

# Fear of falling in older persons: does it protect or does it hurt?

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Falls Network Forum 2011

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1. Fear of falling as a fall risk factor

2. Assessment of fear falling

3. Fear of falling interventions

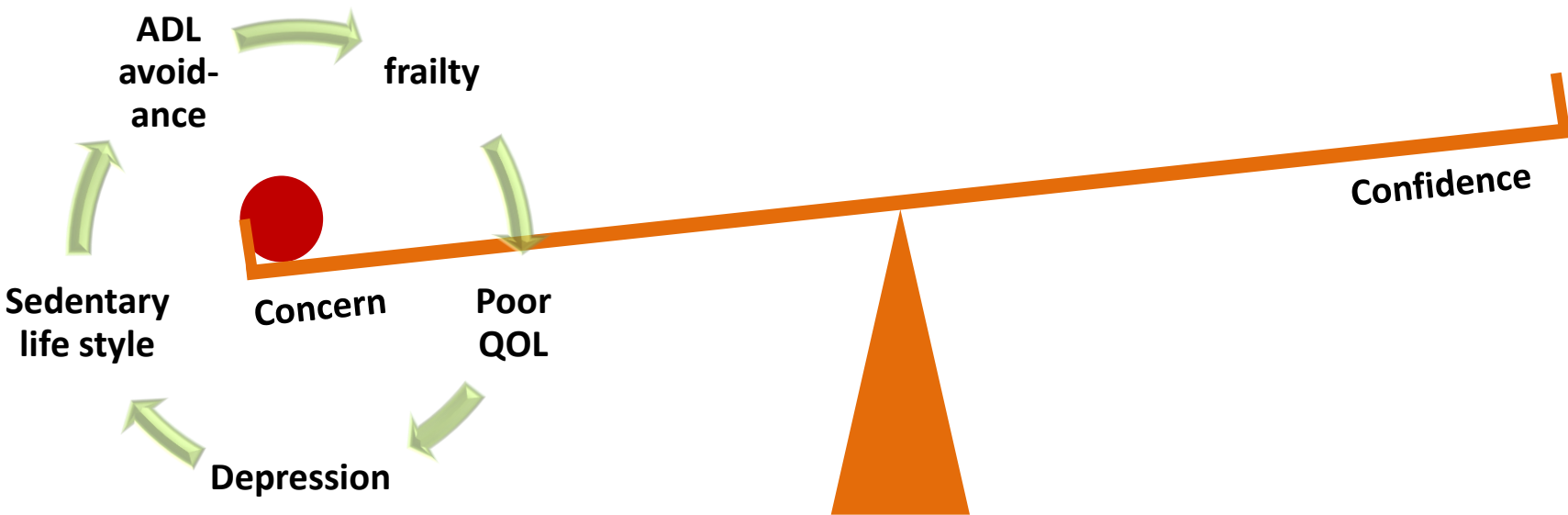
I'm getting a bit older and I feel that I am not as stable on my feet any more. The other day my sister had a bad fall and broke her wrist. She has always been the better one ! I don't want to imagine what would happen if I would break my hip after a fall ... I don't think that I would be able to cope by myself anymore.



