

ACCULTURATIVE STRESS AND MENTAL HEALTH IN THE IMMIGRANT POPULATION

Francisco Collazos^{1,2} Adil Qureshi¹, Montserrat Antonin³ y Joaquín Tomás-Sábado³

¹Programa de Psiquiatría Transcultural, servicio de Psiquiatría, Hospital Universitario Vall d'Hebron, Barcelona.

²Departamento de psiquiatría, Universitat Autònoma de Barcelona.

³Escola Universitària d'Infermeria Gimbernat. Universitat Autònoma de Barcelona

The phenomenal increase in immigration seen in Spain over the past few years has opened up the debate concerning the relationship between immigration and psychopathology. A large number of studies in Europe and North America have shown contradictory findings; it remains unclear if there is a direct relationship between immigration and psychopathology. Increasingly, a direct relationship between immigration and the appearance of a mental disorder is questioned, although it is recognized that the migratory process, culture and minority group membership impact mental health. Stress related to immigration, cultural difference, and perceived discrimination are recognized as risk factors. This article examines the relationship between psychopathology and immigration with a focus on acculturative stress and its moderating factors.

Key words: Acculturative stress. Immigration. Mental Health

El incremento en la inmigración observado en España en los últimos años ha abierto un debate sobre la relación entre el proceso migratorio y el desarrollo de ciertos problemas psicopatológicos. Estudios realizados en Europa y Estados Unidos han mostrado resultados contradictorios; no queda claro si existe una relación directa entre la inmigración y la psicopatología. Cada vez se cuestiona más la existencia de este tipo de relación, aunque se reconoce que el proceso migratorio, la cultura y la pertenencia a un grupo minoritario influyen sobre la salud mental. El estrés relacionado con la inmigración, las diferencias culturales y la discriminación percibida son considerados factores de riesgo. Este artículo examina las relaciones entre psicopatología e inmigración, incidiendo, especialmente, sobre el concepto de "estrés aculturativo" y sus factores moderadores.

Palabras clave: Estrés aculturativo. Inmigración. Salud mental.

At the beginning of 2008, it was estimated that 10% of the 45 million people residing in Spain were foreigners. This percentage is expected to undergo a progressive tendency to rise until reaching 25% in very few years. The significant increase in immigration which has taken place in Spain in the last few years poses a large number of challenges among which are those related to mental health assistance for these people.

In this sense, mental health professionals wonder if there is any relationship between the migratory process and the subsequent development of psychopathology (Achoategui, 2002; Collazos, Qureshi & Casas, 2005; Gracia-Campayo & carillo, 2002). In reality, this issue has been of interest for more than a century (Bhugra, 2004). With the intention of clarifying this possible relationship, many studies have been conducted with very contradictory results. At first, the association between immigration and

the development of psychiatric disorders was taken for granted (Ritsner et al., 1996; Watters, 2002); however, later, thanks to methodologically more adequate studies, this conclusion was questioned suggesting that in reality it is a spurious correlation due to methodological problems or even to other moderating factors (Bhi & Bhugra, 2002; Farley, Galves, Dickinson & Diaz Perez, 2005; Kirmayer & Groleau, 2001). At present, we prefer to say that immigration is not always related to the development of psychiatric disorders, and it is even questionable to consider it as a risk factor which, depending on its intensity and the vulnerability of the immigrant, can facilitate the development of psychopathology (Bhugra, 2004b; Collazos et al., 2005).

The inconsistency of the findings regarding the relationship between immigration and psychopathology seems to be related to the scarce precision with which certain terms relative to difference are used: race, culture, ethnicity, immigrant, minority, etc. (Helms & Cook, 1999). The lack of rigor with which some terms are used instead of others, depending on the ideological perspective from

Correspondence: Francisco Collazos. Programa de Psiquiatría Transcultural. Servicio de Psiquiatría. Hospital Universitario Vall d'Hebron. Pg. Vall d'Hebron 119-129. 08035 Barcelona. España. E-mail: fcollazos@vhebron.net

which an opinion is being given, could be the reason why, on many occasions, these factors are confused and lead the researchers to come to contradictory conclusions (Bhugra & Mastrogianni, 2004).

The scarcity of updated and well-designed epidemiological studies in the countries of origin complicates conducting an analysis of the before and after of immigration which allows us to assure to what degree today's mental health problems have appeared "de novo" or were premorbid. Research often turns out to be contradictory, showing, for example, that certain immigrant populations have lower or higher rates of a particular mental disorder compared to the members of the dominant group. In fact, the combination of all these problems reveals to what extent this field is still in a very initial phase and presents serious deficiencies in many aspects (Bhugra, 2004; Collazos et al., 2005). With this, we do not intend to question the pertinence of research but simply to point out the degree of complexity underlying transcultural psychiatry probably because in reality it represents a complex combination of biological and psychological factors and socio-cultural processes.

