Depersonalization in Psychiatric Patients
A Transcultural Study

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Abstract: There is evidence suggesting that the prevalence of depersonalization in psychiatric patients can vary across cultures.

To explore the possible influence of culture on the prevalence of depersonalization, we compared psychiatric inpatient samples from the United Kingdom ($N = 31$), Spain ($N = 68$), and Colombia ($N = 41$) on standardized and validated self-rating measures of dissociation and depersonalization: the Cambridge Depersonalization Scale and the Dissociative Experiences Scale (DES). Colombian patients were found to have lower global scores on the Cambridge Depersonalization Scale and the DES and all its subscales, with the exception of DES-Absorption. No differences were found for measures of depression or anxiety. These findings seem to support the view that depersonalization is susceptible to cultural influences. Attention is drawn to the potential relevance of the sociological dimension "individualism-collectivism" on the experience of the self, and it is proposed that cultures characterized by high individualism may confer vulnerability to depersonalization experiences.

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Depersonalisation is defined by the DSM-IV as "a feeling of detachment or estrangement from one's self. The individual may feel like an automaton or as if he or she is living in a dream or a movie." Other prominent symptoms include a lack of emotional feeling and reactivity (American Psychiatric Association, 1994). Depersonalization occurs in association with diverse neuropsychiatric conditions (Hunter et al., 2004; Lambert et al., 2002), or as a primary disorder, in which case it tends to run a chronic and disabling course (Baker et al., 2003; Simeon et al., 2003a). A recent study comparing historical with prospective cases of DPD suggests that the clinical manifestations of the condition have remained stable for the last century (Sierra and Berrios, 2001). However, the reported prevalence of depersonalization in psychiatric inpatients has ranged from 7% to 80% (Hunter et al., 2004). These differences could be due to variation in caseness definitions, different nosological groups, transcultural differences, or, until recently, the lack of validated and standardized scales. Research on dissociative disorders in general has also revealed a wide range of prevalence in psychiatric inpatients. In particular, attention has been drawn to differences between the prevalence of dissociative disorders in Europe and the United States, and it has been suggested that these differences are due to diagnostic biases rather than genuine prevalence differences (Friedl et al., 2000). However, other findings point to true differences in the prevalence of dissociative symptoms across different cultures. For example, it has been repeatedly reported that the prevalence of DSM-IV or ICD-10 dissociative disorders is extremely low among Indian psychiatric inpatients (Alexander et al., 1997; Das and Saxena, 1991). Although we are not aware of transcultural studies focusing on the prevalence of depersonalization across cultures, several lines of evidence suggest that there are significant differences. For example, Parikh et al. (1981) used the Dixon depersonalization scale to screen a sample of 288 Indian psychiatric inpatients and found that 7.6% had depersonalization symptoms. In contrast, Noyes et al. (1977), using a self-rating questionnaire partially derived from the Dixon scale, found that in a sample of 100 American psychiatric inpatients, 40% endorsed at least five features of depersonalization.

Studies focusing on the phenomenology of panic attacks also suggest that the prevalence of depersonalization can vary significantly across cultures. Thus, while studies in western countries have found the prevalence of depersonalization/derealization in patients with panic disorder to be around 40% to 60% (Swinson and Kuch, 1990), its prevalence in Japanese patients has been found to range from less than 10% (Mizobe et al., 1992; Shioiri et al., 1996) to 36% (Iketani et al., 2004). Similarly low prevalences have been found in panic disorder patients from India (17%; Neerakal and Srinivasan, 2003), Thailand (23%; Udomratn, 2000), Turkey (24%; Tamam et al., 2000), and Latin America (32%; Caetano, 1985). Interestingly, the prevalence of depersonalization reported in Spanish panic disorder patients also seems lower (29%) than that found in most Western European countries (Marquez et al., 2001).

In a transcultural study comparing depressive symptoms across a Peruvian sample of 93 and a US sample of 64

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adult depressive patients, Mezzich et al., (1983) found that the prevalence of "derealization" in the Peruvian group was less than half that found in the US sample (6.4% vs. 14.1%, respectively). A similar trend can also be observed in the prevalence of "derealization" across countries as reported by the International Pilot Study of Schizophrenia (World Health Organization, 1973). In keeping with the findings above, the highest prevalence of "derealization" was found in the United States and Western Europe (United States, 40%; United Kingdom, 30%; Denmark, 27%); with the lowest in Asia, Latin America, and Eastern Europe (India, 5%; Czech Republic, 15%; Colombia, 19%).

