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ECCroN

European Consortium on Cross-Cultural Neuropsychology

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European Consortium on Cross-Cultural Neuropsychology (ECCroN)

ECCroN

European Consortium on
Cross-Cultural Neuropsychology

https://eccron.org/#research

ECCroN

European Consortium on
Cross-Cultural Neuropsychology

- 10 different countries.
- 20 different cultural heritages.
- 21 different languages.

- The majority are:

- Bi- or multilingual (85%).
- Female (64%).
- Aged 25-44 years (73%).
- With personal migration experience (61%).

- Neuropsychologists (76%).
- Employed at universities or hospitals (88%).

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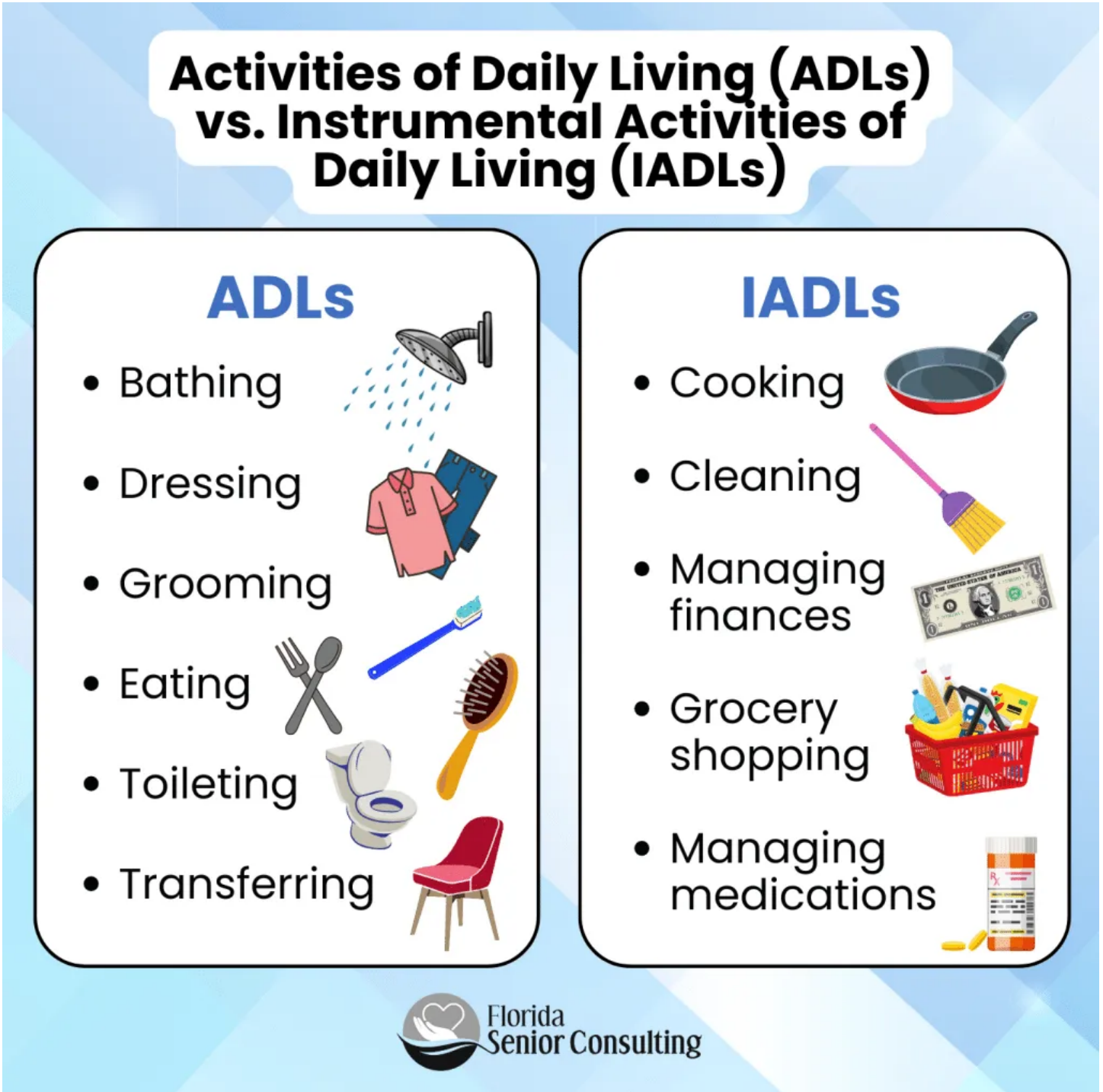
ETHICAL RESPONSABILITY

