



Assessment scales for upper limb and hand

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1 Overview

2 Introduction of the
assessment scales

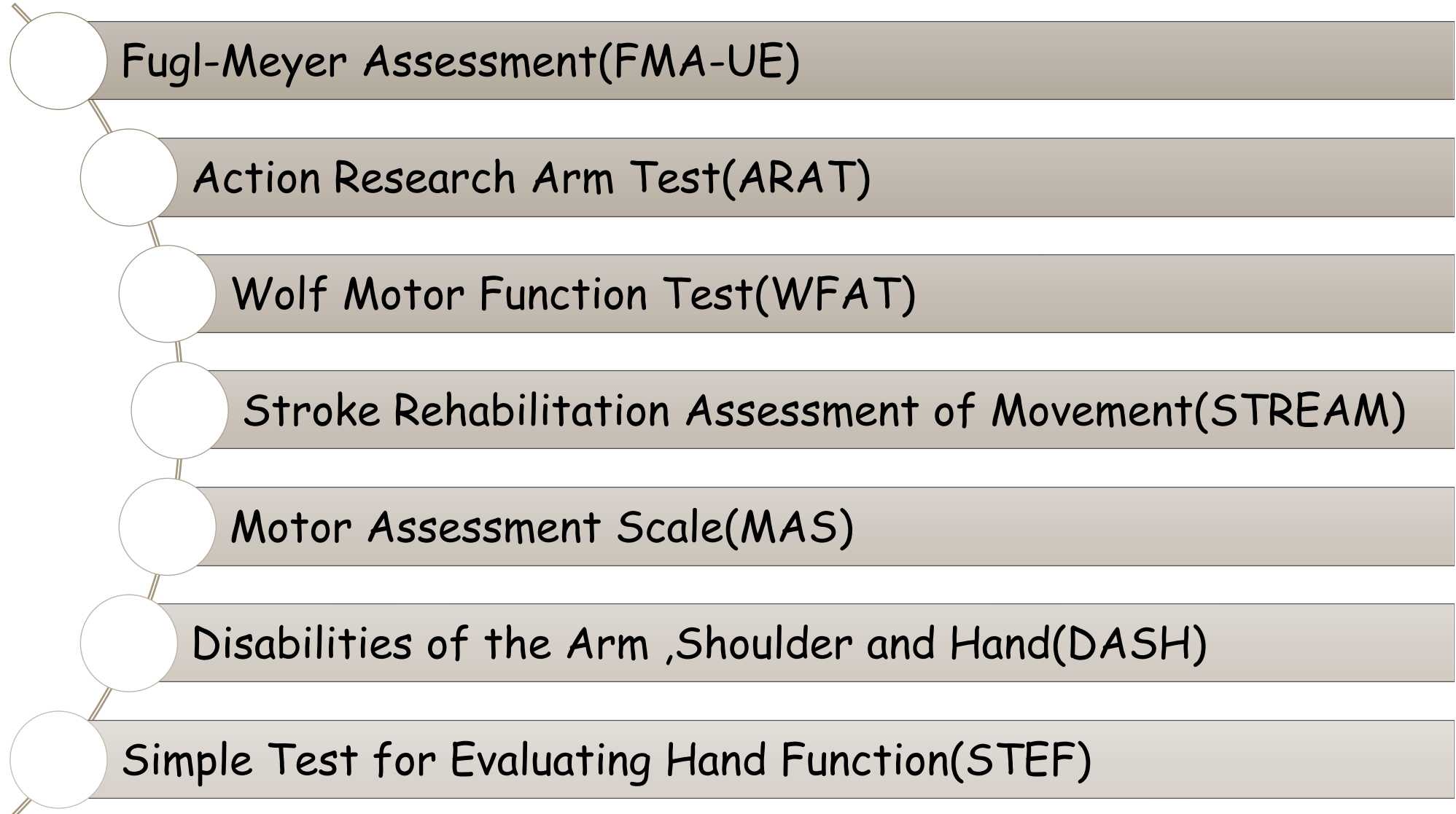
3 Demonstration

／ **CONTENT** ／

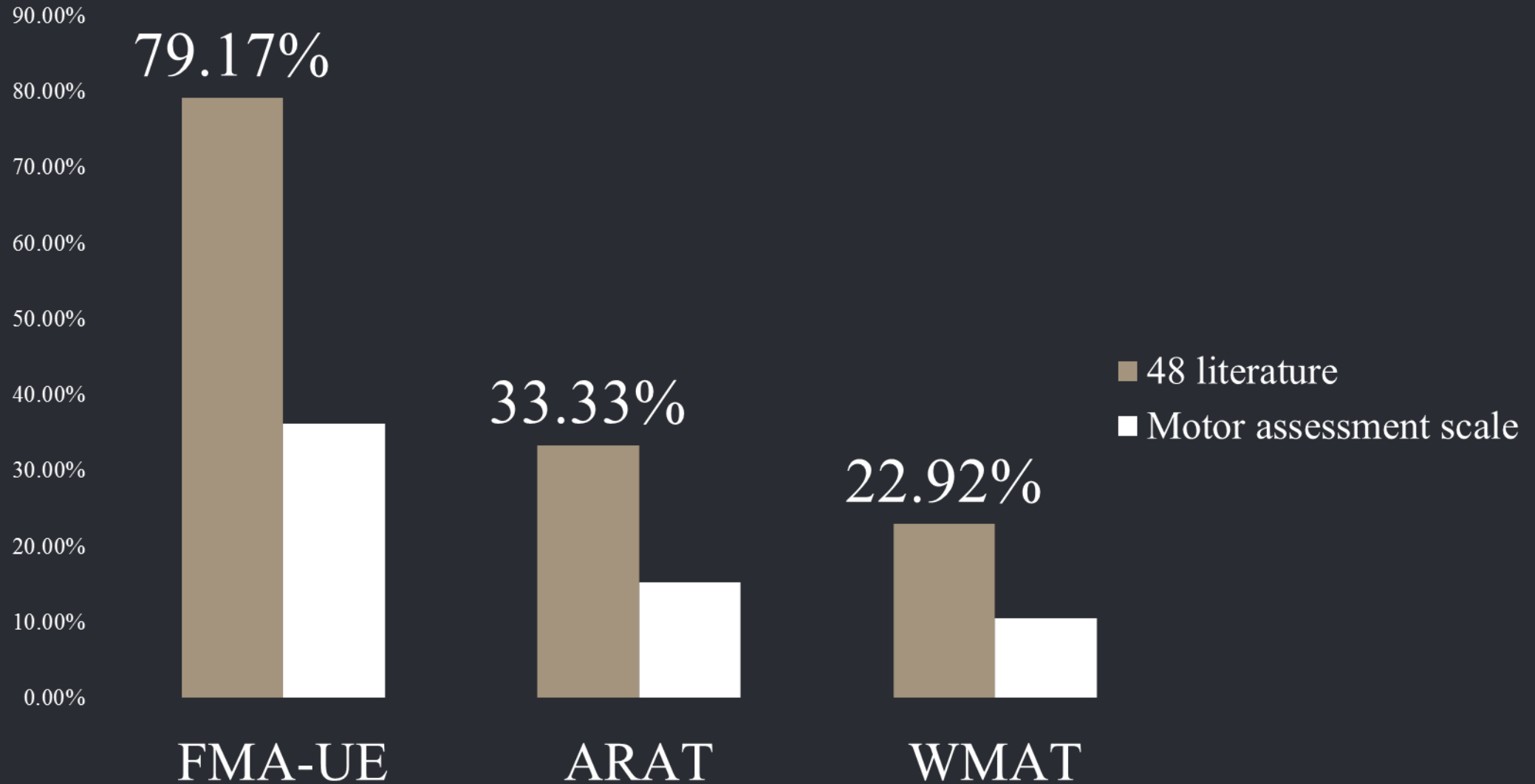
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/ Overview

