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# Effectiveness of validation therapy (VT) in group: Preliminary results

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**Abstract**

VT is one of the best known psychosocial treatment for elderly affected by dementia. Notwithstanding its wide use, its efficacy is still a controversial issue, especially in comparison with other approaches. This study of 30 elderly subjects in a nursing home compared the effects of VT, sensorial reminiscence (SR) and no treatment on cognitive, functional, and affective status of the participants. The results indicated an improvement in the global functioning of the two treatment groups, compared to the control group, but the differences did not reach statistical significance. Significant within-group effects could be observed, where the SR treatment was the most effective in improving cognitive, affective, and behavioral status; the VT-group showed a reduction of the behavioral disturbances; the participants at the control group demonstrated a slight deterioration at all the three levels. Considerations are made about the implication of VT for the caregivers, as possible mediator of its effect on elderly.


*Keywords:* Validation therapy (VT); Treatment of dementia; Sensorial reminiscence (SR); Psychosocial treatment of the elderly

## 1. Introduction

During the last decade one could observe a spreading of numerous psychosocial interventions for dementia, each with different theoretical depths, but all with similar difficulties regarding the evaluation of their effectiveness (for review, see Morton, 1999; Finnema et al., 2000). Results about the non-pharmacological interventions are scarce and

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controversial (Finnema et al., 2000; Graesel et al., 2003), mainly due to methodological limits of the performed studies and the complexity of the issue per se.

The VT (Feil, 1993) is one of the most known psychosocial treatments for dementia, even though it has not been proven to be more effective than the other methods. The work of Feil (1993) suggests an interpretative scheme of the patient's behavior, with the purpose of helping the caregivers by offering a means at their work with confused persons. The disorientation observed in many elderly patients is a defense mechanism and a tentative solution of past conflicts. The redefinition of the behavior of confused persons confers to the caregivers a therapeutic role: in validating the emotions of the elderly patient, they can help him/her to solve the residual life tasks.

The principles of the VT outlined a new approach to individuals suffering from dementia. However, as noted above, similarly to many other psychosocial approaches, the effectiveness of the VT techniques has yet to be fully evaluated.

The few studies on VT focused mainly on single cases, or small samples including from 3 to 12 participants. Often the control group was absent, no one compared individual and group VT, and results were of difficult interpretation and generalization (Neal and Briggs, 2000). Few studies compared VT with other techniques (Toseland et al., 1997).

Efficacy evaluation is a particularly important question in the case of VT. It is central to distinguish the elements that eventually make this approach so different from other techniques, apparently simpler and more accessible.

We conducted the first study in 2001 (Deponte and Sorrentino, 2002) on a post-facto basis: we analyzed the data about psychotropic medications before and after a 3-month period during which elderly patients suffering from dementia were treated with individual ($n = 16$) and group ($n = 16$) VT. After the treatment, the 87.5% of the patients needed fewer medications, as opposed to the 37.5% of patients who did not participate in the sessions. The difference was significant at the $\chi^2$-test ($\chi^2(48, 4) = 13.46; p < 0.01$). Interestingly, group and individual VT led to the same effects. Being aware of the limitations of the study, especially regarding the post-facto design, the single measure adopted, and the weakness of the measurement (the use of psychotropic medications is affected by many factors), we choose to conduct another, more precise study. In the work presented here, the sampling procedure was formalized and a pre–post multidimensional evaluation was prepared, considering affective, cognitive, and functional state. Furthermore, both an untreated control group, and another, differently treated control group were added, in order to compare VT with other methods.

If the interventions were effective, we expect to observe a significant positive change in cognitive and functional states, and a reduction of behavioral problems, as indicated both by the caregivers and by the amount of psychotropic medications needed. We expect these results to be particularly evident in the case of VT applied in group.

## 2. Subjects and methods

### 2.1. Participants

Thirty elderly residents of a large nursing home were selected on the basis of the following criteria: (i) diagnosis of dementia, (ii) residency at least 6 months or longer, (iii)

above 70 years of age (mean age = 86.8 years; range from 71 to 96), and (iv) lack of concomitant psychiatric pathologies.

Three participants died during the period of observation, their initial data were discarded from the analyses. Data from 27 participants were retained.

### 2.2. Measures applied

#### 2.2.1. Cognitive functioning

The Mini Mental State Examination (MMSE) (Folstein et al., 1975) was administered to assess the cognitive impairment of the participants. Composed of 30 items, it investigates time and space orientation, registration, attention and calculation, recall, language, and visual construction. Score ranges from 0 to 30, higher scores indicate higher functioning; a score of less than 23 is usually associated with the cognitive impairment.

#### 2.2.2. Activities of daily living

In order to assess the functional activity level of the participants, we selected the Bedford Alzheimer Nursing Severity Scale (BANSS), which was developed specifically for advanced stages of dementia (Volicer et al., 1994) and it is based on caregivers' interview. Score ranges from 7 to 28, and is directly proportional to the functional impairment.

#### 2.2.3. Behavioral problems

The UCLA neuro-psychiatric inventory (NPI) (Cummings et al., 1994) assesses 10 behavioral disturbances as, for example, anxiety, dysphoria, agitation, and disinhibition. Information is obtained from caregivers. Score ranges from 0 to 120, higher scores indicate extremely severe and frequent disturbances.