We should start consider the cultural, linguistic, and educational backgrounds of the people we assess in all aspects of our practice by:

- using appropriate measures
- the languages in which we are competent to assess
- update training contents and materials
- considering the diagnostic and interventions' implications



Functional assessments

….measure how well a person performs daily activities in their usual environment.

core criterion in dementia - monitoring disease progression, patient care, and legal protection measures, as it plays a crucial role in assessing decision-making capacity and implementing safeguarding interventions (Hedge & Ellajosyula, 2016; Lindbergh et al., 2016; Webster et al., 2017).

Most validation studies have been conducted in Western, Educated, Industrialised, Rich, and Democratic (W.E.I.R.D) populations (Kjaergaard et al., 2025).

Social and structural factors, such as education quality and access to healthcare, can influence how cognitive decline manifests, is detected, and is interpreted (Livingston et al., 2020; Parra et al., 2018).

The need for cross-cultural functional assessment- content

In societies with significant cultural diversity, individuals may operate within **overlapping cultural frameworks,** migrants often balance collectivist traditions with the individualist norms of their new environment (Schwartz et al., 2024).

Traditional scoring methods often assume equal weighting of all items, which may obscure meaningful cultural variations of different activities (Watkins, 2010). For example:

- in some contexts, older adults *may not traditionally perform tasks* like meal preparation or financial management (Chandra et al., 2001; Mathuranath et al., 2005).

- transportation or technology use may be *less relevant in resource-limited regions* (Fillenbaum et al., 1999).

- many functional assessment tools are validated primarily through *expert reviews rather than panels representative* of the community (O'Donald & Calia, 2024; Senanarong et al., 2003; Umayal et al., 2010).

Method

- Self Report: complex when individuals lack insight into their own condition.
- Informant-report: family members may feel uncomfortable commenting on a parent's cognitive decline (Lim et al., 2007).

Self- or informant-report: may be influenced by cultural attitudes toward independence or illness

- Clinician-rated interviews
- Performance-based tasks: may reduce bias but introduce logistical barriers in some settings (Bhui & Dinos, 2008).
- Passive environmental monitoring (e.g. wearable sensors) (Marshall et al., 2012).

Current practices in cross-cultural functional assessment

Translation and Adaptation

Barthel Index (Mahoney & Barthel, 1965) used in diverse cultural contexts (Magklara et al., 2019) BUT lack appropriate validation (O'Donald & Calia, 2024).

Transcultural markers

Amsterdam IADL Questionnaire (A-IADL-Q) (Dubbelman et al., 2020) cross-culturally. It captures:

- both *instrumental and advanced activities* of daily living,
- uses an *adaptive scoring* system
- incorporates *alternative task formats*—traditional/digital financial management
- minimises bias due to literacy or technological familiarity.

BUT It does not adjust for cultures or education and the study's sample was highly educated and European.

Developed for specific cultural contexts

Thai Instrumental Activities of Daily Living Scale includes culturally relevant tasks, ensuring ecological validity and relevance (Senanarong et al., 2003).

Everyday Abilities Scale for India (EASI), designed for rural and illiterate populations across culturally meaningful domains (Pandav et al., 2002).

BUT their sensitivity for detecting functional decline indicative of dementia is often low (Collingwood et al., 2015).

Dementia-specific markers

Bristol Activities of Daily Living Scale (BADLS)
or
Details of Functions of Everyday Life Scale (O'Donald et al., 2024; Parra et al., 2020), functional assessments that align with dementia subtypes.

Multidimensional approach should combine objective measures of functional decline with person-centered evaluations is necessary to capture cultural expectations, individual autonomy, and dementia-specific impairments (Slachevsky et al., 2024).

Rather than relying solely on a fixed set of tasks, the tool should **integrate standardised functional assessments with person-centred questions**.

A core measure of functional ability would be complemented by a **flexible module**, allowing respondents to select culturally significant daily activities and other cultural dimensions (gender roles, family structures, and socioeconomic contexts).