Overview of assessment scales

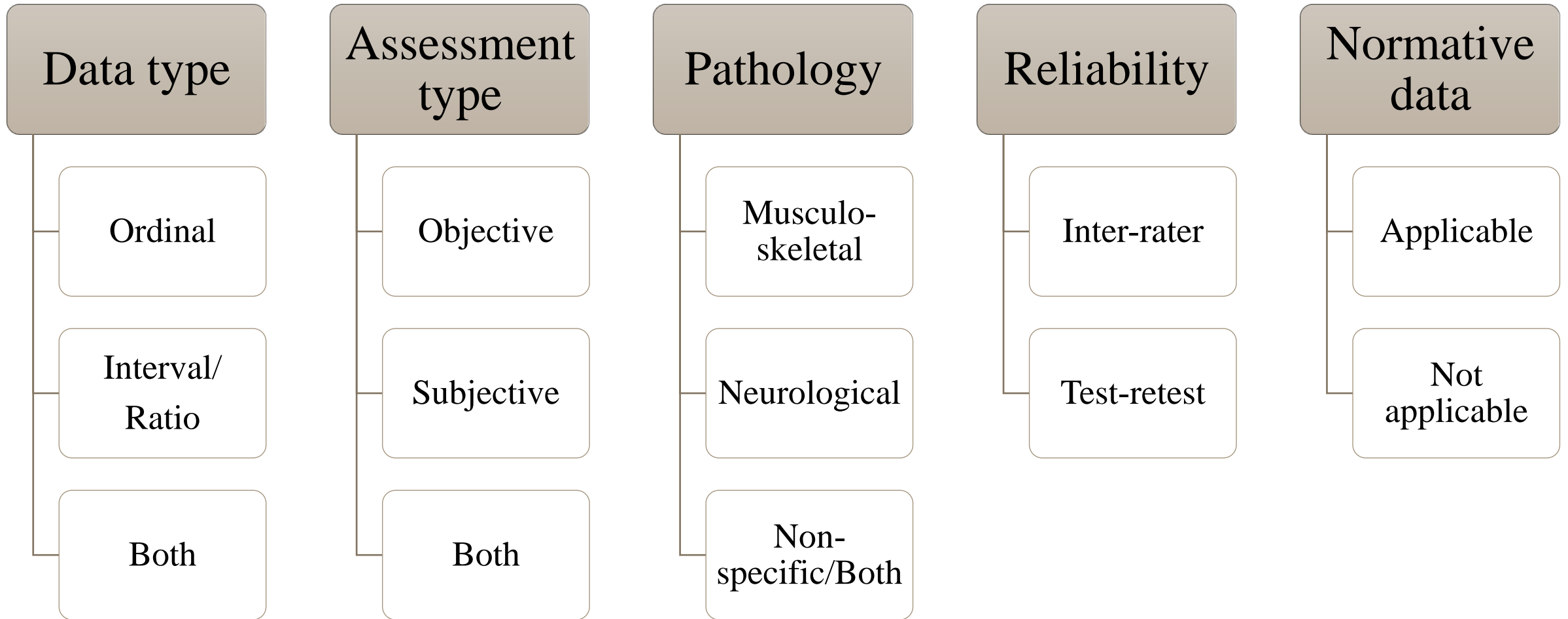


Frequency comparison between 3 upper limb scales



林淑芳, 徐颖, 叶晓倩, 等. 脑卒中上肢运动功能评价量表在康复中的应用[J]. 中国康复, 2015, 30(6):424-427.

Analysis method framework



2

Introduction of the
assessment scales

Introduction of the assessment scales

01

Fugl-Meyer Assessment of the
Upper Extremity

02

Action Research Arm Test

03

Wolf Motor Function Test



Fugl-Meyer Assessment of the Upper Extremity(FMA-UE)

1. It's the most commonly used, was developed to evaluate upper extremity motor impairments after stroke. and it's focuses on multijoint upper extremity function.

2. It's reliability and validity has been certified.so in scientific research the FMA often used as a **GOLD STANDARD.**



Fugl-Meyer Assessment of the Upper Extremity(FMA-UE)

Disadvantages

- 1.It has only three levels of assessment for each item. therefore, a majority of patients get an intermediate score in most items, and remain so for a long time .
- 2.The test is difficult to use and examines synergy patterns that no longer form the basis for many functionally oriented treatments.
- 3.The Fugl Meyer assessment is time consuming.

Action Research Arm Test

The ARAT is a responsive and valid measure of upper limb functional limitation and is a useful measure for use in upper limb rehabilitation and clinical research.



Advantages

1. The ability to discontinue testing after failure of the least demanding items without sacrificing a valid score .
2. It's items were truly hierarchical.
3. ARAT is the possibility of videotaping assessment for scoring at a later date, or by another tester, without affecting reliability.



Disadvantages

The scoring of the ARAT appears complex and the scoring is subjective.



General Description of the WMFT

Time

- 1. Forearm to table
- 2. Forearm to box
- 3. Extend elbow
- 4. Extend elbow with weight
- 5. Hand to table
- 6. Hand to box

Strength

- 7. Weight to box
- 8. Reach and retrieve
- 9. Lift Can
- 10. Lift Pencil
- 11. Lift paper clip
- 12. Stack Checkers
- 13. Flip Cards
- 14. Grip Strength

Functional ability

- 15. Turn Key in Lock
- 16. Fold towel
- 17. Lift Basket

Quantitative measure of upper extremity motor ability through timed and functional tasks.

