Anuario de Psicología Clínica y de la Salud / Annuary of Clinical and Health Psychology, 4 (2008) 15-25

Migration and psychopathology

Patricia Delgado Ríos[1]

INTECO. Research and Cognitive Therapy. Sevilla (España)

ABSTRACT

Given the social and political relevancy that in the last times is receiving the phenomenon, appears in this article a theoretical review of the relation among psycopathology and immigration. Analyzing the variables that influence the above mentioned relation (Genre, language and acculturation, conditions and stages of the migration, cultural differences as for the manifestation of psychiatric symptomatology, etc.) as well as the relative weight of each one of them in different aspects of the psycopathology. In this regard, one presents the integration Theory of Bhugra (2004), which analyzes the interaction among the stages of the migration and a series of factors of risk and protective. Now we´re going to detail the plot lines and the most significant results that the research has offered on psychopathologycal concrete disorders. Of among them, probably the most interesting ones have been the disorders for stress, especially from our country with the formulation of Ulises's Syndrome for Joseba Achotegui, and the psychotic disorders. Of the above mentioned, one presents the evolution in the hypotheses brings over of the relation among schizophrenia and the migration, in spite of which attempts it continues without being sufficiently clarified. It turns out indispensable to place all this boarding in a cultural frame, emphasizing in the modulation that the cultural environment exercises on the psychopathologycal manifestations, and naming some of the syndromes dependent on the culture as they are contemplated by the Diagnostic and Statistical Manual of the Mental Disorders (DSM). Finally, this analysis is completed by the description of the variables that exercise a protective role as for the negative influence of the migration on the mental health as well as there are mentioned the principal methodological problems which there face the investigators been interested in this topic.As conclusion, is held that, in spite of the vast quantity of available information, it does not seem that may exists a mental specific disorder of the immigrant not that unfailingly the migratory phenomenon takes the psycopathology as a consequence.

KEY WORDS*:* immigration; psycopathology; cultural psychiatry, Ulises's syndrome.

INTRODUCTION

Basic issues on migration

Migration, understood as the movement of individuals or groups of people from their place of origin or residence to another one which is geographically distant and which has marked differences, is related to the expansion of the human being and to his struggle for survival. Migration as such is not recent, just the opposite, since it has been practised by enormous numbers of peoples and cultures throughout the history of mankind. However, over the last few years, it has taken on greater relevance due to the generalization of the phenomenon and to the entailing substantial social, legislative or economic consequences both for the countries of origin and for the receiving ones. Among others, factors such as the call effect of some destination countries or the facilitating impulse that globalization supposes have turned migration into one of the most familiar socio-cultural and political problems over the last few years.

A typology of migration

Immigrants involve an extremely heterogeneous group, as much in the clinical manifestations of psychopathology, their prior psychological background and the mechanisms of adaptation to the new culture, as in the influence of their countries of origin or in the reasons and initial situations that encourage them to migrate. Thus, we can distinguish those who seek an improvement in their professional aspirations and who have a favourable starting situation; those with an urgent need to move in order to subsist given the impossibility of doing that in their countries of origin; refugees, whose

surrounding socio-political situation make them vulnerable to post-traumatic stress disorders (Boehnlein and Kinzie, 1995); foreign students, or those who emigrate as a result of a family regrouping process.

Acculturation. Adapting to the new country

The adaptation resulting from the migration process does not exclusively depend on the immigrant's strategies and resources to get adjusted to the rules and customs in the functioning of the new culture (Table 1). It is also subordinated to the host country's attitudes to immigrants (Berry, 2001). As long as the host society accepts differences of race and life style and promotes the immigrant's adoption of its social values and conditions, mutual integration will be made easier. The opposite attitude could result in social rejection and discrimination, both currently regarded as possible environmental factors associated with the aetiology of schizophrenia (Cantor-Graae y Selten, 2005).

Integration Keeping original cultural aspects while incorporating traits of the new culture.	**Separation** Rejecting the new culture and intensifying original cultural identity
Asimilation Deserting the original culture to adopt dominant cultural aspects from the host society	**Marginalization** Moving away both from the original culture and the host culture.

Table 1. Immigrant adaptation to the mainstream culture of the host country (Modified from Berry's (2001)

Acculturation is understood as the phenomenon that takes place naturally when two different cultures meet and which could imply changes in both cultures. However, it can often be observed that one of the groups dominates and prevails over the other. The effect derived from adapting to such a situation, known as *acculturative stress*, is added to the difficulties that normally characterize immigration. Among the additional problems likely to be subject to clinical attention, the *Diagnostic and Statistic Manual of Mental Disorders* (DSM) (APA, 2000) includes a category called the problem of acculturation (V62.4) to refer to the difficulties that immigrants cope with to initiate a new life in a different culture when they integrate new styles and norms of interpersonal relationships, social habits and rules, organization of community services, and so on.

MIGRATION AND MENTAL HEALTH

Variables affecting this relationship

There is widespread agreement that the repercussions on mental health of the migration process are many and heterogeneous. The effect varies according to the interaction among the variables of the migration process itself and the individual's abilities to manage it, as well as to the individual's own vulnerability to develop some disorder.

Following some authors and reviews of the issue (Bhugra, 2004; Collazos, Achotegui, Caballero and Casas, 2005), this paper presents a set of factors to bear in mind to assess the possible relationship between migration and psychopathology.

Age when migration takes place. The developmental period determines the resources available to cope with the stressors to the process, the previous experience with the original culture or the possible aspirations built up, among others, as described by García-Campayo and Sanz Carrillo (2002):
"Teenagers tend to assimilate, denying their original culture, which is also that of their parents, with whom, at that age, they usually begin having conflicts. Teenagers want to appear more like their own age group,who in the main belong to the host country. Older people are prone to adapt themselves through separation, by rejecting the new culture and taking shelter behind their own. People between these age groups are the ones who most easily carry out integration processes in both cultures" (p. 188)

Gender. A number of studies have found higher rates of upset in the females in their samples. Some authors (Murphy, 1968) have explained these discrepancias by arguing that the decision to migrate is often taken by men and women just second the decision and follow them. For this reason, differences in psychopatological rates may not be accounted for by merely focusing on the migration process.

