CULTURE AND CLASSIFICATION: THE CROSS-CULTURAL APPLICATION OF THE DSM-IV

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ABSTRACT. Changes incorporated into the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) include a number of features designed to enhance its cross-cultural applicability. However, the overt move toward a culture-sensitive nosology is undermined by an implicit assumption of the universality of its primary syndromes. In this review we argue that the DSM-IV’s underlying thesis of universality based on Western-delineated mental disorders is problematic and has limited cross-cultural applicability. Research on the cross-cultural manifestation of schizophrenia and depression shows that presentation of these disorders varies significantly across cultures. We conclude by discussing the research and clinical implications of these findings. © 1998 Elsevier Science Ltd

DEVELOPERS OF CLASSIFICATION systems ideally attempt to carve nature at its joints and to construct ways of grouping phenomena that reflect their natural state (Millon, 1991). Such systems represent a means of placing together disorders or entities on the basis of their shared attributes or relations. A major difficulty in the psychopathology area is that there are a number of possible ways to group mental disorders or psychological problems; no one way is necessarily more natural than another. Functional classification is concerned with grouping together phenomena (e.g., problem behaviors) that are functionally equivalent (Hayes & Follette, 1992), while structural classification emphasizes the clustering of symptoms and signs that appear to cohere. For example, in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV; American Psychiatric Association, 1994). Despite ongoing disputes concerning the most appropriate system for categorizing mental disorders, one thing is clear: classification is indispensable for systematizing scientific observation and knowledge (Follette & Houts, 1996). It also enables clinicians and researchers to communicate about patients and guides treatment and research initiatives. The various versions of the DSM have played an important part in furthering our understanding of mental disorders, and in turn, defining them.

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A particular difficulty that is the focus of this paper, concerns the incorporation of culture specific disorders and factors into a general diagnostic system. The latest edition of the DSM incorporates a number of new features designed to enhance its cross-cultural validity. Building on a view mentioned only briefly in previous manuals, it develops more fully the idea that mental disorders may be influenced by cultural factors. Efficacy of these modifications has been the subject of widespread debate. While some view them as giant leaps forward, others are more critical of their utility and validity. Lewis-Fernandez and Kleinman (1995) argue that those involved in constructing the DSM-IV ultimately decided on a watered-down cultural component that seeks to perpetuate the view that difference and heterogeneity are superficial and unimportant.

Despite inclusion of culture-bound syndromes in the DSM-IV, we argue that there still appears to be an implicit assumption that the diagnostic categories represent universal disorders. Yet many theorists argue that such disorders represent a predominantly Western illness perspective and that, therefore, the latest manual may not be universally applicable (e.g., Aderibigbe & Pandurangi, 1995; Fabrega, 1994; Kleinman, 1986). Historically classification in clinical psychology and medicine has been notably underresearched (Parshall & Priest, 1993) and little attention has been paid to its guiding theory or to the suitability of this theory. This is exemplified by the DSM-IV, which avoids any explication of its theoretical basis, yet appears to assume the validity of a biomedical model of mental disorders (Follette & Houts, 1996). According to this model, mental disorders are fundamentally biological in origin, and, given the common physiology of Homo sapiens worldwide, psychopathology will be essentially homogenous, with only superficial variation in presentation across peoples.

We argue that the prima facie acceptance of the biomedical approach to the understanding of psychopathology is problematic, given that mental disorders have been shown to vary significantly across cultures. While the DSM-IV has attempted to extend its scope by acknowledging cultural factors, it is impeded by its reliance on notions of biology and associated ubiquity, which are at this time highly speculative. In support of our argument, we review the literature on the cross-cultural manifestation of schizophrenia, a disorder that has often been viewed as culturally immutable. But first there is a detailed look at the development of the DSM-IV followed by an analysis of the debate surrounding the question of the universality of mental disorder. Finally, before concluding, we summarize research on the cross-cultural manifestation of depression. Because of space constraints our discussion of this research is brief and simply functions as a further reminder that cultural factors appear to impact dramatically on presentation of some major psychiatric disorders.

THE DEVELOPMENT OF THE DSM-IV

It was not until the appearance of the DSM-III that the American Psychiatric Association became a significant force in psychiatric nosology. Published in 1980, the third DSM (American Psychiatric Association, 1980) extended use of descriptive diagnostic criteria with the aim of multitheoretical compatibility. It was broadly based on a biopsychosocial model of psychopathology, reflecting developments in psychopharmacology and growth in cultural understanding (Alarcon, 1995). Yet its aim was to be atheoretical — to describe psychopathology without reference to any particular theory. However, as many theorists have pointed out (e.g., Nikelly, 1992; Poland, Von Eckhardt, & Spalding, 1994) it was unable to achieve this aim. The process of classification necessar-
ily involves the application of theory. For instance, *DSM-III* introduced a multiaxial system dividing mental disorders into two different kinds, clinical disorders (Axis I), and personality disorders and mental retardation (Axis II). Development of this framework (at the very least) would have involved the ascription of theories of the similarities between particular disorders.

Although the *DSM-III* was found to have better reliability than its predecessors (Skodol-Wilson & Skodol, 1994), it met with some criticism, especially with regard to the cross-cultural applicability of the manual (Alarcon, 1995). Many of the mental disorders included in the manual are rarely found outside the West, for example, anorexia nervosa. As noted by Alarcon, 80% of the total human population exists in non-Western cultures, hence it could not be considered a truly international classification system if it were based solely on Western conceptions of disease. In response to such criticisms, revisions to the *DSM-III* in 1987 included an acknowledgment of the limitations of the manual in diverse cultural settings and a recommendation that clinicians respond with sensitivity to differences in language, values, and behavior. However, for those expecting a major move toward the embodiment of cultural factors, this modification was seen as nothing more than a token gesture. The *DSM-III-R* (American Psychiatric Association, 1987) was accused of expressing “...Western or more appropriately American cultural commitments” (Alarcon, 1995, p. 453).

The Task Force involved in development of the *DSM-IV* (American Psychiatric Association, 1994) sought to address this issue, with the aim of enhancing its applicability, in the multiethnic environment of the U.S., and in diverse international settings (Skodol-Wilson & Skodol, 1994). Lewis-Fernandez and Kleinman (1995) note that use of the *DSM* has increased over the years to the point where it has surpassed use of the International Classification of Diseases (ICD-10) in some countries. For example, it is now widely used in Japan and in the U.K. It was the aim of those instrumental in the development of the fourth *DSM* that cultural issues be rigorously addressed. Hence a committee was set up to establish the inadequacies of the *DSM-III-R* in this area and propose ways of improving the cultural validity of the forthcoming edition.

This investigation culminated in a number of changes. Basically, the *DSM-IV* attends to cultural factors in three ways. First, it includes in the text a discussion of the cross-cultural differences in the presentations of some disorders. Second, it provides in an appendix a list of culture-bound syndromes. Third, it suggests a framework for assessment of cultural factors, which may be used in conjunction with each of the axes of the *DSM-IV*. The cultural framework uses the following five category headings: cultural identity of the individual; cultural explanations of the individual’s illness; cultural factors related to psychosocial environment and levels of functioning; cultural elements of the relationship between the individual and the clinician; and overall cultural assessment for diagnosis and care (American Psychiatric Association, 1994, p. 844).

The cultural formulation, then, represents a needed addition to the diagnostic procedure. It allows, within diagnosis, the embodiment of the many rich and diverse aspects of culture and acknowledges their multidimensional impact on the individual and his or her psychopathology. Mezzich (1995) describes some of the potential benefits of the use of the cultural formulation in clinical assessment. He states that one of the primary advantages is the greater capacity for understanding the patient and his or her situation. After recognizing the culture with which the client identifies, the clinician should gain an understanding of the client’s own-culture illness explanation and of the ways in which his or her culture might impact on the illness.

As noted by Mezzich another important advantage of the cultural formulation is the
potential for data collection. Traditional diagnostic approaches focus on prototypical symptom patterns, to the exclusion of other potentially relevant variables. They provide no systematic way of recording or considering culture-specific factors. In contrast, the cultural formulation encourages inclusion of cultural data, not only for the benefit of the client but also for the purpose of expanding and enriching knowledge of the impact of culture on psychopathology. The final benefit of the cultural formulation, identified by Mezzich, is the general enhancement of the clinical process through a better client–clinician relationship. If the client feels that his or her beliefs, values, and practices are understood and respected by the clinician, then there is increased likelihood that good rapport will be established and that the client will trust the clinician and his or her clinical procedures.

While the changes in the direction of cultural understanding incorporated into the 

**DSM-IV**

may seem substantial, they represent only a portion of those recommended by the committee (Lewis-Fernandez & Kleinman, 1995). The proposed additions to the general introduction were significantly reduced, as were the cultural elements of particular disorders. The three suggested Western “culture-bound” syndromes, namely, Anorexia Nervosa, Chronic Fatigue Syndrome, and Dissociative Identity Disorder, were not specified as such.

