

HEALTH AND ILLNESS: A CONTRIBUTION TO THE RESEARCH IN THE FIELD OF SOCIAL REPRESENTATIONS

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Abstract. The aim of this research is the study of the social representations of Health and Illness through the analysis of its components: information, representation field and attitude. The research includes two different phases where both samples and instruments of analysis are different. In the first phase of the research we chose a qualitative method in order to obtain a "deep analysis" of the two concepts of health and illness. We selected a "mixed technique performance/language", with the purpose of attributing a relative value to the language role. Collected data were processed by content analysis. A quantitative method was utilized in the second phase of the research to integrate the data obtained from the first phase. We chose the method created by Guy Le Bouedec (1979): it allows reconstruction of the plot of social representations of health and illness and their comparison. Collected data were processed by correspondence analysis

Health has always been the greatest gift or better "value" that men have tried to preserve during all their life. We can consider illness an object, a product of life style, or even better of the society; on the contrary, health is totally owned by man, never alien to him. Illness is the result of a process of interaction or of a conflict. Health is an immediate matter: we can speak about the genesis of health. Till now, health and illness have appeared as clear and indissoluble entities - health of man versus illness of life style. If we analyze individual experiences, we can point out that health and illness are experienced as multiplicity and unity at the same time. According to Herzlich (1969), we can say that it is impossible to speak about "health". In fact, her famous research reaches the conclusion that at least three models of health exist: "empty health", "health fund" and "balance".

Empty health represents the absence of illness. It is a "deficiency", a negative phenomenon defined in a private way. The relationship between health and illness is

therefore asymmetrical, where illness represents a unique datum-point. Health, as a negative pole, only exists as a "break in illness".

The most important characteristic of the "health fund" is not a status but rather a "capital". "Empty health" stands for *being* in good health, while the health fund—people *have* a good health. The "health fund" represents something which always coexists with health and illness.

"Balance" either present or absent represents an autonomous experience: you feel on balance or you realize you have lost it. We can consider "balance" a personal and immediate experience. In opposition to the "health fund", "balance" is something which exists or doesn't exist. After having considered "empty health" as *being* and the "health fund" as *having*, "balance" somehow represents *doing*.

Different approaches of studying health and illness in Italy exist today. According to Bosio (1991), social psychology became interested in this matter only after 1980.

We face two different paradigms: the "dominant paradigm" is experimentally very strong but poor in suggestions for social psychology; the "minority paradigm" pays greater attention to psycho-social dynamics. This paradigm gives preeminence to the people's point of view. It is divided into two lines of research: the first is more cognitivistic (Rodin, 1978; King, 1983; Nicoli, 1987); the second, more oriented to understanding the social nature of health and illness representations (Herzlich, 1969; Jodelet, 1976, 1982; Farr, 1977; Herzlich, Pierret, 1984; Augé, Herzlich, 1984).

This research has been designed and carried out only in the perspective of social representations. To study social representations of health and illness means to observe how values, social rules and culture patterns are thought out and acted out by people in our society. Therefore to study social representations of health and illness means to understand attitudes and behaviours, always considering the relationship between individual, health and illness.

Thus, according to Herzlich (1969), the study of social representations of health and illness must be the study of health and illness *for* people *in* the society.

The aim of this research is the study of the social representations of Health and Illness through the analysis of its components: information, representational field and attitude. The research includes two different phases where both samples and instruments of analysis differ.

1ST PHASE

SAMPLES AND METHODS

In the first phase of the research we chose a qualitative method in order to obtain a "deep analysis" of the two concepts of health and illness. We selected a "mixed technique performance/language", with the purpose of attributing a relative value to the language role. This technique consists of two different moments: in the previous one subjects undergo a graphic test (they are asked to draw the investigation object), then they undergo a verbal test (they are asked to write down what they think about the object itself).

Eighty-six children (45 males and 41 females, average age: 9 yrs) attending the fourth year of compulsory school from three different Neapolitan schools participated in the study on the social representation of health. Eighty-one children (41 males and 40

females, average age: 9 yrs) from the same school classes participated in the study on the social representation of illness.¹

The test was collectively administered to both samples during school time. No child refused to undergo the test. Collected data were processed by content analysis.