To explore further the possible influence of culture on the prevalence of depersonalization, we compared psychiatric inpatient samples from the United Kingdom, Spain, and Colombia, on standardized and validated self-rating measures of depersonalization and dissociation.

METHODS

One hundred forty psychiatric inpatients were consecutively recruited from sites in the United Kingdom, Spain, and Colombia. In all sites, patients were recruited from general psychiatric wards in university teaching hospitals: United Kingdom = 31 (London; Maudsley Hospital); Spain = 68 (Cordoba; Hospital Reina Sofia); and Colombia = 41 (Medellin, Hospital Samein). All patients received a thorough psychiatric assessment by experienced psychiatrists and received DSM-IV axis I diagnoses (American Psychiatric Association, 1994). Inclusion criteria were as follows: (1) age range of 18 to 65, (2) birth and upbringing in the respective country, (3) a Minimental Examination State (Folstein et al., 1975) score above 25. Exclusion criteria were as follows: (1) patients who were too agitated or sedated and those who scored below 25 on the Minimental Examination State, and (2) history of or comorbid neurological conditions.

The study was approved by the respective local ethical committees, and all patients provided informed consent to participate in the study.

Administered Scales

To establish the prevalence of depersonalization, the Cambridge Depersonalization Scale (CDS; Sierra and Berrios, 2001) and the Dissociative Experiences Scale (DES; Bernstein and Putnam, 1986) were used. For the Spanish and Colombian groups, the Spanish validated versions of the CDS (Molina et al., 2006b) and DES (Icaran et al., 1996) were administered.

The CDS is a self-rating instrument containing 29 items that comprehensibly address the complaints classically associated with the depersonalization syndrome (Sierra and Berrios, 2001; Sierra et al., 2005). Each item is rated on two Likert scales for frequency and duration of the experience. The sum of these two scores generates an index of item intensity (range, 0–10). The global score of the scale is the arithmetic sum of all items (range, 0–290). The CDS was originally validated on patients with depersonalization disorder, and was shown to differentiate these patients from patients with temporal lobe epilepsy or patients with anxiety disorders. It has a high internal consistency (Cronbach α and split half reliability of 0.89 and 0.92, respectively). A cutoff point of 70 was shown to yield a sensitivity of 75.5% and a specificity of 87.2% (Sierra and Berrios, 2000). The Spanish version of the CDS was validated on a sample of 130 Spanish inpatients and has revealed a similar psychometric profile (Molina et al., 2006).

The fact that patients had been hospitalized with other primary psychiatric diagnoses precluded the diagnosis of depersonalization disorder. However, it was assumed that patients scoring above 70 on the CDS were likely to be experiencing severe and long-lasting depersonalization.

The DES is a 28-item self report questionnaire with a cutoff point of 30 for dissociative disorders. The DES has three subscales: depersonalization/derealization (DES-Dep/Der), amnesia (DES-Amnesia), and absorption (DES-Absorption; Carlson et al., 1991). Briefly, *dissociative amnesia* involves a deficit in the retrieval of information, which prevents the intentional recollection of stored information (Holmes et al., 2005). *Absorption* refers to the experience of becoming immersed in internal events such as thoughts and imagery to the extent of becoming disconnected from one's surroundings (Waller et al., 1996). Lastly, the DES-Taxon subscale, an 8-item subscale, seems more specific than the global DES for the detection of pathological dissociation (DES-Taxon). Although this subscale has proved sensitive for the detection of depersonalization disorder (Simeon et al., 1998, 2003b), the CDS has shown to be a more accurate measure (Michal et al., 2004).

Given the well-established relationship between depersonalization symptoms and depression and anxiety (Baker et al., 2003), the Beck Depression Inventory (BDI; Beck et al., 1961) and the Beck Anxiety Inventory (BAI; Beck et al., 1988) were administered in their English and Spanish validated versions (Conde López et al., 1984; Sanz and Navarro, 2003). The BAI was administered only in the English and Colombian samples.

Statistical Analysis

Statistical analysis was carried out with the SPSS version 11. Nonparametric statistical methods were used throughout (Kruskal-Wallis with post hoc comparisons) due to the different size of samples. The Mann-Whitney U test was used to estimate differences of BAI scores between the UK and Colombian groups. Differences were considered to be significant at a $p < 0.05$, and all significance tests were two-tailed.

RESULTS

There were no significant differences in age or sex between groups (Table 1). Patients in the Spanish group had a lower scholarity than the English and Colombian samples ($\chi^2 = 47.7$; $df = 1$; $p < 0.01$). Patients did not differ in regard to the age of onset of primary illness ($\chi^2 = 1.8$; $df = 2$; $p = 0.40$) or history of substance abuse ($\chi^2 = 4.8$; $df = 2$; $p = 0.09$).

