

MANIMO
The weighted companion

Webinar
**Stimulating the
Proprioceptive
Sense**

September 20, 2022



Biography presentation of presenter

Karine Gagner
President and General Manager, fdmt



Sarah Glover
Occupational Therapist, Therapro



Our goals for today's webinar

- Overview of the sensory system, its components and the dysfunction
- In dept explanation of the proprioceptive sense
- Learn and discover tools and strategies to enhance optimal sensory processing.

Karine Gagner – Sarah Glover
Creator of manimo, President fdmt | Occupational Therapist, Therapro

fdmt | créateur de | creator of **MANIMO**



For more than 20 years, we have been committed to providing innovative quality sensory tools.

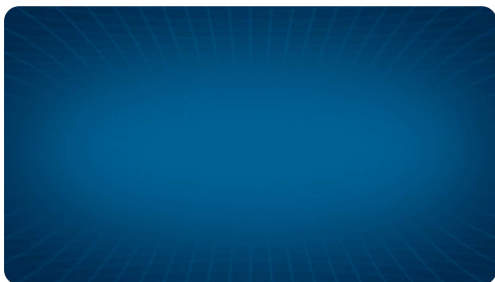
We were the first to create and introduce to education professionals comforting weighted plush, the manimo series.

Our mission is fostering the maximum development of all children.



**WOMEN
OWNED**

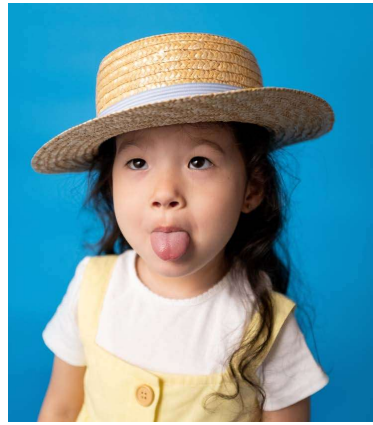
Brain development



**Sensory processing
and our 8 senses explained**



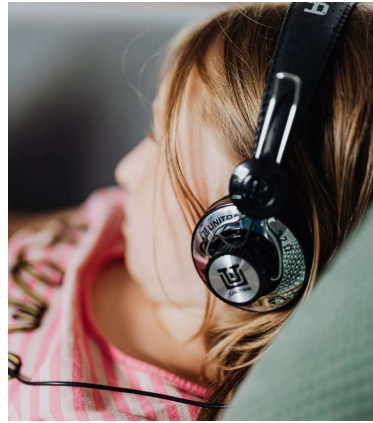
Visual input
Sight



Gustatory input
Taste



Tactile input
Touch



Auditory input
Sound/Hearing



Olfactory input
Smell



Vestibular input
Balance



Proprioceptive input Movement



Interoceptive input Internal



What is Sensory Integration Sensory processing

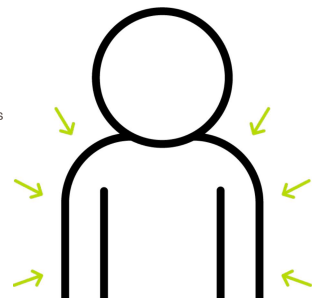
How our senses interact together

- Sensory integration is the process by which people register, modulate, and discriminate sensations received through the sensory systems to produce purposeful, adaptive behaviors in response to the environment (Ayres, 1976/2005)
- Effective integration of these sensations enables development of the skills needed to successfully participate in the variety of occupational roles, such as care of self and others, engagement with people and objects, and participation in social context.
- As children grow, they typically develop the refined ability to appropriately register, modulate, and discriminate sensory information to support the development of effective emotion regulation, social skills, play skills, and fine motor and gross motor skills.
- Problems effectively integrating sensation can limit a child's ability to attend to tasks, perform coordinated motor actions, plan and sequence novel tasks, develop social relationships, manage classroom demands, perform self-care tasks, and participate in family activities.

