The social representation of mental health and illness among Mexican students

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Summary

The aim of this study was to determine the social representation of mental health and mental illness among a group of Mexican students. Results indicate that social representations of mental health and mental illness appear at an early age, associating the first one to health, balance, well-being, sanity, intelligence, thought, capacity, happiness and tranquillity; and the second to insanity, unbalance, illness, incapacity, anguish, retardation, dumbness, evil, sadness and disorder. These representations are similar to those obtained by similar approaches in other cultural contexts.

As for the semantic richness, differences according to gender were found only at the elementary education level, but disappeared thereafter. On the other hand, education appeared as associated to significant differences between groups, indicating that the amount of information handled is higher according to the advancement in educational levels. The information obtained on the social representation of mental health and illness can be useful for planning mental health services and for promoting their maximum utilization. Additionally, it can constitute an aid to develop research in psychiatric epidemiology, still scarce in Latin America, and to design adequate instruments to study the population's beliefs, attitudes and education needs.

Key words: Mental health, mental illness, social representation, semantic networks.

Resumen

Se presentan los resultados de un estudio realizado con el propósito de obtener una aproximación a la representación social de la salud y la enfermedad mental en un grupo de estudiantes mexicanos. Se utilizó una muestra de 160 alumnos de primaria, secundaria, preparatoria y profesional de escuelas públicas de la ciudad de México. Los resultados indican que la representación social de la salud y la enfermedad mental empieza a estructurarse desde edades tempranas, en las que la salud mental se asocia con la salud en general, equilibrio, bienestar, cordura, inteligencia, pensamiento, capacidad, felicidad y tranquilidad, mientras que la enfermedad mental se describe como locura, desequilibrio, enfermedad, incapacidad, angustia, retraso mental, tontería, maldad, tristeza y desorden. Estas representaciones son similares a las obtenidas bajo enfoques similares en otros contextos culturales.

En cuanto a la riqueza semántica, sólo se encontraron diferencias significativas en relación con el género de los sujetos en los estudiantes de primaria, pero estas diferencias desaparecieron en los niveles escolares más elevados. Por otro lado, el nivel educativo sí parece ser una variable importante, ya que se encontraron diferencias significativas entre los grupos, con mayor cantidad de información conforme se avanzaba en el escalafón escolar. La información obtenida sobre la representación social de la salud y la enfermedad mental puede ser de utilidad como base para planear y desarrollar los servicios de atención para la salud mental, así como para promover su óptimo aprovechamiento. Adicionalmente, puede constituir un apoyo para desarrollar investigaciones epidemiológicas, que aún son escasas en Latinoamérica, así como para diseñar adecuadamente instrumentos que permitan evaluar las creencias, actitudes y necesidades de educación de la población sobre la materia.

Palabras clave: Salud mental, enfermedad mental, actitudes, psiquiatra.

Introduction

The study on the popular conceptualization of mental health and illness is of utmost importance considering the current reforms in the care of the mentally ill, now that institutional care is being replaced by community care. If mental health care programs are to be successful, the prevailing beliefs and attitudes toward the mentally ill, based on the lay representations of mental illness, should be taken into account.

The concepts of health and illness are not easily defined. There is no agreement on the multiple definitions generated from different perspectives on the basis of statistics, evaluation or clinics. This conceptual difficulty in defining health and illness becomes more acute when applied to the psychic or mental area.

In this context, a very important problem faced by social and epidemiological studies lies in adequately defining the concepts to be studied, since even among mental health specialists, diverse opinions on almost all aspects persist, ranging up from the definition of mental illness to its causes and treatments. Another problem is the difference between the popular conceptions of mental health and the diverse definitions of specialists in that field (40). Even the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), when defining the object of psychiatry as the study and treatment of mental disorders, begins with a declaration of

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impotence: "there exists no satisfactory definition of the precise limits and concept of mental disorders" (1).

Based on the analysis of different perspectives used to define mental health and illness, Ruiz (69) found it practically impossible to agree on what should be understood by each of these concepts, Therefore, the confusion and notional uncertainty on their nature, found in the studies of attitudes, opinions and social representations regarding mental disorders, should not be surprising (50,59,85).

Likewise, the knowledge of community concepts about mental health and illness is a fundamental basis for the design and implementation of programs for the promotion of mental health and the prevention and treatment of mental illness, including the optimal use of available resources, an adequate planning of future developments, and the creation of effective mental health education al projects (39,48,67).

Thus, in order to be efficient, all educational programs or mental health promotion campaigns, must be based on the knowledge of the conceptions, beliefs and attitudes of the population to which they are destined. The design of adequate measurement instruments for epidemiological research also requires the knowledge and understanding of the main concepts prevailing among the population. This research was carried out for obtaining an approximation to such concepts, by means of its social representation.

Background

Interest in the study of public concepts, attitudes and opinions regarding mental illness and the mentally ill goes back to the 1950's, when the first isolated studies on the subject were undertaken (15,35,58,66,72). The number of studies on this subject has increased considerably in the last decades, as a result of the evident importance of community conceptualization and the attitudes towards mental illness for the success or failure of community psychiatric programs. Several bibliographic revisions offer a wide view of the studies carried out to this date on this subject (7,9,12,43,65,68).

In general, most studies have found that the general population has not a clear conceptualization of mental illness (26,59,78,84), and that the more positive attitudes towards it are related with a higher educational level and social status and a lower age (13,14,44,58,66). Nunnally (58) also reports that people shows negative attitudes based on fear, insecurity and lack of information about mental illness.

Research carried out in Latin-America also found confusion and ignorance about the nature, causes and characteristics of mental illness, and the same correlation determined by social-demographic characteristics: more positive attitudes the younger the subject was and the higher his educational, occupational and socio-economic status may be (46,55,73,74,75,76).

Penayo et al (64), from research carried out in Nicaragua, and Parra and Yiu-Cheon (63), studying the Mexican community in the United States, conclude that cultural common factors determine the people's attitudes. Results, obtained from some European countries under the same point of view, led to similar conclusions (3,6,45).

Most research in this field has been mainly directed to assess attitudes and opinions on the subject (3,6,23, 24,25,36,47,57,64,83), rather than the meaning or conceptualization of the concepts, and has been developed under the American social psychology point of view, which has an intrinsic individualistic focus, almed to explain interpersonal behavior from intra-individual processes.

Unfortunately, the sociological social psychology developed in Europe, represented by authors like Moscovici (53), Doise (22), Jodelet (42) and Farr (27), centered in the study of the social representation, has been scarcely taken into consideration in America.

The interest in social representations aroused in France by the efforts of Moscovici, and has now imposed itself on the attention of the European social researchers, marking the release of European social psychology from the long-standing condition of "colonization" to which it had been subjected by the scientific models typical of the North American culture (17).

The concept of social representation is inspired in the sociological tradition of Durkheim, for whom society is a fact which cannot be reduced to the simple sum of subjects. In this tradition, society exists due to an institutionalized moral order, which consists mainly in a conjunction of collective representations (Durkheim, in 2). Following Moscovici (52), a social representation is an idea, belief or opinion, shared by the members of an specific social group, which is a product of the life experiences of the members of the group in relation with an object, which in this case is mental illness.

Some of the major empirical studies on social representations deal with topics of health and illness. This trend began with Claudine Herzlich's early study on the social representation of health and illness in France in the late sixties, where she found typologies of health and illness related concepts (38).

She based her study on non-structured interviews carried out in Paris and in several rural communities of Normandy, and showed that illness in general is largely attributed to the environment, the artificiality of urban life, unhealthy eating habits and pollution. Although her results showed almost no spontaneous references to mental illness, she found notions such as indisposition "depression" and "fatigue" located on the intermediate level between health and illness, and also an occasional observation on the development of mental illness as proof of the growing severity of nervous fatigue in modern cities.