The exact relationship between immigration and psychopathology still remains a mystery. The most recent meta-analyses (Cantor-Graae & Selten, 2005; Swinnen & Selten, 2007) show a wide range of findings with respect to the prevalence of mood disorders and schizophrenia among immigrants. This same tendency is presented by some rigorous epidemiological studies conducted with large samples in the United States. The National Latino and Asian American Study (Alegria et al., 2007; Takeuchi et al., 2007) which includes a stratified sample of 2,554 Latinos and 2,095 Asians and the National Epidemiological Study on Alcohol and Related Conditions (NESARC) (Breslau & Chang, 2006; Grant et al., 2004) in which 1,236 Asians, 4,558 Mexicans and 23,262 non-Hispanic whites participated, found lower levels of anxiety and mood disorders and substance dependency among the immigrant populations compared to those born in the US. The results from the National Comorbidity Survey Replication (Breslau et al., 2007) were similar, although the difference between both groups was slightly lower. However, when a small sample of Mexican immigrants was examined, they found that the presence of anxiety disorders predisposed to emigration and that emigration, in turn, predicted the subsequent development of anxiety and mood disorders (Breslau et al., 2007). The Health Interview Survey conducted in Belgium in 2001

(Levecque, Lodewyckx & Vranken, 2007) using a sample of 6,121 Belgians, 244 Greek, Italian and Spanish immigrants, 214 immigrants from Turkey and Morocco and 328 immigrants from other countries of the European Union found that depressive symptomatology is more prevalent in Turks and Moroccans than in the rest of immigrant groups. On the other hand, immigrants from Greece, Italy, Spain, Turkey and Morocco showed a higher prevalence of anxiety disorders than the Belgians or those coming from other parts of the European Union.

In a first meta-analysis on immigration and schizophrenia (Cantor-Graae & Selten, 2005) and its subsequent updates (Selten, Cantor-Graae & Kahn, 2007) a greater risk for developing this psychotic disorder has been found among immigrants and their descendants. However, this tendency has always been detected among groups of black immigrants from the Caribbean region or Moroccans arriving in countries with a white majority such as Great Britain or Holland. The risk of developing schizophrenia is also higher among immigrants from the Indian subcontinent, although not significantly. In an ambitious study conducted in 10,108 homes in Great Britain (Brugha et al., 2004) they found a higher risk of suffering schizophrenia in the African and Afro-Caribbean populations, but they did not find this in the immigrants from the Indian subcontinent.

Throughout all these studies, the authors insist in trying to find the causes responsible for these differences. In the Belgian study, (Levecque et al., 2007) it is suggested that it is the "region of origin" more than immigration itself that is the main risk factor. The relationship between the region of origin and variables such as economic disadvantage, unemployment or low level of education is what makes it a risk factor. In some ways, it can be said that socioeconomic status more than immigration is related to the development of psychopathology. In accordance with this, Brugha et al. (2004) suggested that "socioeconomic disadvantage" is what explains the differences in question although they recognize that more studies in this direction are necessary.

Economic interpretation is not, however, supported by those studies carried out in the United States in which, although not directly including variables related to socioeconomic status, found that citizens of second or third generation, individuals that at least in theory were expected to have a better socioeconomic status than their parents or grandparents, had higher levels of psychopathology than their predecessors (Alegria et al., 2007; Takeuchi et al., 2007).

In their meta-analysis, Selden and colleagues (Cantor-Graae & Selten, 2005; Selten et al., 2007; Swinnen & Selten, 2007) suggest that some type of social factor – what they call “social defeat” – is the determinant factor in the development of mental disorders in immigrant populations. They recognize that racism, the problems associated to housing conditions, employment and other related factors, can have an influence on this. Since the prevalence of schizophrenia is higher in a specific group of immigrants and in a certain context – the Afro-Caribbeans in Great Britain or the Moroccans in Belgium – it could be that the key factors in this finding were racism and exclusion. However, what is clear is that there is not only one explanation for either the prevalence of psychopathology or its development. The fact that only the Belgian study (Levecque et al., 2007) found a higher prevalence for depression and not for anxiety is an unexpected finding. It would be expected that the difficulties linked to migration would have higher rates of anxiety. At the same time, these findings support the stance of the authors of this article who consider that the psychopathology of the immigrant is related with the stressors associated to their migratory project, understanding stress within the framework of the stress-process model.

The fact that the migratory process, culture or belonging to a migratory group are influenced by different moderating and mediating factors makes comparison between the different groups even more difficult (Collazos et al., 2005). Therefore, we deduce that in order to interpret the complex relationship between psychopathology and immigration correctly, it is necessary to take into account the influence exerted by these moderating or mediating factors, in particular that of the acculturative stress that the immigrants are subjected to.

