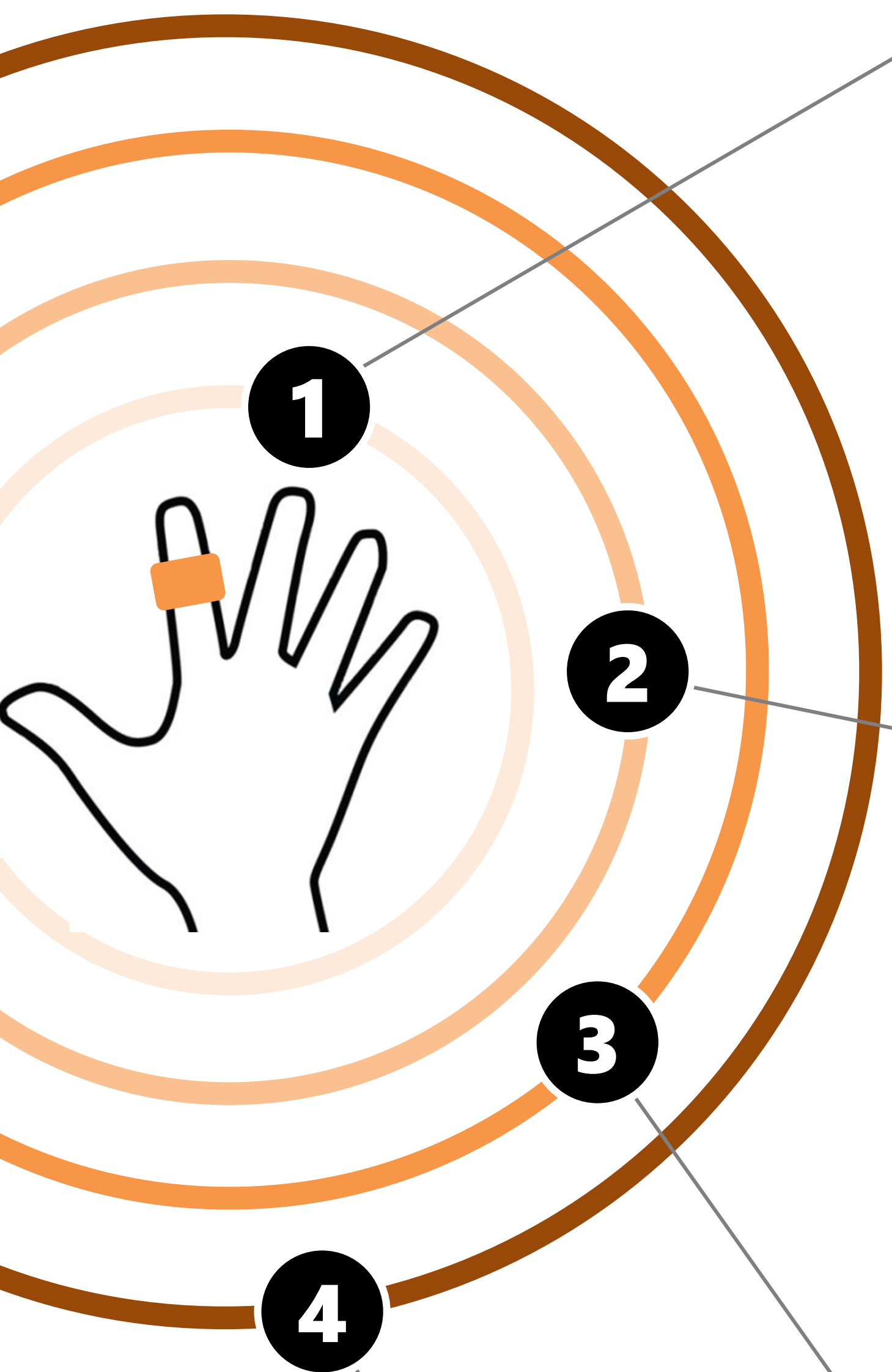


Index-finger centricity

Category/Subcategory

Correspondences with other taxonomies*



Finger-level

1.1 grasp Manipulation of the iFAD

e.g., slide the iFAD along the finger, rotate the iFAD across the finger, etc.

