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Validation of Fall-Related Psychological Measures to Predict Falls Risk Among Independent Living Older Adults

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SUMMARY

It is important to classify older adults living in the community who experience fall-related psychological issues according to their overall risk for falls. By doing so, they can be targeted for interventions that include strategies to improve fall-related psychological difficulties and to reduce the likelihood of a future fall. Before using a fall-related psychological instrument to evaluate the effectiveness of a falls prevention intervention, it is imperative to first know that these instruments are measuring what they were intended to measure in the setting in which they will be used. The goal of this research was to evaluate the psychometric properties of several fall-related psychological instruments to determine the most reliable and valid measure(s) to predict total falls risk among independent living older adults.

Findings from this study provided additional evidence to support the reliability and validity of four fall-related psychological instruments that measured falls efficacy, balance confidence, fear of falling, and perceived consequences of falling, respectively, in a community-based falls risk screening context. Results showed that the four instruments were significantly moderately correlated with each other, mostly moderately correlated with measures of physical activity, mobility, and health-related quality of life (HRQL), and had acceptable internal consistency reliability. It was also found that the balance confidence measure yielded the highest correlations with the physical activity, mobility, and HRQL measures, and was the only instrument that could discriminate between fallers and non-fallers and significantly predict total falls risk.

Overall, this research provided additional psychometric support for four fall-related psychological scales for use with independent-living older adults in a falls risk screenings context. Results from this study also suggest that falls efficacy, balance confidence, fear of falling, and perceived consequences of falling are related yet different constructs, as demonstrated by moderate to large correlations ranging from .40 to .68. Additionally, results also

suggest that the balance confidence instrument may be the better instrument to choose in this context based on the magnitude of its correlations with physical activity, mobility, and HRQL measures, its ability to detect differences in balance confidence levels between fallers and non-fallers, and its ability to predict total falls risk. Findings from this research can aid researchers and healthcare professionals in identifying those older adults in the community who experience fall-related psychological difficulties and in designing interventions to improve fall-related self-efficacy to ultimately prevent future falls and enhance HRQL.

For more information on the fall-related psychological instruments used in this study, please see:

Powell, L.E., & Myers, A.M. (1995). The Activities-specific Balance Confidence (ABC) Scale. *The journals of gerontology. Series A, Biological sciences and medical sciences*, 50A, M28-34.

Yardley, L., Beyer, N., Hauer, K., Kempen, G., Piot-Ziegler, C., & Todd, C. (2005). Development and initial validation of the Falls Efficacy Scale-International (FES-I). *Age & Ageing*, 34, 614-619.

Yardley, L., & Smith, H. (2002). A prospective study of the relationship between feared consequences of falling and avoidance of activity in community-living older people. *The Gerontologist*, 42, 17-23.