Other researchers have criticized the cultural component with regard to presentation of particular disorders. For example, Alarcon (1995) argues that there are inadequacies in the **DSM-IV**’s approach to the understanding and delineation of personality disorders. He claims that the modes of expression of some aspects of behavior are dependent on the sociocultural environment, particularly those aspects mediated by personality. However, he notes that, in the **DSM-IV**, the sociocultural nature of personality seems to have been overlooked and, therefore, the personality disorders outlined in the manual are relative to Western-derived behavioral and social standards. According to Alarcon, such standards should not be treated as universal measures of normality. Diagnostic categories, such as borderline personality disorder, multiple personality disorder, along with hypoglycemia and chronic fatigue syndrome, actually reflect the complex relationship between culture and the diagnostic process, and should not be considered universal disorders.

**THE THEORETICAL BASIS OF THE DSM-IV**

The cultural additions in the **DSM-IV** demonstrate a move toward a general acceptance of differences in psychopathology across cultures. However, this move is undermined by the assumption that disorders included in the main text are essentially universal. Such incongruence is indicative of general theoretical uncertainty in the manual. While the **DSM-III** and **III-R** claimed to be atheoretical with regard to etiology and psychophysiological processes, the **DSM-IV** provides no such acknowledgment, yet neither does it specify its guiding theory. Development of classification systems necessarily involves the ascription of theory; without theory there would be no way of organizing the information.

According to Hempel (1965), there is, in any science, an important and inextricable connection between raw data and the formation of theories (as espoused in his particular version of logical empiricism). Classification systems must not only explain observable phenomena but also fit into, and explicate, general laws and theories. It has been

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1 These are only some of the omitted or altered recommendations that Lewis-Fernandez and Kleinman (1995) outline in their article.
claimed that Hempel’s logical empiricism has had a significant influence on recent editions of the DSM (Schwartz & Wiggins, 1986). Hempel’s views on taxonomy have often been referred to in discussions of the DSM’s approach to classification. However, some researchers assert that although creators of recent manuals may have aspired to a logical empiricist model of explanation, the essence of this model has not been captured. For example, Follette and Houts (1996) write: “. . . while adopting the accoutrements of logical empiricism such as ‘operational definition’ and ‘scientific progress’ the modern DSMs have also abandoned the substance of that philosophy of science” (p. 1126). The omission of any reference to underlying theory bears testament to this claim.

However, while the DSM-IV appears to espouse atheoreticality, it clearly employs a medical—and less overtly a biological—model (Follette & Houts, 1996). According to the medical model, mental disorders are construed as diseases requiring diagnosis and treatment (Blashfield, 1984), just as purely physical conditions are. Similarly, mental disorders are viewed as having a fundamentally biological basis. Follette and Houts propose that in recent years the DSM has moved from utilization of a medical model to a more distinctly biological one. They are highly critical of this development, primarily because the biological model has not “earned” its position through any respectable evaluation procedure. They suggest that it would be advantageous if the DSM explicitly stated its underlying theoretical approach so that it may be openly discussed and tested.

The DSM-IV’s implicit thesis of the universality of psychopathology is arguably linked to its equally implicit biological model. Those who assert that mental disorders are typically universal often support their claim with reference to evidence of the biological substrates of various conditions (Kleinman, 1988). It is most likely this view—that mental disorders are essentially the result or manifestation of physiological mechanisms—that underlies the hypothesis that many primarily Western-delineated disorders are to be found cross-culturally. However, biological correlates of most mental disorders have not yet been determined. The signs of pathology outlined in the DSM-IV are overwhelmingly behavioral. While neurochemical changes or physiological processes have been implicated in a number of conditions, these do not appear in the various symptom lists.

At best, the links between biology and psychopathology can only be described as speculative. Even the more widely accepted theories in this domain require further investigation before they can become part of a relatively established body of knowledge of this field. Hence, it is premature to assert the primacy of biophysiological explanations in mental disorder to the exclusion of other approaches. As Follette and Houts (1996) astutely note the DSM-IV’s tacit use of the biomedical model does exactly this, and, moreover, by failing to overtly state its theoretical basis it discourages any challenge to its underlying assumptions. Noting the enormous changes over time in the various DSMs (American Psychiatric Association, 1952, 1968, 1980, 1987, 1994), it is reasonable to refer to this classification process as a “research project.” That any research project can proceed without explicitly stating its central hypotheses is surprising and, more importantly, unscientific.

The significance of biological phenomena can be seen in the DSM-IV’s definition of mental disorder. According to Wakefield (1992b), this definition is essentially “harmful disfunction” There must be both a negative impact on the individual and

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2 Follette and Houts (1996) provide an excellent discussion of the connection between the medical and biological models and their roles in the development of the DSMs.
a corresponding dysfunction. As noted by Follette and Houts, the notion of dysfunction is critical to the definition, as in order for something to be classed as a disorder there must be a malfunction within the individual. This definition uses the concept of dysfunction to demarcate disorder from nondisorder according to a particular biological state (Klein, 1978; Wakefield 1992b). Exactly how this biological norm is established has not been explicated in any of the DSMs. Both Wakefield and Klein suggest that the best way to establish normal functioning is to use an evolutionary approach wherein normal is equated with the way in which a particular mechanism functions according to its evolutionary “design” and “purpose.”\(^3\) According to this view, a condition is a mental disorder if and only if it involves the disruption of an adaptive function.

The other aspect of the definition is the concept of “harm.” The dysfunction must be associated with discomfort or distress or some other negative consequence for the person. And there is a social dimension to this as well. The person and/or those around him or her must view the condition as problematic. This acknowledges the role of value in establishing behavioral norms. What may be judged as inappropriate or “sick” in one sociocultural environment may not be in another. So while there may be dysfunction, there must also be corresponding distress or impairment that impacts negatively on the person, as judged by that person or significant others.

The DSM-IV’s definition of mental disorder is consistent with its use of an essentially biological model, which asserts the centrality of physical change. The sociocultural component of the definition is diminished by the overreliance on physical dysfunction, which is seen as the “core” of the problem. If disorders are significantly influenced by sociocultural factors—if the symptoms themselves and the ways in which they are variously interpreted differ across peoples—then there may be no such core. Hence, the continued explication of a biological and relatedly universalist approach to the understanding of psychopathology would have to be viewed as misguided. The following section looks in detail at the long-running debate surrounding the question of the universality of mental disorders.

**UNIVERSALISM VERSUS RELATIVISM: A KEY DEBATE**

What is Culture?

Culture provides people with a framework within which they can relate to one another and co-exist. It is a medium for the transmission over time of ideas, values and customs, and, more generally, ways of living. While for some, the primary manifestations of culture are manmade objects, such as architecture and automobiles (Herskovits, 1948), for others, they are the less tangible correlates of humanity, such as beliefs, values, and norms (Triandis, 1972). According to Fabrega (1992, p. 91) culture is, “... a system of meanings that is learned, that provides people with a distinctive sense of reality and which helps shape behavior and affective responses.” Brislin (1990, p. 12) writes: “Culture is indicated by ideas that are transmitted generation to generation, rarely with explicit instruction, by members of the older generations. Obviously the ability to fit into and typify a particular culture is not innate.”

Culture permeates and is permeated by many aspects of human existence. One of the primary difficulties for investigators of culture is the fact that they too are influ-

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\(^3\) Unfortunately it is not possible to discuss further Wakefield’s and Klein’s analyses. Wakefield, in particular, has written extensively on this proposition (refer also to Wakefield, 1992a, 1993).
enced by that which they are attempting to study (Fernando, 1988). When we study another culture it is perhaps always (although often unintentionally) in comparison to our own. Understanding another culture may be seen as analogous to understanding another language. Just as strange words are translated into familiar ones, foreign beliefs and behaviors are interpreted according to similar beliefs and behaviors in our own sociocultural environment. Anthropologists attempt to overcome this difficulty by immersing themselves in another cultural setting for long periods, thereby enabling a less ethnocentric understanding of the novel culture. Psychologists and psychiatrists, on the other hand, have traditionally used more ethnocentric methods (Kleinman, 1988; Littlewood, 1990).

Universalism and Relativism

In contrast to such claims of psychological difference across cultures, many early cross-cultural studies were aimed at both the discovery of human universals and the confirmation of Western diagnostic categories. For instance, Kraepelin’s (1902) pioneering studies early this century investigated the epidemiology of schizophrenia in Asia. He boldly concluded after examining hospitalized patients in Indonesia and Singapore that schizophrenia is a universal disease. Many researchers have followed Kraepelin’s example, forming what Littlewood (1990) refers to as “the old transcultural psychiatry.” He states: “Given the primacy of European psychiatry, local ‘psychiatric systems’ were examined, not as self-contained, meaningful and functioning patterns in themselves, but as more or less accurate approximations to the ‘real’ (Western) classification” (p. 309). This is contrasted with the “new cross-cultural psychiatry,” the inception of which Littlewood credits to Kleinman (1977), who challenged, among other things, the assumption that Western diagnostic categories are culture-free and therefore universal.

