

Supplementary Table S1. Example of restricted and repetitive behaviors across the four domains.

M1 - Simple Motor: behavior consisting of one movement
Finger tapping
Finger drumming
Hand waving
Repetitive limb movements: either hand or arm flapping/waving
Body rocking
Hair twisting
Regular, rhythmic, head movements: e.g., an up-and-down “yes” movement, a side-to-side “no” movement, head nodding, head banging, shoulder-to-shoulder movement
Mouth opening and closing
Facial grimacing
Eye blinking
M2 - Complex Motor: behavior consisting of repeated sequences of movements in several body districts
Toe walking, jumping while walking, or running
Arms flapping, and flexion and extension of the wrist while running
Arm swinging while running
Moving the upper limbs (waving) while either running or jumping
Skipping or hopping while walking
Teeth Chattering while leg shaking or kicking
Clapping hands while body rocking
Regular, rhythmic, head movements while either arm flapping or waving
S1 - Simple Sensory: involves a single sensorial aspect
Touching an object or a surface
Licking body parts or objects
Hand-sniffing
Hearing the sound produced by an object
Facing rubbing glass windows

Rubbing or touching the ear
Ears closing/plugging with hands
Biting hand

S2 - Complex Sensory: involves different sensory channels

Grasping small non-food items from the floor and putting them in the mouth
Body rocking while biting the hand
Touching and smelling the hairs
Touching and smelling the hand
Putting the hand in the mouth while licking and smelling it
Looking and listening to a sound object
Ears closing/plugging with hands while touching lips

V1 - Simple Vocal: repeated simple vocalizations or “noises,” acontextual sounds

Vocal remitting grunt
Raspberries made by bilabial trill produced by lips
Babbling
Clearing throat
Blowing

V2 - Complex Vocal: repeating words phonemes, acontextual or nonfunctional speech/words

Echolalia
Coprolalia
Repeating phrases unrelated to the present situation

Intellective: rigid, repetitive, stereotyped behaviors that express a need for routine, resistance to change, and a tendency to maintain environmental immutability. The Intellective domain was further divided between simple (I1) and complex behaviors (I2)

I1 - Simple Intellective: simple rituals of rigid and repetitive behaviors that express a need for routine and resistance to change

Arranging objects in a specific order or pattern
Crumbling the food before eating it
Arranging the glass in the same place

Keeping the door of the cupboard open in the same position

Walking up the stairs two steps at the time

Pencil sharpening

Picking at finger nails and cuticles

Refusing to walk on specific ground (e.g., grass)

I2 - Complex Intellective: complex ritual from the point of view of the reiterated behavioral sequence

Trashing items while following the same route

Walking, turning around, and stopping.

Pacing and walking in circles

Coughing while either hand or arm flapping/waving

Keeping the cabinet door open and moving the door slightly to hear the noise

Walking in circles before sitting.

Insistence of walking on the same route before entering a room

Insistence on turning in a circle times before entering a room

Aligning shoes before wearing shoes