The nosological composition of the three groups was fairly similar with the exception of more manic and fewer schizophrenic patients in the Colombian group (Table 2).

As can be seen in Table 3, the global scores on both the CDS and the DES were significantly lower in the Colombian

TABLE 1. Demographic Characteristics of the Three Samples

	United Kingdom ($N = 31$)	Spain ($N = 68$)	Colombia ($N = 41$)	Kruskal-Wallis
Men/women	17 (54.8%)	38 (55.9%)	18 (43.9%)	1.5 (2) $p = 0.45$
	14 (45.2%)	30 (44.1%)	23 (56.1%)	
Age	38.52 ± 13	35.13 ± 9	33.78 ± 13	2.9 (2) $p = 0.22$
Educational level				
Primary	—	34 (60.7%)*	8 (19.5%)	37.2 (2) $p < 0.001$
Secondary	23 (76.6%)*	17 (30.4%)	15 (36.6%)	18 (2) $p < 0.001$
University	7 (23.4%)	5 (8.9%)	18 (43.9%)*	15.9 (2) $p < 0.001$

patients. Scores on all DES subscales, with the exception of DES-Absorption, also showed significantly lower scores in the Colombian sample. No significant differences were found for the BDI or BAI.

Figure 1 shows the mean CDS global scores for those nosological categories with patients in the three groups. As can be seen, a similar pattern is observed with the Colombian group showing lower CDS scores across all nosological categories.

To explore the possibility that the lower CDS and DES scores in the Colombian group could be an artifact of different nosological composition (i.e., fewer cases with schizophrenia and more with mania in the Colombian sample), a category of major depression was created by collapsing all cases with major depression (unipolar and bipolar), and compared across sites. This nosological category was chosen on the grounds that it had similar numbers of patients on the three groups. Consistent with the above findings, it was found that both the CDS >70, and scores on the DES-Dep/Der were significantly lower in the Colombian major depression sample. With the exception of the DES-Dep/Der, differences for the DES global score and its subscales were nonsignificant across sites. Global CDS scores were also lower in the Colombian group with the difference on the verge of significance ($p = 0.058$).

Given that patients with mania showed the lowest mean scores on the CDS across the three sites and the fact that they constituted 29% of the Colombian sample, its potential distorting effect on the data was further explored by removing all manic cases from the analysis. Although the same trends are apparent, only the difference for the DES-Dep/Der was found to be significant ($\chi^2 = 7.9$; $df = 2$; $p = 0.01$).

DISCUSSION

This study has several limitations worth mentioning: the relatively small size of samples, the nosological heterogeneity across groups, and the fact that patients were not diagnosed with standardized diagnostic procedures. However, given that the main purpose of the study was to compare the prevalence of depersonalization experiences across three general psychiatric populations, rather than across specific nosological categories, it is unlikely that this drawback introduced a significant source of bias.

In keeping with previous studies, the prevalence of the depersonalization syndrome was found to be high across the three sites, and confirms the view that depersonalization is a frequent occurrence among psychiatric inpatients (Hunter et al., 2004). Of particular interest, however, is the significantly lower prevalence of depersonalization in the Colombian patients. The fact that all administered scales were self-rated excludes the possibility of diagnostic biases, previously suggested as a likely explanation for differences in the prevalence of dissociative disorders across America and Europe

TABLE 2. DSM-IV Diagnoses Across Sites ("Other Diagnoses" Include Personality Disorders and Not Otherwise Specified Diagnoses)

Diagnosis	United Kingdom ($N = 31$)	Spain ($N = 68$)	Colombia ($N = 41$)
Schizophrenia	10 (32.3%)	20 (29.4%)	4 (9.8%)*
Schizoaffective disorder	3 (9.7%)	7 (10.3%)	—
Bipolar mood disorder (manic episode)	2 (6.5)	6 (8.8)	12 (29.3)*
Bipolar mood disorder (depressive episode)	—	2 (2.9)	1 (2.4)
Delusional disorder	1 (3.2%)	3 (4.4%)	—
Acute psychosis	1 (3.2%)	5 (7.4%)	1 (2.4%)
Major depressive disorder (without psychotic features)	10 (32.2%)	10 (14.7%)	15 (36.6%)
Major depressive disorder (with psychotic features)	1 (3.2%)	2 (2.9%)	1 (2.4%)
Anxiety disorders	2 (6.5%)	1 (1.5%)	3 (7.3%)
Alcohol dependence	1 (3.2%)	—	2 (4.9%)
Other diagnoses	—	12 (17.6%)	2 (4.9%)

*(Schizophrenia $\chi^2 = 8.7$; $df = 2$; $p = 0.01$; mania $\chi^2 = 10.6$; $df = 2$; $p = 0.005$).