These two contrasting directives represent two fundamental epistemological approaches within cross-cultural psychology: universalism and relativism. Fabrega (1989) provides a comprehensive discourse on the nature and influence of these two opposing themes within psychiatry. He explains that universalists use the Western biomedical framework to find similarities across cultures. This approach uses explicit standard diagnostic criteria to interpret and classify psychopathology in diverse populations. Typically, protagonists of this cross-cultural investigative method are traditionally trained psychiatrists. Their central claim is that mental disorders as defined in Western taxonomies will have similar, if not identical, manifestations in all cultures because they are the result of physiological dysfunction and human beings share a common physiology. Hence, the universal incidence of a mental disorder would be viewed as evidence of biological etiology (Patel & Winston, 1994). If social and cultural factors vary across populations then it is assumed that similarity in psychopathology is due to genotypic similarity.

Patel and Winston (1994) suggest that the quest for universality and, therefore,

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1 The terms psychology/psychologist and psychiatry/psychiatrist will be used interchangeably as the issues in question and the related literature concerns both fields.

5 Schweder and Sullivan (1993) include the “universal versus relative” distinction along with others such as “innate versus learned” in a list used to illustrate their claim that “... the social sciences are rife with invidious distinctions and divisive (and arguably false) dichotomies” (p. 505). However, at the risk of perpetuating a distinction of this sort it is necessary to discuss the pertinent literature in the way that it has traditionally been presented.
biological etiology, represents a hope of validation of modern diagnostic systems. Psychiatry, like medicine, seeks clearly defined illness categories that can be explained in terms of physiological or biological change; and it is believed that cross-cultural research can contribute to this objective. In this sense universalists are more interested in their own culture than in the cultures of others. Non-Western populations are seen as testing grounds for Western ideas and it is only those variables within these populations, which are relevant to these ideas, that are taken into account.

By contrast, the relativist researcher uses a qualitative or descriptive methodology with the aim of understanding psychopathology within the context of its manifestation. This usually demands a thorough knowledge of the culture of those who are being studied and is therefore characteristic of an anthropological approach. Fabrega (1989) states: “Cultural relativism refers to the differences in beliefs, feelings, behaviors, traditions, social practices, and technological arrangements that are found among diverse peoples of the world” (p. 415). The relativist researcher assumes that these cultural constituents may have a significant impact on mental disorder, meaning that if culture varies across societies there will be corresponding differences in psychopathology. Accordingly, mental disorders are conceived, to varying extents, as social (as opposed to biological) phenomena.

In countering the universalist directive, relativists assert that diagnostic categories are essentially abstractions or constructions used to explain psychiatric phenomena within the context of Western culture and the Western medical tradition (Fabrega, 1989). Hence, they are necessarily limited in their capacity to explain such phenomena in diverse settings. Moreover, relativists question the merit of the practice of using a classification system devised in one culture for understanding psychopathology in a substantially different culture, because this sort of methodology places constraints on cross-cultural learning. If only those aspects of belief and behavior that fit into the Western framework are noted, there will inevitably be much that is unseen or overlooked. Therefore, capacity for developing a deep and genuine understanding of the nature of mental disorder in the context of a contrasting culture will be limited. And furthermore, this approach may undermine indigenous knowledge systems.

In response to these criticisms, universalists would point out that the “lost” data are extraneous, in the sense that they do not contribute to the confirmation or disconfirmation of the hypothesis of universality; because at most, cultural factors simply colour the content of mental disorder without influencing the physiological cause or structure. As Kleinman (1987) explains, this is a common view within psychiatry and, as he notes, it is reductionist. Cross-cultural variation in symptomatology is seen as superficial; as part of the outward appearance of disease, while underlying biological change is seen as the disease itself. But this view is problematic, as many disorders are defined by symptom patterns and not by physiological change. While there are some biologically based theories of some mental disorders, this area of research can only be described as being in its infancy. In addition, few theorists would posit purely biological theories. Most acknowledge biology’s interaction with environmental factors, and therefore favor multidimensional models.

While there may be differences in symptomatology, those who follow the universalist directive look for broad underlying similarity. So, the central question would be whether or not a person is delusional as opposed to an inquiry into the nature and content of the delusion. However, even if a similar symptom pattern as that defined in, say, the DSM-IV, is found cross-culturally, this should not be interpreted as prima facie evidence that it is the same disorder. In the case of a purely somatic disorder, this conclusion would require the discovery of a common “pathology” (Patel & Win-
ston, 1994), meaning a common physiological presentation. And if such pathology is considered central to mental disorder, then psychiatrists or psychologists involved in cross-cultural research should include biological measures as well as behavioral ones in their investigations. Obviously this is a difficult requirement, but it is nonetheless essential if physiological deviation is to be seen as the essence of mental disorder.

**The Arguments**

Discovery and use of a variety of psychoactive drugs has had a big impact on contemporary conceptualizations of mental disorders. In particular, it lends support to the argument that mental disorders are essentially the result of physiological malfunction. For example, effectiveness of antipsychotic medication, such as chlorpromazine, has lent support to biological theories of schizophrenia. Such theories typically utilize a medical model of psychopathology that views mental disorders as discrete entities with clear physiological correlates (Kleinman, 1988). But it is fallacious to reason that an effective treatment type points directly to an etiological counterpart. Nonetheless, there is no doubt that success in psychopharmacology has provided encouragement to those who are looking for cross-cultural universals. A major problem, however, is that researchers have failed to identify biological mechanisms to explain drug action.

And interestingly, while psychopharmacological treatments have been used successfully in many countries, some researchers have reported differential responding across ethnic groups. For example, a number of studies have compared the response to psychotropics of Asian and Caucasian individuals. Differences between these ethnic groups have been found in the response to antidepressants (Sakauye, 1992; Silver, Poland, & Lin, 1993) and neuroleptics, lithium and benzodiazepines (Lin & Poland, 1995). Lin and Poland note that the causal mechanisms underlying these differences are as yet unknown, but are likely to involve both physiological and psychological factors. While this remains a new and largely unchartered area of research, such results challenge the view that, with respect to the understanding and treatment of mental disorder, human beings are physiologically equivalent.

Evolutionary based arguments that refer to phylogenetic similarity have also been used in support of the universalist position. One such argument claims that emotions operate according to “fixed action patterns,” which are essentially reflexive (Griffiths, 1990). As noted by Smith (1993), this view of the universality of emotion has been investigated through studies of facial expression. Such studies reveal that the facial expressions that correspond to particular emotions are primarily innate, with only slight cultural differentiation (Ekman, 1992; Ekman & Friesman, 1971). It may be argued that if correlates of emotion, such as facial expression, exhibit universality due to common phylogeny then the mental mechanisms involved in emotion and their respective dysfunctions may also be ubiquitous.

However, there would appear to be more to emotion than neurophysiological phenomena. The human experience of emotion involves invocation of cultural variables, especially language, which varies tremendously across peoples of the world. While some theorists have promoted the thesis of universal “basic” emotions, linguists, most notably Whorf (1950), have suggested that the so-called basic emotions are in fact artifacts of the English language. In a detailed analysis of emotion concepts across cultures, Wierzbicka (1992) reviewed a number of linguistic differences between English and other languages that suggest that the basic emotions, as delineated by the English language, do not designate lexical universals. The position of Wierzbicka and others is controversial but raises important issues. Language may not only shape the
interpretation of emotion but also the emotion itself (if it is possible to distinguish between them), forming a complex psycholinguistic mode of experience. Some anthropological research lends support to this hypothesis (e.g., Lutz, 1985; Rosaldo, 1980).

Turning to a quite different area of research, Jovanovski (1995) argued that findings in perceptual psychology lend support to the relativist position. He claimed that people raised in urban areas respond differently to visual tests and to people who have grown up in rural areas. The former respond more readily to angular and structured stimuli, whereas the latter show more sensitivity to less regular and perhaps more “natural” configurations. This is due to the deterioration, early in life, of some of the cells in the visual cortex. It is generally proposed that there are several different types of cells that correspond to particular types of visual stimuli. If cells are exposed to the stimuli that is their particular “forte” then they will be strengthened, and if not, they will degenerate. In this way, the brain develops according to the demands of a specific environment.

These findings support the relativist stance. As Jovanovski (1995) states: “. . . if cultural standards, impressions, and experiences can influence no less than our visual tendencies, then, indeed, we could hardly convincingly deny that those same social characteristics can and do give rise to context-identifiable ideas, interpretations, worries, phobias and obsessions.” (p. 295). This is a powerful objection to those who posit the cross-cultural similitude of mental disorders based on the universality of neurophysiological structure. During infancy the human brain is remarkably plastic, largely because compared to other mammals it is, at birth, relatively underdeveloped (Kolb & Whishaw, 1996). The human infant is born comparatively premature and, during the first year of life, its brain along with the rest of its body grows rapidly. This growth is to some extent context dependent, meaning that it is influenced by environmental factors. And this shaping continues throughout childhood and, to a lesser extent, into adulthood (Weinberger, 1987).