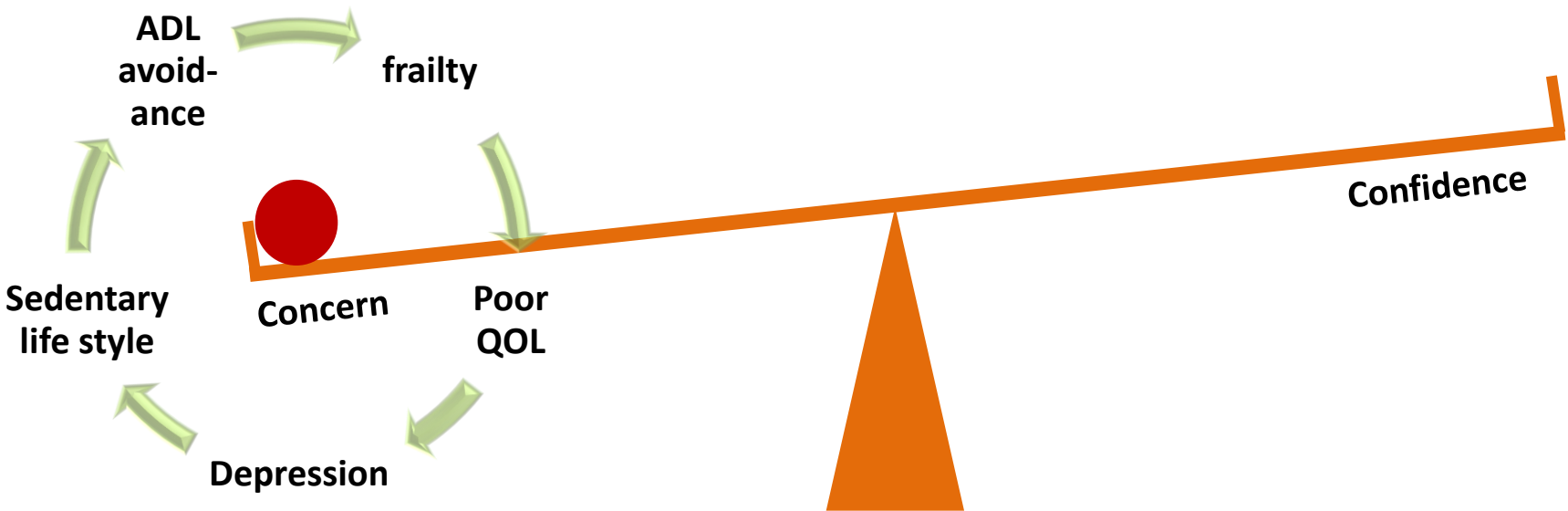
# Fear of falling

- Important psychological factor associated with falls in older people (since 1982)
- Prevalence
  - 29-92% in older people who have already fallen
  - 12-65% in older people who have NOT fallen
  - Women > men
  - Increases with age
- Many associated factors

# Fear of falling: good or bad ?



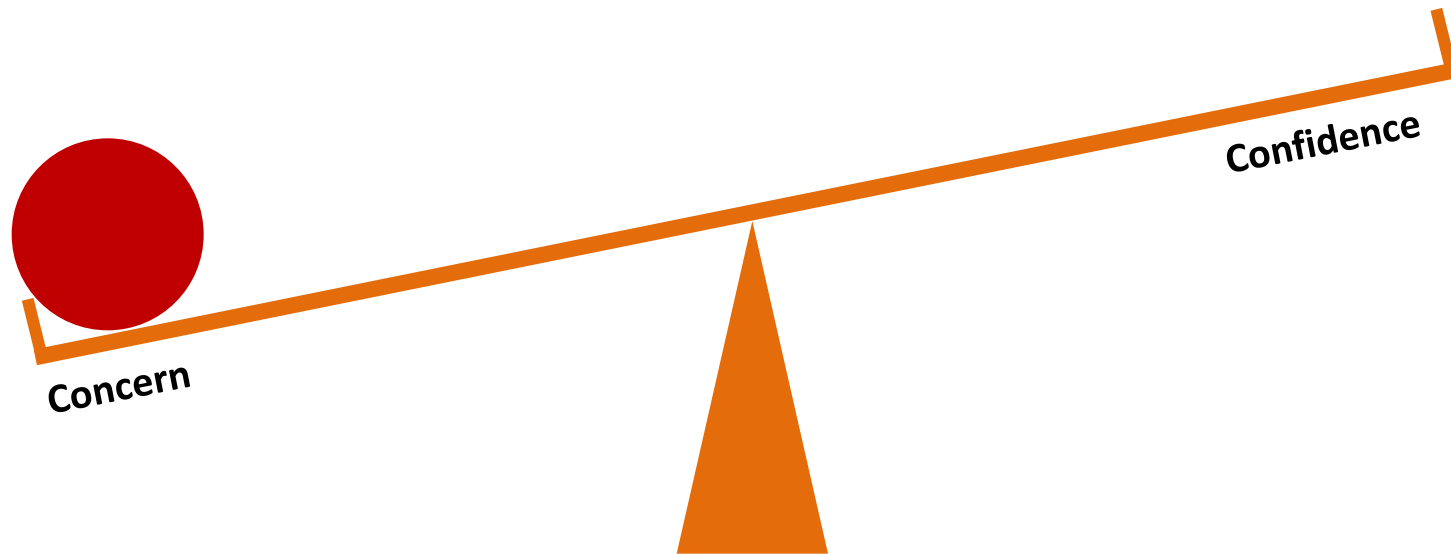
# Fear of falling: good or bad ?