STRESS AND PSYCHOPATHOLOGY

According to the transactional approach proposed by Lazarus (1999), stress is defined as a situation in which the external or internal demands surpass the individual's adaptive resources (Lazarus, 1999). In this sense, immigration can be considered a challenge since the migratory process requires the adaptation to a new reality but without being able to count on the same resources he/she had in the country of origin (Bhugra, 2004).

Classically, it has been considered that there are two basic types of stress: acute and chronic (Dimsdale, Irwin,

Keefe & Stein, 2005). Acute stress represents a tough, specific event; that is, a stressing episode in the life of the subject. The acute stressors of immigration can be related to possible significant events which could have provoked the departure from the usual place of residence during the migratory journey or already in the receiving country. Chronic stressors include conflicts with the new roles played in the new place of residence, change of status, stressful transitions, stressful contexts or environments, unresolved chronic stress or everyday stress or “daily hassles” (Cassidy, 2000; Hahn & Smith, 1999).

Since the sixties, researchers have been exploring the existing relationship between proneness - or diathesis - and an intervening factor – stress - which transforms the incomplete disposition toward a mental disorder into a full-blown disorder. Research suggests that this type of model adequately explains a significant proportion of the variance in studies which try to justify the development of psychopathology (S. Folkman & Lazarus, 1986).

Another complex question pertains to the potential capacity of stress to provoke psychopathology by itself, without an existing genetic or biological predisposition (Dohrenwend, 2000; Hammen, 2005; Zuckerman, 1999). Although there is no sufficiently solid research to support this possibility, everything seems to indicate that it could be perfectly possible when stressors with the necessary intensity and duration are presented, combined with a limited resource availability on the part of the person in order to respond to stress (Hammen, 2005; Zuckerman, 1999). In other words, the coping style (and not necessarily personality disorders) could predispose the person to developing a mental disorder if his/her usual way of responding to stress were dysfunctional, or could simply mediate in the appearance of psychopathology when the necessary individual resources for overcoming the stressor in question are lacking (Chan, 1997; Dohrenwend, 2000). Thus, stress can both favour the development of psychopathology and be the cause of it.

IMMIGRATION AND STRESS

Every migratory process implies a component of loss and another of gain, inherent to the change that entails leaving the usual place of residence to move to another which is more or less far away and different. From this difference, both geographic and especially cultural, derives a subsequent effort of adaptation to the new conditions of life. This effort of adaptation can be defined as “immigration stress”. People who change cultures, such

as immigrants, experience some unique stressors. The loss of status, marginality, alienation and perceived discrimination, fragility of cultural identity, etc., can become preoccupations which challenge the fortitude of the person's mental health (Sandhu & Asrabadi, 1994; Sandhu, Portes & McPhee, 1996).

Following the reasoning of the previous point regarding the relationship between stress and psychopathology, the concept of "immigration stress" lacks clinical relevance if it is not contrasted to that of "the individual's coping mechanisms" or "internal resources" (Lazarus, 1999; Noh & Kaspar, 2003) such as self-esteem (Chan, 1997) or locus of control (Cervantes & Castro, 1985; Hovey, 1999) and the social support network on which he/she counts. This approach, which can be conceptualized as "stress proneness" is useful in establishing the relationship between migration and the mental disorders derived from it (Berry & kim, 1988; Bhugra, 2000, 2003; Hovey, 2000; Hovey & Magaña, 2002; Mena, Padilla & Maldonado, 1987; Miranda & Mathery, 2000; Noh & Kaspar, 2003; Smart & Smart, 1995). The factors which have been invoked as possible stressors related to immigration are multiple and have been studied from very different perspectives. From a psychoanalytical point of view, it has been suggested that immigration carries associated with it a series of bereavements which can trigger, when not dealt with appropriately, a proteiform syndrome which could include affective, anxious or psychotic symptoms (Akhtar, 1995; Grinberg & Grinberg, 1996). Regardless of the theoretical interest of this approach, a direct relationship between migratory bereavement and the presence of psychopathology has not yet been demonstrated.

For others, the essential element in establishing a relationship between immigration and psychiatric disorders must be looked for in the acculturation context, understood as the cultural change that takes place when two or more cultural groups come into contact (Moyerman & Forman, 1992). The adaptation effort involved in this phenomenon is known as acculturative stress (Berry & Kim, 1988; Padilla, Olmedo & Loya, 1982).

