GRIPABLE

SERIOUS. FUN. REHAB.

MODERNIZING THE DYNAMOMETER FOR GRIP ASSESSMENT

Excellent correlation with Jamar ICC 0.90

Highly robust to drops over 1.5 m

High accuracy within 2 Kg

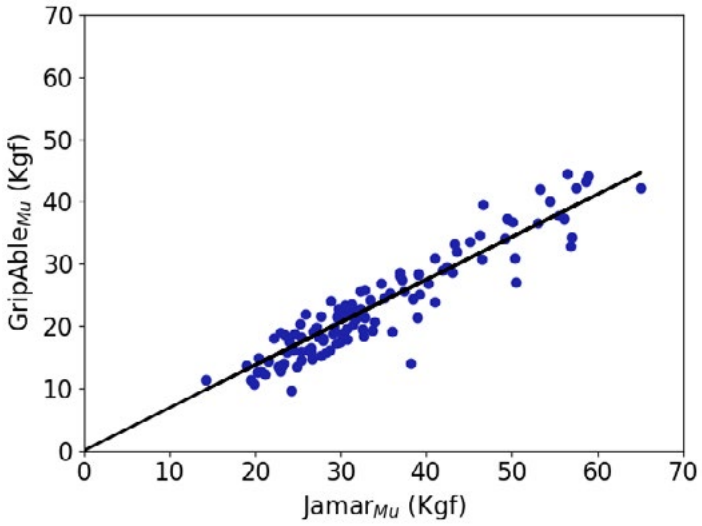
Outstanding sensitivity within 100 g

Here we present a summary of findings from a set of experiments to show the sensitivity, accuracy and robustness of GripAble as well as the correlation with the Jamar dynamometer.

Detailed data is found in the two publications listed on back page.

EXCELLENT CORRELATION WITH JAMAR

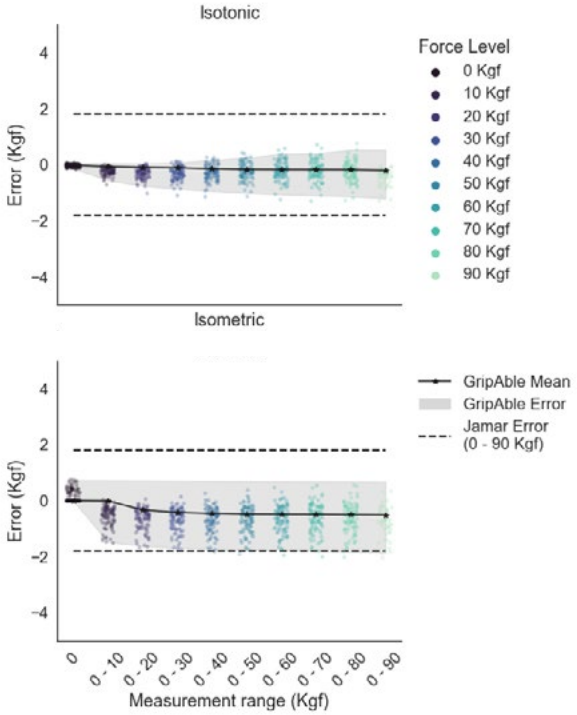
- **Inter-device reliability shown by intraclass correlation coefficient**
- **Excellent correlation** (ICC = 0.90)
- **0.7 Kg on GripAble = 1 Kg on Jamar**
  Difference likely due to different shape, size, and weight of devices
- **Normative data sets to follow**



GRAPH Comparison of Grip strength recorded on GripAble and Jamar across 61 adults (122 hands).