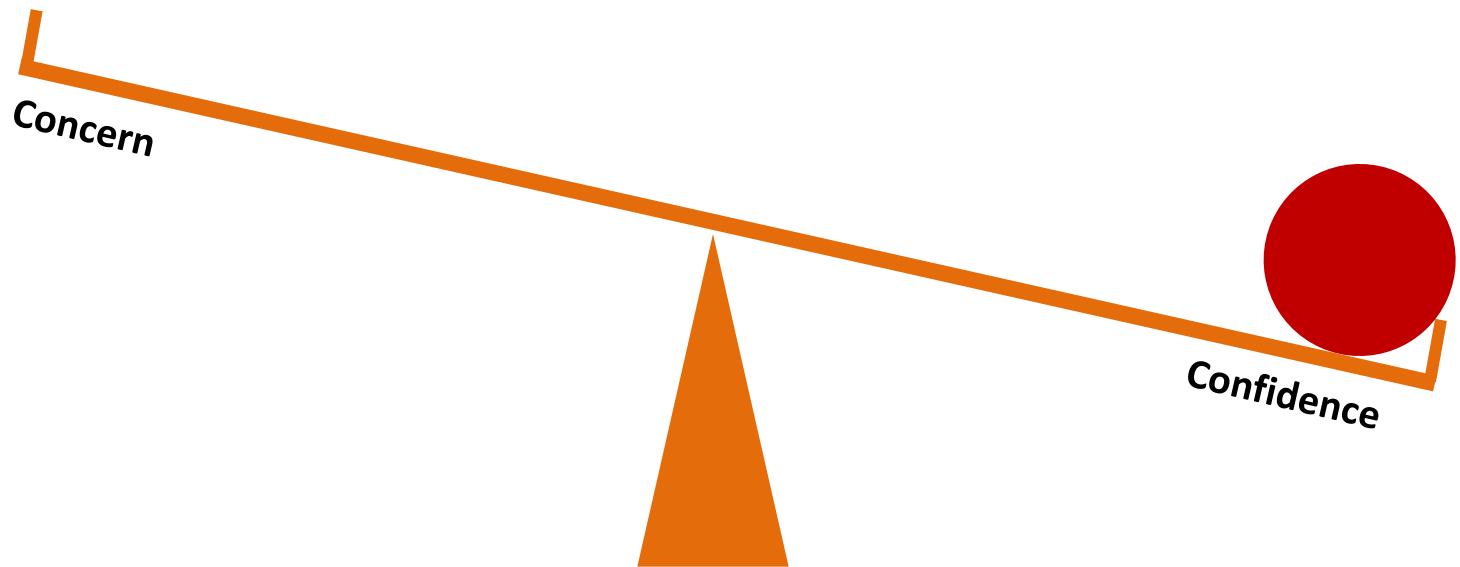
# Fear of falling: good or bad ?



