ISSUES SURROUNDING THE CLASSIFICATION AND DIAGNOSIS OF SCHIZOPHRENIA, INCLUDING RELIABILITY AND VALIDITY

The classification and diagnosis of mental disorders

The first 'modern' attempt at classifying mental disorders was made by **Emile Kraepelin** (1883). Kraepelin's work was important in the development of two classificatory systems introduced after the Second World War.

In 1948, the WHO was created and, shortly afterwards, published the **International Standard Classification of Diseases, Injuries and Causes of Death** (**ICD**). This was a manual that provided a classification of all diseases, including those the WHO considered to be *psychological* in nature. Independently, the American Psychiatric Association (1952) published the first edition of its **Diagnostic and Statistical Manual of Mental Disorders** (**DSM**), which contained a classification of mental disorders based on a scheme developed by the US Army in World War II.

Both ICD and DSM have undergone several revisions since their introduction. The most recent version of ICD is the tenth, or **ICD-10**, which was published in 1992. The version of DSM currently in use is **DSM-IV-TR**, published in 2000.

Reliability

In this context, reliability refers to the **consistency** of a diagnosis across repeated measurements. These may be measurements taken by a single clinician at several points in time, or by different clinicians at the same point in time. The latter yields a figure called **inter-rater reliability**, and is usually expressed as a percentage agreement or as a correlation coefficient.

Validity

Validity refers to an estimation of a particular measure's accuracy. In this context, validity is the **extent to which a diagnosis reflects an actual disorder**. Clearly reliability is a *precondition* for validity. If a disorder cannot be agreed upon, the different views expressed cannot *all* be correct. Because, for most disorders, there is no absolute standard against which a diagnosis can be compared, validity is much more difficult

to assess. As a result, there is no guarantee in psychiatry that a person has received the 'correct' diagnosis.

<u>Issues surrounding the classification and diagnosis of schizophrenia</u>

In one of psychology's most famous published investigations (entitled *On Being Sane In Insane Places*), **Rosenhan (1973)** reported what happened when 8 'psychiatrically normal' people from various backgrounds tried to gain admission to psychiatric hospitals in the USA complaining of hearing disembodied voices saying 'empty', 'hollow' and 'thud'. This research is worth reading, but do not base a whole examination answer on it, as there are many other issues that are equally important.

Studies of inter-rater reliability in schizophrenia have not always been encouraging. For example, **Beck, et al (1961)** found an inter-rater reliability of only 54% between two psychiatrists for 154 individuals. It is obviously the case that no classificatory system (be it medical or psychiatric) is of value *unless* users of it can agree with one another when trying to reach a diagnosis.

The fact that two different classificatory systems are used by American and British psychiatrists presents an immediate problem. In the early days, a diagnosis of schizophrenia was actually much more common in the USA than Britain because early versions of DSM contained very broad diagnostic criteria. **Schneider (1959)** introduced the '*first rank symptoms*' to try and make diagnosis more reliable, and they still form the basis of the ICD system.

It would be surprising if ICD and DSM did not overlap extensively or be virtually identical with respect to the classification and diagnosis of mental disorders. However, whilst this is the case for many categories, it is *still* not the case for schizophrenia, and this is why reliability is such an issue with the disorder.

For example, whilst DSM and ICD both recognise 'paranoid schizophrenia' (and actually agree about four other sub-types of schizophrenia), neither **simple schizophrenia** nor **post-schizophrenic depression** are recognised by DSM. Thus, one highly effective treatment for these sub-types would simply be to fly from Heathrow to New York. The systems differ in other

important ways, too. For example, DSM requires symptoms to have been evident for a period of **six** months, whereas ICD requires only **one** month.

As well as issues caused by the use of different diagnostic systems, there are several other problems that reduce reliability (and validity for that matter):

- Catatonic schizophrenia is easily confused with encephalitis lethargica
- People with temporal lobe epilepsy often show schizophrenic – like symptoms
- Drug-induced psychoses also share schizophrenic characteristics
- With the possible exception of paranoid schizophrenia, psychiatrists find it difficult to tell the sub-types apart
- Some psychiatrists will simply identify an individual as 'undifferentiated' whereas others will try to identify a specific sub-type. This is because in at least some cases people display symptoms of more than one sub-type, and the sub-types are supposed to be mutually exclusive!

As noted elsewhere, schizophrenia is more common in working class people than middle class people. There are many reasons why this might be. For example, life is generally more stressful for working class people because of greater economic constraints. However, it has been argued that a **bias in diagnosis** exists with schizophrenia. It is believed that psychiatrists are much more reluctant to diagnose people from their own social class as 'schizophrenic' (because of the stigma that schizophrenia brings to families, which is argued to be greater amongst the middle class). If this bias does exist, then it clearly raises important issues about how reliable diagnosis is.

Related to this is the observation that although black people account for only 5-10% of the total British population, 25% of patients on psychiatric wards are black. So are black people more vulnerable to schizophrenia? Perhaps, but other explanations are equally plausible. One of these concerns the mis-interpretation by white middle-class psychiatrists of behaviour which is perfectly ordinary within Afro-Caribbean culture. **Banyard (1996)** gives the example of the games of dominoes, a game played quietly by white people. The way in which Caribbean men play

dominoes, however, could be seen as 'aggressive' and 'threatening' by a white observer, who might consider such behaviour to be indicative of a psychological problem.

Another explanation derives from the finding that of those people from Caribbean backgrounds who had been diagnosed as schizophrenic, only 15% showed the classic diagnostic indicators. The other 85% had a distinctive pattern which **Littlewood & Lipsedge (1989)** call *West Indian psychosis*. According to these researchers, mental illness in ethnic minorities is often an intelligible response to disadvantage and racism.

Despite these reservations, it has been argued that whilst agreement for the diagnosis of schizophrenia is low, it is at least as good as those in some medical diagnoses. For example, an agreement rate of only 66% has been reported for cause of death when death certificates were compared with post-mortem results. Also, agreement between physicians regarding angina and emphysema (without a laboratory test) are no better, and sometimes worse, than that for schizophrenia.

There have been attempts to improve the reliability and validity of diagnosis. The *US-UK Diagnostic Project* was devised to try and increase agreement amongst psychiatrists. **Cooper et al (1972)** found that when specific criteria for various conditions were established, and the American and British clinicians trained in these, the level of agreement amongst them was significantly higher. Research has also shown that agreement can be improved if clinicians use **standardised interview schedules** (e.g. **Okasha, et al's** *Present State Examination*).

ICD-10 and DSM-IV-TR now appear to be much more reliable (and possibly more valid) than their predecessors. The use of *decision trees* and *computer programs* to aid diagnosis has also increased reliability. Even so, there is still room for subjective interpretation in the diagnostic process. For example, in mania, the elevated mood must be '*abnormally and persistently elevated in comparison with an* ***average*** *person*', which begs the question of what an 'average' person actually is!

Note, though, that not all people diagnosed as schizophrenia respond in the same way to treatments. This suggests that there is no single underlying cause of the condition (and if there was a single cause, we would expect all schizophrenics to display the same symptoms, which they clearly do not). This has led some researchers to suggest that there is no

such thing s as 'schizophrenia', and that all of the symptoms should be seen as a disorder in their own right, each with a particular cause and each treatable in a particular way. Not surprisingly, this approach has been supported most by cognitive neuropsychologists, and their argument that disturbed thinking processes are the *cause* of 'schizophrenia' rather than the result of it. They say that *physiological abnormalities cause cognitive malfunctioning*, and that the cognitive malfunctioning *is* what we call 'schizophrenia' (see the section on 'Psychological explanations of Schizophrenia).