Appraisal | Clinimetrics

# Fall Efficacy Scale - International (FES-I)

## Description

Fall Efficacy Scale - International (FES-I) is a questionnaire that assesses fear of falling (FOF).[1] Fear of falling has been defined as an ongoing concern about falling, which ultimately limits the performance of activities of daily living.[2] The 16-item FES-I was developed by the Prevention of Falls Network Europe group (ProFaNE) to augment content covered by the original 10-item Fall Efficacy Scale (FES); the social dimension of FOF was added.[3] In order to minimise the assessment burden and increase the acceptability, a 7-item version of FES-I (short FES-I) has also been developed, validated and recommended for the community-dwelling older population.[4]

**Scoring and administration:** Individuals are asked to rate, on a four-point Likert scale, their concerns about the possibility of falling when performing 16 activities. Individuals are instructed to rate each activity regardless of whether they actually perform it. The scores are added up to calculate a total score that ranges from 16 to 64 for the FES-I and 8 to 28 for the short FES-I.[5] A higher score indicates a greater FOF. The original and translated versions (available in 14 languages) of FES-I questionnaire can be downloaded from the ProFaNE website: www.profane.eu.org.

**Reliability:** The FES-I and short FES-I exhibit excellent internal consistency (Cronbach's alpha = 0.96 and 0.92) and test-retest reliability (ICC = 0.96 and 0.83) in a community dwelling population.[1,4] The 16 items of FES-I demonstrate mean inter-item correlations of 0.55 (range 0.29 to 0.79).[1]

**Validity:** The FES-I correlates highly with the short or original FES (r > 0.90) in the frail elderly.[4,6] Convergent construct validity of the FES-I has been confirmed for: previous falls;[7,8] depressive symptoms;[7] overall disability;[9] low quality of life;[10] and physical impairment.[11] Additionally, the predictive validity (at one year follow up) of the FES-I and short FES-I reveals that both questionnaires accurately predict future falls, physiological falls risk, muscle weakness, overall disability, and depressive symptoms.[12] Delbare et al have defined a cut-point for high FOF as scores > 23 for the 16-item scale and scores > 10 for the 7-item scale.[12]

**Responsiveness/sensitivity to change:** The FES-I and short FES-I have shown adequate to good sensitivity to change in frail older adults with or without cognitive impairment.[6]

**Dimensionality:** The unidimensionality of the FES-I structure has been supported by both factor analysis[5] and Rasch analysis.[12]

## Commentary

The prevalence of FOF is reported to be highly variable; it ranges from 12% to 92% in the elderly.[13,14] Fear of falling may be an important barrier to consider, as it is associated with distress, increased use of medication, decreased physical function, increased risk of falls, reduced quality of life, activity restrictions, fractures, and admission to institutional care.[6,15] Identification, intervention and post-intervention evaluation of FOF may be fundamental to comprehensive physiotherapy management of at-risk populations. The FES-I provides a useful tool to assist in this process.

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