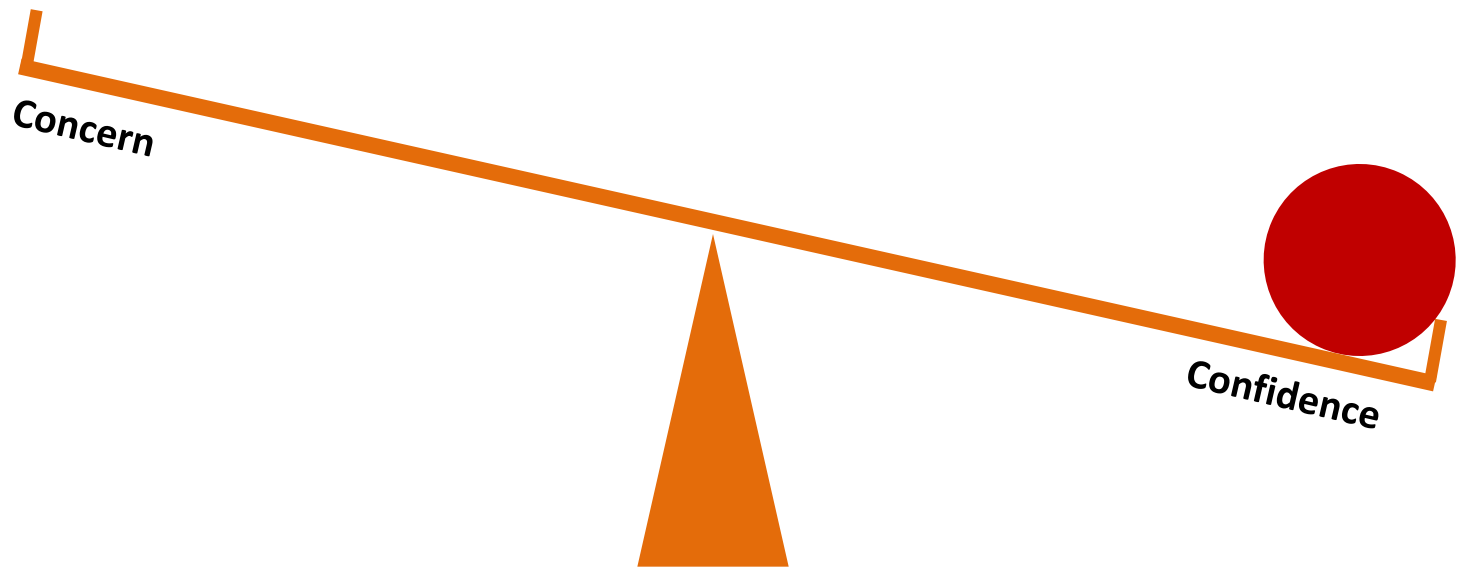
# Fear of falling: good or bad ?