Even before that, during the fifties, Serge Moscovici (51) studied the social representation of psychoanalysis among the French population. His study reflects the changes of everyday concepts about health which were inaugurated by the entrance of Freud's theory into public discussion, the media and everyday's knowledge.

Following the same path, Denise Jodelet (41) studied the social representation of mental illness among the population of a rural community in central France, where the mentally ill have been institutionally received since the beginning of the century. Using the participative observation technique, Jodelet found that while living with their families the inmates had the status of strangers and were excluded from daily activities to avoid contagion. She found a clear pattern of rejection

and social discrimination that seriously obstruct their reintegration to community life. Implicit in the accounts and observations obtained by Jodelet is a representation of mental illness as threatening.

Paez and Ayestaran (60) carried out a study in Spain, about the social representation of mental illness in relation to social distance from the mentally ill. They used the methodology developed by Di Giacomo (19) to asses representations in different groups: patients in treatment, university students and their parents. Among their main conclusions, they found that subjects represented themselves near normality, in opposition to mental illness and madness. They also found that there is an association among group position, representations and behavior.

De Rosa (17,18) carried out some interesting research of the social representations of the "mad person" and "madness" in Italian children and adults. Subjects investigated defined the normal person as balanced, healthy, calm, coherent, rational, self reliant, active, social, communicative, happy and satisfied. The mad person is described as irrational, strange, bizarre, agitated, unpredictable and with intense emotional reactions; inactive, lonesome and desperate.

Among her most important findings, she concluded that there are two different dimensions of the representational field: one is a connotative dimension of representation of madness, which is negatively oriented, and the other one is a behavioral component more oriented toward the reduction of the social distance from the madman. She found a range of images associated with strangeness, deviance and danger, which indicate that lay people anchor madness into archaic belief systems. She summarizes her findings stating that the two forms of language (verbal and figurative non-verbal) reveal the two faces of social representation of madness rooted in the collective imagination, thus the ambivalence which characterizes man's historical relationship to madness.

Another Italian work using word association tasks (70) suggests that lay people represent mental illness as abnormal, defined in generally negative terms associated with social deviance, stigma and danger.

Ida Galli and Roberto Fasanelli (32) carried out a study of the social representation of health and illness among Italian children. They considered that to study the social representation of health and illness means to understand attitudes and behaviors, and that knowing how people represent the idea of health and illness is a condition *sine qua non* for the society to promote health and everything related to it. They concluded that the social representations of health and illness are clearly and exactly outlined, showing a dialectic relationship between them. Health is mainly represented through ideas of behavior, movements and psycho-physical welfare, while illness is outlined as an ambivalent and ambiguous representation through stillness and therapeutic tools. As main conclusion, they stated that "when knowing the social representation of a given object, we also know the attitudes shown by people toward the object itself; so we can anticipate people's behaviors. Only with the knowledge of the social representations of health and illness will we be able to carry out effective programs of illness prevention and mainly health promotion".

Nicola Morant (50) conducted a research focused on the social representations of mental illness held by mental health professionals in Britain and France. Evidence of two social representations of mental illness was found: a medical social representation based on the language and assumptions of psychiatry, and a functional social representation which conceptualizes mental illness as an inability to cope and function. They conclude that professional social representation of mental illness appears to be complex and characterized by uncertainty and ambivalence, and that they are relatively consistent cross-culturally.

It seems to be clear from this research, that mental illness is a phenomenon which is viewed negatively, with fear and suspicion. As Morant (50) states, it is associated with abnormality, danger and difference, leading individuals and groups to reject, exclude and separate themselves from the mentally ill.

As can be seen, the studies developed under the social representations point of view come from European countries, and there is almost no antecedents in Latin-American countries where the North American attitudinal theories prevail. Nevertheless, some studies on the subject undertaken in other countries, including Mexico, stand out as more directly related to the community image and perception of mental illness (10,11,31,33,34,37,54,56,62,63,77,78,82). Main results obtained from these studies conduct to similar conclusions in terms of uncertainty, ambivalence and fear.

Considering that the social representation of mental illness may influence the decision to seek medical help and to carry out individual and social practices tending to attain and sustain mental health, it was considered of fundamental importance to develop an investigation leading to a better knowledge of the social representations of mental health and illness among the Mexican population.

Method

Subjects

The Ss were 160 public school students, distributed by quotas according to gender and educational level as follows: 40 subjects from the 6th grade of the elementary school (ages range 11-13, media = 11.8), 40 from 3rd. grade of high school (ages range = 14-17, media = 15.15), 40 from 6th grade of high school (ages range = 16-19, media = 17.67), and 40 from the 8th semester of professional studies (ages range = 20-30, media = 22.27). Each educational level group was formed by 50 % males and 50 % females. The same middle socio-economic level was shared by all subjects.

Technique

In the study of social representations, one important topic has been the methodology and the specific technique to be used for the best assessment of the proposed objectives. De Rosa (17) mentions that the most

frequently used methods have been the semi-structured interviews, questionnaires, scales of social distance (among the verbal type ones), and figurative drawing tests (for the non-verbal type), as well as the semantic differential or free association lists evoked by induced stimulus words, under the conception of verbal type but eliciting responses that were less mediated by rationalization processes.

We suggest the use of the semantic networks technique, which originated from the studies of the semantic memory and has been developed by some Mexican social psychologists (28,29,79,80,81). It resembles the free association lists but introduce some new elements which convert it into a very interesting option for the study of social representations.

The semantic network technique is considered as the most adequate to access the psychological representation of information in memory (8), and by group consensus, to the social representation of a concept. This technique has been widely used for the analysis of perceptions and meanings as well as beliefs and attitudes shared by specific groups (20,29,33,34,79,81).

Basically, the procedure consists in requesting a group of subjects to produce a list of words defining a given concept and to later place them in hierarchic order, according to their proximity to the concept that is being defined. The analysis of the subject's responses is based on the pondered value assigned to each of his defining words. With these values a quantitative and qualitative analysis of the concept's representation for the group can be made.

The instrument was specifically constructed for this study, following the original model developed by Figueroa et al (28,29). It consists of a first page where instructions are clearly explained and the subject must register his age, school grade and gender. Each of the following pages was headed with each concept to be defined (mental health and mental illness), with a series of spaces in three columns: in the first one the subject had to write the list of words generated to define the concept, in the second one he had to rank them according to their closeness to the concept, by means of ascending numbers; and in the last one he had to evaluate each word in terms of positive, negative or neutral.

Instructions

Ss were required to define the concepts of "mental health" and "mental illness" using only single words, not sentences or groups of words. They could use nouns, adjectives or verbs, but not prepositions, conjunctions or any other grammatical particles. After defining each concept, they had to order the words given by assigning number 1 to the word which best defined the concept or would be "nearer" to it. Number 2 was given to the next word which best defined the concept, and so on until all words were ranked. Finally, all the words must be evaluated as positive (+), negative (–) or neutral (n).

When the instructions were clearly understood, subjects were instructed to start with the first concept. The test administrator read the concept and started a stopwatch, allowing one minute for the task. Then he indicated them to order all the words given and afterwards to give each of them an evaluation. Subjects were allowed to use all the time they needed for these two tasks.

Codification

The information obtained was codified and analyzed according to the procedure established by Figueroa et al (28,29). Nomenclature used to identify the different values obtained through this technique, was arbitrarily established by the original authors, as follows:

J Frequency of different words generated by each group. It indicates the network's richness.

JC Sets of isolated words or groups of synonyms, which exclude each other due to their different meaning in social life.

M Indicates the frequency of occurrence of each defining word in relation to the hierarchy that each subject assigned to it, thus indicating the semantic value of each defining word.