Mukherji (1995) states: “. . . while there are many ‘hard-wired’ aspects of brain function and development, there is a vast and relatively undifferentiated network where patterns of transmission are laid down as a function of the persons learning history. Thus, the ways in which information is transmitted through the brain, and the actual form of the networks themselves are modified by learning, by the person’ experiential history . . .” (p. 207). There is a complex and dynamic interaction between phylogenetic and sociocultural factors. Although, as Draguns (1995) notes, little is known of how this interaction produces psychological symptoms. While the above research may be convincing evidence for the plasticity of the nervous system, its application to cross-cultural psychology represents an argument from analogy. Visual systems differ markedly from those implicated in psychopathology and, moreover, it is their normal functioning, which is described here as opposed to the dysfunction of mental disorder. However, when so little is known of the neurobiological substrates of mental disorder, the possibility of cross-cultural variation needs to be acknowledged.

In response to the claims of cultural relativism, Brown (1991) presents strong opposition in his book, Human Universals. His primary thesis is that, although there is superficial variation between human beings across different societies, there are more prominent similarities. He accuses anthropologists of effecting a bias toward the discovery of difference while often ignoring the blatant sameness of human cultures. In support of his stance he refers to biological, behavioral, and social phenomena and offers a comprehensive list of human universals including, for example, phonemes, interpersonal relationships, childbirth, and law. His description of Universal People, while in
some areas underdeveloped, is compelling and should remind relativists that while there is evidence of some degree of cross-cultural variability in people, there is nonetheless an impressive core of that which is quintessentially “human.”

To what extent this common humanity influences, or manifests in, mental disorder is unclear. Littlewood (1990) writes: “Psychiatry remains balancing the two dominant academic paradigms: in that of the natural sciences, biological processes determine behavior and experience; in that of the humanities and social sciences, human societies select out for remark, classification, and amplification certain aspects of the natural world. Going one way we have biological determination, going the other way we have social choice” (p. 311). While it may be the case that the various constituents of psychopathology will never be as readily identifiable and dissectable as those of general medicine, there is a mounting body of literature on the cross-cultural manifestation of some disorders, which can contribute to the understanding of their social dimension. The following two sections looks at this literature.

**SCHIZOPHRENIA**

Late last century, Kraepelin (1902), who was the first to formally identify schizophrenia, put it under the heading of “metabolic diseases.” Although he referred to it as “dementia praecox,” his characterisation of the disorder is similar to contemporary descriptions and has directly influenced recent versions of the *DSM* system (Jablensky & Sartorius, 1988). Interestingly, although Kraepelin (1902) believed that dementia praecox was primarily due to biological dysfunction, he was also mindful of the influence of culture on mental disorders and traveled to Singapore and Indonesia in order to develop his understanding of this field. He recognized the importance of developing clear clinical concepts and ensuring observer reliability—tasks that are fundamental to all good research, but are particularly important in the application of cross-cultural studies.

Despite Kraepelin’s awareness of the limitations of his cross-cultural exploration, he nevertheless concluded, after identifying several cases of dementia praecox in institutions in both Singapore and Indonesia, that it is a universal disease (Torrey, 1973). As noted by Torrey (1973), Kraepelin’s observations were limited to institutionalized persons who would not have been representative of the general population. Inpatients of mental hospitals were necessarily those who had had substantial contact with Western culture and Western technology—they generally lived in the colonially driven urban areas and were often employed by the colonists. As will be demonstrated below, this sort of investigative error was commonly seen in early cross-cultural studies in psychology. In light of the shortcomings of Kraepelin’s work, his conclusion of the universality of dementia praecox was premature. This is reflected by the fact that the question of the universality of the disorder is still avidly debated almost a century later.

**What is Schizophrenia?**

In 1896, Kraepelin wrote:

> We designate as dementia praecox the development of a simple, more or less pervasive, state of mental weakness, which manifests itself as an acute or subacute mental disorder. The course of this disease process can exhibit very different patterns. . .This behavior indicates, I believe, that in all likelihood we are dealing with organic change in the brain. (Jablensky & Sartorius, 1988, p. 65)
Although, over the years, many clinicians and theorists have commended Kraepelin on this definition, it is overly general. Its appeal lies primarily in its flexibility, serving as testimony to the fact that schizophrenia is a complex and perhaps elusive concept. More specifically, he believed the following symptoms to be typical of dementia praecox: hallucinations, delusions, decrease in attention to outside stimuli, lack of curiosity, disordered thought, diminished insight and judgment, affective blunting, and negativism. He noted that its initial onset was usually during early adulthood and believed this to be an important defining feature. The definition of schizophrenia offered in DSM-IV is remarkably similar. Here it is classified under the heading of psychotic disorders and its symptoms are as follows: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, social withdrawal, and negative symptoms (which are, restricted affect, restriction of fluency of thought and speech, and avolition). In order to fulfill the diagnosis, at least two of these symptoms must be present for 1 month and some signs of the disorder must be present for at least 6 months (American Psychiatric Association, 1994).

Although Kraepelin’s original characterization of schizophrenia and the definition found in the DSM-IV are very similar, throughout the century there have been several other quite different approaches to the definition of the disorder. The most consequential of these were the definitions of Bleuler (1950) and Schneider (1959). Bleuler recognized the heterogeneity of the condition and broadened the definition to include various subtypes; the unifying feature of which was a loss of integration of mental functions. He described the primary symptoms as altered associations, altered affect, ambivalence, and autism. Schneider, on the other hand, was interested in the core indicators of the disease, which he referred to as “first rank symptoms.” In an attempt to clarify the concept of schizophrenia, Schneider’s goal was to find symptoms that could be described as definitive markers of the disorder. His central claim was that delusions and hallucinations are the core features of schizophrenia.

Discussions about the “essence” of schizophrenia continue today. Due to the complex nature of the disorder and its diverse symptomatology, its validity as a diagnostic label has frequently been questioned (e.g., Bentall, Jackson, & Pilgrim, 1988; Heinrichs, 1993; Helmchen, 1988). And, many researchers have commented on its elusiveness (e.g., Andreasen, 1987). However, whatever definition one decides to utilize, it is essential to be aware of the issues that surround this discussion. If schizophrenia is not one disorder, but rather many related yet distinct and more narrowly defined conditions, then this would undoubtedly influence the design and outcome of research on schizophrenia. How can the search for schizophrenia in other cultures be undertaken if there is uncertainty about the nature and boundaries of schizophrenic symptoms? Another important consequence of conceptual uncertainty is the impact on treatment. The efficacy of pharmacological treatments, particularly, relies on diagnostic accuracy. And, it is also important to consider the wider significance of the diagnostic label and the possible ramifications of misdiagnosis.

Schizophrenia is a serious mental disorder inasmuch as it is usually associated with significant social and/or occupational dysfunction. With a lifetime risk, in Western societies, of slightly greater than 1%, schizophrenia accounts for approximately one fifth of all serious and long-term disability (Jablensky, 1989). As such, it has through-

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6 It should be noted that while the Western/non-Western dichotomy is often a useful and accurate way of classifying cultural groups, there may be substantial differences within these domains. For instance, compared to other parts of Europe, some Scandinavian communities are reported to have very high rates of schizophrenia (Kleinman, 1988). And a number of researchers have
out this century, received considerable attention from psychologists, psychiatrists, and anthropologists. The cross-cultural manifestations of the disease have been increasing a primary focus of the research, as well as etiological factors and the reliability and validity of the diagnostic label. However, despite the rigorous and resolute approach of researchers, there is much that remains in question.

**Biological Factors**

Doran, Breier, and Roy (1986) suggest: “Such characteristics as pharmacologic responsiveness and genetic transmission and the development of biological markers may be the prospective cornerstones for validating the diagnosis of schizophrenia” (p. 29). This has been, and remains, the hope of many who seek clarification of schizophrenia as both a nosological concept and a disease. However, studies investigating neurobiological abnormalities, which may play a part in the onset of schizophrenia, have been fraught with methodological difficulties (Minas, Jackson, Doherty, & McGorry, 1985). While the “dopamine hypothesis” (i.e., that essentially schizophrenia is due to dopaminergic overactivity) has received considerable attention, there have been no major advancements since its inception many years ago. The dopamine hypothesis arose primarily from the success of antipsychotics in the treatment of schizophrenia. These drugs, in addition to relieving some of the symptoms of schizophrenia, may also cause parkinsonism, which is commonly believed to be caused by a dopamine deficiency in the basal ganglia (Murray, 1979). Hence, it was reasoned that schizophrenia is associated with excess dopamine in this region. Other evidence in support of the theory comes from schizophrenic-like symptoms in an amphetamine-induced psychosis; amphetamines are believed to produce an increase in synaptic dopamine (Murray, 1979).