20th Century: Modern Times

Steps to support the development and implementation of culturally relevant tools for dementia:

1. Understand Cultural Perceptions of Functional Independence

Functional independence may carry distinct meanings depending on cultural values (Mukadam et al., 2011). A consensus on its *core components across cultures* may not always be feasible, but understanding these variations is a key first step.

- Future research should focus on identifying these thresholds through Delphi consensus methods involving patients, caregivers, clinicians, and academics.

2. **Develop Core Principles-** cultural competence, inclusivity, and standardisation.

- Frameworks such as the WHO's International Classification of Functioning, Disability, and Health (ICF) and COSMIN guidelines provide valuable benchmarks for achieving these goals.

3. Selecting Appropriate Measures

Researchers and clinicians need to ensure that a measure has been validated for the population in which they intend to use it.

Clinicians should be cautious in administering a potentially biased tool; it is essential to *report these limitations*.

Consider when to rely on *informal versus formal informant* reports. Cultural norms surrounding caregiving can influence the accuracy of informant reports.

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4. **Adapt existing tools or develop new tools**

The adaptation of tools should involve linguistic translations and cultural adaptations.

- follow the International Test Commission (ITC) guidelines (Judd et al., 2023; Nguyen et al., 2024).

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ervices-enforcement-is-lax/

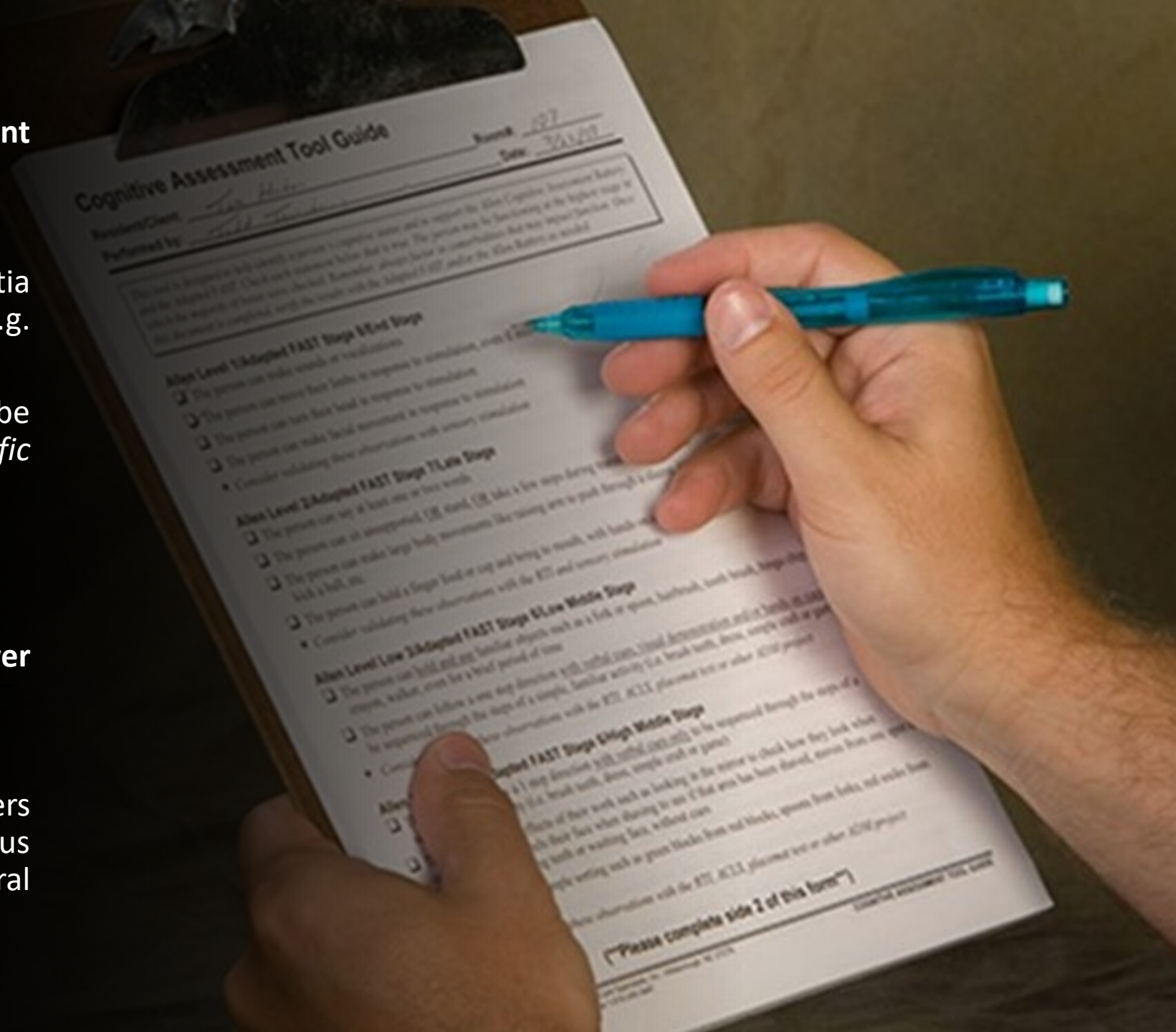
5. Developing New Functional Assessment Tools