VMT "M" total value obtained for each definer by a group of subjects.

FMG Semantic distance between the defining words. It is expressed in percentages.

G Represents the density of the network, corresponding to the media of the differences or distances among the "M" values.

SAM Set of the 10 definers having the highest "VMT" for a group, constitutes the basic semantic network of a concept.

First of all, the "J" value was obtained by listing all the defining words for each concept-stimulus, generated by each group. This value corresponds to the total frequency of different words generated by each group and indicates the network's richness. Secondly, the semantic or conceptual categories were developed, that is, the sets of isolated words or group synonym words, which exclude each other due to their differences of meaning in social life (80,81). In this manner, conceptual categories were grouped as "JC" category values, to facilitate the explanation of the results obtained. To determine the categories under synonymy criteria, an initial classification was made using a Synonyms Dictionary (21), and then it was reviewed by 5 judges (mental health professionals). Thus, "JC" values are a reduced equivalent of the "J" values, indicating the total number of categories (words grouped due to its synonymy or similar meaning according to the dictionary and the judges criteria) generated by each group.

The next step was to obtain the "M" values, which relates the frequency of occurrence of the defining word to the hierarchy that the subjects assigned to each one, thus indicating the semantic value of each defining word. To obtain the "M" value, each word was pondered on the basis of a ten point scale: the first word in hierarchy was assigned an "M" value of 10, the second was given a 9 "M" value and so on till the end.

Data were collected in frequency tables where features for each concept appeared in the first column, followed by 10 additional columns. In these columns ap-

TABLE 1
Semantic richness by groups (JC Values*)

Group	*elementary*		*secondary*		*preparatory*		*professional*		*subtotal*		*subtotal*				*total*
Concepts	*masc*	*fem*	*masc*	*fem*	*masc*	*fem*	*masc*	*fem*	*masc*	*fem*	*elem*	*second*	*prep*	*prof*	
Mental health	*30*	*39*	*39*	*41*	*34*	*40*	*55*	*54*	*95*	*92*	*53*	*62*	*53*	*80*	*127*
Mental illness	*22*	*29*	*42*	*41*	*43*	*44*	*61*	*60*	*101*	*104*	*35*	*61*	*66*	*94*	*145*

* Frequencies of definers' categories.

peared the frequencies with which numbers ascending from 1 to 10 had been assigned to them. For scoring, the frequency of a word assigned number 1 was multiplied by 10, the frequency of a word assigned number 2, by 9, the frequency of assigned number 3 by 8, and so on, until number 10. There were no further words, because Ss gave a range between 3 and 10 features for each concept. The different scores of each word were added in order to obtain their respective M value. From each concept's frequency table, the ten highest "M" features were selected, as well as their synonyms, The final "M" value ("VMT") for each feature was the sum of their first "M" value plus those of their synonyms.

Later, a selection was made of the ten highest "VMT" value categories for each concept integrating its basic semantic network. For each semantic network, the "FMG" value was also obtained, indicating the semantic distance among definers, in terms of percentages; it was obtained by giving the first definer a 100 % value and calculating the following percentages by its equivalence to it. Finally the "G" value was calculated; it represents the density of the network. This value is the media of the differences or distances between the 'M' values, and is obtained by subtracting from the highest 'M' value the following one, from the second, the third one, and so on. The sum of these differences is then divided by the number of substractions made. The lower this value is, the highest the net density.

Based on the values obtained, bidimensional diagrams of the basic semantic networks regarding mental health and illness were developed. The concept defined was represented as the networks nucleus, by a circle located at the center of the definers. The 10 definers constituting its "SAM" set were located with reference to the nucleus and linked to it by means of lines whose lengths correspond to the "M" value or semantic distance to the concept, The obtained "M" value was translated into centimeters (cm) by using a 1 to 10 scale, where the highest "M" value was arbitrarily established as corresponding to 1 cm. Then, assigning 100 % to the first "M" value of the set, the following "M" values were translated into percentages, obtaining their differences regarding the first one and dividing them by 10 (10 cm established as the longest distance). The distance between definers was then estimated on a degree scale, and definers were accordingly located in a circle surrounding the nucleus concept. The first definer (the one semantically closer) was located at 0 degrees, with an upward vertical line towards the nucleus; starting at that point the distance between definers was translated into degrees and measured clockwise, up to the last one located at 270 degrees.

Results

Table 1 shows the frequencies of the different categories of words ("JC" values) generated by each group to define the investigated concepts. As may be appreciated, there is an evident increment of network richness when ascending the educational level, particularly from elementary school to secondary (junior high school), and from preparatory (senior high school) to professional levels. Concerning gender, an irregular and nevertheless similar pattern is observed for both concepts: while at the elementary school level a considerable difference appears favoring females, the diversity disappears at the higher educational levels.

Each network's mean and standard deviation, reported in Table 2, was later estimated. The networks produced to define mental health had 42 categories of defining words, with a standard deviation of 8.2310, while those produced to define mental illness had 43, with a larger standard deviation: 12.5275.

TABLE 2
Mean and standard deviation

JC Values	*Mean (X)*	*Standard deviation*
Mental health	*41.5000*	*8.2310*
Mental illness	*42.7500*	*12.5275*

Statistical tests were carried out afterwards to determine the significance of the differences between groups by gender and schooling. The one way X2 (CHI square) was used for an independent variable with four levels, for the frequencies obtained for each concept in each educational level, the same test with two levels was used to determine the significance of the possible differences related to the gender variable; and the two way X2 to establish the significance of the differences between groups, considering the interaction of the two independent variables: education with four levels and gender with two levels (4 × 2).

As shown in Table 3, there were considerable differences depending on the educational level on both concepts, with a $p < .05$ probability in the case of mental health and $p < .01$ in that of mental illness, indicating that increases in the information level handled by the semantic memory are related to advancements in educational levels. Regarding gender, differences were not significant for either of the concepts. Considering the two independent variables jointly, there were no significant differences when applying the two way X2 test.

TABLE 3
Differences between groups

JC Values	Education		Gender		Education/Gender	
	CHI^2	PROB.	CHI^2	PROB.	CHI^2	PROB.
Mental Health	7.8387	$p < .05$	0.0481	no sign.	0.9530	no sign.
Mental Illness	27.4063	$p < .01$	0.0439	no sign.	0.8865	no sign.

Later, a selection was madde of the ten highest "VMT" value categories for each concept integrating its basic semantic network. The corresponding data is shown in tables 4 to 21, which include total "M" values ("VMT") for each category, the positive (+), negative (–) or neutral (n) grades assigned by the subjects, the "FMG" value indicating the semantic distance in terms of percentages, and the "G" value representing the density network.

TABLE 4
Mental Health General Sam[1] Set

Categories	VMT[2]	FMG[3]	G[4]
Healthy	+ 527	100.0 %	
Balanced	+ 404	76.7 %	123
Well-being	+ 308	58.4 %	96
Sane	+ 303	57.5 %	5
Intelligence	+ 298	56.5 %	5
To think	+ 275	52.2 %	23
Capacity	+ 206	39.1 %	69
Studious	+ 206	39.1 %	0
Exercise	+ 187	35.5 %	19
Happiness	+ 181	34.3 %	6
Tranquillity	+ 181	34.3 %	0
JC = 127			G = 38.44

[1] Set of the 10 definers with the highest VMT.
[2] M total value obtained for each definer.
[3] Semantic distance between the definer words.
[4] Density of the network.

Based on the values reported in tables 12 and 21, corresponding to the "SAM" set of total subjects for both concepts, diagrams were developed of the basic semantic networks regarding mental health and illness.