The search for the biological substrates of schizophrenia has been driven, in part, by the results of genetic studies that show unequivocally that genetic factors play a role in the etiology of the disorder. While twin and other familial studies reveal a genetic component, the physiological instantiation of this component has not been identified (Lyons, Kremen, Tsuang, & Faraone, 1989). Twin studies reveal average concordance figures of 50% for monozygotic pairs and 17% for dizygotic (Minas et al., 1985). According to Murray, Reveley, and McGuffin (1986), there is no substantial difference in concordance between monozygotic twins reared together and those reared apart. This is not to say, however, that environmental factors do not also play an important role in the etiology of schizophrenia. McGue and Gottesman (1989) suggest that the concordance rate for monozygotic twins is considerably less than 100% (they suggest that it is about 44%), meaning that environmental variables also have considerable etiological significance.

Interaction of biological factors with sociocultural ones, in the manifestation of schizophrenia, is complex. The assumption that a disorder with a genetic component will necessarily appear in all human populations is misguided. There are several physical diseases that occur only in specific populations. For example, Oliver Sacks (1996), in his typically eloquent fashion, describes congenital color-blindness in the native inhabitants of some islands of Micronesia. Two more familiar examples are sickle-cell anemia and Tay-Sachs disease. Although it is not possible to discuss these diseases in detail, they show, simply by their mere existence, that different human populations suggested that the rates of schizophrenia differ according to peoples’ socioeconomic status within a given community (Elnagar, Maitra, & Raol, 1971; Minas et al., 1985; Odegard, 1959; Rose, 1964).
can have diseases unique to the genotype that is shared by individuals in the group. So a genetic element in a mental disorder does not necessitate universality. Moreover, the genetic elements in schizophrenia are arguably predispositions that interact with environmental factors rather than solitary markers of causation.

In an early study, Brown and Birley (1968) demonstrated the importance of stressful life events in the onset of schizophrenia, a finding that has received considerable recognition. And other studies have revealed a complex interaction between the manifestation of schizophrenia and particular environmental variables, such as socioeconomic status (e.g., Dohrenwend et al., 1992). Research in these areas suggests that even if human beings in all regions of the world are genetically equivalent, there may yet be differences in the manifestation of schizophrenia due to environmental variation. Some researchers argue that if schizophrenia is essentially the result of neurological malfunction, then there will be few if any transcultural differences in symptomatology. However, to date the neurochemical pathways of schizophrenia are not fully understood. Increases in synaptic dopamine may simply be correlates, not causes, of the disorder. Hence, any argument asserting universality of schizophrenia based on biological etiology is unquestionably premature.

**Early Cross-Cultural Studies**

Early cross-cultural research on schizophrenia deserves only brief acknowledgment because of its methodological inadequacies. Although some interesting work had been carried out over the past century, it was not until the 1970s that well-designed studies emerged. Much of the early research utilized a very broad interpretation of the concept of schizophrenia, including cases that would not fall within the modern diagnostic category. And often cultures were described as “primitive” when in fact they had been significantly influenced by Western civilization.

Throughout the first half of the century the question of the universality of schizophrenia received considerable attention. A common outcome of the various investigations was that incidence of schizophrenia was found to correlate with the amount of Western influence to which people had been exposed. Three studies carried out between 1929 and 1937, in New Guinea, Brazil, and the Congo reported that no cases of schizophrenia were found in natives who had little or no contact with Europeans (Torrey, 1973). Other researchers (Dhunjibhoy, 1930; Rao, 1966; Shelley & Watson, 1936) replicated these findings, concluding, after studying cases in Africa and India, that European or Western influences increased rates of schizophrenia.

A review by Benedict and Jacks (1954) seemed to change the tide of opinion, convincing many that schizophrenia was beyond doubt, universal. The review, entitled, “Mental Illness in Primitive Societies,” included studies on five cultures: New Zealand Maori, native Hawaiian, South African Bantu, Africans in Kenya, and Australian Aborigines. All five studies presented data that were alleged to prove unequivocally the universality of schizophrenia. However, as argued convincingly by Torrey (1973), all five studies had such serious methodological problems that the review by Benedict and Jacks, which relies on their data, should not be given the recognition that it received 40 years ago. While the populations in the five countries were described as primitive, none would have met the usual criteria for such a label. In fact, most cases were hospitalized patients in urban areas who had, to a large extent, been “Westernized.”

Another problem with the studies referred to in the review, typical of other cross-cultural studies from this era, was that the concept of schizophrenia was used so
loosely, so as to refer, in some instances, to all types of mental disorder. The investigation of Carothers (1951) into the extent of manifestation of schizophrenia among Africans in Kenya was actually a report on the total incidence of all forms of mental illness among the native people of the region. Carothers theorized that the mental deficiencies of Africans were due to underdevelopment of their forebrains, describing their behavior as similar to that of “leucotomized Europeans.” Considering comments such as this, it is surprising that Carothers’ work was ever taken seriously.

Despite the shortcomings of the Benedict and Jacks (1954) review, it has frequently been cited, without question, as testimony to the universality of schizophrenia, with many later studies basing their hypotheses on its premise. According to Torrey (1973), this view of schizophrenia has greatly influenced more recent studies, which often sought to confirm the already known fact of its universality. Lin’s (1953) study of schizophrenia in three communities in Taiwan reported a prevalence of 2 per 1000, which approximates prevalence figures in the West. Measuring prevalence of schizophrenia in indigenous inhabitants of Taiwan, Rin and Lin (1962) reported a rate of .9 per 1000. They noted, however, that most of the cases had an acute onset, short duration, and often a complete remission, which is a very different symptom profile from that found characteristically in the West.

Burton-Bradley (1969) studied schizophrenia in New Guinea where he had practiced psychiatry for 15 years and reported that, although it seemed relatively common among the native inhabitants, it almost always occurred in people who lived in urban areas. He claimed that it was rarely seen in the “so-called bush individual.” He did say, however, that sometimes people who had recently left their villages to settle in the city, exhibited the symptoms of acute schizophrenia, which often abated if the individuals returned to their rural environment.

Unfortunately, few conclusions can be drawn from these early studies. Many of the claims that have been made by the various researchers are based on unsound methodology, which is characterized by vague definitions and somewhat careless fieldwork. While schizophrenia has been reported in many diverse environments, little work has been undertaken in cultures that are largely unaffected by the West. One could argue that the degree of Western influence is not necessarily consequential. After all many non-Western communities that have been colonized, or influenced in other ways, by Western practices, retain a strong cultural identity and may seem largely unaffected by invading customs. Or what may be of more interest to some researchers is whether or not schizophrenia occurs across races, regardless of social environment. Taken together, the early studies suggest that psychoses have been recognized in a variety of peoples, but not unequivocally universally and not necessarily in the form of “schizophrenia.”

The WHO Cross-Cultural Research Program

The International Pilot Study of Schizophrenia (IPSS) conducted by the World Health Organization (WHO) represented a significant improvement in the quality of cross-cultural psychological research. Carried out during the early 1970s, in nine countries, it set out to show that core features of schizophrenia occur similarly in primitive and modern, Western and non-Western societies (World Health Organization, 1973, 1979). To ensure standardization of diagnostic systems across countries, the participating psychiatrists in the various centers were all trained in the use of the same diagnostic instrument (the Present State Examination), which had been translated into the vari-
ous local languages. The IPSS demonstrated that in all nine centers, groups of psychotic patients could be found who exhibited the symptoms characteristic of schizophrenia.

However, while this result may seem impressive and conclusive, as noted by Kleinman (1988), the IPSS used strict inclusion and exclusion criteria resulting in an artificially homogenous sample. Kleinman claims that the “...similarity was an artefact of the methodology.” (p. 19). Patients who would have been more likely to show different symptom patterns were excluded from the study from the outset. So, although subjects who met the rigid criteria for diagnosis were found across cultures, it must be noted that those who would have shown the greatest diversity, and would perhaps have challenged the diagnostic approach, were not included in the final sample. This highlights a difficulty with this type of research. A cross-cultural study of a mental disorder will necessarily require definition of the particular disorder and corresponding guidelines for sample delineation that is relative to a particular diagnostic system. However, ideally, the possibility of cross-cultural differences should also be incorporated into the methodology so that if there are differences they will be revealed. The WHO study was a search for similarity, which it found, but it was a limited search within a predetermined sample. As will be discussed below, the WHO research design functioned to exclude individuals who should be been included in the study.