Language and acculturation. Needless to say, being fluent in the language of the host society can facilitate the adjustment to the new culture (Akiyama, 1996), although some studies have opposite findings, as language is interpreted as an acculturation measure that assimilates them to the host culture in psychopathological morbility (Nazroo, 1997).

Job. As in other phenomena, educational level and professional background influence postmigration adjustment. It seems that not meeting prior expectations and not achieving the expected success have an important effect on these people's self-esteem, even more so if their education and professional skills are higher than necessary to do the jobs they eventually carry out in the host country. To be specific, immigrants with greater academic knowledge are the ones who find it most difficult to have satisfactory jobs (Tseng, 2001).

Conditions and migration stages. In general terms, a series of stages can be distinguished in all migration processes. Before moving, expectations are generated about life improvement in the host country and preparations for the move are carried out at different levels. Once arrived in the host country, an adjustment period takes place in which the immigrant has to cope with many different stressors and demands which reach a peak during the first two years. From this time onwards, the immigrant usually

and gradually recovers the normal prior levels of behaviour (Pernice and Brook, 1996).

Some authors (Bhugra, 2004) have echoed the relationship between the phases of the migration process, namely premigration, migration and postmigration, and the variables that increase both psychopathological vulnerability and resilience. In this way, as shown in Table 2, the phase prior to migration considers both intrapersonal vulnerability factors[1], namely personality characteristics, and extrapersonal ones, such as being prosecuted for religious reasons. In the same way as the possibility that preparation and wilfulness represent resistence components, there are certain circumstances, such as coping with loss and counting on social support, that make vulnerability and resistance, respectively, evident during the migration phase. Once the migration has taken place—and the actual adaptation process is going on—the discrepancies as regards the cultures or against the preconceived expectations turn into vulnerability variables in the face of the beneficial processes of identification and perception of social support and other social advantages for which reasons they have immigrated[2].

VULNERABILITY FACTORS	PHASES OF THE MIGRATION PROCESS	RESILIENCE FACTORS
Personality Lack of abilities Forced migration Persecution	PREMIGRATION	Voluntary preparation
Loss Sorrow Post-traumatic stress	MIGRATION	Social support
Cultural shock Cultural conflict Discrepancy aspiration/appraisal	POSTMIGRATION	Positive cultural identity Social support Socioeconomic advantages

Table 2: Hypothetical model accounting for the relationship between psychopathology and immigration. (Modified from Bhugra, 2004)

Finally, Bhugra (ibid.) emphasises that acculturation, which takes place during the postmigration phase, generates two possibilities, *deculturation-alienation,* which is a pathological process[3], or *assimilation.*

Reciprocal attitude of the immigrant and the host culture. As stated above, depending on the adaptative situation, the appearance of psychopathological symptoms will be more or less probable. Thus, integration seems to play a protective role in the same way that marginality supposes a risk factor for the appearance of psychopathological symptoms. Another variable to bear in mind in the emergence of psychological disorders makes reference to the individualistic or social orientation of the original and host societies, given that the demands, expectatations and adjustments of how everything will function are different for one and the other.

Rates of incidence and prevalence in the countries of origin. The data managed by many studies are based on epidemiological studies comparing rates of psychopathological disorder between countries of origin and host countries. However, this procedure demands that multiple factors are overseen that might be distorting the findings and which are often not adequately controlled during the research, for example, lack of precision in the samples and/or specific disorders or the possible barriers that prevent the immigrants' access to mental health services.

Cultural differences regarding the manifestation and expression of psychopathological symptomatology. The culture in which people are immersed determines not only the interpretation of the clinical relevance and seriousness of psychopathological symptoms and disorders but also the way how such symptomatology is expressed or manifested. As cultural differences influence the expression of feelings, such divergences are expected to be extrapolated to the area of emotional upset.

In relation to the obsessive-compulsive symptomatology, some authors have found that the religious nature of upbringing and education in Egyptians and the intense ritualization associated with them strongly determines both the content and the seriousness of their obsessive-compulsive disorders (Okasha, Saad, Khalil, Seif and Yehia, 1994).

The manifestation of psychotic symptomatology has also shown cultural differences. In a research study assessing differences in positive and negative symptomatology of three different ethnic groups, higher rates of mistrust and hallucination were perceived in African Americans, more agitation in White Americans and more somatic complaints in the Latino group (Barrio, Yamada, Atuel, Hough, Yee *et al.* 2003). In addition to this, in non western cultures a greater number of cases of catatonic and hebefrenic types of schizophrenia have been detected..

As for depression, recent studies that applied qualitative methodology to content analysis have found that even though the depressive symptoms acknowledged by contemporary scientific texts and diagnostic systems are frequent in the Chinese population, the systems used are not exhaustive enough about the experience of the

[1] Stress coping abilities, the experiences of success and/or failure, styles attributional to the individual are among others, the variables that usually mark the difference in the ability to adapt to the change.

[2] The APA also coincides when it draws attention to the mediating effects of some factors on the intensity of the migration change: such as language, as the major communication means; the social support network, which has proved to be an important cushioning factor in migration stress; employment, due to its relationship with social status; economic independence, or coverage of vital necessities (APA, 2002).

[3] The ones involved in parental closeness and separation processes would be in the basis of the schizophrenic processes, characteristic of immigrants. Generally speaking, those negatively affecting self-esteem would give rise to other mental disorders, such as depression, anxiety, or somatoform disorders.

depression and its expressions (Lee, Kleinman and Kleinman, 2007).

Various warlike contexts such as the Vietnam war, the Nazi Holocaust or the recent attacks against the World Trade Center have provided data to support cross-cultural differences to express and manifest post-traumatic stress disorder (Boehlein and Alarcón, 2000; Schuster, Stein, Jaycox, Collins, Marshall *et al*., 2001).