1.2 touch **Gesture input on the iFAD**
e.g., short and long taps on the iFAD, double taps, pressing a button on the iFAD, swiping across the surface of the iFAD, etc.



prehension and tactile sensing (Jones & Lederman, 2006) ☒

manipulative (Karam & m.c. schraefel, 2005; Quek *et al.*, 2002) ☐

palm, pad, and side grasps (Wolf *et al.*, 2011) ☐

touching the finger-worn device (Shilkrot *et al.*, 2015) ☐

button gestures (Gheran *et al.*, 2018) ☐

gestures performed on the ring (Gheran *et al.*, 2018) ☐

dominant and nondominant unimanual (Gheran *et al.*, 2018) ☐

simple and compound gestures (Gheran *et al.*, 2018) ☐

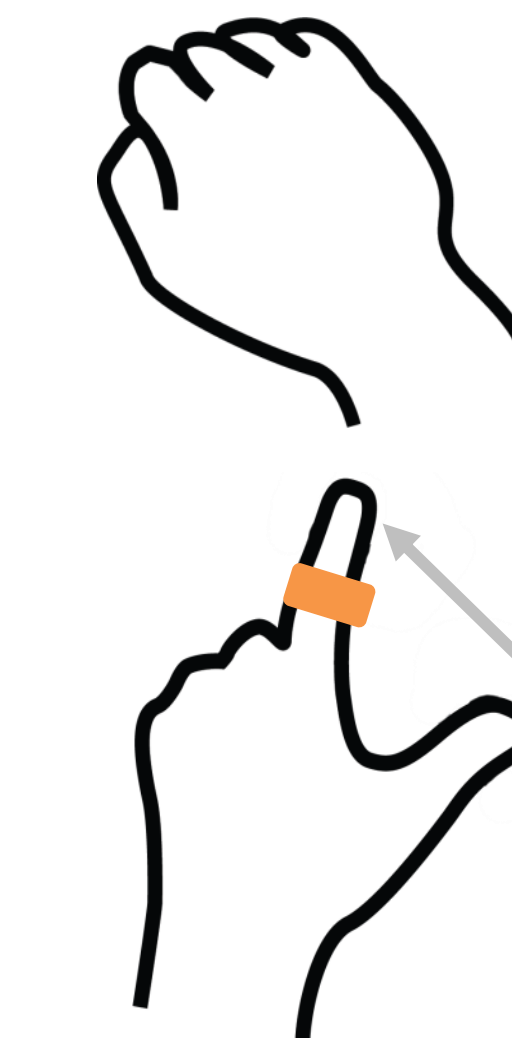
Hand-level

2.1 pose Finger and hand poses

g., open hand, fist, thumbs up and thumbs down, victory sign, etc.
(mostly emblematic and cultural gestures)

2.2 motion **Finger and hand movements**

e.g., thumb-to-index tap, swiping the index finger across the other fingers, shake the hand, single-hand microgestures, etc.



non-prehensile skilled movements (Jones & Lederman, 2006) ☒

signs and emblems (Kendon, 1997) ☒

semaphoric gestures (Karam & m.c. schraefel, 2005; Quek *et al.*, 2002) ☐

static and dynamic gestures (Karam & m.c. schraefel, 2005) ☐

gesturing in the air (Shilkrot *et al.*, 2015) ☐

palm, pad, and side grasps (Wolf *et al.*, 2011) ☐

hand poses, hand motion, poses & motion, mixed (Gheran *et al.*, 2018) ☐

dominant and nondominant unimanual (Gheran *et al.*, 2018) ☐

simple and compound gestures (Gheran *et al.*, 2018) ☐

Arm-level

3.1 one stroke **Unistroke gestures**

e.g., flick and swipe gestures to the left and right, swipe upwards and downwards, letter "C" in one stroke, etc.

3.2 N strokes **Multistroke gestures**

e.g., writing letter "X", symbol "\$",
drawing, sketching, and doodling in
mid-air, etc.