RESULTS

The Drawings. We chose not to utilize predetermined categories; therefore we decided to pick out the basic elements from every drawing and to utilize them to construct our categories.

At first glance one immediately recognizes that the most represented category is "*representation of people*" (39%). These data can be explained by the difficulty for children to imagine health as an abstract concept. Therefore they tend to personify it and to attribute it to human beings, never to animals. This aspect is clearly odd considering the fact that animals often appear in the drawings of 9/10 yr old children.

The second category, which we consider the most significant, is "*representation of moving people*" (35%). The concept of movement can be considered as the central

TABLE 1

Categories	Males N=45	Females N=41	Total N=86	%
Representation of people	21	13	34	39
Representation of moving people	14	16	30	35
Representation of the sun	11	16	27	31
"Open air" setting	13	13	26	30
Food	5	6	11	12
Patient in bed	3	6	9	10
Other	10	8	18	21

concept of the social representation of health. With regard to it, Claudine Herzlich (1969) states: "...If inactivity can be considered the pregnant concept of illness, health is moving, active control of the environment and of the relationship with the others." In children's drawings, movement is expressed by the actions of playing, running, jumping.

The category "*representation of the sun*" (31%) contains a positive symbolic value. The sun could be a different way of objectification of health representation. This may be strengthened by the high frequency of presence of the sun, even in the "interiors" drawings.

In a good percentage of cases (30%), the drawing represents an open setting (see "*open air setting*" category); this consists of the idea of health as acting, going out, moving.

The category "*food*" (12%) is also interesting, and demonstrates that feeding and health compose a classical binomial.

¹ We decided to utilize different samples to avoid biases: answers on both health and illness by the same subject at the same moment could produce a misunderstanding.

TABLE 2

Categories	Males N=42	Females N=40	Total N=82	%
Patient in bed	28	22	50	61
Hospital	11	8	19	23
Drugs	12	5	19	23
Representation of people	9	9	18	22
Sick person	4	11	15	18
Doctor	6	5	11	13
Nurse	7	3	10	12
Syringe	7	3	10	12
Ambulance	5	4	9	11
Other	10	7	17	21

A few subjects (10%) chose an "opposite concept" to represent health: the category "*patient in bed*" shows a dialectic relationship between health and illness.

The category "*other*" (21%) includes several suggestive attempts to represent our study object. Health is drawn as a fairy, a vitamin, a breeze, an anthropomorphic cloud, a luminescent figure,...or as the sea.

Let's now analyze the drawings of the social representation of illness.

Table 2 shows that the most popular category is "*patient in bed*" (61%), as everybody might imagine. In fact, children clearly tend to draw the ill subject as a bedridden and immovable one.

The two following categories "*hospital*" (23%), and "*drugs*" (23%) are clear examples of the connection between setting and therapy of the illness. "*Representation of people*" (22%) was most frequently connected with "bedridden patient"; children like to represent relatives or friends when taking care of the patient.

Another large category is the so-called "*sick person*" (22%). We referred all the drawings of people affected by various exanthemas to this category. This probably means that children drew their illness according to their personal experiences (measles, chickenpox, German measles, etc.). The categories "*doctor*" (13%), "*nurse*" (12%),

TABLE 3

Categories	Males N=45	Females N=41	Total N=86	%
Psychophysical wellbeing	22	22	44	51
"Happiness"	12	9	21	24
Evaluations	7	13	20	23
Movement	11	8	19	22
Values	7	10	17	20
Feeding	5	5	10	12
Other	23	14	37	43

TABLE 4

Categories	Males N=42	Females N=40	Total N=82	%
Evaluations	31	28	59	72
Definitions	8	18	26	32
Obstacle	10	13	23	28
Stillness	11	11	22	27
Emotions	13	9	22	27
Pain	8	7	15	18
Death	9	3	12	15
Drugs	7	3	10	12
Objectification	3	7	10	12
Other	16	14	30	37

"syringe" (12%) and "ambulance" (11%) are all connected to therapy. The category "other" (20%) includes all the drawings which objectify the illness; it is pictured as a great virus or bacterium, blood-red cells or monsters. In the same category we also find drawings of para-sanitary tools (plasters, thermometers, etc.).