As the existing data shows (Bernstein, Lee, Park and Jyoung, 2008; Kirmayer, 2001; Sherazi, McKeon and McDonough, 2006), there is an important basis to defend cultural differences as regards the expression of the psychopathology; these differences are clinically relevant. Therefore, learning about psychopathology as it is in the culture of origin may help us not to magnify some symptoms or to interpret them in tune with the beliefs or socio-cultural factors of the patient.

We can end this section by observing that the relationship between migration and psychopathology is certainly complex, not only due to the methodological difficulties that such study entails, but also because of the important variability and multiplicity of migration factors, sometimes impossible to control. In the light of all that has been said, we can deduce that, even though we cannot irrefutably accept that immigration itself generates psychopathology, we can certainly hold that it is an important psychopathological risk factor.

DISORDERS AND DIAGNOSTICS

Even though the relationship between migration and psychopathology has aroused interest since ancient times, its systematic research only began at the beginning of the 20th century. In general terms, it seems to be clear that the data is contradictory, with big methodological and sampling variability, without a definitive confirmation about the existence of greater psychopathology associated to migration.

Some of the explanatory hypotheses proposed have been applied, above all, to certain types of disorders, although they could as well be extended to general psychopathology from a wide perspective. As it is evident when reviewing the existing literature, the disorder that has aroused the most interest is schizophrenia. When dealing with the rest of disorders, the methodological problems become more severe and the research findings are both contradictory and partial, as they characterise the sample rather than the actual population that the data intends to cover. Yet, in spite of the confusion and the amount of available data, there does not seem to be a mental disorder related to or exclusive to the migration process.

Next, the most outstanding aspects as regards the relationship between immigration and the most frequently diagnosed disorders; as well as the proposal that the Ulysses Syndrome is an exclusive clinical manifestation which is restricted to the migration process, are briefly described.

(Adaptative) stress disorders. Due to the definition of stress itself and to its psychological conception, as could be expected, these disorders have frequently been related to the migration experience. As stated above, the contact between two cultures gives rise to a phenomenon known as acculturation, and the stress associated to it as *acculturative stress*. Some research studies have focused on finding out whether the responses to this situation are exclusively symptoms or rather a syndrome, as the *psychological distress syndrome* (Ritsner and Ponizovsky, 1998) or the *Ulysses syndrome*, which we elaborate on in the following section.

Post-traumatic stress disorder (PTSD). Post-traumatic stress disorder is one of the most frequently diagnosed disorders among the immigrant population, above all when the migration process, in any of its phases, has been undergone with serious events which make the individual's adaptation more difficult. This is the reason why high rates of PTSD are systematically found in groups of refugees, due to the circumstances of repression and torture associated to the wars and political conflicts in their countries of origin (Gorst-Unsworth and Goldenberg, 1998; Holtz, 1998).

It is worth mentioning that postmigration conditions and experiences become relevant in PTSD, as recurrent situations of loss, economic difficulties, job limitations, etc. may activate the characteristic symptoms of the disorder.

The *immigrant syndrome with chronic and multiple stress* or *Ulysses syndrome* (Achotegui, 2004) has been proposed by our country, Spain, to refer to clinical manifestations characterised by the experience of a series of stress factors or sorrow in the form of psychiatric symptoms, which might encompass various areas of psychopathology. For this author, we are before an independent nosologic entity exclusive to immigrants and according to his own words, "there is a direct and unmistakable relationship between the degree of the limit of stress experienced by these immigrants and the appearance of their symptomatology." (p. 2) (Achotegui, 2008) This syndrome appears as a consequence of situations of forced adaptation in which two concepts, well known in the area of psychology, have a close relationship, namely sorrow and stress, in such a way that, according to the author, "the sorrow is a long and intense stress" (p. 3). According to this, the Ulysses syndrome is one on the borderline between adaptative disorders and the post-traumatic stress disorder.

Contextualization of the Ulysses syndrome

Stressors. There is a number of stress factors that demarcate and condition the immigrant syndrome with chronic and multiple stress; among them, loneliness, sorrow due to the failure of the migration project, struggle for survival or the fear stemming from the uncertainty of an insecure future. To actual effect of these stress factors one has to add certain conditions or characteristics of these stressors which increase this effect, such as: a) multiplicity; b) chronicity and recurrence; c) intensity and relevance; d) lack of feeling of control; e) lack of a social support network; f) appearance of the symptomatology, which has a disabling effect and reduces even more the ability to adapt; and g)

difficulties in having access to the health services and to receive health assistance in the host country.
As stated above, this situation of chronic stress and the loss that it brings about shape what is known as 'migration sorrow'. For Achotegui, both factors greatly account for the symptomatology shown by the migrant population[4].

The syndrome's clinical manifestation. As shown by Table 3, the most frequent symptoms associated to the Ulises syndrome cover various areas of psychopathology.

Areas of psycho-pathology	Symptoms
Depression dimension	Crying, sadness, blame, low self esteem, death and suicidal ideas (not very frequent), anhedonya, loss of sexual appetite, and loss or increase of weight or apetite
Anxiety dimension	Tension and agitation, excessive and recurrent worries, irritability and insomnia.
Somatization dimension	Cephalalgia (a symptom of greater chronicity), tiredness, bone and muscle discomfort, sleep alteration (insomnia being the best prognosis symptom).
Dissociative and confusional dimension	Memory deficits, space and time disorientation, fantasising.

Table 3: Clinical manifestations of the Ulysses syndrome

It is possible to differentiate varieties related to the clinical manifestation, in function of number and intensity of the symptoms (partial or complete) and the number of stress factors present (more or fewer).
As for the duration of symptoms, it is worth pointing out that they fluctuate as a reflection and response to the changing circumstances being coped with at that moment.

As it is frequently done when establishing a specific diagnosis, this set of symptoms needs to be quantitatively and qualitatively delimited from others that they are related to, in order to qualify for a disorder category proper. In this regard, difficulties arise when nosologically identifying this syndrome, as the symptoms shown are not specific, they encompass disparate to each other, groups of symptoms, and there is not sufficient research that guarantees the specific nature of their course, their prognosis or their clinical manifestation.

