Evaluation of the body representation in schizophrenic persons

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Object of the research

Body representation and language are two fundamental problems encountered by schizophrenic subjects. The goal is to evaluate how a schizophrenic subject translates through his own speech his conceptualization of the representation of the body. Or notion of body representation is based on a multidimensional model (Fig 1.)

Mains hypotheses

- The schizophrenic subjects are distinguished from the healthy subjects in the way in which they semantically qualify people taken in photos
- The body schema is fundamental to distinguish the schizophrenes from the not-schizophrenes

Multimodal and integrative models of representation of the body

Experimental design

Two groups of 15 subjects. Experimental group of general schizophrenic subject paired to the control group

For each subject, two tasks are required:
- a physical description of the character presented on each photo (Fig.2)
- a semantic judgment of the appearance of the character (Fig.3)

Description of material used

18 photos distributed into 3 categories and randomly presented:

1. A person alone expressing an emotion
2. A body presenting incongruities
3. A person alone carrying out an action

For each qualifier, the subjects have the possibility of a “without opinion” answer: 0:

18 pairs of qualifiers organised in 3 categories:

A Action
E Emotion
F Form

Fig. 2: example of photos used

Results

- 12 photos are discriminating schizophrenic subjects
- The grid of semantic analysis shows that 16,19% of the schizophrenic’s answers are without opinion (0) and 43,16 % are extremes (1 or 7). This tendency is strictly reversed for the nonschizophrenic subjects
- 15 photos present significantly less answers “without opinion” among schizophrenes (p < .001)
- Two groups of discriminating criteria are identified: a group of 7 criteria of “content” and a group of 14 “extremes” criteria
- Among 3 dimensions of the model of the representation of the body, the kinaesthetic and sensory representations are most discriminating

Discussion

This research showed that the semantic judgement compared to the body representation can be a good means of distinguishing the schizophrenes from non the schizophrenes. The space of the connotations specific to the body is appreciably different among schizophrenes compared to the non schizophrenes. These results seem to show concretely that schizophrenes have a specific manner to represent the body. The body schema, as an integration of kinesthetic and sensory representations seems a discriminating dimension impossible to circumvent.