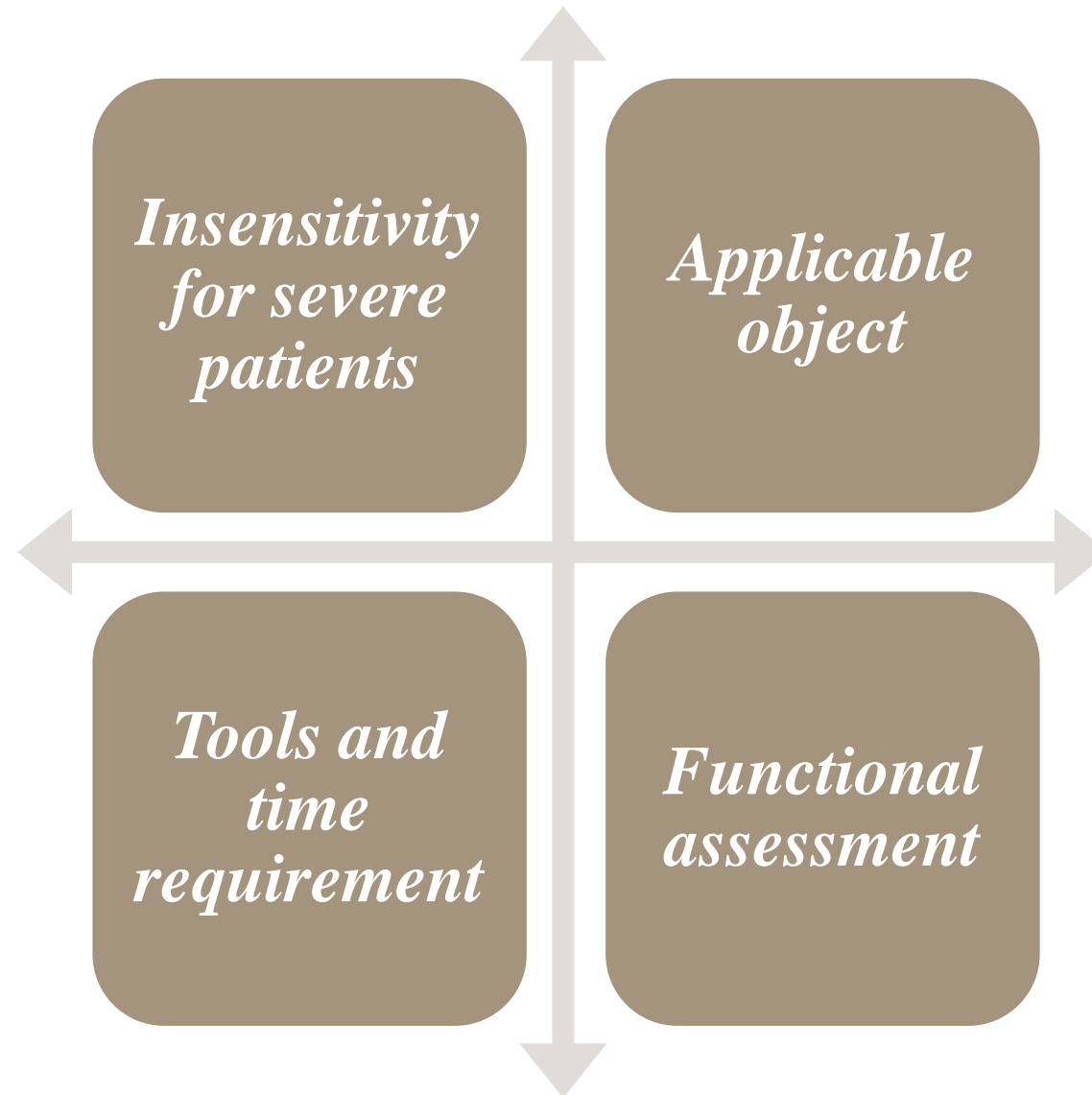
Clinical Application of the WMFT

Examiner should test the less affected upper extremity followed by the most affected side.