Verbal Productions. Let us now analyze the verbal productions of children; we will first take into consideration the social representation of health and then the social representation of illness.

The "*psycho-physical welfare*" category accounts for 51%. This category includes all the expressions connected with welfare, both physical or psychological. The "*happiness*" category (24%) includes all positive emotions connected with welfare. Both the "*psycho-physical welfare*" and the "*happiness*" categories show a positive representation of welfare, viewed as an autonomous value, not as a simple break in illness.

The "*evaluations*" category (23%) is less interesting: it includes several "all positive" statements very similar to each other (health is...a wonderful thing, ...desirable, ...important, etc.). Substantially reproducing the results of the drawings study, the most significant category is probably the so-called "movement" (22%). The idea of movement resembles the concept of health more than in the case of the others. In this category we included all the verbal productions related to sports, games or simple actions.

In the "*values*" category (20%), we included all the verbal productions concerning health as an absolute value. Health was, in fact, described as the most beautiful thing, as essential, as welfare or pleasure.

Several connections with the idea of "*feeding*" (12%) were also found in the verbal productions. Nevertheless, in contrast to the drawings, subjects referred their points of view about feeding with more diversified expressions: some subjects elected the idea of "diet", some "a healthy feeding", some "the hyper-nourishment".

A high percentage of verbal productions were placed in the "*other*" category (43%); this is due to the difficulty of giving a definition to health. Several answers refer to the idea of "empty health", seen as "absence of illness"; other answers refer to the incidence

of life style or to the concept of "health fund": in this case health is considered equipment to preserve and to utilize at its best.

We finally analyze categories obtained from the verbal productions about social representation of illness. As already seen for the drawings, the verbal productions categories of social representation of illness are also numerically superior and more homogeneous in comparison with those of health.

The category "*evaluations*" (72%) shows that to "judge" illness is the simplest way to describe it: illness is "an ugly thing", "very ugly", "serious", "dangerous", "troublesome", "undesirable", "disagreeable".

The "*definitions*" category (32%) evoked many responses; it includes all the technical specifications of several diseases from serious (neoplasm, AIDS) to slight ones (flu, cough, cold), with special regard to pediatric diseases (chicken pox, measles, mumps).

The two categories "*obstacle*" (28%) and "*stillness*" (27%) resemble to each other very much: they both refer to the deprivation of active movement possibilities, etc. The "*emotions*" category (27%) obviously assembles negative evaluations. The less represented "*pain*" category (18%) is very interesting: it includes all the references to the meaning of pain itself and to either physical or psychological "suffering". The "*death*" category (15%) has to be prevalently explained as a consequence. It is described as the worst implication of illness.

We found "*drugs*" (12%) and "*objectification*" (12%) among the less represented categories: illness is seen as a fight, a microbe or a virus, an aggressive or immaterial element. The "*other*" category (37%) assembles various conceptions: among others, the ideas of old age, poverty and war are seen as causing the illness itself or wasted money is seen as a consequence.

DISCUSSION OF PHASE 1

A comprehensive view of the results shows the advantages that result from using the "mixed technique" performance/language. When analyzing the drawings it is clear that the representation of real elements is connected with children's practical experiences. The categories obtained from verbal productions offer a representation which is more closely linked to their emotional life, enriched by their personal evaluations.

When comparing the social representations of health and illness, the attitude of the healthy subject ("full of vitality", "in action", "bright", "in relationship with the others") is clearly opposite to the attitude of the sick subject (with limited possibilities of interacting with the others, expressing and satisfying his necessities and with the sole aim of overcoming the "illness condition").

The idea of movement is the basic element of the social representation of health, while the idea of stillness (sometimes also viewed as an obstacle) is the basic one of the social representation of illness. Ambivalence toward illness expressed by subjects is particularly interesting. In fact illness was judged either negatively (this is absolutely justified) or positively, as an opportunity "not to go to school". Some subjects evaluated illness both positively and negatively. And a girl says: "I think that illness is beautiful and ugly; beautiful because I don't go to school, ugly because I feel sick...".