### 2.3. The study procedure

Before the period of treatment was started (T1), a single evaluator administered the MMSE during the morning time, in a living room familiar to the elderly person. BANSS and NPI were filled in by the same evaluator through interviews with the head-nurse of the unit. The 30 participants were divided into three groups, matched for age and functional state as expressed by the score at the battery test (MMSE, BANSS, and NPI). Each of the three groups was randomly assigned to one condition: Controls (C), VT-group, and SR-group. During 3 months, the two experimental groups were conducted by two distinct facilitators, 2 days a week, at the same time in the afternoon (4.00 p.m.). Each session lasted from 45 to 60 min.

After 3 months (T2), the same evaluator of the pre-treatment phase administered again the battery test, following the same procedure. We registered also the use of psychotropic medication, for each person, in T1 and T2.

## 3. Results

The results are shown in Table 1. The scores at T1 indicated moderate to severe cognitive impairment in all the participants by the MMSE scores, ranging from 2 to 20. The

Table 1
The results of the psychometric tests at T1 and T2 in the study groups (mean ± S.D.)

| Tests, at times | VT 9[a] | SR 9[a] | Control 9[a] |
|---|---|---|---|
| MMSE T1 | 11.0 ± 7.0 | 12.4 ± 4.5 | 12.3 ± 4.3 |
| MMSE T2 | 12.3 ± 8.1 | 14.7 ± 3.2 | 11.3 ± 5.9 |
| BANS T1 | 14.2 ± 2.8 | 14.2 ± 5.8 | 13.6 ± 4.7 |
| BANS T2 | 14.4 ± 4.9 | 12.8 ± 4.8 | 15.2 ± 5.0 |
| NPI T1 | 18.9 ± 14.9 | 17.6 ± 15.4 | 10.6 ± 10.3 |
| NPI T2 | 14.9 ± 13.3 | 9.9 ± 9.1 | 10.8 ± 9.0 |

[a] Number.

dependence of the subjects was also from moderate to severe, ranging 8–21 in all but one participants (BANSS score = 7). Severe behavioral disturbances were found in 23% of the participants, moderate and light disturbances in the 70%. Only two individuals were not affected by behavioral problems (NPI score range from 0 to 52). Globally, the measurement at T1 indicated a quite severe impairment of the participants, at all three levels studied: functional, affective, and cognitive one.

Analyses were conducted by means of non-parametric tests, given the limited number of participants in each group. The Kruskal–Wallis test confirmed that the three groups were homogeneously formed (none of the $\chi^2$ reached significance). The groups did not differ significantly either in T2, but significant within-group effects could be observed: the Wilcoxon signed ranks test revealed that the best results were observed in the SR group, where the MMSE score raised significantly ($Z = -2.05$, $p < 0.05$), and both BANSS and NPI scores decreased significantly ($Z = -2.41$, $p < 0.02$, and $Z = -2.52$, $p < 0.01$, respectively). The VT group was effective in reducing the NPI scores ($Z = -2.21$, $p < 0.03$), but the increase of MMSE score did not reach significance ($Z = -1.81$, NS), and the BANSS was almost the same at T1 and T2 ($Z = -0.34$, NS). The control group showed a general decline, significant in the BANSS scores ($Z = -2.06$, $p < 0.05$). Data about psychotropic medications at T1 and T2 were analyzed trough the sign test, and no differences emerged in any of the groups.

## 4. Discussion and conclusion

Overall, in our sample of individuals suffering from dementia, small group interventions were effective in reducing behavior disorders and in increasing both cognitive and daily activity functioning. The within-subjects comparisons showed improvements after a 3-month period of treatment. VT in group was less effective than the SR in our study: the latter lead to a significant reduction of the behavioral disturbances and cognitive impairment, and a significant enhancement in level of functioning. In the VT in group there was a significant decrease of behavioral problems, but the effects on cognitive and functional levels appeared only as a tendency.

The individuals in the control group did not show any improvement and rather a slight deterioration was noticed in cognitive and daily functioning. The within-subjects

comparisons seem to lead to an optimistic conclusion about the effects of non-pharmacological intervention, but caution should be used in drawing conclusions because of the lack of significance of the between-subjects comparison: the effects were not strong enough to result in differences between the groups. This could be explained in part by the limited amount of time devoted to the treatments (2 h per week, for 3 months), or eventually, by the relatively low number of subjects involved.

The reduction of psychotropic medications observed previously (Deponte and Sorrentino, 2002) was not observed here. Following other works (Toseland et al., 1997), the administration of these medications in a nursing home is probably affected by many factors, lowering its strength as an index of effectiveness.

The present study lead to a conclusion we already traced in a previous work (Deponte and Sorrentino, 2002): the VT is probably as effective, as other forms of interventions, not because of the techniques proposed, but for what implies. More than specific techniques, what is effective is the general recognition of the value of the person, the greater attention given to the individuals and to their needs, the more intimate relationship between the elderly person and the caregiver, the emotional support, the affirmation of the dignity of the person independently from his/her psychophysical conditions. VT represents one of the many emergent approaches that are useful in avoiding the trap of objectification of the demented patient, one of the many social factors that intervene in the process of dementia (Kitwood, 1997). More than for the patient, VT seems useful for the caregiver, because of the interpretative framework it proposes. From this perspective, its impact on the well-being of the confused person is not direct, but mediated by the caregiver's feelings of being able to find a meaning in the patient's behavior. It is not a little thing.

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