

# Implicit Memory of People with Dementia Facilitates their Independence in an Artistic Painting Activity

Eduardo González-Cabañes MA,<sup>1</sup> Penelope Kuhn PhD,<sup>2</sup> Sara Ortega-Merino BA,<sup>3</sup>  
Universidad de Oviedo,<sup>1</sup> California State University,<sup>2</sup> & Universidad de Burgos<sup>3</sup>

**Introduction:** Independence in hobbies is an important factor in the quality of life of PWD. It is through hobbies how we mainly express our personality. In the present study we focus on artistic painting. The creative process in artistic painting is not limited by symptoms of the dementia. However, there is little evidence of artistic painting in people in the severe stages of the dementia. The aggravation of their symptoms, especially executive function and declarative memory symptoms, might interfere in their independence performing the painting procedures. On the other hand, implicit memory is generally spared in PWD, allowing them to automatize procedures as they practice. Also, some studies suggest that this implicit learning is higher when practice sessions are close in time with each other, specifically, separated by 2/3 days rather than a week. Can we apply these principles to promote their independence in artistic painting?

**Objectives:** Our first objective was exploring how the independence of PWD in an art painting activity was related to their wellbeing and engagement in the activity. Secondly, we wanted to explore whether they could gain more independence as they practiced more sessions, comparing their independence in the first session to their independence in their fourth session. Our final objective was exploring if these improvements would be moderated by the spacing of the practice, by comparing a group who practiced once a week and a group who practiced three times a week.

**Methods:** Twenty-three participants with dementia were randomly assigned to practice once a week ( $n = 11$ ) or three times a week ( $n = 12$ ) in an artistic painting activity. Two independent blind observers rated their independence painting, well/ill-being expressions, and engagement with the activity, using a systematic selection of observation intervals from videotapes of their first and fourth session. Results were displayed separately for participants with severe dementia ( $n = 9$ ) and participants with milder dementias ( $n = 14$ ).

**Results:** Independence was directly correlated with engagement and inversely correlated to expressions of ill-being. Participants significantly gained independence from the first to the fourth session. In applicability terms, it was meaningful the improvements of participants with severe dementia, who passed from receiving assistance in most observation intervals, and some of them requiring constant assistance, to being independent in most of the observation intervals for all requirements, and none of them requiring constant assistance. We did not observe any significant effect regarding the spacing of the practice sessions.

**Conclusion:** It is plausible to include participants with severe dementia in group activities of artistic painting. Nevertheless, it might be convenient they previously go through individualized sessions, through which they can reach standard levels of independence. Such levels of independence might be crucial for their socialization with others as equals, and for the promotion of their sense of autonomy and competence in the activity.