

Reliability of the MIDVAQ, a French Quebec Ecological Adaptation of the *Melbourne Low Vision ADL Index, Weighted Version*

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Disclaimer

No conflicts of interest exist for the presenter,
financially or otherwise



The MIDVAQ

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Mesure de l' Impact de la Déficience Visuelle dans les Activités Quotidiennes ¹

French-Quebec translation and adaptation of the Melbourne Low Vision ADL Index – Weighted version ²

1. Duquette J, Boisvert I, Boutet M, Normand M & MC Wanet-Defalque (2011). *Mesure de l'impact de la déficience visuelle dans les activités quotidiennes*. Longueuil : Institut Nazareth et Louis-Braille, 81 pages.
2. Haymes, S., Johnston, A., & Heyes, A. (2001). A Weighted version of the Melbourne Low-Vision ADL Index: a measure of disability impact. *Optometry and vision science*, 78(8), 565-579.

Objective of the MIDVAQ

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- To measure the **personal impact of the disability** caused by the visual impairment in **instrumental activities of daily living (IADL's)**, considering:
 - ✓ The **ability** to perform the task
 - ✓ The **personal importance** of the activity

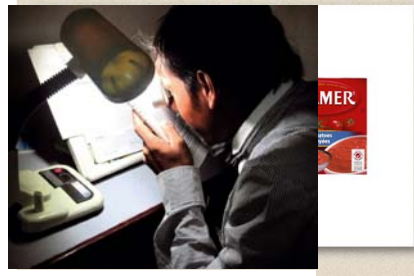
Part A – Observed Performance

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16 near vision items

- **Finding information** (medicine label, account, packet labels, letter, tel book)
- **Telling time** (wrist watch, digital display, wall clock)
- **Reading** (newspaper print, headlines)
- **Writing** (cheque)
- **Faces**
- **Coins**
- **Telephone**
- Needle **threading**
- **Pouring** water