# Fear of falling: good or bad ?



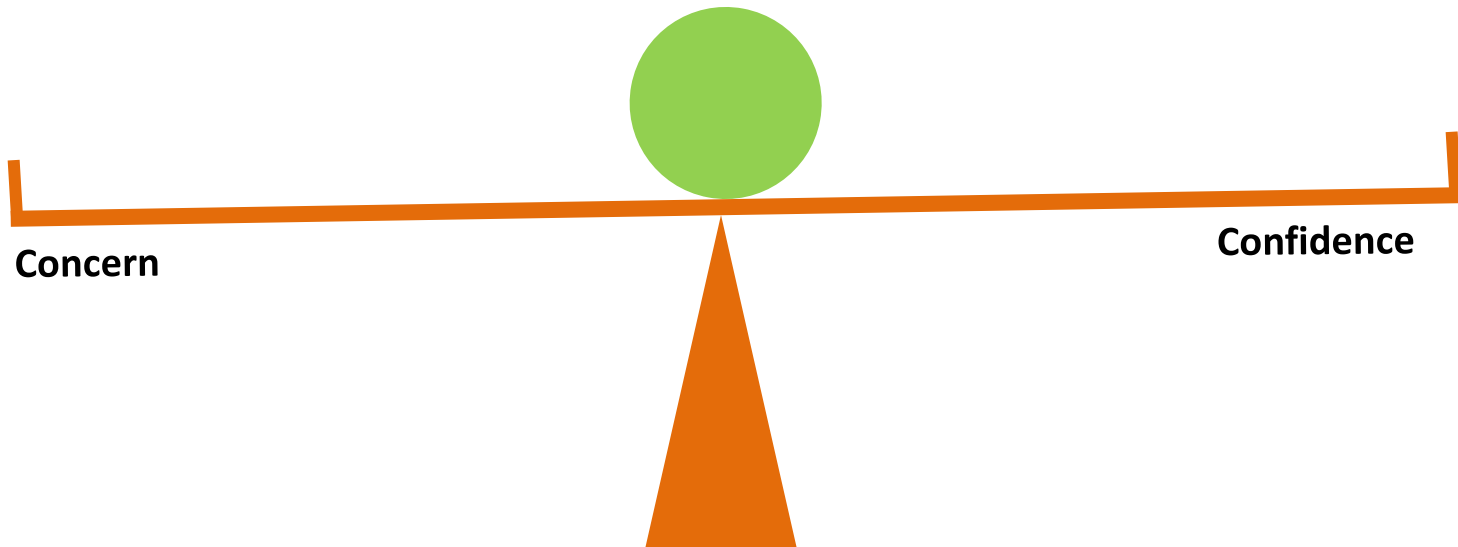
# Fear of falling: good or bad ?



