Apathy is the most prevalent neuropsychiatric symptom (NPS) in patients with Alzheimer's disease (AD) and it has been reported to influence cognitive performance and functional abilities. We evaluated the association of apathy with other NPS, cognition and functioning in activities of daily living (ADL) in AD outpatients without clinical depression.

Mild-to-moderate AD patients (N=176; 122 female; age=74.5±8.6 years; MMSE=18.7±3.5) were subjected to a neuropsychological evaluation assessing cognition (ADAScog+), ADLs (DAD), NPS (NPI) and depression (Hamilton Depression Scale). Significant clinical depression was ruled out according to the provisional criteria for depression in AD. ApoE genotype, education, psychotropic medication and GDS disease stage were controlled. According to NPI-apathy scores, patients were divided into three groups: no-apathy (score=0; N=57); mild-apathy (score=1-3; N=55); and relevant-apathy (score≥4; N=64).

AD patients with mild apathy (p< 0.05) or relevant apathy (p< 0.01) had reduced DAD scores as compared to patients without apathy. Partial correlation analysis demonstrated a significant correlation between apathy and DAD scores (r=-0.345; p< 0.001). Apathy was associated with significant impairments in instrumental ADLs, initiation, and planning and organization, but not in basic ADLs and effective performance DAD subscales. No significant differences were found between apathy-related groups for cognitive performance.

According to results of the present study, apathy is associated with disability but not with cognitive performance in mild to moderate AD outpatients without clinical depression. This finding suggests that apathy might influence the rate of functional deterioration in AD, which could also be relevant for the clinical response to therapeutic interventions.