Contextual translation & adaptation



Source: Community Eye Health, on flickr

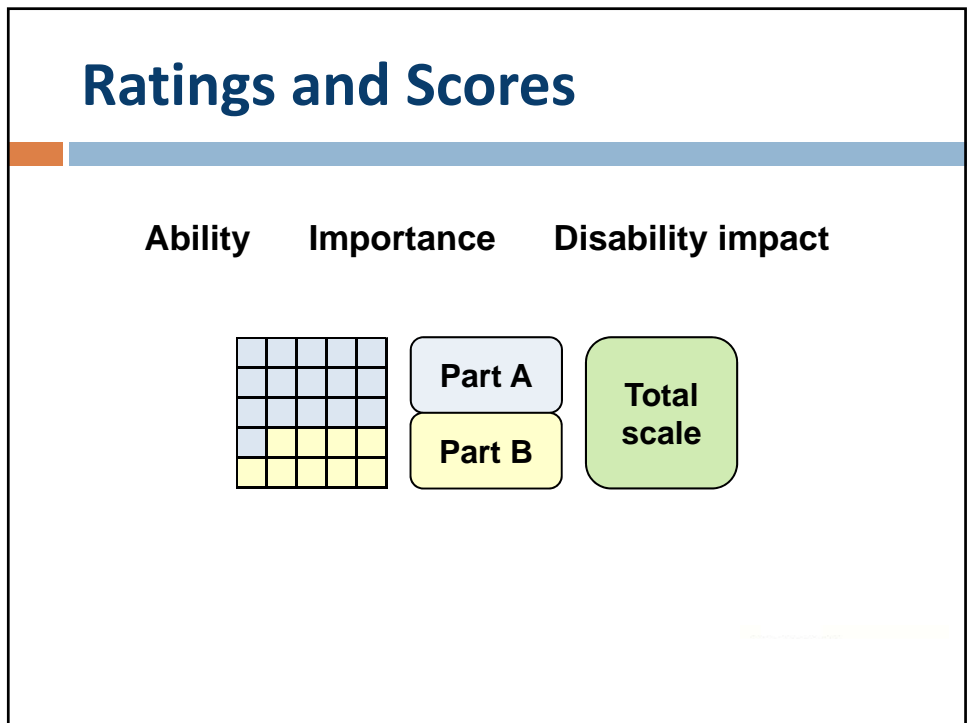
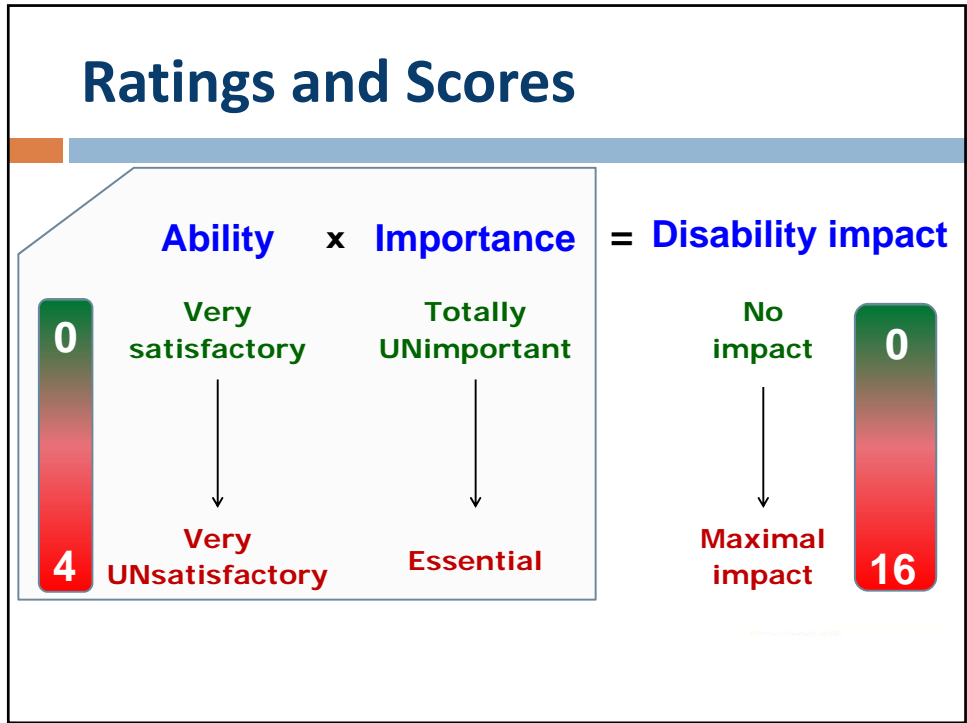
Part B – Questionnaire

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9 self-care and domestic life activities

1. Dressing
2. Grooming
3. Bathing
4. Eating
5. Managing medicine
6. Preparing meals
7. Mobility
8. Housework
9. Shopping





Research Objective

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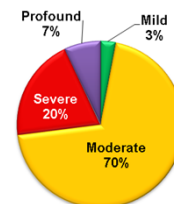
To determine the **Reliability** of the MIDVAQ

- Interjudge
- Test-retest
 - ◆ MIDVAQ components
 - ◆ Part A parallel versions (*Ability rating*)

Subjects




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- N = 100 (52 F, 48 M)
 - ◆ 71 ± 14 yrs old (range 33 - 95)
- No active rehabilitation services episode
- Moderate to profound low vision
 - ◆ Central vision loss: n = 40
- Independent living
- No significant physical or cognitive impairment