Achotegui (2008) has recently proposed identifying these clinical manifestations in the area of mental health rather than in that of psychopathology, as he thinks that "The Ulysses syndrome is a syndrome and an early symptom at the same time" (p. 24) and stresses that the immigrants who manifest these symptoms do not suffer from a mental disease but are rather "experiencing inhuman stressors to which there is no possible way to adapt." This brings about, therefore, a conceptual opening that emphasizes the recognition of stress as the interaction between the situation and the individual's resources to cope with it. According to the author, this consideration will allow for preventive work to be undertaken and to really help the immigrant in his adaptation to the new culture.

Depressive disorders. Mood disorders show strong links to the phenomenon of migration, since it generally implies multiple and recurrent sorrow as it brings about a personal and material loss that is highly significant for the immigrant.

From a cultural point of view, it has long been shown that the specific manifestations of each disorder vary according to the cultural context in which they take place. As for depressive disorders, for example, it is possible to find greater psychologization of the symptoms or, quite the opposite, greater somatic expression. The latter, received with great interest by the scientific literature, have been named as *immigrant syndrome of psychosomatic disadaptation* (Seguin, 1956), *immigrant hypocondriasis* (Hes, 1958) or *migrant chronic adaptative disorder* (Westermeyer, 1988).
In addition to this, the research studies comparing immigrant and native rates of mood disorders have obtained contradictory findings. Sometimes they have found greater rates of symptoms in immigrants and have provided different explanations by referring to the external locus of control, the loss of social support, the emotional response deriving from the cultural clash, etc. However, the findings are not clear and the ways to interpret them vary according to the researcher's perspective. As an example, we can mention the role of language and acculturation in the appearance of depressive disorders in the immigrant population. Even though it has been argued that this variable can facilitate access and adaptation to a new culture, there are authors (Nazroo, 1997) who observed that those immigrants who adopted the language of the host society showed similar psychopatological rates than white natives, and that both groups manifested even higher rates than the immigrants who did not adopt the new language. Thus, it has been interpreted that, as language is a measure of the degree of acculturation, it may give rise to similar rates of psychological morbility.

Somatoform disorders. There are a number of unspecific somatic symptoms such as migraines, backaches, digestive upsets, fatigue, etc., which are frequently referred to by the immigrants who request medical assistance. It is accepted that these symptoms

[4] The said process of sorrow has the following characteristics: it is a partial sorrow, since the object of sorrow does not really disappear or disappear for ever; it is recurrent and tends to become chronic; it is linked to very deeply rooted childhood experiences which, if not properly formed, may determine and make it difficult to adapt to the current loss; it has many manifestations—as a matter of fact, seven types of sorrow associated to migration can be differentiated, namely sorrow over family and friends, over the language, the culture, the land, social status, contact with the national ethnic group, and over the physical risks associated with migration; it is linked to identity; it brings about psychological regression; it is a process consisting of a series of stages; its manifestation uses a series of psychological defences; it is ambivalent towards the host country and the country of origin, and it is cross-generational. (Achotegui, 2002)

show similar prevalence in different cultures (García-Campayo and Sanz, 2000), but there are reasons why immigrants, above all those from developing countries, manifest somatization more frequently (García-Campayo, 2001), such as the *impossibility to communicate due to lack of language*, the *social sanction for expression* (a psychologization characteristic of the western culture versus externalization of symptoms in underdeveloped societies), which could also be understood as a *construct bias of the mental disease or disorder*, on the basis of the cultural components of psychiatric nosology.

Other reasons to justify this higher rate of somatization in the migrant population might be related to the greater language competence and security to refer to somatic symptoms or the belief that these symptoms may bring quicker assistance in the health care system (Collazos, Achotegui, Caballero y Casas, 2005).

Psychotic disorders. Symptoms characteristic of brief reactive psychosis and paranoid disorders such as hostility, agitation, hallucination, excessive mistrust and so on, need to be differentiated from secondary feelings of distrust of situations of isolation and social rejection. Terms such as *foreigner's paranoid reaction* or *refugee's paranoid reaction* (Kinzie y Feck, 1987) have been used abroad to refer to the severe paranoid symptomatology observed in students, workers and refugees. We should differentiate the somatic component that may be the partial reaction of the disorder, that is to say, of the deployment and consolidation of some clear (and not latent) manifestation of vulnerability.

Squizophrenia is the disorder that has generated the greatest and earliest research related to its prevalence and manifestation in immigrants. The origin of these studies date back to authors such as Ödegaard (1932) and Malzberg (1955; 1964), who concluded that there were higher rates of first hospital admissions due to schizophrenia in immigrants than in the native population. Later on, the interest in the likely relationship between schizophrenia and immigration spread to the United Kingdom, where some research groups tested their hypotheses on the African Caribbean and South Asian migrant population while they tried to correct the methodological errors of earlier studies (Cochrane, 1977; Harrison, Owens, Holton, Neilson *et al.* 1988; Hemsi, 1967; Kiev, 1965; King, Coker, Leavey, Hoare, Jonson-Sabine, 1994; Van Os, Castle, Takei, Der, Murria., 1996). More recently, evidence has been collected showing higher rates of schizophrenia and other psychoses in other European countries with immigrants from Surinam, Dutch West Indies and Morocco, and East Africa (Selten, Slaets, Kahn, 1997; Selten, Veen, Feller, Blom, Camoenie, 2001; Zolkowska, Cantor-Graae, McNeil, 2001). Finally, an ambitious study was conducted in the United Kingdom to determine the aetiology and ethnicity in schizophrenia and other psychoses (AESOP study) (Fearon, Kirkbridge, Morgan, Dazzan, Morgan *et al.*, 2006) with the objectives of verifying the results of former studies and isolating possible risk factors. Cochrane and Bal (1987) reviewed the main hypotheses proposed and the data obtained in favour and against in each one of them. We base ourselves on this review while we incorporate data from the latest research studies published (Table 4).