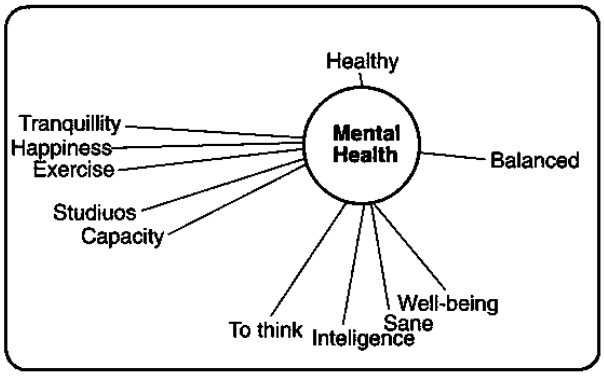

Figura 1.

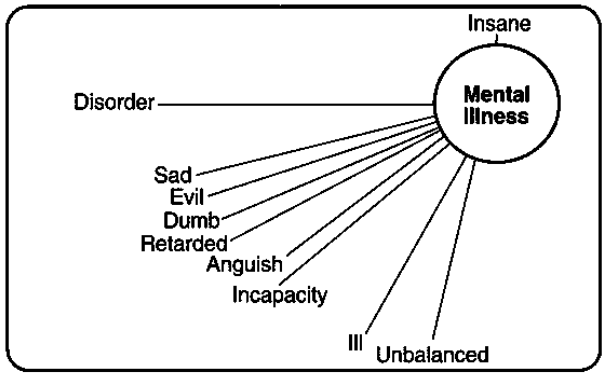

Figura 2.

A description of the results obtained for each of the concepts and reported in tables and diagrams is given below.

Mental Health

Mental health was basically defined as general health. The category named "healthy" appeared as its main defining category, grouping words such as health, healthy, healthy body and healthy things, among others. Thus, there seems to be no clear conceptual distinction of mental health and health in general. A segment of the defining categories refers to effects of mental health, such as "balance", "well-being", "happiness" and "tranquillity", while others concern the means to attain and sustain it, such as study ("studious") and practicing physical "exercise". Mental health is also fundamentally associated with sanity ("sane"). Several definers relate it to mental processes, such as "intelligence" and "to think". The 10 definers integrating the "SAM" set were graded as positive.

The "healthy" category appears in the "SAM" set of all the groups, except in the one of the professional level males, and was mostly located between the first and third places regarding their proximity to the concept of mental health. "Balance" obtained a general second place as a definer; although absent at the elementary school level, it appears in the junior high school group at a great distance from the concept-stimulus, and gets progressively closer to the stimulus concept, attaining the first place as the mental health definer for the professional group.

"Well-being", as a definition of mental health, although it is a very important definer for the total sample (4th place), it appears in the "SAM" set in only half of the groups, and as the main definer for the male senior high school subgroup. "Sane" is also a fundamental definer of mental health, appearing at "SAM" level in six of the

TABLE 5
Mental health SAM set
Elementary school masculine group

Categories	*VMT*	*FMG*	*G*
Healthy	*+ 114*	*100.0 %*	
Intelligence	*+ 70*	*61.4%*	*44*
To think	*+ 144*	*38.6 %*	*26*
Don't know	*n 40*	*35.1 %*	*4*
Nutrition	*n 34*	*29.8 %*	*6*
Studious	*+ 32*	*28.1 %*	*2*
Without vices	*+ 29*	*25.4 %*	*3*
Sane	*+ 25*	*21.9 %*	*4*
Communication	*+ 20*	*17.5 %*	*5*
Fat	*– 20*	*17.5 %*	*0*
JC = 30			*G = 10.44*

TABLE 6
Mental health SAM set
Elementary school feminine group

Categories	*VMT*	*FMG*	*G*
To think	120	100.0%	
Healthy	110	91.7 %	10
Exercise	+ 76	63.3 %	34
Tranquillity	+ 50	41.7 %	26
Understanding	+ 49	40.8 %	1
Studious	+ 45	37.5 %	4
Insane	– 40	33.3 %	5
Capacity	+ 38	31.7 %	2
ill	– 37	30.8 %	1
To think well	+ 37	30.8 %	1
JC = 39			G = 9.33

TABLE 7
Mental health SAM set
Junior high school masculine group

Categories	*VMT*	*FMG*	*G*
Healthy	+ 98	100.0 %	
Intelligence	+ 60	61.2 %	38
Sane	+ 58	59.2 %	2
Exercise	+ 43	43.9 %	15
Well being	+ 35	35.7 %	8
Studious	+ 35	35.7 %	0
Balanced	+ 33	33.7 %	2
To think well	+ 30	30.6 %	3
Reason	+ 23	23.5%	7
To know	+ 21	21.4 %	2
JC = 39			G = 8.56

TABLE 8
Mental health SAM set
Junior high school feminine group

Categories	*VMT*	*FMG*	*G*
Intelligence	*+ 41*	*100.0 %*	
To think well	*+ 38*	*92.7 %*	*3*
Healthy	*+ 38*	*92.7 %*	*0*
Retarded	*– 34*	*82.9 %*	*4*
Understanding	*+ 29*	*70.7 %*	*5*
Family	*n 29*	*70.7 %*	*0*
Creativity	*+ 28*	*68.3 %*	*1*
Exercise	*+ 24*	*58.5 %*	*4*
Amusement	*+ 22*	*53.7 %*	*2*
Balanced	*+ 19*	*46.3 %*	*3*
JC = 41			*G = 2.44*

TABLE 9
Mental health SAM set
Senior high school masculine group

Categories	*VMT*	*FMG*	*G*
Well being	*+ 88*	*100.0 %*	
Healthy	*+ 72*	*81.8 %*	*16*
Sane	*+ 66*	*75.0 %*	*6*
Capacity	*+ 63*	*71.6 %*	*3*
Normal	*+ 47*	*53.4 %*	*16*
Balanced	*+ 42*	*47.7 %*	*5*
Intelligence	*+ 41*	*46.6 %*	*1*
Good	*+ 36*	*40.9 %*	*5*
Reason	*+ 31*	*35.2 %*	*5*
Tranquillity	*+ 30*	*34.1 %*	*1*
JC = 34			*G = 6.44*

TABLE 10
Mental health SAM set
Senior high school feminine group

Categories	*VMT*	*FMG*	*G*
Hygiene	*+ 94*	*100.0 %*	
Happiness	*+ 92*	*97.9 %*	*2*
Well being	*+ 86*	*91.5 %*	*6*
Intelligence	*+ 68*	*72.3 %*	*18*
Balanced	*+ 66*	*70.2 %*	*2*
Capacity	*+ 47*	*50.0 %*	*19*
Tranquillity	*+ 47*	*50.0 %*	*0*
Sane	*+ 42*	*44.7 %*	*5*
Healthy	*+ 38*	*40.4 %*	*4*
To live	*+ 27*	*28.7 %*	*11*
JC = 40			*G = 7.44*

TABLE 11
Mental health SAM set
Professional school masculine group

Categories	VMT	FMG	G
Balanced	+109	100.0 %	
Sane	+ 72	66.1 %	37
Clearness	+ 53	48.6 %	19
Studious	+ 43	39.4 %	10
Insane	– 41	37.6 %	2
Hygiene	+ 39	35.8 %	2
Eloquence	+ 27	24.8 %	12
Reason	+ 27	24.8 %	0
Coherence	+ 26	23.9 %	1
Social	n 26	23.9 %	0
JC = 55			G = 9.22

TABLE 12
Mental health SAM set
Professional school feminine group

Categories	VMT	FMG	G
Balance	+ 135	100.0%	
Healthy	+ 57	42.2 %	78
Responsibility	+ 51	37.8 %	6
Coherence	+ 43	31.9 %	8
Happiness	+ 40	29.6 %	3
Sane	+ 38	28.1 %	4
Studious	+ 36	26.7 %	2
To think	+ 30	22.2 %	6
Well being	+ 28	20.7 %	2
Social	+ 23	17.0 %	5
JC = 54			G = 10.89