PHASE 2

SAMPLES AND METHODS

A quantitative method was utilized in the second phase of the research to integrate the data obtained from the first phase. We chose the method created by Guy Le Bouedec (1979, 1984, 1986); it allows reconstruction of the plot of the social representations of health and illness and their comparison.

Onehundred-sixty-seven children (M=88, F=79), aged 8 and 9 years, attending the fourth year of compulsory school from three Neapolitan public schools, participated in the study.

To reconstruct the "information" component of the social representations we adopted the method of free associations. A first sample of 86 subjects was asked to freely associate as many words as possible to the stimulus word Health. Subjects gave 226 different substantives. A second sample of 81 subjects was asked to associate as many words as possible to the stimulus word Illness. Subjects gave 147 different substantives.

In order to assess the "representation field" of health and illness we adopted the paired evaluations technique. To construct these we selected the substantives given by at least 15% of the subjects. With regard to health, we obtained 21 coupled evaluations² from the following substantives: *welfare, food, body, happiness, diseases, drugs, movement*³.

With regard to illness we obtained 45 coupled evaluations from the following substantives: *fever, bed, drugs, doctor, measles, death, hospital, cold, syringe, sadness*⁴. We applied a forced choice *yes/no* to estimate the similarity of every coupled evaluation.

The same subjects (86 for health and 81 for illness) were asked to associate as many adjectives as possible to the stimulus words health or illness. Subjects gave 200 different adjectives for health and 116 different adjectives for illness.

In order to establish the "attitude" component of the social representations we adopted the semantic differential technique. To construct these we selected the adjectives given by at least 20% of subjects. Scales obtained for health were: *Ugly/Beautiful, Disagreeable/Agreeable, Good/Bad, Small/Big*.

Scales obtained for illness were: *Not serious/Serious, Painful/Not painful, Ugly/Beautiful, Infectious/Not infectious, Good/Bad, Not contagious/Contagious, Black/White, Not troublesome/Troublesome*⁵.

We modified the construction of the semantic differential in order to let 9 year old children easily approach the test⁶. In particular, cross-cultural scales (*Desirable/Undesirable* and *Agreeable/Disagreeable*) were added to the pairs of selected adjectives. The semantic differential obtained in this study was employed only to evaluate the

² All the possible pairs according to the formula $n(n-1)/2$.

³ We added the two stimulus words to this series of terms, as we did for the series related to illness. The sequence of the scales and the spacial arrangement of the opposite terms were drawn by lot.

⁴ The term Measles represents the group of all exanthemata and Cold, the group of all diseases involving chills.

⁵ In the adjective pairs the underlined one is given by the subjects. Their order of appearance and polarization were decided by chance.

⁶ Special thanks to Professor Dora Capozza (University of Padova) for the great contribution to the solution of methodological problems and for her valuable suggestions on the choice of the analysis technique.