Hypotheses	Contradictory data
The countries of origin have high rates of schizo-phrenia	Few prevalence studies in the countries of origin Bias in the prevalence rates due to the definitions of schizophrenia (wide versus restricted) (Selten, Zeyl, Dwarkasing, Lumsden, Kahn et al, 2005) High prevalence rates in second generation immigrants (Leao, Sundquist y Frank, 2006)
Negative selection hypothesis: higher vulnerability to suffer from psychological disorders makes migration more likely (Ödegaard, 1932)	As a long and costly process, migration requires strength and resistence to successfully cope with it (Cantor-Graae y Selten, 2005) Higher prevalence rates in second generation immigrants The tendency to higher psychopathological rates is not universal. Frequent contradictory data
Migration provokes stress (related to the diathesis - stress model; Zubin and Spring, 1977)	Prevalence rates in migrant groups lower than in those of native people's samples High rates of schizophrenia a few years after migration was undertaken: possible intervention of psychological and social factors, such as discrimination, long-term unemployment, etc.
Diagnostic errors and methodological bias	Methodological errors in the first studies, such as non standardized diagnostic criteria, insufficient amount of data to carry out reliable and up to date comparisons between groups, confusing definitions and indiscriminate use of terms such as race, culture, or minority. Conceptual discrepancies about mental health and access to psychiatric assistance in the different cultures Bias of health care professionals when diagnosing groups from different cultures (Ananthhanaraganan, 1994)
Different schizophrenia symptoms in different cultures	Different ideas related to clinical manifestation, course and prognosis of the disorder, according to social and cultural background (World Health Organization, 1973)
Psycho–environmental factors involved in the development of schizophrenia: social defeat (Selten, Zeyl, Dwarksing, 2005)	
Role of ethnic density to account for high rates of schizophrenia	Difficulty to accurately determine the effect of a demographic variable as a mechanism that might lie at the basis of such a relationship (Krupiniski, 1975)

Discrepancies between prior aspirations and eventual success may influence the rates	This hypothesis requires greater systematization and research which guarantees and specifies its mechanisms and the processes involved.

Table 4. A summary of the main hypotheses on the relationship between schizophrenia and immigration.

After having enumerated all these hypotheses and the facts that contradict or encourage a better explanation of them, the only idea that might be irrefutably held is that there may not be one outstanding factor for the aetiology of psychosis and schizophrenia. There are a number of well known elements, such as family background, obstretic complications, birth in winter time, age of parents or use of cannabis, among others, whose role has been verified. However, the size of the most relevant effect, which initially pointed directly to immigration, needs to be reviewed in order to include a detalied study of variables such as the socio-economic conditions of privation and the psycho-social difficulties associated to all migration processes. Present-day research has been set a challenge to confirm whether the risk of schizophrenia and emigration has anything to do with the 'increasing urban development' and to verify the protective role of ethnic density (Cantor-Graae and Selten, 2005). In this sense, it is already widely known that the developmental course and the prognosis of psychotic symptomatology is better in developing countries than in well-developed ones (Kupfer, First, y Regier, 2004). Perhaps, together with what has been said, the role played by stigmatization due to mental illness has been undervalued. Add then, this factor of being an immigrant and the other related variables.

Disorders caused by substance abuse and dependence. When analysing whether or not this group of disorders is more frequent in immigrants, there is a series of issues referring to social and legal acceptance, consumption habits, availability and even the physiological reactions to the substances, which are strongly determined by the culture and should not be forgotten.

The wide heterogeneous association between immigration and the abuse of alcohol or other drugs has kept the findings of studies of addictions in the migrant population from being conclusive. The reasons are, among others, the considerable sample differences in the various research studies and the data offered, sometimes descriptions rather than theoretical explanations, which might combine such disparity in the results.
Other sociological and psychological analyses that have been suggested to account for higher rates of immigrant substance abuse refer to the illegal activities related to drugs that some immigrants get involved in as a way out to economic precariousness and lack of opportunities (García-Campayo, 2001), and to the already well-known self-medication hypothesis (Khantzian, 1985).

DISORDERS ASSOCIATED WITH THE CULTURE OF ORIGIN

Appendix I of the *Diagnostic and Statistic Manual of Mental Disorders* (DSM) (APA, 2000) includes the so-called *culture-bound syndromes*, a set of "aberrant behaviour patterns and troubling, recurrent experiences, specific to a particular place, which may or may not be related to a DSM diagnostic category" (p. 898). These syndromes are a real challenge for the researcher, as they are rather unfrequent and are limited to specific cultural backgrounds. The growing multicultural nature of present-day societies demands, to a certain extent, that clinical health professionals are aware of these entities in order to be sure of an accurate diagnosis. The importance of this analysis does not only focus on practical issues, since the cultural globalization phenomenon allows for the discovery of some of these manifestations outside the context in which they have traditionally taken place and, thus, provide a dynamic field to observe how psychopathology changes depend on the social and cultural area in which it develops.

Culture-bound syndrome	Description	Related to…
"Amok" or "mata elap"	Violent, destructi-ve or homicidal behaviour with no apparent trigger	Psychosis
"Ataque de nervios" or panic / nervous breakdown	Out of control feeling and various anxiety symptoms	Anxiety
Distress and wrath	Symptoms associated to wrath experiences	Anxiety and/or somatoform disorders
"Boufée delirante" or severe psychosis	Psycho-motor excitement, aggressive, behaviour, marked confusion.	Psychosis
Brain fag or mental exhaustion	Difficulties to concentrate and memorize and somatic symptoms as a response to academic stress	Somatoforms
"Dhat"	Fear that they are passing semen in their urine and belief of physical and mental weakness	Hypocondriasis and anxiety
Fallin-out and blacking out	Sudden collapse, feeling of blindness and inability to speak or move	Dissociative and conversion
Ghost sickness	Worry about death or the dead	Anxiety
"Hsieh ping"	Possession by ancestral spirits	Dissociative
"Hwa-byung"	Many somatic symptoms associated with wrath inhibition	Somatoforms
"Koro"	Fear of genital retraction	Anxiety and/or dissociative