TABLE 13
Mental illness
General SAM set

Categories	VMT	FMG	G
Insane	– 876	100.0 %	
Unbalanced	– 327	37.3 %	549
ill	– 308	35.2 %	19
Incapacity	– 248	28.3 %	60
Anguish	– 221	25.2 %	27
Retardad	– 212	24.2 %	9
Dumb	– 208	23.7 %	4
Evil	– 190	21.7 %	18
Sad	– 180	20.5 %	10
Disorder	– 136	15.5 %	44
JC = 147			G = 88.22

TABLE 14
Mental illness SAM set
Elementary school masculine group

Categories	VMT	FMG	G
Insane	– 122	100.0 %	
Not to think	n 67	54.9 %	55
Retardad	– 60	49.2 %	7
ill	– 50	41.0 %	10
Incapacity	– 47	38.5 %	3
Misunderstanding	– 41	33.6 %	6
Don't know	n 40	32.8 %	1
Anguish	– 34	27.9 %	6
Evil	– 23	18.9 %	11
Weak	– 20	16.4 %	3
Dumb	– 20	16.4 %	0
JC = 22			G = 11.33

TABLE 15
Mental illness SAM set
Elementary school feminine group

Categories	VMT	FMG	G
Insane	– 166	100.0 %	
ill	– 71	42.8 %	95
Retardad	– 42	25.3 %	29
Evil	– 41	24.7 %	1
Degenerated	– 35	21.1 %	6
Anguish	– 30	18.1 %	5
Discomfort	– 29	17.5 %	1
Dumb	– 25	15.1 %	4
Ignorance	– 18	10.8 %	7
Incapacity	– 11	8.6 %	7
JC = 29			G = 17.22

eight subgroups. "Intelligence", directly related to mental health, appears among the first places in proximity to the defined concept in the male elementary school subgroup and in both junior high school subgroups; nevertheless, it moves backward in the semantic space, at the senior high school level, and completely disappears at the professional level.

"To think", a category grouping definers such as thought, thoughtful, thinking well and thinking positively, has a general 6th place location, appearing as a heavier semantic category among the lower educational levels and diminishing at the higher educational levels. To have "capacity", understood as ability, aptitude, skillfulness, etc., appears as an important definition of mental health for the female elementary school and both senior high school subgroups, while being "studious" is important in five subgroups, among them those of the elementary school and professional levels.

TABLE 16
Mental illness SAM set
Junior high masculine group

Categories	*VMT*	*FMG*	*G*
Insane	*– 138*	*100.0 %*	
ill	*– 44*	*31.9 %*	*94*
Deficiency	*– 35*	*25.4 %*	*9*
Dumb	*– 35*	*25.4 %*	*0*
Unbalanced	*– 30*	*21.7 %*	*5*
Drug-addiction	*– 29*	*21.0 %*	*1*
Discomfort	*– 29*	*21.0 %*	*0*
Without brain	*– 28*	*20.3 %*	*1*
Anguish	*– 27*	*19.6 %*	*1*
Crime	*– 23*	*16.7 %*	*4*
Degenerated	*– 23*	*16.7 %*	*0*
Sad	*– 23*	*16.7 %*	*0*
JC = 40			*G = 12.78*

TABLE 17
Mental illness SAM set
Junior high school feminine group

Categories	*VMT*	*FMG*	*G*
Drug-addiction	*– 69*	*100.0 %*	
Insane	*– 64*	*92.8 %*	*5*
Desperation	*– 41*	*59.4 %*	*23*
Retarded	*– 37*	*53.6 %*	*4*
Mental illness	*– 30*	*43.5 %*	*7*
Anguish	*– 29*	*42.0 %*	*1*
To think badly	*– 29*	*42.0 %*	*0*
Disorder	*– 29*	*42.0 %*	*0*
Misunderstanding	*– 21*	*30.4 %*	*8*
Uncoordination	*– 21*	*30.4 %*	*0*
Neurosis	*– 21*	*30.4 %*	*0*
JC = 41			*G = 5.33*

The relation of "exercise" or physical activity to mental health, obtained the 9th place in the general "SAM" set. It appears among the first definers only for the entire junior high school group, while "happiness" is foremost only at the female senior high school level, and tranquillity, the last category of the general "SAM" set, is present only in three of the eight subgroups studied.

Additionally to the ten categories which integrate the general network, there are some definers which appear to be important only for some specific groups. This is the case of "nutrition", "without vices", "communication" and "fat", mentioned just by the male elementary school subjects. Women from the elementary school group introduce some negative categories, more as antonyms than as definers for mental health, as is the case of "insane" and "ill".

TABLE 18
Mental illness SAM set
Senior high school masculine group

Categories	*VMT*	*FMG*	*G*
Insane	– 124	100.0%	
Incapacity	– 79	63.7 %	45
Dumb	– 74	59.7 %	5
Abnormal	– 54	43.5 %	20
Retardad	– 49	39.5 %	5
Disorder	– 38	30.6 %	11
Disturbance	– 37	29.8 %	1
Deficiency	– 31	25.0 %	6
Unbalanced	- 22	17.7 %	9
Drug-addiction	– 21	16.9 %	1
JC = 43			G = 11.44

TABLE 19
Mental illness SAM set
Senior high school feminine group

Categories	*VMT*	*FMG*	*G*
Insane	*– 79*	*100.0 %*	
Incapacity	*– 75*	*94.9 %*	*4*
Sad	*– 73*	*92.4 %*	*2*
Evil	*– 70*	*88.6 %*	*3*
Unbalanced	*– 63*	*79.7 %*	*7*
ill	*– 50*	*63.3 %*	*13*
Anguish	*– 30*	*38.0 %*	*20*
Insecurity	*– 28*	*35.4 %*	*2*
Discomfort	*– 26*	*32.9 %*	*2*
Disturbance	*– 24*	*30.4 %*	*2*
JC = 44			*G = 6.11*

TABLE 20
Mental illness SAM set
Professional school masculine group

Categories	*VMT*	*FMG*	*G*
Unbalanced	– 109	100.0 %	
Insane	– 98	89.9 %	11
Anguish	– 33	31.2 %	64
Disturbance	– 27	24.8 %	7
ill	– 22	22.2 %	5
Disadapted	– 21	19.3 %	1
Insecurity	– 21	19.3 %	0
Sad	– 21	19.3 %	0
Irrational	– 19	17.4 %	2
Neurosis	– 19	17.4 %	0
To think	– 19	17.4 %	0
JC = 61			G = 10.00

TABLE 21
Mental illness sam set professional school feminine group

Categories	*VMT*	*FMG*	*G*
Balanced	*+109*	*100.0 %*	
Sane	*+ 72*	*66.1 %*	*37*
Clearness	*+ 53*	*48.6 %*	*19*
Studious	+ 43	*39.4 %*	*10*
Insane	*– 41*	*37.6 %*	*2*
Hygiene	*+ 39*	*35.8 %*	*2*
Eloquence	*+ 27*	*24.8 %*	*12*
Reason	*+ 27*	*24.8 %*	*0*
Coherence	*+ 26*	*23.9 %*	*1*
Social	*n 26*	*23.9 %*	*0*
JC = 55			*G = 9.22*

In junior high school, boys add "reason" and "to know". Reasoning appears also in senior high school and in professional male groups, while secondary school women incorporate a negative category: "retarded", and three more that are exclusive of this group: "family", "creativity" and "amusement".

Among senior high school groups, men define mental health in terms of "normality" and "good", while women associate it first to "hygiene" (cleanness, neatness, purity) and, more distantly, with "living".

