Masserman, J.H. & Carmichael H.T (1938) Diagnosis and prognosis in psychiatry: with a follow-up study of the results of short term general hospital therapy in psychiatric cases, *Journal of Mental Science*, 84: 893-946

Mojtabai, R., & Nicholson, RA (1995) Interrater reliability of ratings of delusions and bizarre delusions. *American Journal of Psychiatry*. 152:1804-6

Peralta, V. & Cuesta, M.J (2003) The diagnoses of schizophrenia: old wine in new bottles. *International Journal of Psychology and Psychological Therapy*, 3, (2), 141-152

- Pope, H.G. & Lipinski, J.F (1978) Diagnosis in schizophrenia and manic-depressive illness *Archives of General Psychiatry*, 35, 811-828
- Stephens, J. H., Richard, P. & McHugh, P. R. (1997) Long-term follow-up of patients hospitalised for schizophrenia, 1913 to 1940. *Journal of Nervous and Mental Disease*, 185, 715-721
- Thara, R. & Eaton, W. W (1996) Ten year outcome of schizophrenia: the Madras longitudinal study. *Australian and New Zealand Journal of Psychiatry*, 30: 516 –522
- Torgalsboen, A., (1999b) Full recovery from schizophrenia. *Psychiatry Research* 88: 143-52
- Winters, K. C., & Neale, J. M. (1983) Delusions and delusional thinking in psychotics: A review of the literature. *Clinical Psychology Review*, 3, 227-253
- World Health Organisation (1992) *ICD-10: International Statistical Classification of Diseases and Related Health Problems* (10th revised edn). Geneva: World Health Organisation.
- Verghese, A., John, J. K., Rajkumar, S., *et al* (1989) Factors associated with the course and outcome of schizophrenia in India. Results of a two year multi-centre follow-up study. *British Journal of Psychiatry*, 154, 499-503