TABLE 3. Global Scores of CDS (and Percentage of Patients Above Cutoff Score), DES (and Its Subscales), and BDI and BAI

	United Kingdom (N = 31)	Spain (N = 68)	Colombia (N = 41)	χ^2 p =
CDS	80.8 (64)	74.4 (19.25)	44 (38)*	**9.1 p = 0.01**
CDS >70	13 (41.9%)	24 (35.8%)	7 (17.5%)	5.6 p = 0.058
DES	29.17 (23)	27.89 (24)	16.3 (14)*	**7.3 p = 0.026**
DES-Dep/Der	27.48 (28)	23.1 (27)	10.04 (15)*	**11.2 p = 0.004**
DES-Amnesia	21.41 (23)	26.47 (26)	12.46 (15)*	**9.4 p = 0.009**
DES-Absorption	35.48 (25)	34.35 (24)	24.87 (18)	4.0 p = 0.13
DES-Taxon	27.46 (26)	24.39 (25)	12.46 (15)*	**8.0 p = 0.018**
BDI	23.10 (17)	19.25 (13)	20.98 (16)	0.5 p = 0.77
BAI	25 (17)	—	22.71 (13)	−0.29 p = 0.76

*Group responsible for the significance.

(Friedl et al., 2000). However, in view of the difficulty that patients often experience in describing depersonalization (Edwards and Angus, 1972), it could be argued that the endorsement of scale items was influenced by linguistic competence, educational level, or IQ. Although we did not have IQ measures, the fact that Colombian patients had a similar education level to the British patients and higher than those in the Spanish sample makes it unlikely that low CDS and DES scores in the Colombian group were an artifact of poor education or linguistic competence. Furthermore, the fact that Spain and Colombia share language and cultural heritage to a significant extent makes it unlikely that the differences arose from a linguistic confound.

The fact that there were no differences on the BDI or BAI argues against the possibility that the prevalence difference in depersonalization was secondary to differences in levels of anxiety or depression. Lastly, the fact that all nosological categories compared showed a similar trend and that the same differences were found on a larger depression subgroup make it unlikely that the findings are an artifact arising from different nosological composition across groups. Although it is clear that the higher percentage of manic patients in the Colombian sample contributed to some extent to the findings, after correcting for this effect, a lower prevalence for depersonalization in the Colombian group was still evident, in spite of the fact that the low scores on other dissociative measures were no longer significant. This suggests that rather than being a general finding on dissociation, our findings seem to have some specificity for depersonalization.

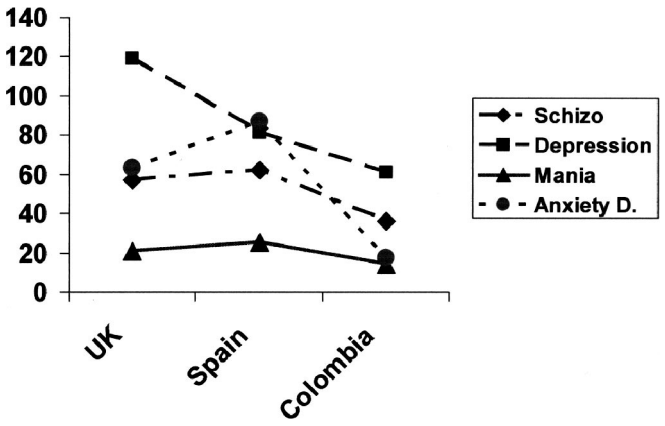

FIGURE 1. Global CDS scores across groups for those nosological categories with diagnosed cases on the 3 sites. Abbreviations: Schizo = Schizophrenia; Anxiety D. = Anxiety Disorders.

All in all, the findings of this study seem to suggest cultural effects on the prevalence of depersonalization, and are consistent with reports of lower prevalence of depersonalization/derealization in psychiatric patients from Asian and Latin American countries compared with Western Europe and North America.