# Fear of falling: good or bad ?

## The perfect balance

- Awareness
- Realistic appraisal of balance ability and falls risk



# Disparity

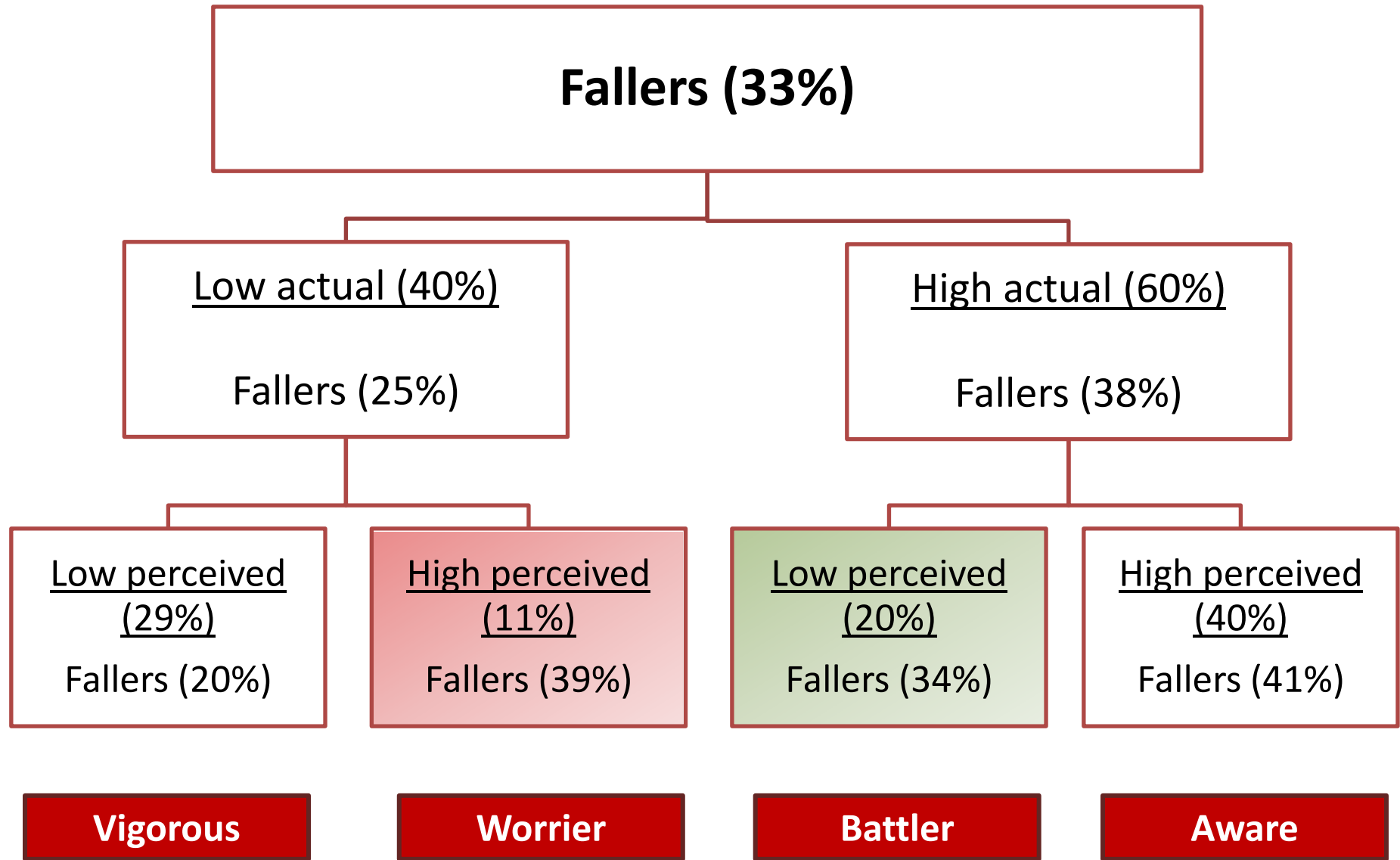
subjective perception  
of fall risk

*versus*

objective physiological  
fall risk



*Results from Classification and Regression Tree analysis*



# Conclusion

- Many elderly people under or over estimate their risk of falling
- Disparities between perceived and physiological fall risk influence the probability of falling
  - Worriers have a higher falls rate despite low actual risk
  - Battlers have a low perceived risk despite high actual risk + slightly lower falls rate
- Fear of falling leads to falls, independent of physiological fall risk factors

# Worrier



- Similar fall risk
- Similar activity levels
- **Psychological profile: neurotic personality traits, i.e. increased vulnerability to develop irrational fears**
- More likely to be female
- Older
- Worse self-perceived health
- More medications
- More depressive symptoms
- Lower quality of life

# Battler



- Lower levels of fear of falling
- Less previous falls
- **Psychological profile: emotionally stable, less reactive to stress, happy and satisfied with life**
- Younger
- Better self-perceived health
- Better quality of life
- More planned exercise

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# Conceptualizations

1. ***fear of falling*** = continuous concern regarding falls which may limit ADL
2. ***falls efficacy*** = perceived ability to confidently undertake ADL without falling

	Concept	Indoor	Outdoor	Social	Risky	Items
Single item	Fear	No	No	No	No	1
Multiple items						
FES	Efficacy	Yes	No	No	No	10
MFES	Efficacy	Yes	Yes	No	No	14
FES-I	Concern	Yes	Yes	Yes	No	7 / 16
ABC	Confidence	Yes	Yes	No	No	16
SAFFE	Fear / avoidance	Yes	Yes	No	No	14
Icon-FES	Concern	Yes	Yes	Yes	Yes	10 / 30

# Questions

- Are you concerned about falling?
  - No, a little, quite a lot, very much
- Are there ADL that you are not confident doing because of fear of falling?
  - E.g. Reaching
- Do you avoid certain ADL because you are afraid of falling?
  - E.g. shopping, taking a bath/shower
- Do you avoid certain situations because you are afraid of falling?
  - E.g. going to the markets on a crowded day

