

## Development of the Falls Efficacy Scale International-I (FES-I)

The Falls Efficacy Scale International (FES-I), a 16 item modified version of the Falls Efficacy Scale as introduced by Mary Tinetti and colleagues [1], was developed to assess both easy and more complex physical and social activities, in a range of languages and different cultural contexts. The initial version of FES-I was developed through a series of meetings between WP4 members of the Prevention of Falls Network Europe (ProFaNE). In short, each member of this workpackage on psychological aspects of falling (N Beyer, K Hauer, GIJM Kempen, C Piot-Ziegler, C Todd and L Yardley) examined in 2003 the existing items of the original FES in English to identify any potential difficulties they might pose either for accurate translation or for applicability to their cultural context (i.e. Denmark, Germany, the Netherlands, Switzerland, and the United Kingdom, respectively) to increase conceptual equivalence in the translation process later on [2,3]. The wording of items that posed potential problems was then revised through discussion during several meetings in 2003 and 2004 and through the discussion board of the ProFaNE website. Next, the additional items to assess more complex and social activities were selected, drawing on the literature (i.e. selected from instruments such as SAFFE [4], modified FES [5], and ABC [6]) and the professional experience of workpackage members. The cross-cultural face validity of the terminology of these additional items was checked as for the original FES items, and examples useful for different settings were added where needed. The resulting questionnaire comprised sixteen items, including the ten original items from the FES (with some rewording where necessary) and six new items assessing walking on slippery, uneven or sloping surfaces, and visiting friends or relatives, going to a social event or going to a place with crowds. To keep comparability as much as possible, we employed the four response options (in stead of the initial 0% - 100% levels of confidence response format [1]) used with the FES in the FICSIT trial [7]. Elsewhere we have reported the initial validation of the English language version of the FES-I [8], which has been shown to be a valid and reliable measure. The English version has by 2006 been translated into Brazilian-Portuguese, Danish, Dutch, Finnish, (Swiss-)French, German, Greek, Hindi, Norwegian, Punjabi, Spanish, Swedish and Urdu. Translation of the FES-I from English into a local language should be done by a specific translation protocol (see Ten Translation in English on this website). A cross-national study of FES-I using data from comparable samples in Germany, the Netherlands, and the United Kingdom showed fine psychometric properties across different countries [9]. Additional information about the use of local versions of FES-I can be obtained from the contact persons (see Find a FES-I on this website). When the FES-I is used in (scientific) publications, the following two references should be always referred to:

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

Kempen GIJM, Todd C, Haastregt JCM van, Zijlstra GAR, Beyer N, Freiberger E, Hauer K, Piot-Ziegler C, Yardley L. Cross-cultural validation of the Falls Efficacy Scale International (FES-I) in older people: Results from Germany, the Netherlands and the United Kingdom were satisfactory. *Disabil Rehabil.* In press.

## References

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3. Guyatt GH. The philosophy of health-related quality of life translation. *Qual Life Res* 1993; 2: 461-465.
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8. Yardley L, Beyer N, Hauer K, Kempen GIJM, Piot-Ziegler C, Todd C. Development and initial validation of the Falls Efficacy Scale International (FES-I). *Age Ageing* 2005; 34: 614-619.
9. Kempen GIJM, Todd C, Haastregt JCM van, Zijlstra GAR, Beyer N, Freiberger E, Hauer K, Piot-Ziegler C, Yardley L. Cross-cultural validation of the Falls Efficacy Scale International (FES-I) in older people: Results from Germany, the Netherlands and the United Kingdom were satisfactory. *Disabil Rehabil.* In press.