Method

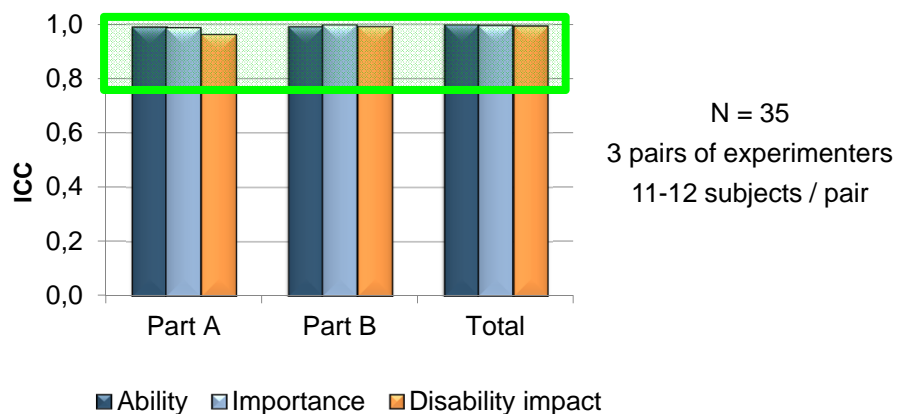
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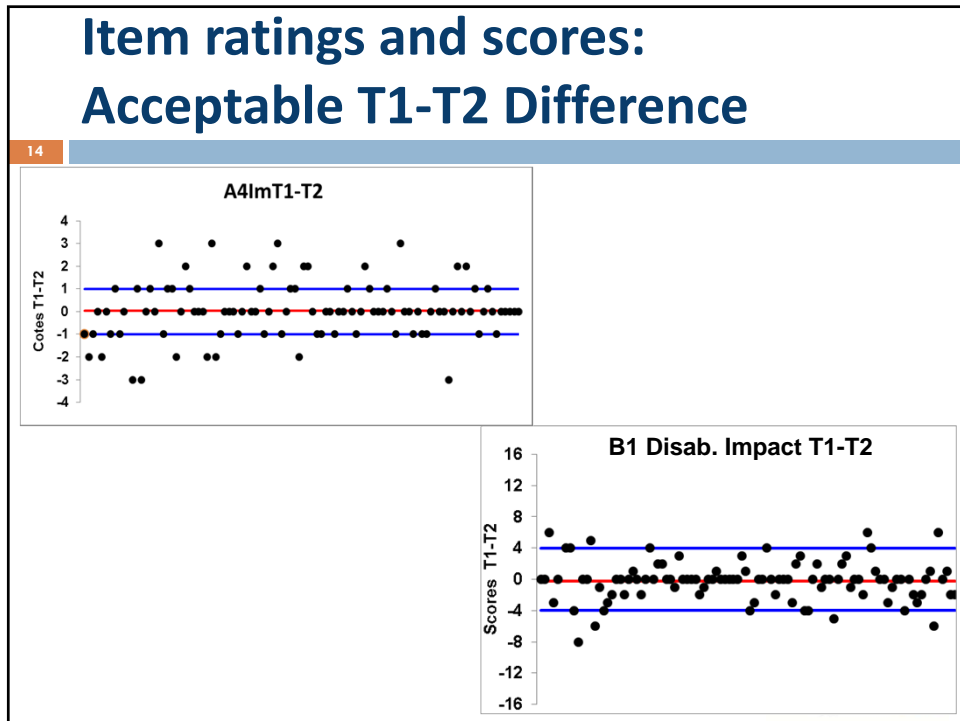
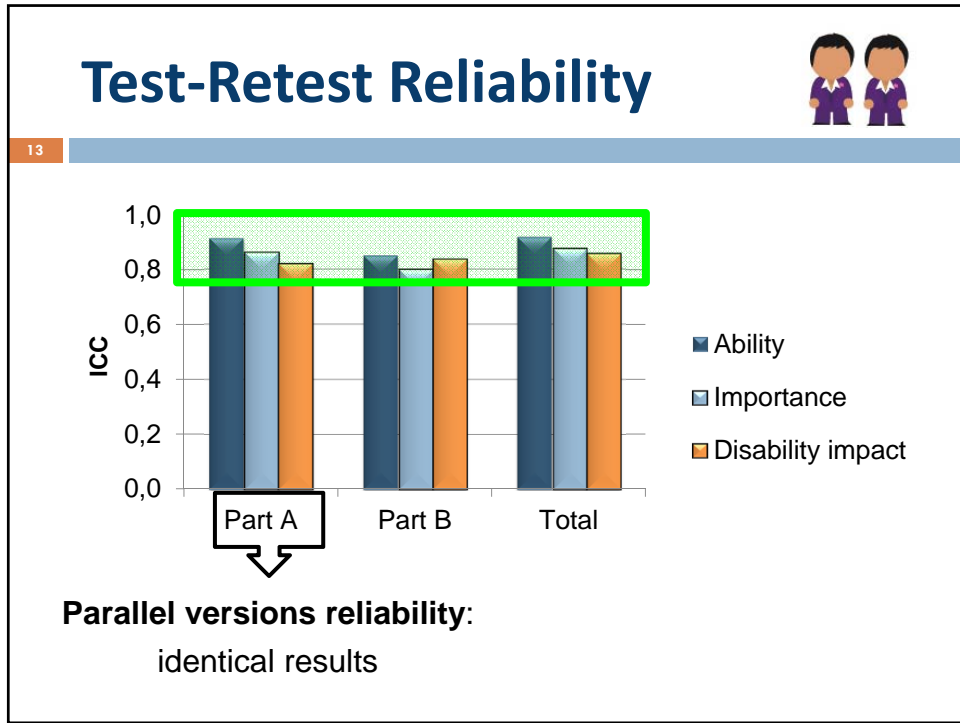
- Experimenters: 3 senior LVRS
- Administration
 - ◆ **At home**, with own visual and non-visual aids
 - ◆ **Twice**, 2-week interval (test – retest) 
 - ◆ **T1: parallel rating** by a 2nd examiner (interjudge) 
- Part A material
 - ◆ Half the sample evaluated with V1 at T1, and V2 at T2
 - ◆ Reversed order for the other half 

