

# isiZulu translation and cross-cultural adaptation of the ABC scale

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# Meeting the social, cultural and linguistic needs of our patients

- Develop and use culturally and linguistically appropriate assessment tools
- Activities-specific Balance Confidence (ABC)
  - Powers and Myers (1995)
  - Self-report measure (16 items)
  - Measures an individual's confidence in performing specific indoor and outdoor activities without experiencing imbalance or falling or fearing that they will fall.
  - Used extensively for research and clinical purposes
  - Translated into several other languages

# Why the ABC scale?

- Falls is a major public health problem
  - 646 000 fatal falls annually
  - Over 80% of occur in low- and middle-income countries
  - Death rates are highest among adults over the age of 60 years
  - 37.3 million falls require medical attention annually
- Causes
  - Environmental factors
  - Extrinsic factors
  - Intrinsic factors

# Cultural adaptation and translation stages

- Cultural adaptation
  - Determine the semantic-, contextual-, conceptual- and cultural equivalence
- Translate culturally adapted tool from the original language to the native language (with back translation)
- Compare the back translation to the original version
- Pre-test
- Pilot study

# Cultural adaption

| Item |                     | Description of items  |
|------|---------------------|---|
| 3    | Original            | Bend over and pick up a <b>slipper</b> from the front of the <b>closet</b> floor                  |
|      | Cultural adaptation | Bend over and pick up <b>shoes</b> from the front of a <b>cupboard</b> floor                      |
|      | isiZulu             | <i>Ugoba futhi ucosha ophaca endaweni yakho yokugcina izimpahla?</i>                              |
| 14   | Original            | Step onto or off an <b>escalator</b> while you are holding onto a railing                         |
|      | Cultural adaptation | Step onto or off an escalator ( <b>Description in Zulu</b> ) while you are holding onto a railing |
|      | isiZulu             | <i>ugibela noma wehla kwi-escalator (izitebhisi ezihambayo) ubambelele ezinsimbini zayo?</i>      |
| 16   | Original            | Walk outside on <b>icy sidewalks</b>  |
|      | Cultural adaptation | Walk outside on <b>wet/slippery floor/pavement.</b>   |
|      | isiZulu             | <i>uhamba ngaphandle ezindaweni ezineqhwa phansi noma kwi-pavement/phansi?</i>                    |

# Reliability and validity of the ABC-Z scale

- A high internal consistency was obtained with a Cronbach's alpha value of .935
- Test-retest reliability was .82 which is indicative of a good correlation between the items of the ABC-Z scale
- Inter-rater reliability was .88 which indicates very good agreement and reproducibility of the ABC-Z scale that was conducted by two raters in this study.



# Self-perceived balance confidence levels

|       | ABC-Z<br>score | Original ABC<br>score | Brazilian ABC<br>score | Chinese ABC<br>score |
|-------|----------------|-----------------------|------------------------|----------------------|
|       | n = 32         | n = 60                | n = 40                 | n = 100              |
| Mean  | 51.02273       | 59.6375               | 81.7875                | 71.8563              |
| Range | 26.9-74.2      | 20.7-89.5             | 61.2-96.7              | 48.4-89.9            |
| SD    | 14.38075       | 27.7                  | 10.1                   | 23.7                 |

# In summary

- The ABC-Z scale is a valid and reliable measure of balance confidence
- Older person should be routinely screened for known fall risk factors
- Hearing health professionals should endeavour to use culturally and linguistically appropriate assessment tools



# References

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*- Gandhi*