"Latah"	Sudden terror accompanied by ecosymptoms and altered states of consciousness	Dissociative
"Locura" or madness	Incoherence, agitation, hallucinations, inability to follow social interaction rules and possible violence	Psychosis
"Mal de ojo" or evil eye	Insomnia, yelling and somatic symptoms	Anxiety
"Nervios" or nervousness	Emotional discomfort and somatic alterations	Dissociative
"Pibloktoq" and "Grisi Siknis"	Fatigue, depression or confusion followed by disruptive behaviour	Dissociative
"Qi-gong"	Dissociative and psychotic reaction to the Chinese health practice of "qi-gong"	Psychosis
Rootwork / witchcraft	Symptoms attributed to the use of magic or to the devil's influence on people	Anxiety
Sleeping blood	Somatic and conversion symptoms	Somatoform
"Shenjing shuairuo"	Neurasthenia	Somatoform
"Shenkui"	Sexually related somatic symptoms	Anxiety
"Shin-byung"	Possession by ancestral spirits	Dissociative
"Shinkeishtsu"	Perfectionism, ambivalence, obsessions and hypocondriasis	Anancastic personality disorder
Spell	Communication with spirits and personality changes	Psychosis or dissociative
"Suudu"	Increase of pelvic temperature	Somatoform
"Susto" or frightening	Various somatic symptoms subordinated to intense fear from supernatural origin	Somatoform
"Taijin kyofusho"	Phobia to social interaction and fear of contracting diseases	Anxiety
Zar	Spirit possession	Dissociative

Table 5. A summary of the main culture-bound disorders (APA, 2000)

In addition to this, the DSM also provides some diagnostic criteria guidelines to apply to culturally different patients by attending to such diversity, which may hinder the practitioner's work, whose objective is to systematically review the individual's cultural knowledge, the role of the cultural context in the expression and assessment of the symptoms and disfunctions, and the effect provoked by the cultural differences in the relationship between the individual and the practitioner (pp. 897-898)[5]. These guidelines may be useful to diagnose and understand migrant psychopathology.

RESILIENCE, COPING MECHANISMS AND PROTECTION FACTORS

Many studies have offered findings about facts that make the migrant population more vulnerable to psychopathological disorders. Fortunately, these data do not always point to this tendency, and not all the immigrants studied end up manifesting psychopathological disorders. Studies conducted in the USA with Chinese immigrants from Hong Kong (Davis y Katzman, 1998) and with Mexican immigrants (Vega, Kolody, Aguilar-Gaxiola, Alderete, Catalana *et al.*, 1998) found better mental health in the migrant population than in those who kept living in their countries of origin. In this line, some authors (García-Campayo y Sanz, 2002) have proposed urban life versus rural life as a protection factor and as a specific mechanism the increase in quality of life, which is due to the greater material resources of this context.

Various studies have found that migrant mental health has a negative relationship with the ethnic density of their group in the neighbourhood. This might be due to the fact that discrimination is greater in situations of isolation and lesser social support, which may perform as a stress factor likely to increase some psychopathological disorder (Veling, Susser, Van Os, Mackenbach, Selten *et al.*, 2008).

As can be seen in Table 2, the final result of the migration process depends on many different

[5] It is recommended that the practitioner provides data about the following: a) The individual's cultural identity, that is, the ethnic or cultural background of reference and/or belonging; the communication skills, use and preferences, including plurilinguism, if applicable; the degree of involvement in the culture of origin, and the degree of involvement in the host culture. b) Cultural explanations of the individual illness, that is, the predominating language used while feeling discomfort and the local categories of the illness; the sense and seriousness of the symptoms in relation to the cultural norms, and the perceived reasons, explanatory models and experiences with the health care services. c) Cultural factors related to the psycho-social environment and levels of activity, that is, social stressors; social support and the role of religion, the family support network and the levels of functioning and disability. d) Cultural elements relating the individual and the practitioner, that is, discrepancies of status and possible implications for the diagnosis and treatment. e) Comprehensive cultural assessment for diagnosis and assistance, that is, the valuation of the influence of cultural factors on diagnosis and treatment. (APA, 2000)

variables that include both risk factors and protection factors. In this sense, it could be understood that the more prepared and thought over the decision to migrate, the better social and economic situation in the host country, the wider social support networks—not in the sense of extent, but in the sense of cohesion—which characterize such processes, and the lesser the effect of the stressors or changes to cope with. Among them, it is worth citing coping strategies, social and cultural conflicts, a greater divergence on aspirations and real success, which also play an important role in relation to the immigrant's psychological vulnerability.

To finish and in conclusion, we need to highlight the enormous methodological complexity surrounding the relationship between psychopathology and immigration, especially due to the variability and multiplicity of mediating and moderating variables that might affect the relationship, and to the difficult task to discriminate prior psychopathology from the one associated to the migration process.

From the perspective of clinical psychological research, we find that the methodological difficulties characteristic of research are increased by the fact that we are not aware of how reliable our instruments and even our diagnostic criteria are, in order to cope with psychopathology. From a more specific point of view, as reflected in the above sections, the type of population that researchers work with is very challenging, as much in designing the research, as in properly defining the objective to achieve, when selecting comparable groups, and when properly differentiating and controlling moderating and mediating variables that might disguise hidden relationships in a first approach, etc.

As for the controversy about the scope of the migration and psychopathology relationship, the research interest aimed at theses defending an association with general psychopathology from the diathesis-stress model is more relevant than explaining whether the phenomenology manifested by the various groups of immigrants is a specific form of psychopathology. In this sense, we are in front of the challenge to determine whether they are vulnerable people, biologically or psychosocially prone to one or several psychopathologies, whose migration process places them in a risky situation that triggers or makes such pathology chronic.