Another factor which has been thought to be a possible cause of psychopathology in those belonging to "ethnic minorities" is the stress derived from the feeling of discrimination, as a subjective perception, with respect to the dominant social majority. Some authors believe that perceived discrimination should be included in acculturative stress (Gil & Vega, 1996, Gil, Wagner &

vega, 2000; Hovey & Magaña, 2002; Noh & Kaspar, 2003; Sandhu & Asrabadi, 1994), whereas others think that it is an independent factor and that, as such, requires its own study (Rodriguez, Myers, Mira, Flores & Gracia-Hernandez, 2002).

Lastly, it cannot be forgotten that immigrants, as well as other citizens, are subjected to a whole series of daily psychosocial stressors which can become as important or more than those previously mentioned.

ACCULTURATIVE STRESS

Considering immigration as a prognostic factor for the later development of psychopathology becomes very complicated, to a great extent because it is a non-psychological and excessively heterogeneous concept. In its place, some authors advocate the term *acculturation* although, at present, there is still not a wide consensus as to what this term means.

Acculturation can be interpreted in the context of the strategy used by the immigrant to cope with the migratory process (Berry, 2001). Following this view, Berry proposes that depending on which strategy is used the immigrant can become *integrated* if he/she is capable of maintaining the culture of origin while adopting the dominant culture; *assimilated*, when he/she adopts the dominant culture to the detriment of that of origin; *separated*, if she/he keeps the culture of origin and rejects the culture of the receiving society; or, lastly, *marginalized*, when he/she abandons all cultural identity (Berry, 2001). However, this *acculturation* model presents some methodological problems which redound to the obtainment of contradictory results in research as a consequence of employing an excessively conceptual concept with scarce practical applicability.

The lack of a clear relationship between acculturation and mental health, on the one hand, and the limited applicability of the existing models, on the other, make it necessary to resort to other connected conceptual constructions. Stress related to the migratory process, better known in the United States as *acculturative stress* seems to be a very useful concept which can offer interesting psychological information (Finch, Frank & Vega, 2004).

Immigration is stress in the degree that the individual is incapable of responding or coping with certain stressful events as well as with everyday chronic stress factors. The concept of acculturative stress is valuable as it fixes attention on a psychological phenomenon and not on a

demographic one such as immigration (or even belonging to a certain ethnic group) or on a theoretical and empirically faulty conceptual construction such as acculturation.

The studies on acculturative stress insist that what is important is not cultural contact itself but rather the stressful experience derived from this contact (Hovey & Magaña, 2000; Mena et al., 1987; Sandhu & Asrabadi, 1994). The necessity of learning a new language (Finch et al., 2004; Hovey & Magaña, 2000), new customs and cultural codes (Smart & Smart, 1995), change in family and work roles (Rodriguez et al., 2002) and not having a work permit can all result in significant daily stress (Finch & Vega, 2003).

It has been proposed that acculturative stress has different components, such as homesickness or the mourning associated with leaving a particular lifestyle behind (Achotegui, 2002); the cultural clash or acculturative process (Finch et al., 2004); or the frequent experience of discrimination (Sandhu & Asrabadi, 1994). The conclusions reached in the United States (Sandhu & Asrabadi, 1994) and the first conclusions reached in Spain (Tomás-Sabado, Qureshi, Antonin & Collazos, 2007) suggest that although immigration stress is conceptually composed of different factors, it is, from a psychometric point of view, unitary. Although no research studies have thoroughly investigated these three components in Spain, an instrument for assessing immigration stress has been developed and it includes the components mentioned (Tomás-Sabado et al., 2007). The present concept of stress supported in the transactional analysis proposed by Lazarus (Lazarus & Folkman, 1980) implies that the intensity of any of these stress factors must always be understood in the context of the resources which the person has access to, whether these are psychological, social or institutional. It should remain clear that immigration itself, regardless of the intensity of the experience, is not by definition a stress factor, not even a risk factor.

Homesickness

This source of immigration stress is that related to the losses associated with the departure from the country of origin (Smart & Smart, 1995) which have been very well described by Achotegui (2002) and that include the experience of missing essential aspects that, at first, only exist in the country they left behind. The loss of friends and family, social status, work, language, customs and even

the homeland, can become important stress factors, especially if they are accompanied by legal, professional and social difficulties in the receiving country.

Cultural clash

Acculturation stressors are all those related to starting a life in a new culture, such as access to culturally relevant services and products, religious and cultural activities, children's education and interpersonal relationships. The changes that the acculturation process entails frequently require that the individuals adopt new roles which are quite often culturally incoherent. Any profound change in cultural norms, such as the roles played, can provoke considerable stress.

Perceived discrimination

Another possible source of stress is perceived discrimination, related not only to stress but also to the possible development of psychopathology and health problems (Mena et al., 1987; Noh & Kaspar, 2003; Sandhu & Asrabadi, 1994; Utsey, Chae, Brown & Kelly, 2002).