Finally, the older groups add "coherence" and a "social" component to the concept definition, as well as "responsibility".

Mental illness

Mental illness was primarily defined as insanity ("insane") by all groups. Secondly and at a great . distance from the first definer, it is considered as "unbalanced", general "illness" and "incapacity". The mentally ill is considered as "retarded", "dumb" and "evil". Even when definitively associated to insanity, other definers, corresponding to certain specific disorders appear, such as "anguish" and "sadness". It was finally classified as a "disorder". All categories were evaluated as negative.

At specific group levels, "insane" was given a first or second place by all subgroups, only surpassed by "drug-addict" by the female junior high school group; drug-addiction, as a definition of mental illness, was also mentioned by the junior high school and senior high school male subgroups. For the professional groups, the mentally ill are "unbalanced" rather than "insane". This category also appeared in the male secondary school subgroup and the entire preparatory school group, although at a greater semantic distance from the center.

In almost all educational levels, mental illness is defined as a general "illness", except for the senior high school male group and the junior high school female group, which prefer to specify, even being redundant, that it is specifically defined as an "illness of the mind".

While mental illness, defined as "incapacity", appears at a considerable semantic distance for both elementary level subgroups, and semantically occupies a second place near "insanity", at the senior high school level, it disappears from the "SAM" set of the other four subgroups.

Affective disorders, represented by "anguish" and "sadness" (depression), appear with relative consistency: the mentally ill generate or suffer "anguish" according to six of the eight subgroups, and "sadness", according to half of them. They are additionally considered "retarded", "dumb" and "evil", especially by the lower school levels.

Mental illness is also defined by most subgroups as "disorder", "disturbance", "incapacity" and "discomfort". Ignorance of the concept appeared at the elementary school level, particularly in the male subgroup; nevertheless, it was associated with deficient thinking ("not thinking"), "misunderstanding" and "weakness". For the elementary school female subgroup, the mentally ill is also "degenerate", a category shared by the male junior high school subgroup with an association to "crime".

The junior high school male subgroup also considered that mental illness is comparable to severe brain damage ("without brain"), while the female group from the same level added definers such as "desperation", "uncoordination" and "neurosis". The senior high school male subgroup defined mental illness as something "abnormal", and the female subgroup added the category of "insecurity". The professional group added "disadaptation", "irrationality", "confusion", "loneliness" and "stress".

Discussion

Certainly it is not accidental that some of the major empirical studies on social representations are dealing with topics of mental health and illness (4,5,32,38,41, 50,51), and that recently the editors of "Papers on Social Representations" decided to dedicate a special issue to this topic (30). As Flick states, "The specific relevance of social representations as an approach to health and illness nowadays is coming from the general development to conceptualizing and understanding health not (only)as an individual affair" (p. 1).

This work, although very limited in its scope, constitutes a first step to introduce an approach that has been scarcely used in the American context and, specifically, in Mexico. One fundamental purpose was to stimulate the development of more studies in this field in our country, as well as to generate some information which can be better confronted to that aroused in other cultures under similar approaches.

In general terms, the results reported in this article indicate that from their earliest ages, people have a social representation of mental health and illness. Despite being so general and somehow abstract, the concepts studied appeared to be clear and well understood by the subjects of the sample. The main defining category obtained by this study is the fundamental association of mental health to general health, which coincides with the opinion of specialists. De la Fuente (16)

states that "the mental health of a country's population is not separated from its general health. Both depend on the conditions of society..." The representation of mental health as balance, well-being, sanity, capacity, happiness and tranquillity seems to be very similar to the description obtained by De Rosa (17,18) in Italy for the normal person, which is considered as balanced, healthy, calm, coherent, rational, social and happy.

With regards to the representation of mental illness, which has been more investigated in other cultures, the description also corresponds to previous findings in terms of insanity, unbalance, illness, incapacity, anguish, retardation, dumbness, evil, sadness and disorder; in a similar context, Herzlich's (38) results refer to notions such as depression, fatigue and indisposition, and De Rosa (17,18) found such terms as irrational, strange, emotional, lonesome and desperate.

Comparing the networks of both concepts -mental health and mental illness- pairs of antonyms were found in a large segment of the defining categories, such as healthy-ill, sane-insane, balanced-unbalanced, intelligent-dumb, intelligent-retarded, capacity-incapacity, happiness-sadness, tranquillity-anguish or well-being-discomfort, thus confirming the precision and clarity of the corresponding networks as well as the close relationship of both concepts, located, as we stated in the introduction, as poles in a continuum. Nevertheless, it seems that social representations in the studied groups may not consider the wide range of gradations among both poles, where mental health, in such terms as described, could be only an ideal state almost never attained.

Thus, the social representation of these two opposing concepts is quite clear; nevertheless, their association to the intelligent-dumb/retarded concepts should be attended to, inasmuch as they do not necessarily correspond to the sates of mental health or illness, and they add to the stigmatization of the mentally ill. The same problem could be applied to the association of both extreme states (mental health-mental illness) to most of the pairs of bipolar descriptors: sane-insane, balance-unbalance, anguish-tranquillity, sadness-happiness, and so on. It is almost impossible to consider them in a pure condition, rather than in terms of grades.

Considered quantitatively, results regarding the gender and education variables showed a difference of semantic richness between males and females only at the elementary school level, indicating that among adults, gender should not be an important variable in terms of the concepts studied. In contrast, education appeared clearly related to significant differences between groups regarding all concepts, indicating that the levels of information handled by the semantic memory increase in relation to higher educational levels. These results coincide with those of previous research (13,44,45,79).

As for the moment when the social representations of mental health and illness begin to be integrated, this approximation shows that since childhood, there is a clear and concrete conception of these concepts, which are enriched in terms of semantic definers through progress in the educational levels, by the logical increase of vocabulary, though remaining within the same type of ideas.

When studying the cultural basis of images regarding causes of psychological disorders, Micklin and Leon (49) emphasize the need to determine if they are acquired through experience and learning at an adult age, or if they spring from stereotypes developed during the formative years of childhood. According to this study, few of these concepts are formed before the age of twelve and are kept throughout adolescence, while most are integrated precisely during the adolescent years, in the period corresponding to mid-level education, thus making this stage fundamentally important for the development of mental health educational campaigns.

Sherman, Judd and Park (71) state that the study of social cognition is basic to understand the processes by which stereotypes and attitudes are formed, maintained or modified. In this context it is important to emphasize the results showing the possession of a considerable amount of information by the subjects, beyond what would have been expected at such early age levels, and indicating that no important negative stereotypes have been developed. These are positive and stimulating results, since mental health education and prevention endeavors destined for these age groups won't need to face the task of modifying the already acquired negative attitudes but rather that of reinforcing, clarifying and widening the existing information.

It should be noted that due to the number and characteristics of the subjects studied, results cannot be generalized; nevertheless, the data obtained constitutes a limited but important information base to be used in future research, Additionally, this data can be indicative of possible behavioral patterns.

Adequate planning of mental health promotion programs for specific social groups, needs a conception of the people's ideas about mental health and illness, taking into consideration the social influence held upon them, understanding everyday knowledge as socially constructed. In this framework, social representations are one of the most important conceptual contributions of social psychology to the social sciences of mental health and illness.

In accordance to the antecedents reviewed, results from this research seem to indicate that mental illness is negatively perceived, with fear and suspicion. It's association with insanity, evil and in extreme cases, with crime, leads social groups to reject and exclude the mentally ill from their community. If community care is to be successful significant changes must be made in the lay representations of mental illness.

