

Title: Predictors of the Frequency of Engagement in Occupation among Long-Term Care Residents who use Wheelchairs as their Primary Means of Mobility.

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Introduction: Most residential-care facility/nursing home residents use wheelchairs as their primary means of moving. Although research has identified some predictors of participation in facility activity programs, few studies have looked at predictors of occupation more broadly, and these studies have seldom included measures of wheelchair-related or environmental factors that may affect occupation.

Objectives: To identify predictors of the frequency of occupational engagement(FOE) among residents who use wheelchairs as their main means of mobility.

Method: We conducted a cross-sectional study with 268 subjects from 11 residential care facilities, including 149 competent residents and 119 residents with cognitive impairment who required the use of proxy respondents. We measured our main outcome, FOE, with the Late Life Function and Disability Instrument-Disability Component. We used hierarchical linear regression modeling to examine the relationship between FOE scores and data from personal (sociodemographic, functional independence, depression, cognition, comorbidity), wheelchair-related (propulsion skills, fit and comfort, wheelchair type, and mobility) and environmental (perceived barriers to occupational engagement, visits from significant others) measures.

Results: Subjects had a mean age of 84 years(SD=8.6) and 69% were women. Thirty percent of competent subjects and 43% of proxy subjects never or rarely took part in organized social activities. Proxy subjects had significantly lower FOE scores ($p=0.005$). Regression models for competent and proxy subjects respectively accounted for 32% and 51% of variance in FOE. For competent subjects, the best predictors of FOE were depression ($p<0.001$), perceived environmental barriers ($p=0.001$), hours spent in the wheelchair per day ($p=0.076$), and mobility ($p=0.072$). For proxy subjects the best predictors of participation were mobility ($p<0.001$), functional independence ($p=0.004$), cognition ($p=0.01$) and depression ($p=0.054$).

Conclusion: Mobility and depression were variables that were important predictors of FOE for both groups. Interventions that decrease depression, including non-pharmacological ones, or increase mobility may improve FOE among residents, but the efficacy of these treatments needs evaluation.

Contribution: As prescribers of wheeled mobility aids, occupational therapists have the opportunity to improve mobility among residents, which may facilitate their engagement in occupation. By facilitating more frequent engagement in occupation, clinicians may be able to decrease depression and enhance participation for long-term care residents.