The experience of being discriminated against due to race, religion or belonging to an ethnic group covers an important part of some acculturative stress scales and has been identified in itself as a risk factor which predisposes a person to suffer physical and mental health problems (Noh & Kaspar, 2003). Likewise, it has been suggested that discrimination can be one of the explicative factors for the high rates of schizophrenia among European Afro-Caribbeans (Bhugra, 2000; Cantor-Graae & Selten, 2005).

Since it is an individual's experience which is being dealt with here, this factor is conditioned more by perceptions than by the objective experience of discrimination. In fact, the latter is quite irrelevant given that a great part of contemporary racism is implicit (Espelt & Javaloy, 1997) and remains hidden (even for those who discriminate). Research indicates that some minority populations show higher levels of paranoid ideation (Barrio et al., 2003), which has been interpreted as a possible adaptive response to a racist society.

DISCUSSION

Acculturative stress offers a conceptual and empirical framework in which the relationship between psychopathology and immigration can be placed and that is supported by today's extensive research on the

subject. Most researchers recognize the necessity of some additional factor in order to make sense of the frequently contradictory results obtained in the field. This additional factor would be consistent with the construct of acculturative stress.

The higher prevalence of schizophrenia among black and Moroccan immigrants found by Cantor-Graae & Selten (2005), the higher levels of depression among immigrants with lower incomes (Levecque et al., 2007) and the better mental health among immigrants who live in areas with greater ethnic density all indicate (Bhugra, 2004) an interrelationship with acculturative stress. The striking finding that the more time spent in the receiving country and the greater the fluency in its language are related to worse mental health, clearly refutes the conventional belief that "integration" is a predictor of mental health. However, these surprising findings could be explained by acculturative stress which recognizes that the time spent in a new environment, unknown, and frequently hostile, can be very stressful. The habitual interaction with natives in the vernacular of the receiving country - an indicator of integration - can be in itself very stressful due to the effort that the adaptation to different social norms entails at the same time as the individual may be exposed to more or less subtle forms of prejudice and discrimination.

Acculturative stress, as has been mentioned, is founded on the stress-process model; that is, immigration is stressful in the degree that it is experienced as such by the individual, in relation with the personal, social and material resources the person has available. Thus, it is not so much the conditions or specific events - nomothetical categories - that are stressful but rather it is how the individual responds to those conditions and events. Acculturative stress is by definition an idiopathic or individualized construct.

Acculturative stress takes as its reference the transactional paradigm developed by Lazarus (Lazarus, 1999; Lazarus & Folkman, 1980), in which what is relevant is the interaction established between a stressor with certain characteristics and the more or less efficient coping mechanisms developed by the individual. From this perspective, it cannot be asserted that acculturation ineluctably leads to a deterioration of the individual's mental health, but rather, it sometimes implies a range of opportunities from which he/she can come out reinforced (S. Folkman & Moskowitz, 2000).

From all the points expounded, it is evident that the

repercussion of all the stressors associated to migration on the emotional plane become very important. Some authors have spoken of the "foreign student syndrome" (Ward, 1967), the "uprooting disorder" (Zwingman, 1978), "cultural bereavement" (Eisenbruch, 1992) or the "Ulysses syndrome" (Achotegui, 2004).

The stress-process model suggests that individual and specific contextual factors behave as intensity mediators and moderators of the stress related to the migratory experience. Hence, the rigorous study of the possible relationship between the appearance of psychopathology and the migratory process should include the assessment of the moderating and mediating factors which, like acculturative stress, contextualize the latter.

Nevertheless, there are not many studies which adequately analyze the relationship between the acculturative stress level and the development of psychopathology. In some of these studies (Hovey, 2000), it is demonstrated that the higher the degree of this type of stress is, the more frequent depressive symptoms or suicidal ideation as well as anxiety (Hovey & Magaña, 2002), bulimic symptomatology (Pérez et al., 2002) or substance abuse disorders (Gil et al., 2000; Vega, Zimmerman, Warheit & Gil, 2002) are in some of the ethnic groups studied. The preliminary data of an ambitious multicentric study conducted in Aragón and Cataluña, which includes more than 1,500 interviews with immigrants who consulted Primary Health Care Services and who are, at present, starting to be assessed by our team, point towards a relationship between the degree of stress and the presence of mental disorders, especially the anxious-depressive type. From these results, the great interest that the detection of the level of acculturative stress has in this collective as a possible indicator of the risk of developing some type of psychopathology is inferred.

The lack of adequate scales for the assessment of acculturative stress levels in our environment has led to the development of the Barcelona Immigrant Stress Scale (BISS) (Tomás-Sabado, Qureshi, Antonin & Collazos, 2007). The main objective of this self-report scale is to offer the clinician a simple instrument which can advise him/her of the possible presence of stressors given the relationship between these and the later development of psychopathology. Awaiting its definitive external validation, scales such as this are becoming more necessary every day to aid health care professionals in the challenge of giving assistance to culturally diverse populations.