# Inventories

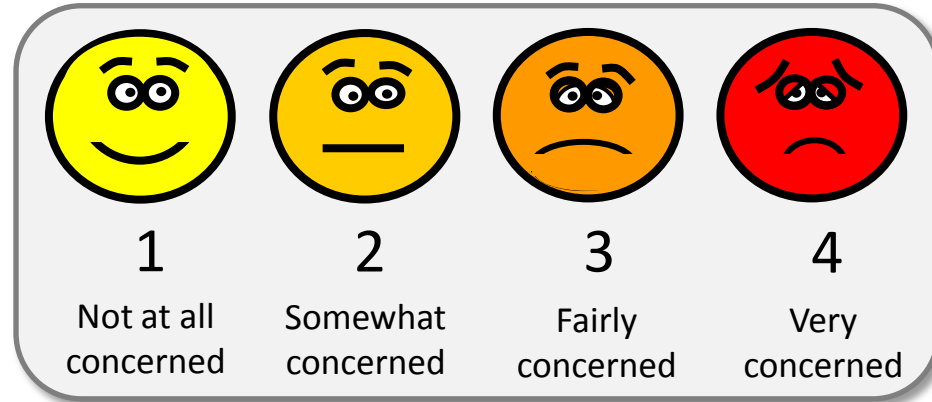
## 1. Falls efficacy Scale International (FES-I)

- [www.profane.eu.org](http://www.profane.eu.org)
- Concern about falling on 7/16 daily activities
  - Including indoor, outdoor, social ADL
- Item score range: 1 (not at all concerned about falling) to 4 (very concerned)
- Interpretation
  - 16-19: Low levels of concern
  - 20-27: Moderate levels of concern
  - 28-64: High levels of concern
- Refs:
  - Yardley, et al. Age and Ageing 2005 34(6):614-619
  - Delbaere, et al. Age and Ageing. 2010;39(2):210-216.

# Inventories

## 2. Iconographical Falls efficacy Scale (Icon-FES)

- [www.NeuRA.com.au](http://www.NeuRA.com.au)
- Concern about falling on 10/30 daily activities
  - Including indoor, outdoor, social, risky ADL
  - Using pictures as visual cues
- Item score range:



- Refs:
  - Delbaere, et al. J Gerontol A Biol Sci Med Sci 2011;2011 (doi: 10.1093/gerona/blr019)



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# A problem we need to consider ...

**Can we do harm by reducing fear of falling in older people during intervention strategies?**

**Probably NOT**

High levels of fear of falling are likely to be dysfunctional and should be reduced

# Clinical implications

- The presence of fear of falling is likely to be a sign that something is wrong:
  - The person has an accurate perception of falls risk
  - The person is spiralling into a vicious circle of general frailty through depression or other psychological factors
- Lower levels of fear of falling are likely to be protective of falls:
  - The person has a low actual falls risk
  - The person has a positive attitude to life and has engaged him/herself in falls preventative activities

**Fallers (33%)**

Low actual (40%)

Fallers (25%)

High actual (60%)

Fallers (38%)

Low perceived (29%)

Fallers (20%)

High perceived (11%)

Fallers (39%)

Low perceived (20%)

Fallers (34%)

High perceived (40%)

Fallers (41%)

