

Introduction

The present study compares the personality traits in patients with Alzheimer's disease (AD) and control subjects and describes the evolution from retrospectively assessed previous to current personality in the AD patients through description by their proxies.

Material and Method

Subjects

We studied a group of 52 patients (37 female and 15 male) diagnosed with mild AD (aged 56 to 89 years) and a group of 80 healthy control subjects (43 female and 37 male aged 56 to 91 years).

Table 1. Description of the sample

| | Women | | | Men | | |
|---|-------|----------|-----|-----|----------|-----|
| | N | Mean age | SD | N | Mean age | SD |
| Healthy participants from the general population (N=80) | 43 | 66.4 | 7.0 | 37 | 68.0 | 7.8 |
| Patients with mild Alzheimer disease (N=52) | 37 | 77.0 | 7.8 | 15 | 78.0 | 8.2 |

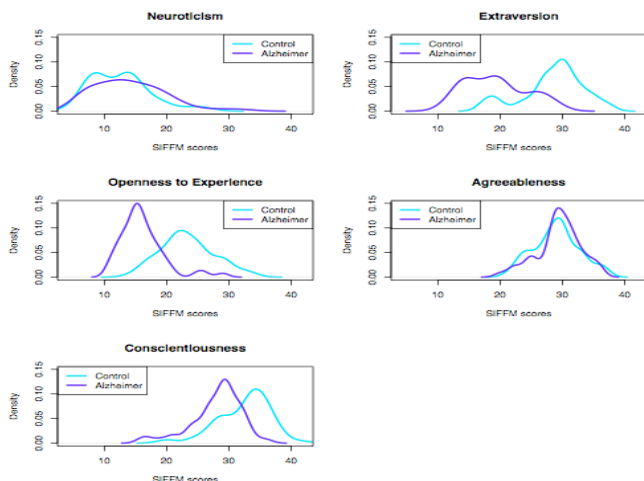
Instruments

All subjects were assessed using the Structured Interview for the Five-Factor Model (SIFFM). The participants' family members reported on retrospectively assessed previous (5 years ago) and current personality traits using the NEO Personality Inventory Revised, Form R (NEO-PI-R).

Results

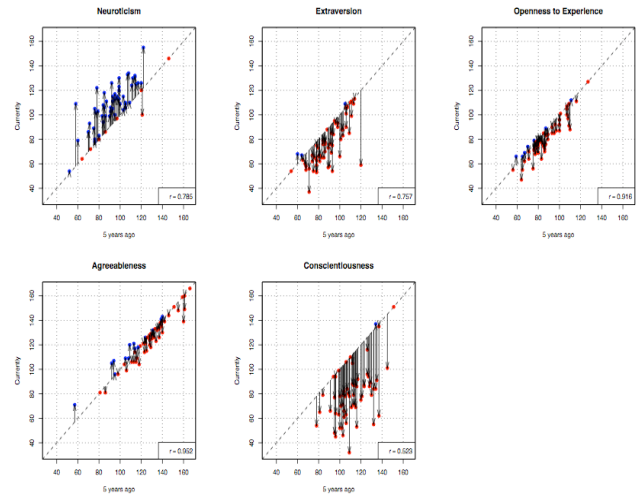
After controlling for age, the clinical group presented significantly higher scores on current *neuroticism*, and significantly lower scores on *extraversion*, *openness*, and *conscientiousness* ($p < .001$), while no significant difference was observed on agreeableness. Comparing retrospectively assessed previous and current personality in the AD group, a significant increase on *neuroticism*, and a significant decrease on *openness*, *extraversion*, and *conscientiousness* were observed ($p < .001$). The retrospective evaluation in the two groups are thus convergent ($p < .001$).

Figure 1. Comparison between current personality using SIFFM in the normal controls and in the AD patients



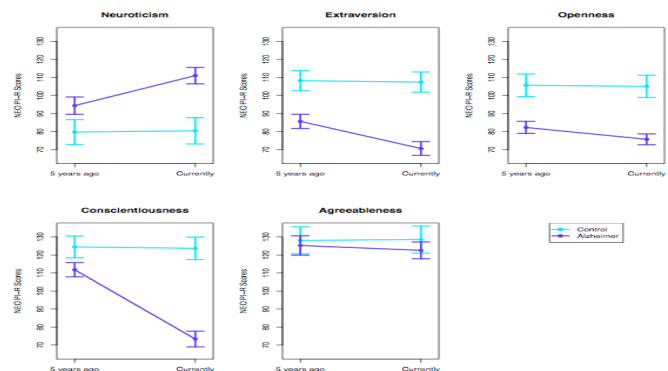
Note: Distribution function obtained by smoothing of SIFFM data for two groups.

Figure 2. Comparison between retrospectively assessed previous and current personality using NEO-PI-R in the AD patients



Note: The scatter diagram shows the current position of AD patients relative to 5 years ago as assessed by their proxies. "↑" and "↓" emphasize the direction of the evolution of personality traits with blue upwards directed arrows indicating increase, and red downwards directed arrows decreased scores on the various personality dimensions (raw NEO-PI-R scores).

Figure 3. Evolution of personality dimensions between 5 years ago and currently through NEO-PI-R in the 2 groups



Note: Interaction diagram: points represent group means and bars 95% confidence intervals.

Conclusions

The group comparison and the retrospective personality evaluation are convergent. AD patients seem to present a specific evolution of their personality profile; the retrospective evaluation seems to indicate that important personality changes occurred. These changes are significant and contrast with the stability of the personality profiles generally observed in mentally healthy individuals throughout their lives.

References

Costa, P.T., & McCrae, R.R.(1992). The NEO-PI-R manual. Odessa FL: *Psychological Assessment Resources*.
 Trull, T.J., & Widiger, T.A.(1997). SIFFM: Structured interview for the Five-Factor Model. *Odessa FL*.
 von Gunten, A., Pocnet, C., Rossier, J. (2009). The impact of personality characteristics on the clinical expression in neurodegenerative disorders: A review.*Brain Research Bulletin*, 80;179-191.