REFERENCES

- Achotegui, J. (2002). *La depresión en los inmigrantes: Una perspectiva transcultural (Depression in immigrants: A transcultural perspective)*. Barcelona: Ediciones Mayo.
- Achotegui, J. (2004). Emigrar en situación extrema: el Síndrome del inmigrante con estrés crónico y múltiple (Síndrome de Ulises) (Emigration in extreme situations: the syndrome of the immigrant with chronic and multiple stress (Ulysses syndrome). *Norte de Salud Mental*, 21, 39-52.
- Akhtar, S. (1995). A third individuation: immigration, identity, and the psychoanalytic process. *Journal of the American Psychoanalytic Association*, 43(4), 4051-1084.
- Alegria, M., Mulvaney-Day, N., Torres, M., Polo, A., Cao, Z. & Canino, G. (2007). Prevalence of psychiatric disorders across Latino subgroups in the United States. *American Journal of Public Health*, 97(1), 68-75.
- Barrio, C., Yamada, A., Atuel, H., Hough, R. L., Yee, S., Berthot, B. et al. (2003). A tri-ethnic examination of symptom expression on the positive and negative syndrome scale in schizophrenia spectrum disorders. *Schizophrenia Research*, 60, 259-269.
- Berry, J. (2001). Conceptual approaches to acculturation. In K. M. Chun, P. Balls Organista & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17-38). Washington DC: American Psychological Association.
- Berry, J. & Kim, U. (1988). Acculturation and mental health. In P. Dasen, J. Berry & Sartorius (Eds.), *Health and cross-cultural psychology: Towards application* (pp. 207-236). London: Sage.
- Bhugra, D. (2000). Migration and schizophrenia. *Acta Psychiatrica Scandinavica*, 102(Suppl. 102).
- Bhugra, D. (2001). Acculturation, cultural identity and mental health. In D. Bhugra y R. Cochrane (Eds.), *Psychiatry in multicultural Britain* (pp. 112-136). London: Gaskell.
- Bhugra, D. (2003). Migration and depression. *Acta Psychiatrica Scandinavica*, 108(Suppl. 418), 67-72.
- Bhugra, D. (2004). Migration and mental health. *Acta Psychiatrica Scandinavica*, 109(4), 243-258.
- Bhugra, D. & Mastrogiani, A. (2004). Globalization and mental disorders. *British Journal of Psychiatry*, 184, 10-20.
- Bhui, K. & Bhugra, D. (2002). Mental illness in Black and Asian ethnic minorities: pathways to care and outcome. *Advancement in Psychiatric Treatment*, 8, 26-33.
- Breslau, J., Aguilar-Gaxiola, S., Borges, G., Castilla-Puentes, R. C., Kendler, K. S., Medina-Mora, M. E. et al. (2007). Mental disorders among English-speaking Mexican immigrants to the US compared to a national sample of Mexicans. *Psychiatry Research*, 151(1-2), 115-122.
- Breslau, J. & Chang, D. F. (2006). Psychiatric disorders among foreign-born and US born Asian-Americans in a US national survey. *Social Psychiatry and Psychiatric Epidemiology*, 41(12), 943-950.
- Brugha, T., Jenkins, R., Bebbington, P., Meltzer, H., Lewis, G. & Farrell, M. (2004). Risk factors and the prevalence of neurosis and psychosis in ethnic groups in Great Britain. *Social Psychiatry and Psychiatric Epidemiology*, 39(12), 939-946.
- Cantor-Graae, E. & Selten, J. P. (2005). Schizophrenia and migration: A meta-analysis and review. *American Journal of Psychiatry*, 162(1), 12-24.
- Cassidy, T. (2000). Stress, healthiness and health behaviors: An exploration of the role of life events, daily hassles, cognitive appraisal and the coping process. *Counseling Psychology Quarterly*, 13, 293-311.
- Cervantes, R. C. & Castro, R. G. (1985). Stress, coping and Mexican American mental health: A systematic review. *Hispanic Journal of the Behavioral Sciences*, 7, 1-73.
- Chan, K. B. (1977). Individual differences in reaction to stress and their personality and situational determinants: Some implications for community mental health. *Social Science and Medicine*, 11, 89-103.
- Collazos, F., Qureshi, A. & Casas, M. (2005). Psicopatología e inmigración (Psychopathology and immigration) In J. Vallejo (Ed.), *Update Psiquiatría* (pp. 37-52). Barcelona: Masson.
- Cuëllar, I. (2000). Acculturation and mental health: Ecological transactional relations of adjustment. In I. Cuëllar & F. A. Paniagua (Eds.), *Handbook of Multicultural Mental Health* (pp. 45-62). San Diego, CA: Academic Press.
- Dimsdale, J. E., Irwin, M., Keefe, F. J. & Stein, M. B. (2005). Stress and psychiatry. In Benjamin J. Sadock & V. A. Sadock (Eds.), *Kaplan and Sadock's comprehensive textbook of psychiatry* (8th ed., Vol. 2, pp. 2180-2195). Philadelphia: Lippincott Williams y Wilkins.



