

**Objective:** Caring for a person with dementia is a chronic stress situation. The quality of the relationship between the family caregiver and the person with dementia (PWD) is a relevant variable to understanding caregivers' well-being. However, there are no specific scales that measure this variable in this context. This study aims to analyze the preliminary psychometric properties of the Relationship Quality Scales in Caregiving" (RQSC) " which measures caregivers' perception of different aspects of the relationship in the dyad before the onset of dementia and the present moment.

**Methods:** The sample was composed of 55 family caregivers of people with dementia. The Relationship Quality Scales in Caregiving (RQSC) include two subscales assessing the quality of the relationship, respectively, before the dementia onset (Past Relationship; PR) and in the present moment (Current Relationship; CR), and it also provides an index of the perception of change (Change score) in the relationship quality, namely: Actual Quality minus Past Quality. Internal consistency and factor validity (through exploratory factor analysis and parallel analysis) were explored. Construct validity of the instrument was also explored, analyzing its correlation with caregivers' reactivity to behavioral and psychological symptoms of dementia (BPSD), caregivers' ambivalent feelings towards the care recipient, and caregivers' depressive symptoms.

**Results:** The results from the EFA and parallel analyses suggest that both RQSC subscales have a unidimensional structure. Both the PR subscale and the CR subscale show good to excellent reliability and validity indexes. Significant negative correlations between both PR and CR subscales and reactivity to BPSD, ambivalent feelings, and depression have been found

**Conclusion:** The instrument seems to show good psychometric properties that recommend its use. The results support the relevance of caregivers' perception of their relationship with the PWD for understanding caregivers' wellbeing. However, these are preliminary results that should be replicated in future studies using a bigger sample and additional psychometric data.

## **P86: Effect of Virtual Reality on Stress Reduction and Change of Physiological Parameters Including Heart Rate Variability in People With High Stress: An Open Randomized Crossover Trial**

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**Introduction:** Although, attempts to apply virtual reality (VR) in mental healthcare are rapidly increasing, it is still unclear whether VR relaxation can reduce stress more than conventional biofeedback.

**Methods:** Participants consisted of 83 healthy adult volunteers with high stress, which was defined as a score of 20 or more on the Perceived Stress Scale-10 (PSS-10). This study used an open, randomized, crossover design with baseline, stress, and relaxation phases. During the stress phase, participants experienced an intentionally generated shaking VR and serial-7 subtraction. For the relaxation phase, participants underwent a randomly assigned relaxation session on day 1 among VR relaxation and biofeedback, and the other type of relaxation session was applied on day 2. We compared the State-Trait Anxiety Inventory-X1 (STAI-X1), STAI-X2, the Numeric Rating Scale (NRS), and physiological parameters including heart rate variability (HRV) indexes in the stress and relaxation phases.

**Results:** A total of 74 participants were included in the analyses. The median age of participants was 39 years, STAI-X1 was 47.27 (SD = 9.92), and NRS was 55.51 (SD = 24.48) at baseline. VR and biofeedback significantly decreased STAI-X1 and NRS from the stress phase to the relaxation phase, while the difference of effect between VR and biofeedback was not significant. However, there was a significant difference in electromyography, LF/HF ratio, LF total, and NN50 between VR relaxation and biofeedback

**Conclusion:** VR relaxation was effective in reducing subjectively reported stress in individuals with high stress.

## **P115: Testing the feasibility of a multicomponent neuropsychological intervention for individuals at-risk of dementia: the REMINDER program**

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**Objective:** Interventions aimed to optimize cognitive function and functionality in individuals at risk of dementia were scarce in validity studies. While some RCTs have been developed in cognitive training interventions, studies of multicomponent interventions (cognitive, social, and behavioral) integrating intervention targeting psychosocial risk factors (social isolation, depression, low cognitive reserve) is absent. Additionally, few efforts have been made to develop such validity studies with individuals at higher risk of dementia who still do not present objective cognitive decline, despite current recommendations in this regard. We aimed to start the validation of a 20-session multicomponent intervention – REMINDER program - with a feasibility test and a preliminary efficacy testing using a comprehensive outcome assessment protocol.

**Methods:** A feasibility randomized controlled trial (RCT) was conducted, recruiting