In addition to this, if we specify the object of the study in question, we can propose several research lines. It seems to be clear that the attempts to find aetiological factors shared by the whole diversity of ethnic groups in the huge number of host countries is a hard and maybe fruitless task. Therefore, a possible change could consist in focusing on the risk factors that do have important clinical evidence for some ethnic group in question, verify those that make or prevent such influence from spreading to other groups and, thus, discriminate the risky or protective factors of the different social and cultural conditions. In the same way, as it may naturally have been observed in the research, comparing ethnic groups that share a new social and cultural context and end up developing different degrees of morbility would allow us to specify the influence of particular social and cultural variables and to generalize ideas on the basis of the social and cultural similarity between the ethnic groups.

Needless to say and in spite of its complexity, the migration phenomenon appears as one of the contexts in which one can better observe the influence of biological, psychological, social and cultural factors in a given degree of combination, even though we cannot yet see all its finer points.

REFERENCES

Achotegui, J. (2000). Los duelos de la migración. *Jano. Psiquiatría y humanidades, 2*, 15-19.

Achotegui, J. (2002). *La depresión en los inmigrantes: una perspectiva transcultural*. Barcelona: Ed. Mayo.

Achotegui, J. (2004). Emigrar en situación extrema: el síndrome del inmigrante con estrés crónico y múltiple (síndrome de Ulises). *Norte de Salud Mental, 21*, 39-52.

Achotegui, J. (2008). Migración y Crisis: El síndrome del inmigrante con estrés crónico y múltiple (síndrome de Ulises). *Avances en Salud Mental Relacional, 7*, 1-28.

Akiyama,T. (1996). Onset study of English speaking temporary residents in Japan. *Social Psychiatry and Psychiatric Epidemiology*, *31*, 194-198.

American Psychiatric Association (APA) (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. DSM-IV-TR*. Washington, DC: APA.

American Psychiatric Association (2002). *Cultural assessment in clinical psychiatry*. Washington: American Psychiatric Publishing.

Ananthhanaraganan, T.S. (1994). Epidemiology of mental illness among Asians in the UK. *British Journal of Hospital Medicine*, *52*, 500-506.

Barrio, C., Yamada, A., Atuel, H., Hough, R.L, Yee, S., Berthot, B. y Russo, P.A (2003). A tri-ethnic examination of symptom expresión on the positive and negative síndrome scale in schizophrenia spectrum disorders. *Schizophrenia Research. 60*, 259-269.

Bernstein, K.S., Lee, J-S., Park, S-Y. y Jyoung, J-P. (2008). Symptom manifestations and expressions among Korean immigrant women suffering with depression. *Journal of Advanced Nursing, 61*, 393-402.

Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57*, 615-631.

Bhugra, D. (2000). Migration and schizophrenia. Acta *Psychiatrica Scandinavica, 102*, 68-73.

Bhugra, D. (2004). Migration and mental health. *Acta Psychiatrica Scandinavica*, *109*, 243–258.

Bhugra, D., Hilwig, M., Corridon, B., Neehall, J; Rudge, S., Mallett, R., y Leff, J. (2000). A comparison of symptoms in cases with first onset of schizophrenia across four groups. *European Journal of Psychiatry, 14*, 241-249.

Boehlein, J.K. y Alarcón, R.D. (2000). Aspectos culturales del trastorno por estrés post-traumático. *Monografías de Psiquiatría. 12*, 18-23.

Boehnlein, J.K. y Kinzie, J.D. (1995). Refugee trauma. Transcultural Psychiatric *Research Review, 32*, 223-252.

Cantor-Graae, E. y Selten, J-P. (2005). Schizophrenia and migration: a meta-analysis and review. *American Journal of Psychiatry , 162*, 12-24.

Cochrane,R. (1977). Mental illness in immigrants to England and Wales: an analysis of mental hospital admissions, 1971. *Social Psychiatry, 12*, 25-35.

Cochrane, R. y Bal, S.S. (1987). Migration and schizophrenia: an examination of five hypotheses. *Social Psychiatry, 22*, 181-191.

Collazos, F., Achotegui, J., Caballero, L. y Casas, M. (2005) Emigración y psicopatología. En J. Vallejo Ruiloba y C. Leal Cercós (Eds.), *Tratado de Psiquiatría (*Vol. II, pp. 2259-2272). Barcelona: Ars Médica.

Davis, C. y Katzman, M.A. (1998). Chinese men and women in the United Status and Hong Kong: body and self-esteem rating as a prelude to dieting and exercise. *International Journal of Eating Disorders, 23*, 99-102.

Fearon, P., Kirkbridge,J.B., Morgan, C., Dazzan, P; Morgan. K; Lloyd, T; Hutchinson, G; Tarrant, J; Fung, W.A; Holloway, J; Mallett, R; Harrison, G; Leff,J; Jones, P.B y Murria, R.M. (2006). Incidence of schizophrenia and other psychoses in ethnic minority groups: results from the MRC AESOP study. *Psychological Medicine, 36*, 1541-1550.

García-Campayo, J. (2001) *Actualización en trastornos somatomorfos*. Madrid: Médica Panamericana.

García-Campayo, J. y Sanz Carrillo, C. (2000). New indices for transcultural comparison in somatization. *Canadian Journal of Psychiatry, 45*, 199.

García-Campayo, J. y Sanz Carrillo, C. (2002) Salud mental en inmigrantes: el nuevo desafío. *Medicina Clínica, 118*, 187-191.

Gorst-Unsworth, C. y Goldenberg, E. (1998). Psychological sequelae of torture and organized violence suffered by refugees from Iraq. *British Journal of Psychiatry, 172*, 90-94.

Harrison, G., Owens, D., Holton, A., Neilson, D., et al. (1988). A prospective study of severe mental disorder in Afro-Caribbean patients. *Psychological Medicine, 18*, 643-657.

Hemsi, L.K. (1967). Psychotic morbidity of West Indian immigrants. Social Psychiatry, 2, *95-100.*

Hes, J.P. (1958) Hypochondriasis in oriental Jewish inmigrants: a preliminary report. *International Journal of Social Psychiatry, 4*, 18-23.