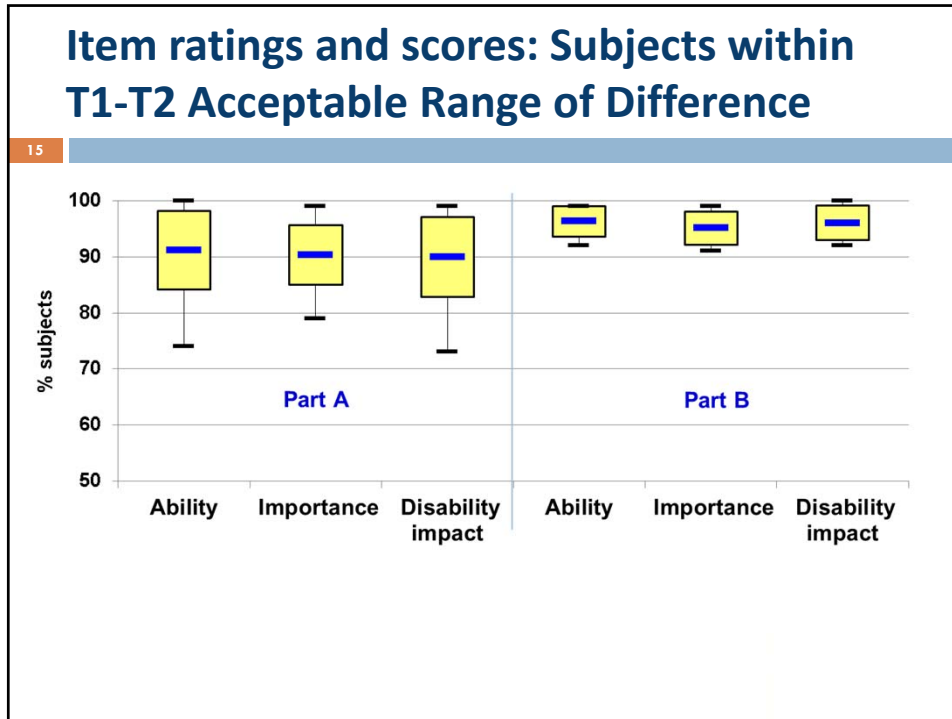
Interjudge Reliability



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Research Limits

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- Small sample size
- Interjudge reliability tested by simultaneous rating
- Part A: not enough consideration of the use of common accessible information technology

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Québec

Conclusion

- Most item ratings and composite scores of the MIDVAQ show excellent to perfect interjudge and test-retest reliability, which are essential qualities for any assessment tool.
- Some items will be revised and modified, for metric quality improvement.

Future Plans

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Short term

- Content and construct validity evaluation
- Global revision of the MIDVAQ

Long term

- Reliability of the modified items
- Change sensitivity evaluation

Research Project Team

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