The information obtained on the social representation of mental health and illness can be useful in terms of planning mental health services and promoting their maximum utilization. Additionally, it may aid to develop research in psychiatric epidemiology, which is still scarce in Latin America (61), and to design adequate instruments to study the population's beliefs, attitudes and education needs.

If we agree with the statement that social representations permit to classify people and objects, and compare and explain behaviors inserting them into a social framework (53), then we must agree that it is possible to use social representations to investigate the construction of social meanings under an individual subjectivity,

thus knowing and evaluating the process by which an stereotype is turned into values that define behavior. It is important to understand the processes by which a social representation turns into norms, attitudes and behaviors; how this representation, following one of the most solid and polemic traditions in social psychology, becomes a behavior.

REFERENCES

1. AMERICAN PSYCHIATRIC ASSOCIATION: *Diagnostic and Statistical Manual of Mental Disorders.* DSM-III. Masson S.A., Spain, 1980.
2. ARZAC A: Influencia de las variables información y edad sobre las representaciones sociales de la enfermedad mental. In: S Ayestarán (Ed). *Psicosociología de la Enfermedad Mental: Ideología y Representación Social de la Enfermedad Mental.* Universidad del País Vasco, San Sebastián, 1984.
3. ASKENASY A: *Attitudes Toward Mental Patients.* Mouton & Co., The Hague, 1974.
4. AYESTARAN S: *Psicosociología de la Enfermedad Mental: Ideología y Representación Social de la Enfermedad Mental.* Universidad del País Vasco, San Sebastián, 1984.
5. AYESTARAN S: Representaciones sociales de la enfermedad mental. *Revista de la Asociación Española de Neuropsiquiatría*, 6: 95-128, 1986.
6. AYUSO JL, SAIZ J: A comparative study of the psychiatric nurses' attitudes towards mental patients. *International Journal of Social Psychology*, 24(1): 47-52, 1978.
7. BHUGRA D: Attitudes toward mental illness: A Review of the Literature. *Acta Psichiatrica Scandinavica*, 80: 1-12, 1989.
8. BRACHMAN RV: What's in a concept: structural foundations for semantic networks. *International Journal of Man-Machine Studies*, 9:127-152, 1979.
9. BROCKMAN J, D'ARCY C: Correlates of attitudinal social distance toward the mentally ill: A review and re-survey. *Social Psychiatry*, 13:69-77, 1978.
10. CASCO M: Percepción y actitud ante los problemas de salud mental entre jóvenes de educación media superior. *Salud Mental*, 13(2):18-23, 1990.
11. CASCO M, NATERA G: Percepción de un grupo de profesionistas hacia la ir .gen que la comunidad tiene de la enfermedad mental: comparación entre ambas poblaciones. *Salud Mental*, 9(2):70-77, 1986.
12. CASCO M, NATERA G, HERREJON ME: La actitud hacia la enfermedad mental, una revisión de la bibliografía. *Salud Mental*, 10(2):41-50, 1987.
13. CLARK A, BINKS N: Relations of age and education to attitudes towards mental illness. *Psychological Reports*, 19:649-650, 1966.
14. COHEN J, STRUENING EL: Opinions about mental illness in the personnel of two large mental hospitals. *Journal of Abnormal and Social Psychology*, 64:349-360, 1962.
15. CUMMING E, CUMMING J: *Closed Ranks: An Experiment in Mental Health.* Harvard University Press, Cambridge, 1957.
16. DE LA FUENTE R: La salud mental en México. *Salud Mental*, 1(1):4-13, 1977.
17. DE ROSA AS: Psychogenetic aspects in social representations of mad person and madness. In: Ayestarán S: *Psicosociología de la Enfermedad Mental: Ideología y Representación Social de la Enfermedad Mental.* Universidad del País Vasco, San Sebastián, 1984.
18. DE ROSA AS: The social representation of mental illness in children and adults. In: W. Doise, S. Moscovici (eds). *Current Issues in European Social Psychology*, Vol 2. Cambridge University Press, Cambridge, 1987.
19. DI GIACOMO JP: Aspects methodologiques de l'analyse des representations sociales. *Cahiers de Psychologie Cognitive*, 1(4):397-422, 1981.
20. DIAZ LOVING R, GAMBOA M, CANALES L: Exploraciones en la configuración semántica del noviazgo, el matrimonio y la infidelidad. In AMEPSO (Ed). *La Psicología Social en México*, Vol. II. México, 1988.
21. *Diccionario de Sinónimos, Ideas Afines y Contrarios.* Editorial Teide, Barcelona, 1981.
22. DOISE W: Social representations, intergroup experiments and levels of analysis. In Farr R, Moscovici S. *Social Representations.* Cambridge University Press, 1984.
23. EKER D: University students' attitudes toward mental patients in a developing country. *Social Psychiatry and Psychiatric Epidemiology*, 23:264-266, 1988.
24. EKER D: Attitudes toward mental illness: Recognition, desired social distance, expected burden and negative influence on mental health among Turkish freshmen. *Social Psychiatry and Psychiatric Epidemiology*, 24:146-150, 1989.
25. ERINOSHO O'A, AYONRIDE A: A Comparative study of opinion and knowledge about mental illness in different societies. *Psychiatry*, 41:403-410, 1978.
26. FARIÑA A, FISHER JD: Beliefs about mental disorders. Findings and implications. In Guilford W, Mirels HD (Eds): *Integration of Clinical and Social Psychology.* Oxford University Press, New York, 1982.
27. FARR R, MOSCOVICI S: *Social Representations.* Cambridge University Press, 1984.
28. FIGUEROA JG, GONZALEZ EG, SOLIS VM: An approach to the problem of meaning: semantic networks. *Journal of Psycholinguistics Research*, 5(2):107-115, 1976.
29. FIGUEROA JG, GONZALEZ EG, SOLIS VM: Una aproximación al problema del significado: las redes semánticas. *Revista Latinoamericana de Psicología*, 13(3):447-458, 1981.
30. FLICK U: Social representations of health and illness. *Papers on Social Representations*, 4(1):1-52, 1995.
31. FRACCHIA J, CANALE D, CAMBRIA E, RUEST E, SHEPPARD C, MERLIS S: The effect of increased information upon community perception of ex-mental patients. *The Journal of Psychology*, 91:271-275, 1975.
32. GALLI Y, FASANELLI R: Health and illness: A contribution to the research in the field of social representations. *Papers on Social Representations*, 4(1):15-27, 1995.
33. GARCIA S, ANDRADE P: El significado psicológico y social de la salud y la enfermedad mentales. *Salud Mental*, 17(1):32-44, 1994.
34. GARCIA S, ANDRADE P: La imagen del psicólogo en los adolescentes. *La Psicología Social en México*, V:672-678, 1994.
35. GARTLY E: Attitudes toward, and incidence of, mental disorder: a research note. *The South-western Social Sciences Quarterly*, June: 27-37, 1957.
36. GRAVES GD, KRUPINSKI J, STOLLER A, HARCOURT A: A survey of community attitudes toward mental illness. *Australia and New Zealand Journal of Psychiatry*, 5:18-28, 1971.
37. HELLER PL, CHALFANT HP, RIVERA MC, QUESADA GM BRADFIELD CD: Socio-economic class, classification of 'abnormal' behavior and perceptions of mental health care: A cross-cultural comparison. *British Journal of Medical Psychology*, 53:343-348, 1980.
38. HERZLICH C: *Santé et Maladie. Analyse d'une Représentation Sociale.* Mouton, Paris, 1969.
39. HOLLINSHEAD A, REDLICH FC: *Social Class and Mental illness: A Communitty Study.* John Wiley and Sons Inc., New York, 1985.
40. INGHAM J: The public image of psychiatry. *Social Psychiatry*, 20:107-108, 1985.
41. JODELET D: *Civils et Bredins: Représentations Sociales de la Maladie Mentale et Rapport à la Folie en Milieu Rural.* Doctoral Disertation, París, 1983.
42. JODELET D: Representación social: fenómenos, conceptos y teoría. In: Moscovici S. *Psicología Social.* Ed Paidós, Spain, 1986.
43. JOHANNSEN WJ: Attitudes toward mental patients: a re-