- Dohrenwend, B. P. (2000). The role of adversity and stress in psychopathology: some evidence and its implications for theory and research. *Journal of Health and Social Behavior, 41*(1), 1-19.
- Eisenbruch, M. (1992). Toward a culturally sensitive DSM: cultural bereavement in Cambodian refugees and the traditional healer as taxonomist. *Journal of Nervous and Mental Disease, 180*(1), 8-10.
- Espelt, E. & Javaloy, F. (1997). *El racismo moderno (Modern racism)*. Barcelona: SOS Racismo.
- Farley, T., Galves, A., Dickinson, L. M. & Diaz Perez, M. (2005). Stress, coping, and health: A comparison of Mexican immigrants, Mexican-Americans, and non-Hispanic Whites. *Journal of Immigrant Health, 7*(3), 213-220.
- Finch, B. K., Frank, R. & Vega, W. A. (2004). Acculturation and acculturative stress: A social epidemiological approach to Mexican migrant farm workers' health. *International Migrant Review, 38*(1), 236-262.
- Finch, B. K. & Vega, W. A. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health, 5*(3), 109-117.
- Folkman, S. & Lazarus, R. S. (1986). Stress processes and depressive symptomatology. *Journal of Abnormal Psychology, 95*, 107-113.
- Folkman, S. & Moskowitz, J. T. (2000). Stress, positive emotion, and coping. *Current Directions in Psychological Science, 9*(4), 115-118.
- García-Campayo, J. & Carillo, C. S. (2002). Salud mental en inmigrantes: el nuevo desafío (Mental health in immigrants: the new challenge). *Medicina Clinica (Barcelona), 118*(5).
- Gil, A. G. & Vega, W. A. (1996). Two different worlds: Acculturation stress and adaptation among Cuban and Nicaraguan Families. *Journal of Social and Personal Relationships, 13*, 435-456.
- Gil, A. G., Wagner, E. F. & Vega, W. A. (2000). Acculturation, familism, and alcohol use among Latino adolescent males: *Longitudinal relations*. *Journal of Community Psychology, 28*(4), 443-458.
- Grant, B. F., Stinson, F. S., Hasin, D. S., Dawson, D. A., Chou, S. P. & Anderson, K. (2004). Immigration and lifetime prevalence of DSM-IV psychiatric disorders among Mexican Americans and non-Hispanic Whites in the United States. *Archives of General Psychiatry, 61*(12), 2004.
- Grinberg, L. & Grinberg, R. (1996). *Migración y exilio: Estudio psicoanalítico (Migration and exile: A psychoanalytical study)*. Madrid: Editorial Biblioteca Nueva.
- Hahn, S. E. & Smith, C. S. (1999). Daily hassles and chronic stressors: Conceptual and measurement issues. *Stress Medicine, 15*, 89-101.
- Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology, 1*, 293-319.
- Helms, J. E. & Cook, D. A. (1999). *Using race and culture in counseling and psychotherapy: theory and process*. Needham Heights, MA: Allyn and Bacon.
- Hovey, J. D. (1999). Psychosocial predictors of acculturative stress in Central American immigrants. *Journal of Immigrant Health, 1*(4), 187-194.
- Hovey, J. D. (2000). Acculturative stress, depression, and suicidal ideation in Mexican immigrants. *Cultural Diversity and Ethnic Minority Psychology, 6*, 134-151.
- Hovey, J. D. & Magaña, C. (2000). Acculturative stress, anxiety, and depression among Mexican immigrant farm workers in the Midwest United States. *Journal of Immigrant Health, 2*(3), 119-131.
- Hovey, J. D. & Magaña, C. (2002). Exploring the mental health of Mexican migrant farm workers in the Midwest: Psychosocial predictors of psychological distress and suggestions for prevention and treatment. *Journal of Psychology, 136*(5), 493-513.
- Kirmayer, L. J. & Groleau, D. (2001). Affective disorders in cultural context. *The Psychiatry Clinics of North America, 24*(3), 465-478.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York: Springer.
- Lazarus, R. S. & Folkman, S. (1980). *Stress, appraisal and coping*. New York: Springer.
- Levecque, K., Lodewyckx, I. & Vranken, J. (2007). Depression and generalized anxiety in the general population in Belgium: a comparison between native and immigrant groups. *Journal of Affective Disorders, 97*(1-3), 229-239.
- Mena, F. J., Padilla, A. M. & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences, 9*(2), 207-225.
- Miranda, A. O. & Mathery, K. B. (2000). Socio-psychological predictors of acculturative stress among Latin adults. *Journal of Mental Health Counseling, 22*(4), 306-318.



