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## An ICF Framework for Game-Based Experiences in Geriatric Care

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Abstract: Board games have been used for different purposes in geriatric care, demonstrating good results for health in general. However, there is not a conceptual framework that can help professionals and researchers in this area to design intervention programs or to think about future studies in this area. The aim of this study was to provide a pilot collection of board games' serious purposes in geriatric care, using a WHO framework for health and disability. Study cases were developed in seven geriatric residential institutions from the center region in Portugal that are included in AGILAB program. The AGILAB program is a serious game-based method to train and spread out the implementation of board games in geriatric care. Each institution provides 2-hours/week of experiences using TATI Hand Game for serious purposes and then fulfill questions about a study-case (player characteristics; explain changes in players health according to this game experience). Two independent researchers read the information and classified it according to the International Classification for Functioning and Disability (ICF) categories. Any discrepancy was solved in a consensus meeting. Results indicate an important variability in body functions and structures: specific mental functions (e.g., b140 Attention functions, b144 Memory functions), b156 Perceptual functions, b2 sensory functions and pain (e.g., b230 Hearing functions; b265 Touch function; b280 Sensation of pain), b7 neuromusculoskeletal and movement-related functions (e.g., b730 Muscle power functions; b760 Control of voluntary movement functions; b710 Mobility of joint functions). Less variability was found in activities and participation domains, such as purposeful sensory experiences (d110-d129) (e.g., d115 Listening), communication (d3), d710 basic interpersonal interactions, d920 recreation and leisure (d9200 Play; d9205 Socializing). Concluding, this framework designed from a brief gamed-based experience includes mental, perceptual, sensory, neuromusculoskeletal, and movement-related functions and participation in sensory, communication, and leisure domains. More studies, including different experiences and a high number of users, should be developed to provide a more comprehensive ICF framework for game-based experiences in geriatric care.

Keywords: board game, aging, framework, experience

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