**Vigorous**

**Anxious**

**Stoic**

**Aware**

**Intervention**

**Intervention**

**Intervention**

**Intervention**

**Nothing**

**Mainly  
psychological  
+  
Standard falls  
prevention**

**Mainly  
physical  
falls  
prevention**

**Both  
psychological  
and physical  
falls  
prevention**

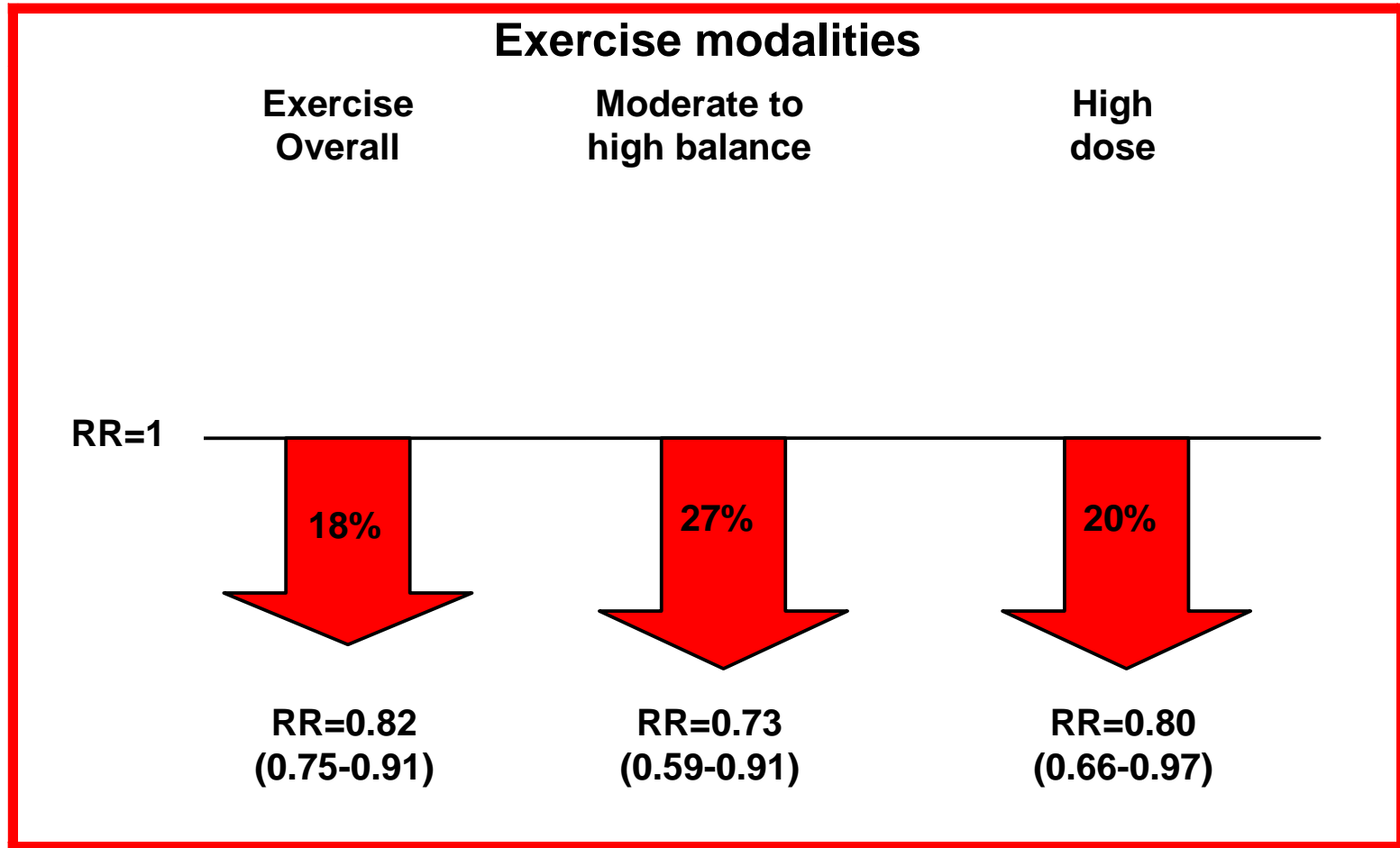
# Falls prevention - exercise

© 2000 Randy Glasbergen. [www.glasbergen.com](http://www.glasbergen.com)



**“The handle on your recliner does not qualify as an exercise machine.”**

# Falls prevention - exercise



# Falls prevention - CBT

- Cognitive restructuring of misconceptions around falls
  - E.g. education on commonness of fear of falling
- Behavioural activation, graded exposure
  - e.g. first time together with someone else
- Problem solving
  - e.g. install a handrail next to the bath tub
- Assertiveness training
  - e.g. ask for assistance

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1. Fear of Falling Study:

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- Chief Investigators: Prof. Stephen Lord, Prof. Jacqueline Close, Dr. Richard Fitzpatrick

2. Memory and Ageing Study of the Brain and Ageing Program

- School of Psychiatry, UNSW
- Chief Investigators: Professors P. Sachdev, H. Brodaty and G. Andrews.