An important finding of the first WHO study was that the outcome for schizophrenic patients in developing countries was significantly better than the outcome for those in developed countries. Building on this finding, WHO then carried out another cross-cultural study called: “The Determinants of Outcome of Severe Mental Disorder Project (Sartorius et al, 1986). This investigation was even larger than the first, drawing on 12 research centers in 10 countries, and including more than 1300 cases. Results supported the findings of the pilot study, showing similar symptom profiles in all centers. At least, this was the primary conclusion of the initial report, a conclusion that Kleinman (1988) is critical of, considering that some important differences also emerged from the data. For instance, the authors state:

The frequency of the use of individual ICD-9 subtype rubrics varied from 0 to 65% of the cases in the different centers. Overall, paranoid schizophrenia was the most commonly diagnosed subtype followed by that of “other” (undifferentiated) and acute schizophrenic episodes. However in the developing countries the acute subtype diagnosis was used almost twice as often (in 40% of the cases) as the diagnosis of the paranoid subtype (in 23% of the cases). Catatonic schizophrenia was diagnosed in 10% of the cases in the developing countries but in only a handful of cases in the developed countries. In contrast the hebephrenic subtype was diagnosed in 13% of the patients in the developed countries and in only 4% of the patients in developing countries. (Sartorius et al., 1986, p. 16; also quoted by Kleinman, 1988)

Whatever the implications of these differences, they deserve as much credence as the data indicating broad similarities. As Kleinman astutely notes, however, in the review by Sartorius et al. (1986) they fall in the shadow of universalist conclusions, receiving only a brief mention. Another interesting finding of this WHO investigation was the figures on the annual incidence of schizophrenia across various centers. Two calculations were made according to the results of two different sample groups: one was based on the “broad” definition of schizophrenia, which included almost all the cases in the study, and one on the “restricted” definition, based on a computer program classification of a particular subtype of schizophrenia called S+. In order to receive a diag-
nosis of CATEGO S+ schizophrenia, a patient must exhibit at least one Schneiderian first rank symptom or other unambiguous symptoms typical of schizophrenia, such as auditory hallucination or delusions of persecution. Calculations according to the broad definition yielded incidence rates varying from 1.5 in Aarhus, Denmark to 4.2 in Chandigar, India. Using the S+ subtype, there was a significantly smaller range of 0.7 in Aarhus to 1.4 in Nottingham (Kleinman, 1988).

Kleinman (1988) is critical of the authors’ decision to base their conclusions on the narrower diagnostic category, which yields quite similar incidence rates across the various populations. He argues that the CATEGO program is a narrow diagnostic instrument that is unlikely to be sensitive to subtle cross-cultural incongruence. In fact, according to the diagnostic criteria found in the DSM-IV, schizophrenia can be diagnosed without the delusional and hallucinatory symptomatology that are considered primary by the CATEGO programme. And moreover, the Schneiderian first rank symptoms of schizophrenia may also occur in other psychotic states, such as affective and organic psychoses (Doran et al., 1986). Kleinman claims, “The restricted sample is artifactual, since it places a clinical template on the original population that excludes precisely those cases that demonstrate the most cultural heterogeneity” (1988, p. 20).

According to Kleinman (1988), the broad definitional sample is the appropriate one to work with, as it is more true to life; that is, it reflects more accurately the diversity in incidence that occurred in the various centers. The researchers argue that the CATEGO-based sample is more appropriate because, although it results in a decreased sample size, there is no loss of statistical significance. Interestingly, Chandigarh, India, which was the only rural center in the study, reported the highest rate of incidence, based on the broad definition of schizophrenia. This would appear to be an important finding, one that is lost when the restricted definition is used.

Like the IPSS, the “Determinants of Outcome Study” confirmed that the course of the syndrome in patients from less industrialized societies was significantly better than in patients from the industrialized West, even when defined narrowly. The figures supporting this conclusion are rather stunning, with the data indicating that 58% of the Nigerian patients and 51% of Indian patients, had a distinct psychotic episode followed by complete recovery, compared to 6% in Denmark and 27% in China. Correspondingly, rates of chronic psychotic illness ranged from 50% of the patients in Denmark, to 47% in the U.S., and 30% in Czechoslovakia and the U.K. In contrast, the Nigerian sample had only 7% of such cases and the Indian sample 20% (Jablensky & Sartorius, 1988).

The distinction between the disorder and the outcome of the disorder is rather misleading. Whereas the WHO studies seemed to differentiate between manifestation of the core symptoms of schizophrenia and the outcome—which is described at times as if it is a separate entity—the course must be seen as an integral part of a disorder. In the DSM-IV, a clear distinction is made between schizophrenia and brief psychotic episode (which may occur in response to stressful life events). Although these two disorders have very similar core symptoms, the time period associated with each is very different. Essentially, what really distinguishes one from the other is “course.” So, the finding that the course of schizophrenia varies across cultures must be seen as a discovery of profound significance, in that course is an essential feature of the disorder.

In conjunction with the “Determinants of Outcome Study,” WHO also conducted several substudies designed to test specific hypotheses. One of these examined the relationship between stressful life events and the acute onset of schizophrenia (Day et al., 1987). This study collected data from nine research centers, five in developed countries and four in developing countries, with two major goals: first, to collect valid
comparative data on the frequency and the kinds of stress-provoking events taking place in the lives of psychiatric patients from a wide range of socioeconomic and cultural settings, and second, to test cross-culturally prior findings in the literature concerning the association between the occurrence of stressful life events and the acute onset of attacks of schizophrenia (Day et al., 1987).

Results showed that methodologies designed to measure the nature and extent of stressful life events in developed countries can be adapted relatively easily to the task of cross-cultural investigation in developing countries. Similar sorts of events were found to be stressful in the various cultural settings, and even where stressful events were peculiar to a particular culture, it was usually clear to the interviewers how, and why, the particular events would have been experienced as stressful.

Second, a relationship was found in all centers between stressful life events and the onset of schizophrenia. However, these stressors were only one of several types of relevant environmental factors that may have influenced the onset of the disease. Day et al. (1987) stated that ‘‘. . . stressful life events are part of a pool of causal factors found to be associated with the disease’’ (p. 192). An interesting and unexpected finding of this project was that onset of schizophrenia in developing countries was more likely to be associated with stressful life events than the onset of the disorder in developed countries. Relating these data to the finding of differential outcome suggests that schizophrenia may be more likely to manifest in developing countries in the form of reactive psychotic episode (Kleinman, 1988). This disorder, which often occurs after exposure to stressful events, is usually associated with a more rapid and complete recovery. The suggestion here is that the difference in outcomes is due to a difference in mode of onset. Perhaps schizophrenia in the form of a reactive or brief psychotic episode is more common in developing countries, while classical schizophrenia is more common in the West.

Commenting on the results of the WHO cross-cultural research program Jablensky and Sartorius state:

The WHO studies have so far only suggested the possibility that in technologically less complex cultures the chronic deteriorating forms of schizophrenia may be less frequent than in societies imposing on their members complex and potentially conflicting cognitive tasks. We know little about the occurrence and manifestations of schizophrenia in societies radically different from those encompassed by cross-cultural psychiatry up to date, e.g. pre-literate cultures or hunter-gatherer groups. The judicious application of modern research technologies to such settings may give us new insights into the nature of schizophrenia. (Jablensky & Sartorius, 1988, p. 69)

Other Studies

A number of studies have investigated differences in the presentation of schizophrenia across ethnic groups in the United States. Several of these have focused on the Hispanic population, which comprises the fastest growing ethnic minority (Ruiz, 1995). Looking at psychosis in general, Cuellar (1982) reported that Mexican-American patients exhibit behaviors similar to other patient groups. Looking specifically at schizophrenia, Escobar, Randolph, and Hill (1986) found no major differences in the primary symptoms of the disorder between Hispanic and Anglo veterans. However, Hispanic patients were reported to have a later age at onset, a finding that has also been documented elsewhere (e.g., Ramirez, Johnson, & Opler, 1992). Another interesting difference reported by Ramirez and colleagues was in the presentation of nega-
tive symptoms, with Puerto Ricans showing significantly fewer than their Anglo counterparts. In contrast, another study (Dassori, Miller, Velligan, Saldana, & Mahurin, 1993) found that Mexican Americans exhibited more negative symptomatology.

As noted by Dassori, Miller, and Saldana (1995) these studies, and others in this area, vary with regard to diagnostic criteria and sampling techniques. The criteria for ethnic identification also appears to differ across studies. Some use the term Hispanic loosely and may include participants who are perhaps acculturated. For instance, the majority of the Hispanic individuals in the study by Escobar et al. (1986) were at least second-generation Americans, and moreover, they were from a specific population, namely war veterans. Other studies, for example, Dassori et al. (1993), sampled hospital admissions. It may be variables such as these that underlie the disparities in the results of the above studies. However, notwithstanding the discrepancies, Dassori et al. (1995), in their review of the literature on schizophrenia among Hispanics, concluded that culture influences a number of illness dimensions and that family factors in particular may play an important role in the course of the illness.

Using data from the WHO Determinants of Outcome Study, Susser and Wanderling (1994) investigated the epidemiology across cultures of nonaffective acute remitting psychosis (NARP). They found the incidence of NARP in developing countries to be 10 times that of industrialized countries and propose that such striking epidemiological differences support the view that NARP should be nosologically differentiated from schizophrenia. This epidemiological difference also supports the proposition stated above, that acute psychosis coupled with favorable outcome is more common in developing than developed countries. Another study (Roland & Malanda, 1988) investigating the differences in mental disorders between Africans and Europeans yielded a similar finding, that is, a significantly higher incidence of acute onset, brief psychotic episodes with complete remission in African patients than in European patients.