Holtz, T.H. (1998). Refugee trauma versus torture trauma: a retrospective controlled cohort study of Tibetan refugees. *The Journal of Nervous and Mental Disease, 186*, 24-34.

Khantzian, E.J. (1985). The self-medication hypotheses of addictive disorders: focus on heroin and cocaine dependence. American Journal of Psychiatry, *142*, 1259-1264.

Kiev, A. (1965). Psychiatric morbidity of West Indian immigrants in an urban group practice. *British Journal of Psychiatry, 111*, 51-56.

King, M., Coker, E., Leavey, G., *et al.* (1994). Incidence of psychotic illness in London: comparison of ethnic minority groups. *British Medical Journal, 309*, 1115-1119.

Kinzie, J.D., Feck, J. (1987). Psychotherapy with severely traumatized refugees. *American Journal of Psychotherapy, 41*, 82-94.

Kirmayer, L.J. (2001). Cultural variations in the clinical presentation of depression and anxiety: implications for diagnosis and treatment. *Journal Clinical of Psychiatry. 62* (Supl.), 22-28.

Krupiniski, J. (1975). Psychological maladaptations in ethnic concentrations in victoria. En I. Pilowsky (Ed.), *Cultures in collision* (pp 49-58). Adelaide: Aust. Nat. Ass. For Mental Health.

Kupfer, D.J., First, M.B. y Regier, D.A. (Eds.) (2004). *Agenda de Investigación para el DSM-V*. Barcelona: Masson.

Leao, T.S., Sundquist, J. y Frank, G. (2006). Incidence of schizophrenia or other psychoses in first-and second-generation immigrants: A national cohort study. *Journal of Nervous and Mental Disease, 194*, 27-33.

Lee,D., Kleinman, J.y Kleinman, A. (2007). Rethinking depression: an ethnographic study of the experiences of depression among Chinese. *Harvard Review of Psychiatry. 15*, 1-8.

Malzberg, B. (1955). Mental disease among the native and foreign-born white populations of New York State, 1939-41. *Mental* Hygiene, 39, *545-563.*

Malzberg,B. (1964). Mental disease among the native and foreign-born white populations of New York State, 1949-51. *Mental* Hygiene, 48, *478-499*

Murphy, H.B.M. (1968). Socio-cultural factors in schizophrenia. En A. Zubin y V. Freyhan (Eds.), *Social Psychiatry* (pp. 74-92). New York, USA: Grune and Stralton.

Nazroo, J. (1997). *Ethnicity and mental health*. London: P.S.I

Okasha, A., Saad, A., Khalil,A.H., Seif El Dawla, A. y Yehia, N. (1994). Phenomenology of obsessive-compulsive disorder: a transcultural study. *Comprehensive Psychiatry*, *35*, 191-197.

Pernice R. y Brook, J. (1996). The mental health pattern of migrants: is there a euphoric period followed by a mental health crisis? *International Journal of Social Psychiatry*, *42*, 18-27.

Ritsner, M. y Ponizovsky, A. (1998). Psychological symptoms among an immigrant population: a prevalence study. *Comprehensive Psychiatry*, *39*, 21-27.

Schuster, M.A., Stein, B.D. Jaycox, L., Collins, R., Marshall, G., Elliot, M.N., Zhou, A.J, Kanouse, D.E., Morrison, J.L. y Berry, S.H. (2001). A national survey of stress reactions after the September 11, 2001 terrorist attack. *New England Journal of Medicine*. *345*, 1507-1512.

Seguin, C.A. (1956). Migration and psychosomatic disadaptation. *Psychosomatic Medicine*, *18*, 404-409.

Selten, J.P., Slaets, J.P.J y Kahn, R.S. (1997). Schizophrenia in Surinamese and Dutch Antillean immigrants to the Netherlands: evidence of an increased incidence. *Psychological Medicine, 27*, 807-811.

Selten, J.P., Veen, N.N., Feller, W., Blom, J.D., Camoenie,W., Oolders, J., Van Der Velden, M., Hoek,H.W., Rivero, V.MV., Van Der Graaf, Y y Kahn, R.. (2001). Incidence of psychotic disorders in immigrant groups to the Netherlands. *British Journal of Psychiatry, 178*, 367-372.

Selten, J.P., Zeyl, C., Dwarkasing, R., Lumsden, V., Kahn, R.S., y van Harten, P.N. (2005). First-contact incidence of schizophrenia in Surinam. *British Journal of Psychiatry, 186*, 74-75.

Sherazi, R., McKeon, P. y McDonough, M. (2006). What´s new? Epidemiology of bipolar I disorder. *Harvard Review of Psychiatry*. *14*, 273 – 284.

Tseng, W.T. (2001). *Handbook of cultural psychiatry*. San Diego: Academic Press.

Van Os, J., Castle, D.J., Takei, N., Der, G. y Murria, R.M. (1996). Psychotic illness in ethnic minorities: clarification from the 1991 census. *Psichological Medicine, 26*, 203-208.

Vega, W.A., Kolody, B., Aguilar-Gaxiola, A., Alderete, E., Catalana, R., Caraveo-Anduaga, J. (1998). Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican-Americans in California. *Archives of General Psychiatry*, 55, 771-778.

Veling, W. , Susser, E. ,Van Os, J., Mackenbach, J.O., Selten, J.P., Hoek, H.W.. (2008) Ethnic density of neighborhoods and incidence of psychotic disorders among immigrants. *American Journal of Psychiatry, 165*, 66-73.

Westermeyer, J. (1988). DSM-III psychiatric disorders among Hmong refugees in the United Status: a point prevalence study. *American Journal of Psychiatry*, *145*, 197-202.

World Health Organization (1973). *The international pilot study of schizophrenia*. Ginebra: World Health Organization.

Zolkowska, K. Cantor-Graae, E. y McNeil, T.F. (2001). Increased rates of psicosis amongst immigrants to Sweden: is migration a risk factor for psicosis? *Psychological Medicine, 31*, 669.

Zubin, J. y Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology*, *86*, 103-126.