Account for differences across dementia subtypes and disease progression (e.g. preclinical or MCI stages).

A one-size-fits-all approach may not be appropriate, necessitating *subtype-specific functional assessments*.

6. Incorporate Patient and Caregiver Perspectives

Involving both patients and caregivers through structured interviews or focus groups enhances assessments' cultural relevance and ecological validity.



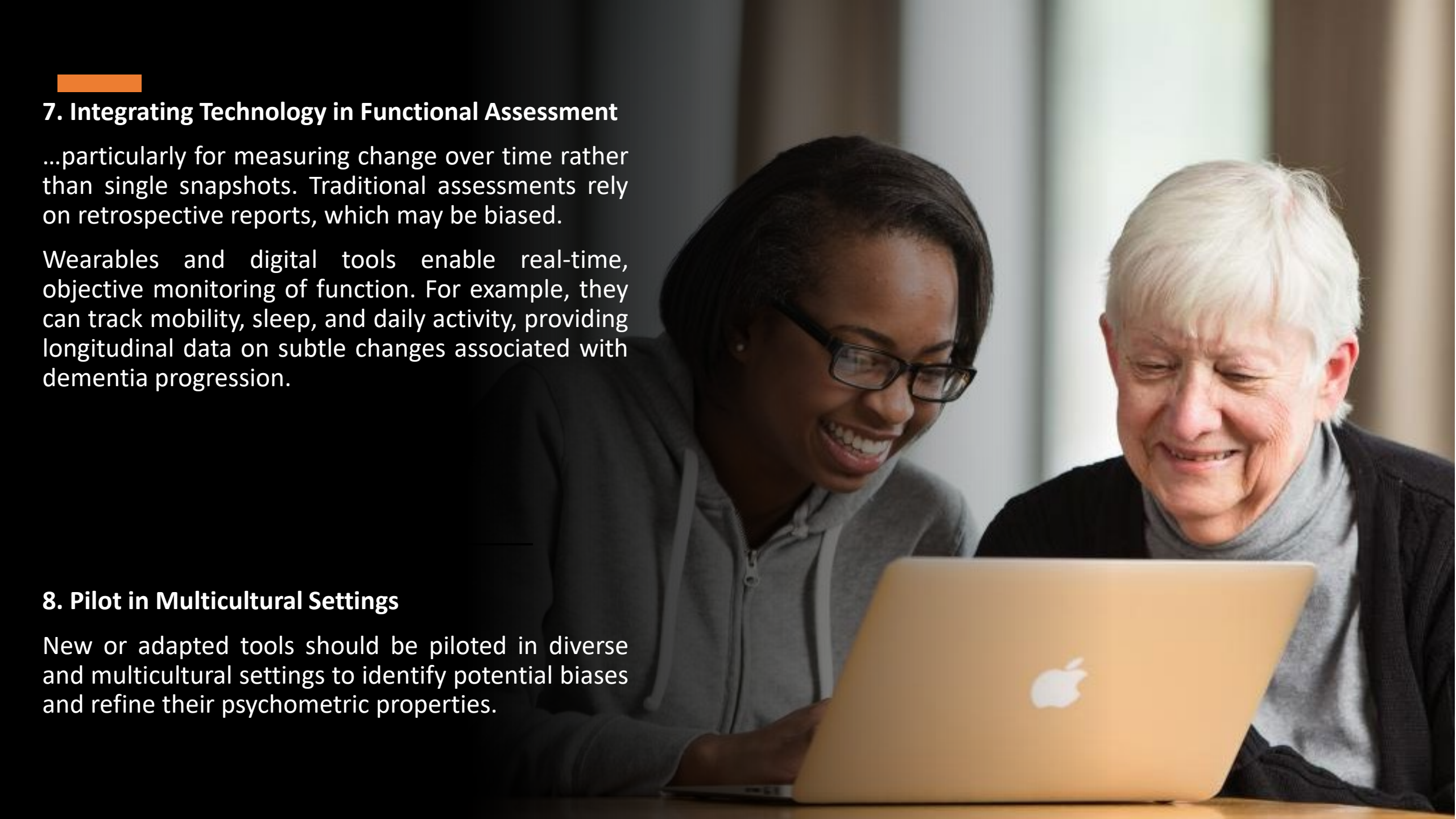
7. Integrating Technology in Functional Assessment