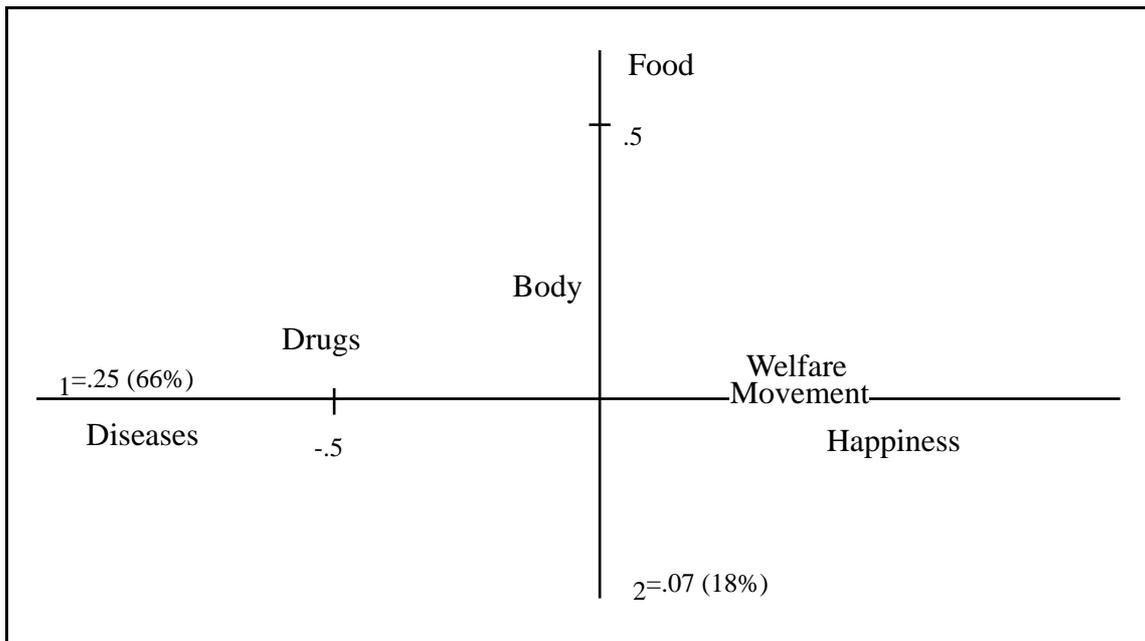


Figure 1

stimulus words Health and Illness. All the other selected substantives were evaluated through a shortened semantic differential made up from the following scales: Desirable/Undesirable, Agreeable/Disagreeable, Beautiful/Ugly, Good/Bad. Because of the young age of the subjects, the semantic differential was always administered by a specifically designed graphic form.

With regard to health a sample of 150 subjects (M=72, F=78) attending the fourth year of compulsory school was asked to evaluate the likeness/unlikeness between the two proposed concepts according to the paired evaluation technique. With regard to illness a similar procedure was carried out for 156 subjects (M=84, F=72) from the same school year. Both samples were asked to evaluate the terms respectively associated to the ideas of health and illness through the scales of semantic differentials specifically realized

RESULTS

Paired Evaluations. Through the paired evaluations subjects were able to judge the relationship likeness/unlikeness between the proposed terms. Data related to both health representation or illness representation were treated with correspondence analysis.

Results of the correspondence analysis related to health showed two main factors together accounting for 84, 55% of the global inertia. The first factor alone accounts for 66.14%, the second for 18.41%.

For the first factor the graph shows a sharp opposition between Diseases and Drugs on the one side, and Movement, Welfare and Happiness on the other side. The second factor is characterized by Food (which gives a CTR of 0.777) while Body is equidistant between the Diseases-Drugs pole and the Movement-Welfare-Happiness pole.

The semantic field of health seems then characterized by two distinct areas. The first gives us the idea of health as a value in itself, fluctuating from movement corporeality