HIGH ACCURACY

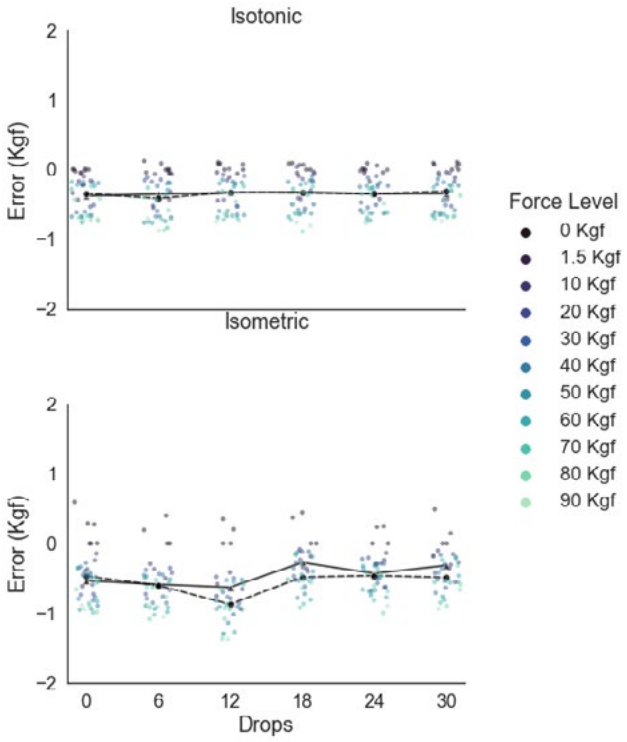
- **GripAble has superb performance across full scale of 0 to 90 Kg in isotonic mode with most devices demonstrating accuracy within 1 Kg**
- **GripAble has equal performance to Jamar across full scale of 0 to 90 Kg in isometric mode**



GRAPH Each GripAble device tested at 10 Kg force steps from 0 - 90 Kg. Dotted line shows claimed Jamar error. In total, 47 GripAbles tested in both isometric and isotonic modes.

HIGHLY ROBUST MEASUREMENT

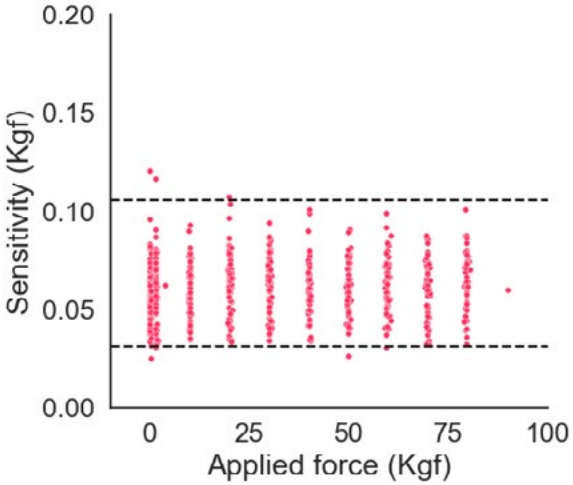
- **Minimal change in error** (less than 2 Kg in all isotonic drops) **even as number of drops increases**
- **Across all drops, the error was within +/- 1 Kg in isotonic mode and +/- 1.5 Kg in isometric mode**



GRAPH Each dot on the graph represents error measured in each of the tested devices (N=2) after a certain number of drops. In total, two GripAbles dropped 30 times from shoulder height (1.5m) onto a hard floor.

OUTSTANDING SENSITIVITY

- **Mean sensitivity 60 g**
- **30 - 100 g sensitivity across all devices**
- **High sensitivity carried through all force levels**



GRAPH Sensitivity measured at each force level across 47 GripAbles tested.

GRIPABLE GRIP ASSESSMENT

- **Five grip assessments currently available, exploring different aspects of grip**
- **On screen instructions provide standardization of position, process and verbal narration**
- **All tests possible in isometric and isotonic modes**
- **Pre-calculated results including mean and standard deviation**
- **Results collated into reports**
- **Follows ASHT assessment recommendations**

GripAble is a two-in-one assessment and training device for a broad range of hand and upper extremity conditions. Combining a highly affordable assessment tool with a captivating training device, GripAble connects to an app on a tablet, with fun and engaging activities that train core hand and wrist movements.

As a therapist, you can objectively and precisely measure an individual's grip strength and track changes over time. Movement and strength are assessed, and games calibrated to the individual, so as the user improves, so does the challenge.

Mutalib, S.A., Mace, M., Seager, C. et al. (2022) 'Modernising grip dynamometry: Inter-instrument reliability between GripAble and Jamar'. BMC Musculoskeletal Disordorders

Mace, M. et al. (2022) 'GripAble: An accurate, sensitive and robust digital device for measuring grip strength', Journal of Rehabilitation and Assistive Technologies Engineering.

Distributed by:

MEDLINE

For more information, contact your Medline representative or email TherapyandRehab@medline.com.