view of empirical research. *Mental Hygiene*, 53:218-220, 1969.
44. LEHTINEN V, VAISANEN E: Social-demographic aspects in the attitudes towards mental illness in a Finnish population. *Acta Psychiatrica Scandinavica*, 55:287-298, 1977.
45. LEHTINEN V, VAISANEN E: Attitude toward mental illness and utilization of psychiatric treatment. *Social Psychiatry*, 13:63-68, 1978.
46. LEON CA, MICKLIN M: Opiniones comunitarias sobre la enfermedad mental y su tratamiento en Cali, Colombia. *Acta Psiquiátrica y Psicológica de America Latina*, 17(6):385-395, 1971.
47. MAHATANE J, JOHNSTON M: Unrealistic optimism and attitudes towards mental health. *British Journal of Clinical Psychology*, 28:181-182, 1989.
48. MCWILLIAMS SA, MORRIS LA: Community attitudes about mental health services. *Community Mental Health Journal*, 10(2):236-242, 1974.
49. MICKLIN M, LEON CA: Cultural bases of images of causation in psychological disorder: A Colombian Survey. *International Journal of Social Psychiatry*, 24(2):79-94, 1978.
50. MORANT N: What is mental illness? Social representations of mental illness among British and French mental health professionals. *Papers on Social Representations*, 4(1):41-52, 1995.
51. MOSCOVICI S: *La Psychanalyse, son Image et son Public*, 2a. Ed. Presses Universitaires de France, Paris, 1976.
52. MOSCOVICI S: *Psicología Social*. Ed Paidós, Spain, 1986.
53. MOSCOVICI S: Notes toward a description of social representations. *European Journal of Social Psychology*, 18:211-250, 1988.
54. NATERA G, CASCO M, GONZALEZ L, NEWELL J: Percepción de la enfermedad mental a través de historietas. *Boletín de la Oficina Sanitaria de Panamá*, 98(4):327-338, 1985.
55. NATERA G, CASCO M: Actitudes hacia la enfermedad mental en población general y en un grupo de profesionales de la salud. *Anales del Instituto Mexicano de Psiquiatría*, México, 1991.
56. NEFF JA, HUSAINI BA: Lay images of mental illness: social knowledge and tolerance of the mentally ill. *Journal of Community Psychology*, 13:3-12, 1985.
57. NIERADZIK K, COCHRANE R: Public attitudes towards mental illness; the effects of behavior, roles and psychiatric labels. *International Journal of Social Psychiatry*, 31:23-33, 1985.
58. NUNNALLY J: The communication of mental health information: a comparison of the opinions of experts and the public with mass media presentation. *Behavioral Science*, 2:222-230, 1957.
59. NUNNALLY J: Popular conceptions of mental health: their development and change. Holt, Rinehart and Winston, New York, 1961.
60. PAEZ D, AYESTERAN S: Representaciones sociales de la enfermedad mental y pertenencia a grupos de diferente distancia social ante ella. In: Ayestarán S. *Psicosociología de la Enfermedad Mental: Ideología y Representación Social de la Enfermedad Mental*, Universidad del País Vasco, San Sebastián, 1984.
61. PAN-AMERICAN HEALTH ORGANIZATION: Epidemiología psiquiátrica en América Latina (1965-1988). *Reseñas Bibliográficas 1, Publication* No. 15. OPS, 1990.
62. PARRA F: Perceptions of mental illness in Mexico: a descriptive study in the city of Chihuahua. *International Journal of Social Psychiatry*, 33(4):270-276, 1987.
63. PARRA F, YIU-CHEONG A: The changing perceptions of mental illness in a Mexican-American community. *International Journal of Social Psychiatry*, 29:95-99, 1983.
64. PENAYO U, JACOBSSON L, CALDERA T, BERMANN G: Community attitudes and awareness of mental disorders. *Acta Psichiatrica Scandinavica*, 78:561-566, 1988.
65. RABKIN J: Public attitudes toward mental illness: A review of the literature. *Schizophrenia Bulletin*, 10(Fall):9-33, 1974.
66. RAMSEY G, SEIPP M: Attitudes and opinions concerning mental illness. *Psychiatry Quarterly*, 22:428-444, 1948.
67. REETZ M, SHEMBERG KM: Fifth and sixth graders' attitudes toward mental health issues. *Journal of Community Psychology*, 13:393-401, 1985.
68. RUIZ M, SERRANO V, SANCHEZ E: Historia de las actitudes hacia la enfermedad mental. *Actas Luso Españolas de Neurología y Psiquiatría*, 16(4):285-293, 1988.
69. RUIZ RH: Acerca de los conceptos de salud y enfermedad. *Acta Psiquiátrica y Psicológica de América Latina*, 22:267-276, 1976.
70. SERINO C: Entre 'normal' e 'different': aspects du lien soi/autrui dans le processus de representation sociale. In G Belleli (ed) *La Representation Sociale de la Maladie Mentale*, Liguori, Naples, 1987.
71. SHERMAN SJ, JUDD CM, PARK B: Social cognition. *Annual Review of Psychology*, 40:281-326, 1989.
72. STAR S: *The Public's Ideas about Mental Illness*. University of Chicago National Opinion Research, 1955.
73. STEFFANI D: Escala de actitudes hacia la enfermedad mental. *Acta Psiquiatrica y Psicológica de America Latina*, 23:202-207, 1977.
74. STEFFANI D: Actitud hacia la enfermedad mental y nivel socioeconómico. *Acta Psiquiatrica y Psicológica de America Latina*, 25: 282-287, 1979.
75. STEFFANI D: Influencia del nivel socioeconómico sobre las actitudes hacia la enfermedad mental. *Salud Mental*, 7(3):25-28, 1984.
76. STEFFANI D: Autoritarismo y actitud hacia la enfermedad mental. *Salud Mental*, 8(2):27-30, 1985.
77. THOMPSON EH: Recovery networks and patient interpretations of mental illness. *Journal of Community Psychology*, 17:5-17, 1989.
78. TOWNSEND JM: Cultural conceptions and mental illness. *The Journal of Nervous and Mental Disease*, 160(6):409-421, 1975.
79. VALDEZ JL, MARTINEZ VR: El significado psicológico de rico y pobre en 4 grupos de estudiantes de distinto nivel académico, usando redes semánticas. *La Psicología Social en México*, Vol. II, AMEPSO, México, 1988.
80. VALDEZ JL: Las categorías semánticas, usos y aplicaciones en psicología social. Tesis de Maestría, UNAM, México, 1991.
81. VALDEZ JL, REYES LAGUNES I: Las categorías semánticas y el autoconcepto. *La Psicología Social en México*, Vol. IV, AMEPSO, México, 1992.
82. WAHL OF: Public *vs* professional conceptions of schizophrenia. *Journal of Community Psychology*, 15:285-291, 1987.
83. WIG NN, SULEIMAN MA, ROUTLEDGE R, SRINIVASA R, LADRIDO L, IBRAHIM HHA, HARDING TW: Community reactions to mental disorders. *Acta Psychiatrica Scandinavica*. 61:111-126, 1980.
84 WHO World Health Organization: *Psychiatrie Sociale et Attitudes de la Colectivité*. Geneve, Rapport Technique, 177, 1959.
85. YANG H: Attitudes towards psychosis and psychotic patients in Beijing. *The International Journal of Social Psychiatry*, 35(2):181-187, 1989.