In view of the fact that depersonalization is usually conceptualized as an abnormality in the perception of the self, it could be hypothesized that cultural influences on how the self is experienced and construed may be of relevance to differences in the prevalence of depersonalization across cultures. Indeed, in recent years, the self has evolved into a key construct in cultural psychology, as it has been established that the concept and experience of the self can vary considerably across cultures (Markus and Kitayama, 1991). In particular, recent studies suggest that the dimension "individualism-collectivism" determines to a great extent variations in self experience across cultures. In short, "individualism-collectivism" pertains to the degree to which the person experiences himself or herself as an autonomous, self-contained being, as opposed to feeling inextricably integrated into a social context (Hofstede, 1991). While in western cultures a notion of the self prevails as a stable and largely independent entity containing a set of dispositional attributes, largely detached from context (Markus and Kitayama, 1991), collectivistic societies construe the self as being interdependent with the surrounding context. In this regard, it is the "other" or the "self-in-relation-to-other" that is central in individual experience. It has been empirically established that Asian, African, and most Latin American countries represent highly collectivistic cultures (Triandis, 2001; Triandis and Suh, 2002; Triandis et al., 1984). Although the relationship between "individualism-collectivism" and psychopathology has not been widely studied, it has been suggested that these

TABLE 4. Comparison of Scale Scores for Patients With a Current Diagnosis of Major Depression (Irrespective of Whether It Is Unipolar or Bipolar) Across Sites

Scale	United Kingdom $N = 10$ (32.3%)	Spain $N = 12$ (17.6%)	Colombia $N = 16$ (39%)	χ^2 p =
CDS	118.9 (79)	68.9 (85.3)	58.6 (27.9)	5.7 $p = 0.058$
CDS >70	7 (70)*	3 (30)	4 (26.7)	5.8 $p = 0.053$
DES	32.8 (28.1)	17.1 (17.5)	21 (15.4)	1.9 $p = 0.37$
DES-Dep/Der	32.8 (27.8)*	8.4 (19.1)	13.1 (15.4)	6.5 $p = 0.038$
DES-Amnesia	24.6 (30)	13.2 (14.7)	17.7 (19)	.56 $p = 0.75$
DES-Absorption	38.8 (31.5)	23.6 (22.9)	29.4 (17.2)	1.9 $p = 0.37$
DES-Taxon	34.5 (29.3)	11.9 (17.5)	15.7 (15.9)	3.7 $p = 0.155$
BAI	33.6 (19.3)	—	29 (11.5)	.003 $p = 0.958$
BDI	34 (17.1)	24.4 (10.5)	29.6 (14.3)	4.1 $p = 0.127$

*Group responsible for the difference.

two types of self construct may confer vulnerability to different types of psychopathology. Thus, it has been found that in individualistic cultures, psychopathology is mainly characterized by experiences of alienation and loneliness (Draguns and Tanaka-Matsumi, 2003). For example, a recent study comparing suicide rates across 33 countries found individualism scores for each country to be a strong predictor of suicide in males (Webster Rudmin et al., 2003). In this regard, it has been found that as compared with collectivistic cultures, people from individualistic societies inhibit both the expression and experiencing of happiness and sadness, emotions which normally have the effect of eliciting group affiliation and supportive behavior from others (Fernández Sedano et al., 2001). In short, it would seem that while collectivistic cultures foster feelings of belonging, high levels of individualism may predispose to feelings of alienation. These observations could be of relevance to understand the effects of culture on the prevalence of depersonalization. In fact, there seems to be a close correspondence between the depersonalization prevalences found in this study and the average score on individualism for each country, as determined by Hofstede's (1991) classic study. Thus, the reported individualism score for the United Kingdom is 89 (high percentile); Spain, 51(midpercentile); and Colombia, 13 (low percentile).

We have previously suggested that depersonalization is a protective response to perceived threat (external or internal) and characterized by pervasive emotional numbing (Sierra and Berrios, 1998). In this regard, it could be speculated that high levels of individualism render people more sensitive to threat, hence potentially making them more susceptible to depersonalization. Interestingly, Simeon et al. (2001) have found that experiences of emotional abuse in childhood (which are mainly characterized by isolation, rejection, degradation, and denial of emotional responsiveness) predicted the occurrence of depersonalization disorder in adulthood. In this regard, it may be speculated that exposure to repeated experiences of emotional abuse hinder the development of a sense of belonging to a social network, hence leading to an experience of the self as being cut off and alienated from its surroundings.

CONCLUSION

Our findings support previous studies suggesting that salient depersonalization symptoms affect a significant proportion of psychiatric patients. However, in accordance to the available literature, the lower prevalence of depersonalization in Latin American patients suggests that this condition is vulnerable to cultural influences. It is clear that more research is needed in this area, as the relevance of cultural predisposition factors go beyond the confines of transcultural psychiatry, and may of relevance to inform psychological models of depersonalization.

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