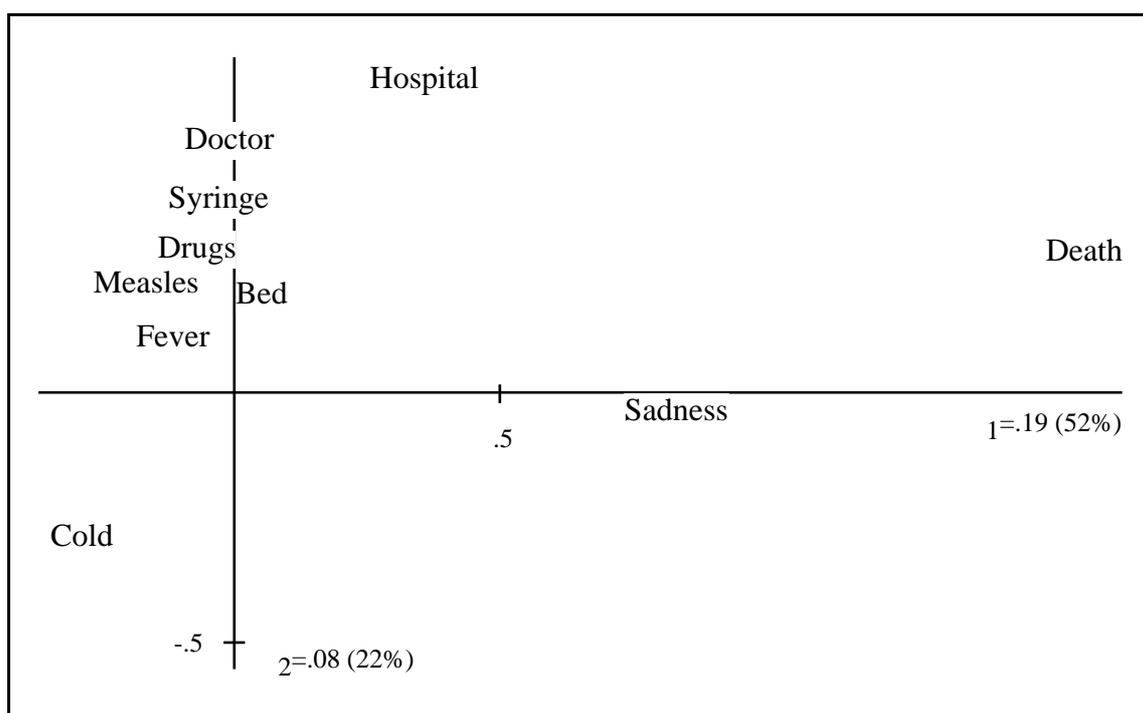


Figure 2

through happiness emotionality to the most complete and complex condition of welfare. The second gives us the idea of "empty health", lack of illness, an all negative phenomenon defined by privation. Between health and illness the Body represents the potential target of aggression or an object of value. Food is in opposition to all the other terms, either positive or negative; while contributing to the genesis of health and illness, nevertheless it is an element external to the body.

Results of the correspondence analysis related to illness show three main factors, which all together account for 86.10% of the global inertia. The first factor alone accounts for 52.33%, the second for 21.94%, the third for 11.82%.

When looking at the graph, the opposition between Death and all the other terms is immediately evident. With a CTR of 0.6 Death is responsible for the first factor; the second factor is characterized by the opposition between Cold and Hospital; the third is prevalently explained by Bed and Measles.

The semantic field of illness is then characterized by two clusters close to each other and by three isolated concepts: Death is far, the Sadness emotion more persuasive, Cold ambiguous. The first area is characterized by Bed, Fever, Measles and Drugs (the most traditional children's representation of the idea of illness); the second one includes all the cures of serious illnesses: Syringes, Doctor and, slightly removed, Hospital.

Data from paired evaluations of health and illness were also treated with a Multi-Dimensional-Scaling: the resulting stress indexes (0.034 for health and 0.052 for illness) can be considered more than satisfactory. Moreover, the above results are extremely consistent with those coming from correspondence analysis; this strengthens the promoted considerations further on.