Constraint Induced Movement Therapy (CIMT)




Strengths and Weaknesses

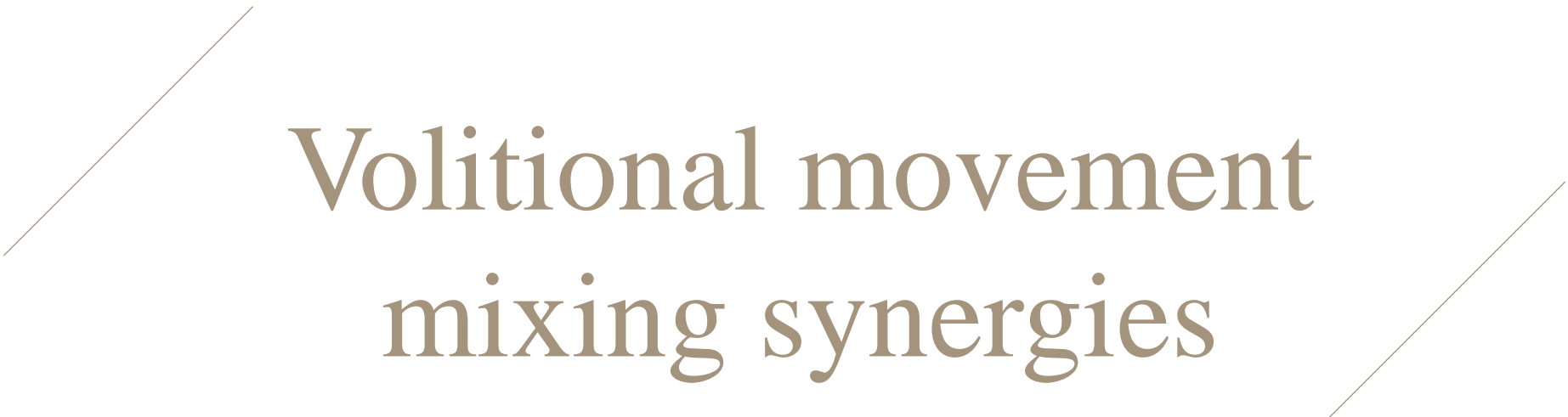


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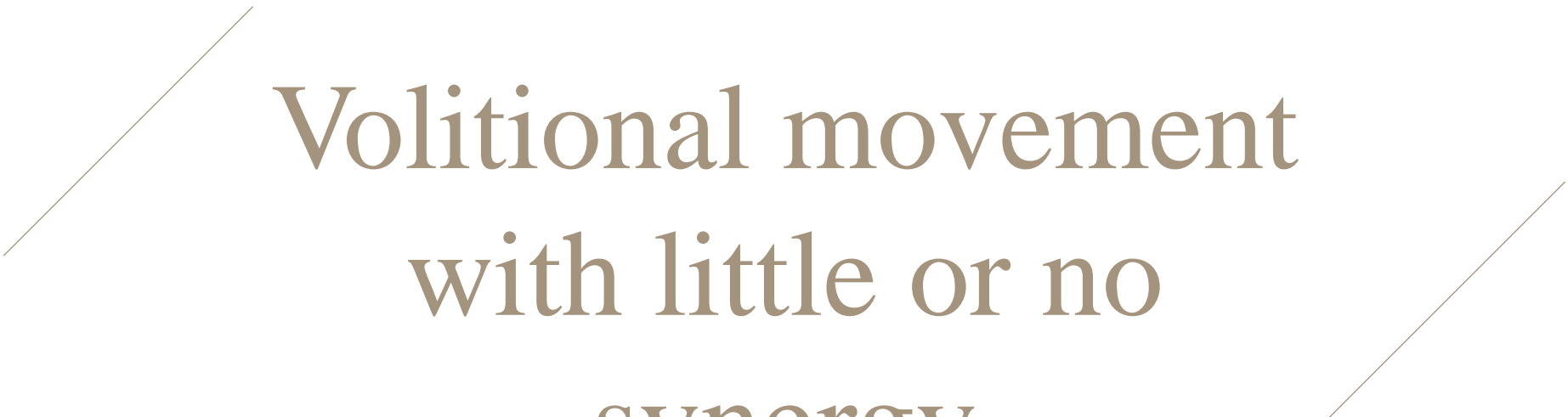
/ Demonstration



Volitional
movement within
synergies



Volitional movement
mixing synergies



Volitional movement
with little or no
synergy




Normal reflex activity

Assessed only if full score of 6 points is
achieved in part IV

Compare with the unaffected side



WRIST



Hand mass
flexion/extension



GRASP





COORDINATION/
SPEED

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Thank You