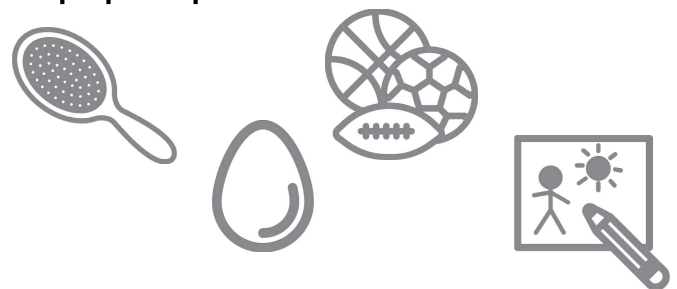
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Smith Roley, S., Mailbou, A., Miller Kuhaneck, H., & Glennon, T. (2005). Understanding Ayres Sensory Integration. OT Practice, 12(17), CE 1-CE 8.

What is proprioception?

To understand what proprioception is, close your eyes and hold out your hands. Move your arms and hands around. Even with your eyes closed, can you tell how far or close your hands are from your body? That's your proprioceptive sense at work!



What are some examples of proprioception?



Where does proprioception come from?



What is proprioception?

Proprioception is the **body awareness sense**. It helps with:

Knowing where our body parts are



Scratching an itch and knowing where to scratch without looking



Touching hands to feet, also known as "finding your feet"

Understanding how much force to use



Using a pencil with the proper amount of force



Holding a delicate item without breaking it

Coordination between body parts and senses



Riding a bike and coordinating the movements to stay on track



Using hand-eye coordination to catch a ball



What happens in case of misinterpretation? Selective attention test - Simons & Chabris 1999



What Is Sensory Modulation?

- Over-Responsivity / hypersensitive
- Under-Responsivity / under responsive
- Sensory Craving / craving

Over-Responsivity

- Delayed motor skill development
- Clothing issues
- Self-care issues
- Frequent melt downs
- Overwhelmed

Under-Responsivity

- Delayed motor skill development
- Food cravings
- Daydreaming or unfocused
- High tolerance to pain
- Clumsiness
- Poor fine motor skill development

Symptoms of Sensory Craving

- Loves movement, loves roughhousing
- Food cravings
- Constant motion
- Difficulty staying still in seat
- Plays rough
- Poor attention span

Sensory overload

This animation gives the viewer a glimpse into sensory overload, and how often our sensory experiences intertwine in everyday life.

How to use your proprioceptive sense to self-regulate

- Proprioceptive input can be very calming for those who are easily overwhelmed by sensory stimulation.
- Proprioceptive input can be alerting for those who need increased sensory stimulation to facilitate attention and learning.



Indicators that a student is seeking proprioceptive input

- Bites/chews on objects
- Hyperextends joints
- Bangs body parts
- Holds objects with excessive pressure
- Enjoys rough-and-tumble play
- Throws self heavily on the floor
- Prefers to run, jump or stomp heavily
- Likes to sit with knees tucked
- Engages in weight-bearing activities
- Walks on tip toes

Ideas for Proprioceptive Activities

- Weight-bearing activities
- Resistance activities
- Heavy lifting
- Cardiovascular activities
- Oral activities
- Deep pressure

Proprioceptive Activities

- **WHAT** is the purpose of the activity?
- **WHEN** will the activity take place?
- **HOW OFTEN** will the activities take place?
- **WHERE** will the activities take place?
- **WHAT** activities will be used?

WHAT activities will be used?