- Moyerman, D. R. & Forman, B. D. (1992). Acculturation and adjustment: A meta-analytic study. *Hispanic Journal of Behavioral Sciences*, 14, 163-200.
- Nicassio, P. M., Solomon, G. S., Guest, S. S. & McCullough, J. E. (1986). Emigration stress and language proficiency as correlates of depression in a sample of southeast Asian refugees. *International Journal of Social Psychiatry*, 32, 22-28.
- Noh, S. & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal of Public Health*, 93(2), 232-238.
- Padilla, E. R., Olmedo, E. & Loya, F. (1982). Acculturation and the MMPI performance of Chicano and Anglo college students. *Hispanic Journal of the Behavioral Sciences*, 4, 451-466.
- Perez, M., Voelz, Z. R., Pettit, J. W. & Joiner, T. E. (2002). The role of acculturative stress and body dissatisfaction in predicting bulimic symptomatology across ethnic groups. *International Journal of Eating Disorders*, 31(4), 442-454.
- Ritsner, M., Ponizovsky, A., Chemelevsky, M., Zetser, F., Durst, R. & Ginath, Y. (1996). Effects of immigration on the mentally ill—does it produce psychological distress? *Comprehensive Psychiatry*, 37(1), 17-22.
- Rodriguez, N., Myers, H. F., Mira, C. B., Flores, T. & Gracia-Hernandez, L. (2002). Development of the Multidimensional Acculturative Stress Inventory for adults of Mexican origin. *Psychological Assessment*, 14(4), 451-461.
- Sandhu, D. S. & Asrabadi, B. R. (1994). Development of an acculturative stress scale for international students: Preliminary findings. *Psychological Reports*, 75, 435-448.
- Sandhu, D. S., Portes, P. R. & McPhee, S. A. (1996). Assessing cultural adaptation: Psychometric properties of the Cultural Adaptation Pain Scale. *Journal of Multicultural Counseling and Development*, 24(1), 15-25.
- Selten, J. P., Cantor-Graae, E. & Kahn, R. S. (2007). Migration and schizophrenia. *Current Opinion in Psychiatry*, 20, 111-115.
- Smart, J. F. & Smart, D. W. (1995). Acculturative stress of Hispanics: Loss and challenge. *Journal of Counseling and Development*, 73, 390-396.
- Swinnen, S. G. & Selten, J. P. (2007). Mood disorders and migration: meta-analysis. *British Journal of Psychiatry*, 190, 6-10.
- Takeuchi, D. T., Zane, N., Hong, S., Chae, D. H., Gong, F., Gee, G. C. et al. (2007). Immigration-related factors and mental disorders among Asian Americans. *American Journal of Public Health*, 97(1), 84-90.
- Tomás-Sabado, J., Qureshi, A., Antonin, M. & Collazos, F. (2007). Construction and preliminary validation of the Barcelona Immigration Stress Scale. *Psychological Reports*, 100(3), 1013-1023.
- Utsey, S. O., Chae, M. H., Brown, C. F. & Kelly, D. (2002). Effect of Ethnic Group Membership on Ethnic Identity, Race-Related Stress, and Quality of Life. *Cultural Diversity and Ethnic Minority Psychology*, 8(4), 366-377.
- Vega, W. A., Zimmerman, R., Warheit, G. & Gil, A. (2002). Acculturation, stress and Latino adolescent drug use. In A. Maney & J. Ramos (Eds.), *Socioeconomic conditions, stress and mental disorders: Toward a new synthesis of research and public policy*. Washington DC: Mental Health Statistical Improvement Program, National Institute of Mental Health.
- Ward, L. (1967). Some observations on the underlying dynamics of conflict in a foreign student. *Journal of the College Health Association*, 10, 430-440.
- Watters, C. (2002). Migration and mental health care in Europe: report of a preliminary mapping exercise. *Journal of Ethnic and Migration Studies*, 28(1), 153-172.
- Zuckerman, M. (1999). Diathesis-stress models. En M. Zuckerman (Ed.), *Vulnerability to psychopathology: A biosocial model* (pp. 3-23). Washington, DC: American Psychological Association.
- Zwingman, C. A. (1978). *Uprooting and related phenomena: a descriptive bibliotherapy*. Geneva: World Health Organization.