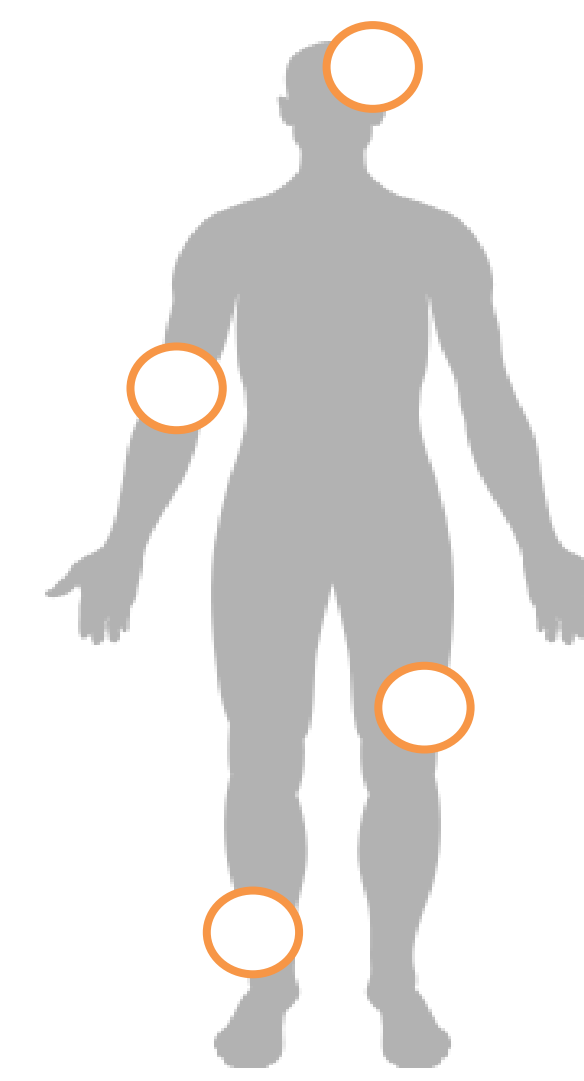
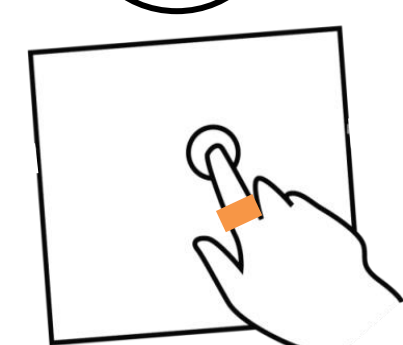
non-prehensile skilled movements (Jones & Lederman, 2006) ☒
deictic (McNeill, 1992) ☒
deictic (Karam & m.c. schraefel, 2005) ☐
dynamic gestures (Karam & m.c. schraefel, 2005) ☐
semaphoric (Karam & m.c. schraefel, 2005; Quek *et al.*, 2002) ☐
gesturing in the air (Shilkrot *et al.*, 2015) ☐
hand motion (Gheran *et al.*, 2018) ☐
dominant and nondominant unimanual (Gheran *et al.*, 2018) ☐
simple and compound gestures (Gheran *et al.*, 2018) ☐
gestures in the air (Gheran *et al.*, 2018) ☐

Body-level

4.1 personal On-body gestures

e.g., tap on the ear, thigh, or elbow, swipe on the forearm, perform a body-referenced gesture, smart pockets gestures, etc.

4.2 **peripersonal** **Near-body gestures**
e.g., tap on a surface or object located near the body, swipe on object, microgestures on objects, etc.



- tactile sensing* (Jones & Lederman, 2006) ☒
- deictic* (McNeill, 1992) ☒
- deictic* (Karam & m.c. schraefel, 2005) ☐
- semaphoric* (Karam & m.c. schraefel, 2005; Quek *et al.*, 2002) ☐
- dynamic gestures* (Karam & m.c. schraefel, 2005) ☐
- touching a surface and pointing at a referent* (Shilkrot *et al.*, 2015) ☐
- dominant and nondominant unimanual* (Gheran *et al.*, 2018) ☐
- simple and compound gestures* (Gheran *et al.*, 2018) ☐
- gestures on other surface* (Gheran *et al.*, 2018) ☐

***Correspondences
with related
taxonomies from:**

Motor planning and control

Psycholinguistics

 Human-Computer Interaction