An investigation into the presentation of acute psychosis in Egyptians (Okasha, Seif El Dawla, Kahil, & Saad, 1993) found that psychotic symptoms were preceded by a stressor in 74% of cases, and that the presence of a stressor correlated with positive outcome. The researchers noted that this finding concurs with the general belief that acute psychotic episodes are often precipitated by stressful life events. And they suggest that this etiological variable explains their favorable outcome, meaning that (as commonly believed) psychosis that occurs in response to a stressor will necessarily have a more benign course. Results of this study have important implications for conclusions drawn from WHO’s research project. As proposed above, the supposed identification of core schizophrenic symptoms across cultures may be a misinterpretation of data, which is confounded by the presence of patients who are diagnosed as schizophrenic, when, in fact, a diagnosis of brief reactive psychosis would be more accurate (Lin & Kleinman, 1988).

A study looking at the cross-cultural use of the CATEGO S–diagnostic tool was carried out by Kulhara, Mattoo, Awasthi, and Chandiramani (1987) in India. Like the WHO studies, the Present State Examination was used to interview patients and determine if they met the diagnostic criteria for CATEGO S+ schizophrenia. Comparing their results with previous studies on the cross-cultural manifestation of schizophrenia, including the IPSS, the researchers reported several important differences. In contrast to the pooled data of the IPSS, summarized by Wing, Cooper, and Sartorius (1974), this investigation reported significantly more cases with symptoms of catatonia and more patients experiencing persecutory delusions. Differences were also found when comparing the Indian data with results of a similar study in South Africa (Teggin, Elk, Ben-Arie, & Gills, 1985). The African patients were found to have significantly more
symptoms of tension, depression, and olfactory hallucinations, while the Indian sub-
jects reported more auditory hallucinations. In contrast to both studies, Kulhara et 
al. found significantly less depressive symptomatology and significantly fewer reports 
of anxiety and tension. Leff (1973) suggested that these findings may be due to differ-
ences in the ability of people to distinguish between various unpleasant emotional 
experiences. He claims that those from developed countries tend to be better at mak-
ing theses discriminations. Kulhara et al. conclude that “. . . even in a so precisely 
defined group of schizophrenics such as CATEGO class S schizophrenia, there are 
striking cross-cultural differences in psychiatric manifestations” (p. 312).

Environmental Variables

Murphy and Raman (1971) carried out a 12-year longitudinal study of schizophrenia 
in Mauritius and reported comparatively favorable outcomes for patients in contrast 
to figures on the recovery of patients in Britain. Similarly, Waxler (1979) reported 
significantly better outcomes for people with schizophrenia in Sri Lanka. In fact, Wax-
ler (1977) proposed one of the more well-supported explanations for this difference, 
suggesting that it is primarily due to the expectations of recovery within families and 
communities. His claim is that in communities where schizophrenia is viewed as an 
acute disorder, there is generally a high expectation that there will be a full, or nearly 
full recovery. In these sorts of environments, significant others tend to encourage 
patients’ reintegration with normal life and discourage perceiving of individuals as 
disabled. Chronicity of schizophrenia is, according to Waxler, largely the result of 
social responses to the patient that exaggerate the long-term effects of the condition 
and undermine the patient’s sense of self-control. Kleinman (1988) notes that in the 
West the course of schizophrenia in many patients is much more positive than the 
general professional prognosis.

In a study investigating the influence of familial variables on the course of schizo-
phrenia Brown, Birley, and Wing (1972) reported that schizophrenic patients were 
particularly affected by excessive emotionality of family members and they suggested 
that this could act as a stressor, perpetuating the illness and perhaps even precipitating 
it. Other more general stressors have also been implicated in the disease, such as 
bereavement, unsupportive relationships, and difficult children (Sheldon, 1994). Fo-
cusing on the influence of family life on schizophrenia, Jenkins, Karno, De La Selva, 
and Santana (1986) measured and compared amounts of expressed emotion (EE) in 
Mexican American and Anglo-American families of schizophrenic patients. EE refers 
to the family’s amount of criticality and overinvolvement with the relative with schizo-
phrenia.7 Jenkins et al. found that, in contrast to their Anglo counterparts, Mexican 
Americans were significantly less likely to be classified as high EE. And concurrently 
they showed that Mexican American patients were less likely to relapse during follow-
up. Other researchers have reported similar findings in comparing Western and non-
Western families of schizophrenics (e.g., Leff et al., 1990).

It has been suggested that EE may reflect aspects of social support (Lin & Kleinman, 
1988). Many non-Western peoples live in the context of an extended family, which 
may perhaps provide a more supportive environment to the recovering schizophrenic. 
Care of the schizophrenic family member is less likely to become the responsibility of 
one particular relative —such responsibility may be shared, meaning that the illness

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7 A detailed account of the EE concept and its use in the study of schizophrenia and family 
functioning is provided by Jenkins (1991).
does not impact so intensely on any one person. Also, in an extended family, simple logistics would imply that the patient will be more likely to find support and understanding within their own home. EE is just one of many sociocultural variables that may impact on the manifestation of schizophrenia. There are many others, although typically they are difficult to measure. EE has received a considerable amount of attention in the literature because of its conduciveness to cross-cultural investigation and perhaps because it attempts to shed light on the issue of differential course and outcome of schizophrenia.

Dassori et al. (1995) concluded that: ‘‘The differences in course of schizophrenia among countries are particularly intriguing. They suggest a powerful influence of environmental factors . . .’’ (p. 304). They also drew attention to the fact that environmental factors are not always purely social. For example, Mendoza, Smith, Polan, Lin, and Strickland. (1991) reported differences in neuroleptic dosage requirements between some ethnic groups.8 The authors of this study suggested that differences were due to factors, such as diet, alcohol consumption, and exposure to toxins, which they propose could affect physiological responses to neuroleptics. Considering environmental variability worldwide, this proposition is profoundly relevant to cross-cultural research on mental disorders.

In summary, the conceptual and methodological limitations of studies investigating schizophrenia cross-culturally preclude the drawing of firm conclusions. While the WHO research program has made a significant contribution to the understanding of schizophrenia across cultures, its results must be interpreted cautiously because of the Western-focused nature of its methodology. It sought to affirm the universality of schizophrenia across people and followed an investigative method that was arguably weighted in this direction. Even so, these research projects represent an impressive achievement and have resulted in the detection of some important phenomena. The difference in course across cultures raises the question of whether the psychosis identified in various populations was in fact schizophrenia, some variant of the spectrum, or another psychotic disorder altogether.

It is highly likely that psychosis of one sort or another is ubiquitous in humanity, however, psychosis as delineated by the concept of schizophrenia may not be. Evidence suggests that it is a condition that may be importantly influenced by socioenvironmental factors. Clearly, more research is needed in order to illuminate the intricacies of the relationship between social and psychological variables and the various ways in which schizophrenia may be influenced by culture.

**DEPRESSION**

Of all the mental disorders listed in Western diagnostic manuals, affective disorders are the most prevalent (Gupta, 1993; Lehtinen & Joukamaa 1994). It is for this reason, and because depression is often claimed to be significantly influenced by cultural factors (Draguns, 1995; Sartorius et al., 1980; Westermeyer, 1989), that a brief summary of research on depression across cultures is included.

Like schizophrenia, depression has a significant genetic component (Allen, 1976), although bipolar depression has a stronger genetic link than unipolar depression (Andreasen et al., 1987; Nesse & Williams, 1994). Similar to schizophrenia, developments in psychopharmacology gave support to causal theories, which claimed that depression was caused by deficiencies in neurotransmitter systems. Yet, on the other hand, cultural

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8 The differences are related to immigrant status not to ethnicity per se.
factors also seemed to exert an important influence on the clinical presentation of depression. For example, the word *depressed* has no equivalent in the languages of some cultures, including American Indian and some South East Asian groups (Manson, 1995). And Yoruba, a Nigerian language, has only one word to denote depression, anxiety, and anger (Abusah, 1993). This does not mean that these people do not experience depressive states similar to those experienced by Westerners, but rather suggests that such states will be more difficult to understand from the perspective of a Western researcher.

Studies investigating the so-called core symptoms of depression (Sartorius et al., 1983; Ulusahin, Basoglu, & Paykel, 1994) reported that such symptoms were found in non-Western cultures, along with some differences. For instance, using a methodological design similar to the schizophrenia pilot study, WHO conducted a cross-cultural investigation of depression (Sartorius et al., 1983). Carried out in Canada, Iran, Japan, and Switzerland, it found several core symptoms, including sad affect and loss of enjoyment, in patients in all four countries. But, the study also reported significant variation in the incidence of some symptoms in the different countries, including hypochondriasis, previous depressive episode, and sleep disturbance.

