

Introduction

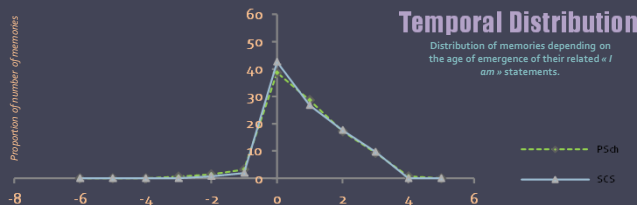
- ✦ Identity is a told expression of self that results from a bidirectional relationship between self and memory: the self constrains the encoding and the retrieving of memories and the memory informs the self about "what it is" (Conway, 2005; Rathbone et al., 2008).
 - ✦ **Self-images (a part of the self):** are abstracted and decontextualized information about identity, ongoing connected with autobiographical memories (AMs), such as roles, personality traits, values, characteristics about oneself, motivations, ...
 - ✦ **Self-defining memories (SDMs)** (another part of the self): SDMs are representative key elements in defining what we are and are linked with an individual's essential goals (Conway et al., 2004)
 - ✦ **Rathbone et collaborators (2008):**
 1. Each self-image is supported by a distribution of distinct memories that are clustered around the appearance times of these self-images.
 2. Mostly, the self-images seems to emerge during the "reminiscence bump period", which is a period corresponding to late adolescence and early adulthood. This period is critical for the formation and maintenance of stable identity.
 3. Possibly, many memories recalled from this period correspond to SDMs and have a powerful effect in binding the identity to a specific reality (Singer & Salovey, 1993).
 - ✦ **Raffard et al. (2009, 2010)** showed that SDMs of patients with schizophrenia (PSch) contain less meaning-making than SDMs of healthy control subjects (HCS).
 - ✦ **Bennouna-Greene et collaborators (2012)** studied self-images and memories related in PSch compared to HCS. They showed that **both groups:**
 1. generated autobiographical memories (AMs) clustered around the emergence of self-images; temporal distribution is preserved in PSch;
 2. showed similar quality and complexity of self-images generated (but self-images were more passive in PSch);
- However, in comparison to HCS, PSch:
- a. recalled AMs less specifics and less AMs consciously remembered;
 - b. had a thematic organization between AMs and their related self-images weakness.

Method

19 PSch and 19 HCS matched have participated to this study.

Material and procedure

1. **Twenty Statements Task (TST; Kuhn & McPartland, 1954; Rhee et al., 1995):** participants were asked to write down 10 enduring "I am..." statements (e.g. roles, traits, characteristics about oneself, functions, ...).
- Afterwards, they selected the 3 of these statements as the "most personally significant to their sense of identity".
2. For each of these 3 statements, participants recalled **three memories** "where they had impression that this statement was significantly present in their life" (Bennouna-Greene et al., 2012). Furthermore, memories had to (1) be important for themselves, (2) be specific, (3) take place at least a year ago. The memories were narrated out loud.
- Then, they gave the dates "when they think that the memories took place" and the dates "when they felt that the 3 statements were a significant part of their identity".
3. **A short version of LABEL (Unpublished):** Participants completed 2 parallel versions of a questionnaire (A version and B version). Each one contains 50 personality traits for which participants respond to question "how does this adjective describe me?" with the help on a likert scale (1 "not at all" to 5 "very well"). A comparison between both versions allows to investigate the stability of traits self-knowledge.
 4. **Neuropsychological measures:**
 - Digit Span Forwards and Backwards (Wechsler, 1997)
 - Stroop-Color Word Test (Stroop, 1935);
 - Verbal Fluency Task (Benton & Hamsher, 1976).
 5. **Depression and symptomatology:**
 - Beck Depression Inventory II (Beck, 1996);
 - PANSS (Kay, Opler, Fiszbein, 1987).



Objective

The present study aims to investigate self-images and AMs associated in PSch, such as Rathbone et al. & Bennouna-Greene et al.

Hypotheses

- We hope replicate the results come from Bennouna-Greene et al.'s study.
- Furthermore, we supposed that meaning-making related to retrieved memories will be more absent in PSch than HCS.
- Finally, we hypothesized that PSch have a traits self-knowledge more instable than HCS,

Results

Means(SD) of results from different measures

	PSch	HCS	p
Clinical measures			
Age (years)	35.95(9.96)	38.21(10.63)	.50
Education (years)	5.31(2.36)	4.89(1.97)	.55
Duration of illness (years)	11.26(8.92)	/	
PANSS total score	64.74(15.9)	/	
PANSS positive score	14.74(4.83)	/	
PANSS negative score	18.05(5.91)	/	
PANSS general score	31.95(8.21)	/	
Depressive symptomatology	12.74(8.34)	7(10.86)	.07
Neuropsychological Measures			
Digit Span Forwards	5.79 (1.18)	5.89 (1.04)	.77
Digit Span Backwards	4.10 (1.37)	4.42 (1.35)	.48
Verbal Fluency	31.15 (10.26)	32.89 (8.9)	.58
Interference STROOP*	86.89 (24.08)	67.84 (14.68)	<.01
Characteristics of memories			
Proportion of specific memories	7.94(1.17)	7.94(1.08)	.1
Proportion of meaning-making	0.28(.21)	0.38(.21)	.18
Age of memories	25.19(6.35)	26.72(6.91)	.48
Characteristics of "I am" statements			
Age of emergence	18.12(8.48)	17.48(6.76)	.8
Quality: Abstract statements (vs. specific statements)	6.05(2.53)	5.58(2.02)	.53
Quality of 3 Abstract statements (vs. specific statements)			
Complexity (number of subcategories)	7.42(2.89)	7(1.79)	.59
Strong Subjective thematic link (assessed by experimenters) (vs. weak)*	.037	.23	<.01
Stability of traits self-knowledge	0.77(0.16)	0.83(0.17)	.27

Discussion

- Parallel to Bennouna-Greene et al. (2012), both PSch and HCS have presented a same temporal distribution of their memories around the "I am" statements that generated those ones. This result showed that PSch's self-images are supported by distinct AMS that are clustered around the emerging times of these self-images.
- In contrast, the thematic organization, assessed by the subjective thematic link, was defective in PSch in comparison with HCS.
- Schizophrenia illness does not seem to affect the patients' "I am" statements in this sense that the complexity and the quality of their self-images were similar to those of HCS. This is certainly due to the fact that the temporal distribution is also preserved. PSch as HCS possessed memories to justify/explain their self-images. Furthermore, PSch have a trait self-knowledge stability preserved. It must not be forgotten that the traits, abstract self-knowledge, represent the cognitive structures that are most resistant to changes (Duval et al., 2009; Klein and Lax, 2010; Boulanger et al., submitted). In this study, the traits were used around 60%, in comparison with specific "I am", in both groups.
- Contrary to expected, there was no difference between both groups on (1) the recall of specific AMs and (2) the meaning-making related to memories. Further, contrary to hypothesized, the proportion of memories associated with meaning-making was low in both groups. Nevertheless, only meaning-making was taken into account. Other variables could be evaluated in order to check if the recalled memories are SDMs.
- The conclusions should be taken with caution in view of the small sample. The recruitment is continuing.