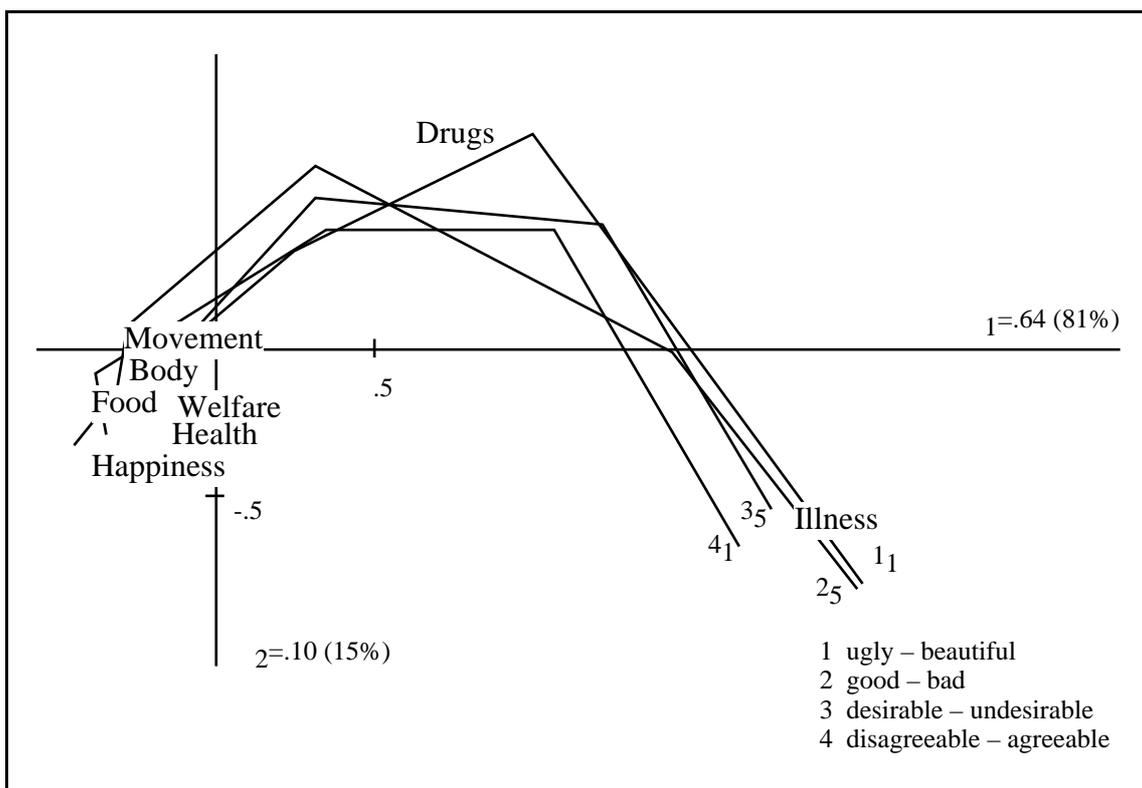


Figure 3

Semantic Differential. The scores obtained through the semantic differential scales gave us the possibility to know how the substantives are placed on the factorial axes.

With regard to the semantic differential of health, the first two factors together account for 95.71% of the total inertia: the first factor explains 80.80%, the second 14.90%.

In figure 3, Happiness, Health, Welfare and Food, followed by Body and Movement were all judged absolutely positive, as everybody would expect. Also in compliance with our expectations, we find a clear opposition between the group of all the above terms and Illness (very ugly, very bad, extremely disagreeable and undesirable). Drugs are placed on the intermediate degrees of the scales, thus expressing the children's ambiguous attitudes; they emotionally feel the negative aspects of discomfort and suffering but rationally realize their role in curing illness.

When analyzing the semantic differential of illness and of the related terms, the two first factors together account for 89.43% of the total inertia; the first accounts for 72.08%, the second for 17.35%.

Bed clearly received a totally positive attribution while evoking feelings of protection, rest, welfare. Doctor, Drugs and Hospital were judged as substantially positive in their role as therapeutic agents. Fever and Cold were quite undesirable and bad, Sadness, Syringe and Illness ugly and disagreeable; Measles follows, considered the most serious illness by children. Consistent with the results coming from correspondence analysis of paired evaluations, Death also places itself far from the others here and is assigned a totally negative value.