As noted by Marsella et al. (1985), the findings of homogeneity across cultures was due in part to the design guiding this research. Methodology involving the prior delineation of core symptoms based on a predominantly Western conception of depression was weighted toward the discovery of similar symptoms in other cultures. Therefore, it is unclear whether or not the discovery of these core symptoms in different ethnic groups and cultures supports the hypothesis that depression occurs universally.

Undoubtedly, the most striking and consistent research finding concerning the relationship between culture and depression is the variation in somatization. Essentially, somatization is the presentation or experience of physical symptoms rather than psychological ones (Mukherji, 1995). In other words, an individual experiences bodily symptoms that are thought to be related to, or even caused by, an underlying psychological problem. This type of symptomatology is relatively unusual in Westerners, but very common in many non-Western populations, particularly in some Asian communities (Weiss, Raguram, & Channabasavanna, 1995; Zhang, 1995). High rates of somatization have also been reported in other non-Western countries, for example Turkey (Ulusahin et al., 1994).

In a comprehensive analysis of the worldwide occurrence of somatization, Mumford (1993) questioned the depth and importance of cross-cultural differences and suggested that although many people report somatic symptomatology, their actual experience of depression may be similar to that of Westerners. However, there is no evidence to support this claim and, therefore, doubt the legitimacy of somatic symptomatology, which according to Mukherji (1995), may be the most ubiquitous expression of psychological distress in non-Western cultures.

One suggested explanation for high rates of somatization in many non-Western cultures is their disapproval of strong expressions of emotion, particularly negative emotions (Al-Issa, 1990; Chen, 1995). In many Asian and Arabic nations the open expression of emotion, in any form, is considered socially unacceptable. This makes it difficult for individuals to openly seek help or emotional support and they may resort to indirect means of achieving these goals, “Thus a legitimate entry into the sick role in these cultures may be by the communication of somatic or physical illness” (Mukherji, 1995, p. 209).

This observation highlights the important and complex connection between culture and mental illness. The primacy of somatization in the experience and expression of
disordered emotion in many non-Western countries is not reflected in the DSM-IV’s diagnostic criteria for major depression, which gives less weight to somatic than psychological symptoms. Interestingly, depression in developing countries is often referred to as masked depression, as if the somatic presentation simply functions to disguise the real underlying core symptoms. But using this line of argument, it is equally plausible to claim that depression in Western countries is simply masking an underlying somatiform disorder (Mukherji, 1995).

CONCLUSIONS

In this paper, we have argued that although the DSM-IV has moved overtly toward an acknowledgment of the cultural dimension of mental disorders, it has retained an underlying theoretical framework that asserts the primacy of the biomedical model. This is consistent with the implicit proposition that disorders listed in Axis I are essentially universal, with only slight and superficial cross-cultural variation. Research on the manifestation of schizophrenia across cultures has revealed some important differences, leading to the conclusion that the universality of this disorder has not been empirically demonstrated. Nor has the universality of depression been demonstrated. Studies such as those conducted by WHO, which utilized a core symptom approach, found widespread incidence of such symptoms, although the methodological weaknesses of this research reduces the force of its findings. Moreover, the overall impression created by these core symptoms does not match the picture of schizophrenia presented DSM-IV.

One of the key issues implicit in our review and the ongoing debate on classification, concerns the role of theory in the construction of diagnostic systems. Determination of DSM-IVs to be atheoretical, although motivated by sound methodological intentions, may have contributed to its problems when used in different cultures. Millon (1991) argues that theory should underpin our attempts to group psychopathological phenomena together. Once we have specified the nature of the mechanisms generating psychological distress and disability, it is easier to make rational decisions about how to “cut the cake” up. This strategy has the advantage of focusing directly on the relevant phenomena (e.g., thought disorder rather than schizophrenia), and arguably results in more meaningful research and targeted interventions. Whether or not cultural/social variables are included in a list of possible mechanisms is crucial. The decision to assume that mental disorders are essentially caused by physiological mechanisms constrains the development of theory. However, if cultural mechanisms are accepted as legitimate (partial) causes of mental disorders, then each culture may have its own particular, although overlapping, types of mental disorders. Whether or not “depression” is the same across different cultures will depend on whether they share certain cultural institutions or processes; it is something to be discovered not assumed.

The research approach outlined by Persons (1986) may be advantageous in cross-cultural contexts. Persons proposes that in order to gain an understanding of the psychological processes underlying particular symptoms, research programs should investigate the symptoms rather than the diagnoses. She describes a number of important advantages of such an approach, the most pertinent being the capacity for “theoretical development.” As noted by Persons, a diagnostic category, such as schizophrenia, may be applied to a diverse group of individuals who share only a small number of symptoms. Hence, studies that attempt to determine the mechanisms underlying thought disorder by examining those who have a diagnosis of schizophrenia have the
disadvantage of having to deal with a very complex database. In contrast, a study including only those individuals who exhibit thought disorder allows for a straightforward analysis with fewer extraneous variables. Such an approach would be particularly useful in cross-cultural research wherein subtle differences in symptom presentation are considered important. Traditional syndromal-based research methods that focus on predetermined symptom patterns tend to overlook such differences.

Relatedly, behaviorally inclined clinicians and researchers have been critical of the DSM’s diagnostic or syndromal approach to classification arguing that the tendency for diagnostic categories to overlap, the within category heterogeneity, at best modest reliability, and the lack of treatment utility all suggest the need for an alternative (Hayes & Follette, 1992). While a behavioral perspective accepts the levels of symptoms (behavior) and syndrome (clusters of behaviors, feelings, thoughts), it rejects the construct of disorder. Rather, grouping behaviors according to their function is suggested as a way of classifying psychological problems. The aim of this approach is to develop categories that focus on problematic behaviors and relate them to controlling variables (antecedents and consequences). Such a construction strategy crosses traditional diagnostic boundaries and groups together phenomena that are functionally similar. For example, a category of disorders of rule-following (without adequate rule vs. excessive rule-control) could integrate problematic behaviors found in such disorders as antisocial personality disorder, obsessive compulsive disorder, and borderline personality disorder (Hayes & Follette, 1992). The advantage of this approach is that it provides a middle range conceptualization of psychological problems, and because of its emphasis on context and function, may be more easily applicable to other cultures.

Kleinman (1992) advances an ethnographic approach to the study of health and illness across cultures. Ethnographic methods, which have a long history in anthropology, describe illness and suffering in relation to the sociocultural contexts in which they occur. This requires that researchers attempt to understand the cultural variables that mediate and impinge on the local experience and expression of illness, such as language and traditional health practices. It is assumed that a complete understanding of illness, within a social context that is rather different from that of the researcher, is not possible without the acquisition of intimate knowledge of culture-specific factors. As Kleinman points out, while this sort of methodological framework may seem “sensible” it is not commonly used. This is perhaps because it requires more time and probably more money than traditional research methods.

Whatever the reason there is clearly a need for more context-centered studies that have the depth and complexity to deal with the richness of sociocultural data. Such approaches could be combined with the more commonplace universalist-style studies yielding research methodologies that have the capacity to discover both cross-cultural similarity and diversity. The biomedical approach to the conceptualization and classification of psychopathology has been frequently criticized in this paper. While such a perspective may eventually prove to be appropriate, we suggest that it is important to consider alternative understandings. One such alternative was outlined by Lilienfeld and Marino (1995) in a critique of Wakefield’s definition of mental disorder. They argue that Wakefield’s naturalistic analysis has a number of important weaknesses, many of which arise from the difficulty of mapping mental disorder on to natural phenomena. They propose, instead, that mental disorder be understood as a “Roschian concept,” which is characterized by unclear boundaries. They argue that the border between disorder and nondisorder may be unclear and that the borders between particular disorders may also be indeterminate. Note that their point is not to doubt that disorders exist or to suggest that they have no biological correlates, but rather to
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consider the possibility that due to the social and contextual nature of their various manifestations, that they are unlikely to map directly on to natural phenomena. Lilienfeld and Marino suggest that this understanding should play an important role in the development of classification systems and in planning future research, which they claim should focus more clearly on the influence of sociocultural forces. Advancement will only be achieved when their effects are understood and the dynamic and mutable nature of mental disorder acknowledged.

Obviously, more research is needed in this area in order to understand the complex and dynamic relationship between biologic and sociocultural forces in the manifestation of psychopathology. Researchers must consider the contextual nature of mental disorder, which necessarily involves issues of “meaning” and “value,” and many profoundly rooted folk psychological conceptions that contribute to the way in which individuals see themselves and their world. Future research needs to place greater emphasis on these variables by ascribing more weight to alternative understandings and developing more culture-sensitive research methods. In the meantime, if the DSM series continues to uphold a thesis of universalism based on the utilization of a biomedical model of psychopathology, it must validate this approach by developing a coherent supporting theoretical framework and demonstrate empirically the ubiquity of its mental disorders.

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REFERENCES