…particularly for measuring change over time rather than single snapshots. Traditional assessments rely on retrospective reports, which may be biased.

Wearables and digital tools enable real-time, objective monitoring of function. For example, they can track mobility, sleep, and daily activity, providing longitudinal data on subtle changes associated with dementia progression.

8. Pilot in Multicultural Settings

New or adapted tools should be piloted in diverse and multicultural settings to identify potential biases and refine their psychometric properties.



9. Addressing Literacy and Neurodevelopmental Differences

Separate modules for illiterate and neurodivergent populations. Tasks like financial or computer use may show early impairment in literate individuals but are not applicable to illiterate groups.

For neurodivergent populations, particularly older autistic adults, traditional screening may lack sensitivity (O'Donald et al., 2024).

- Assessment should reduce reliance on verbal tasks and focus on functional abilities over time.

10. Balancing Cultural Expectations

Consider a range of cultural dimensions but, it might be complex, particularly for those who have migrated from collectivist societies to individualist cultures.

- Assessments may need to incorporate considerations of *acculturation*.

Cultural responsiveness must be balanced with detecting dementia-specific impairments.

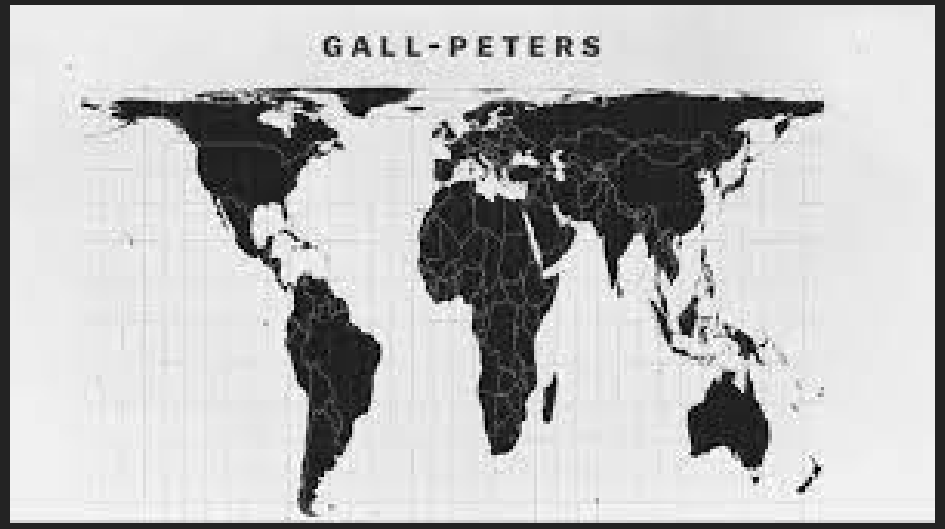
A **hybrid scoring approach** can distinguish cultural norms from cognitive decline (e.g., not cooking by role vs inability to plan a meal).

This may combine reports with performance-based observations or follow-up questions.

Set of proposed priorities from ECCroN:

1. Use cultural dimension frameworks to select items
2. Adapt tools to specific cultural contexts- follow the ITC and COSMIN guidelines
3. Evaluate the relevance of the items across cultures
4. Develop modular and flexible assessment formats
5. Assess individuals' cultural values: Instead of relying solely on group-based cultural assumptions
6. Ensure community involvement in tool development
7. Promote cross-cultural validation studies
8. Integrate person-centred and longitudinal perspectives
9. Tailor assessment strategies to the dementia subtype
10. Inclusive design and scalable implementation: Prioritise the development of brief, open-access, low-cost tools that can be used in diverse and resource-limited settings

Thank you!



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