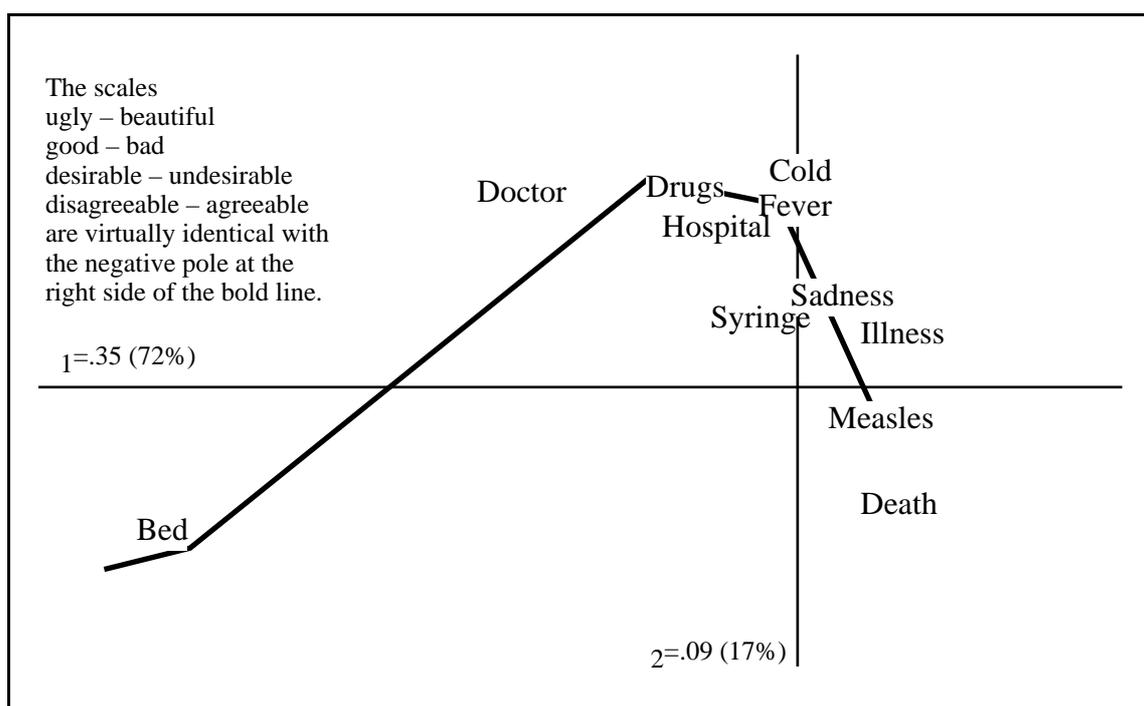


Figure 4

DISCUSSION OF PHASE 2

The aim of the second phase of this research was to compare data obtained through qualitative techniques with data obtained through quantitative analyses. Through this second phase of the research, we were able to assess the semantic fields of social representations of health and illness and the subjects' related attitudes.

When comparing the semantic fields of health and illness we notice that health is characterized by a clear opposition between structural positive elements and negative ones; with regard to illness, terms are differently grouped according to a certain grading of the relationship acceptance/non acceptance. In fact, we start from Cold (considered an altered physiologic situation more than a real disease) and arrive at Hospital through various pathologies, situations and remedies; the Death category was never included in this series.

Children obviously showed absolutely positive attitudes toward health and negative ones toward illness. The attitudes toward Drugs and Doctor receive a particular intermediate position: they're probably considered "a necessary trouble", "the cost to pay" to overcome illness and reach health.

CONCLUSIONS

In our opinion, to know how people represent the idea of health to themselves is a *conditio sine qua non* for the society to promote health itself and everything related to it (life style, habits, culture). When analyzing a social representation, knowledge of the

connections between the culture which bred it and the reasons which sustain it has to be considered absolutely mandatory (Moscovici, 1994).

From the analysis of our data we can conclude that the social representations of health and illness are clearly and exactly outlined; these social representations are complex and articulate, letting us recognize their structural elements. Explanatory lines of the results are altogether extremely consistent. This speaks in favor of an integrated utilization of different qualitative and quantitative methods; it allows a "more complete" study of a social representation regarding width and depth. As our data show, both the "mixed performance/language technique" and the free associations technique result in fewer health categories when compared to illness. The information component of illness is larger. This is probably due to the attention which society pays to it and to its prevention (through information and sensibilization programs), while less attention is paid to health promotion and to the related values.

A brief discussion of the organizing principles and the peripheral elements of social representation of health and illness is in order. The "central nucleus" of health representation is significantly substantial and homogeneous while the "periphery" of illness representation is complex and articulate. As a value in itself health shows its own "hard nucleus". Illness, considered as "life style illness" more than "man illness", shows a relative weakness in its organizing principles and a certain strength in its peripheral elements.

When considering the dialectic relationship between health and illness and the definition of the first depending on the other, the research recognizes two different and autonomous semantic fields come out for health and illness. Health is mainly represented through ideas of behaviour, movements, psycho-physical welfare while illness through stillness and therapeutic tools. Illness is outlined as an ambivalent and sometimes ambiguous representation. It is judged negatively, as something to keep at a distance; nevertheless, several concepts concerning illness are evaluated positively, when considered remedies or neutral element (for example: a cold is considered not really dangerous).

In conclusion, 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 behaviours. Only knowledge of the social representations of health and illness will then let us hope to realize effective programs of illness prevention and mainly health promotion.

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