- Chair based exercises
- Classroom based exercises
- Other exercises
- Functional activities
- Oral activities
- Passive activities
- Weighted resources

Chair based exercises

- Hand pushes - pulls
- Head compressions
- Chair push ups
- Theraband on chair
- Squeezing a stress ball



Classroom based exercises

- Wall pushes
- Push ups
- Lifting weights e.g. tins, books, dumbbells
- Jogging on the spot
- Star jumps
- Bouncing on therapy/exercise ball



Other exercises

- Climbing wall bars/ropes in PE Hall
- Throwing/catching weighted ball
- Crawling obstacle course
- Gymnastics- handstands, cartwheels, using gym equipment
- Jumping e.g. hop scotch
- Bouncing on space hopper
- Lying on stomach over exercise ball and weightbearing through arms



Functional activities

- Wiping benches and tables
- Brushing/mopping floors
- Holding doors open
- Carrying piles of books
- Carrying a backpack with a heavy item in it
- Stacking chairs
- Moving furniture
- Putting out and tidying away PE equipment



Oral activities

- Blowing bubbles
- Blow football i.e. blowing cotton wool along a table to score goals
- Drinking through a straw of bottle with a sports cap
- Chewing food or appropriate object e.g. chewy tube
- Playing a wind instrument
- Blowing up a balloon
- Drinking a thick liquid through a straw e.g. milkshake, yoghurt, custard



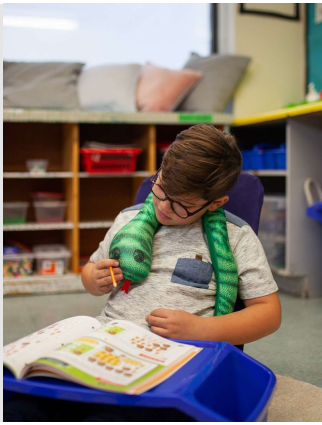
Passive activities

- 'Hot dog': student is rolled in a blanket and another student or adult pretends to spread on tomato ketchup, mustard etc.
- 'Sandwich game': student lies on a mat, and another mat is placed on top of him/her
- Steamroller: student lies on stomach and an exercise ball is rolled over his/her back
- Applying deep pressure to shoulders/arms
- Tight hugs



Weighted resources

- Weighted jacket/vest/belt: should be used after consulting an occupational therapist
- Weighted blanket
- Weighted lap pad
- Backpack with heavy book (or equivalent)
- Weighted animals



Points to remember

- Input to the muscles and joints is regulating
- Proprioceptive input can be provided through resistance activities
- Proprioceptive input can be provided through deep pressure touch
- Provide proprioceptive activities at regular intervals throughout the day

Physiological responses to deep pressure therapy



- The parasympathetic system
- The sympathetic system
- Increases in endorphins and neurotransmitters

Observable effects of deep pressure therapy

- Improved proprioceptive processing for increased balance
- Improved body/spatial awareness
- Improved coordination
- Improved sleep
- Improved digestion
- Increased focus/attention
- Decreased anxiety/stress

How does manimo work?



Biometrics



manimo Benefits are Scientifically Proven

Based on a study conducted by an independent laboratory

+31%

STIMULATES

activity for passive individuals

-24%

SOOTHES

activity for active individuals

+21%

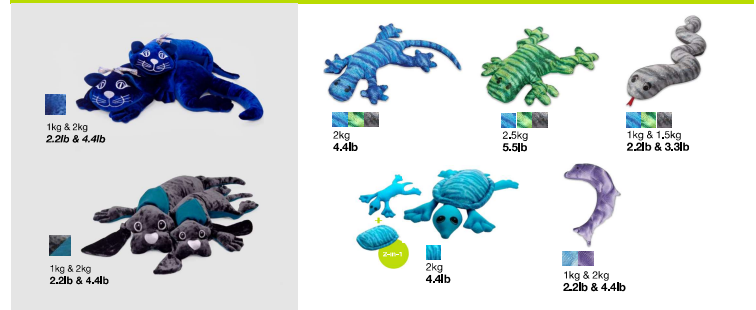
CONTROLS

ability to manage stress and anxiety

† Results based on a study conducted by (DFSA and RE-AK Technologies) in 2020 with 40 participants

The manimo line

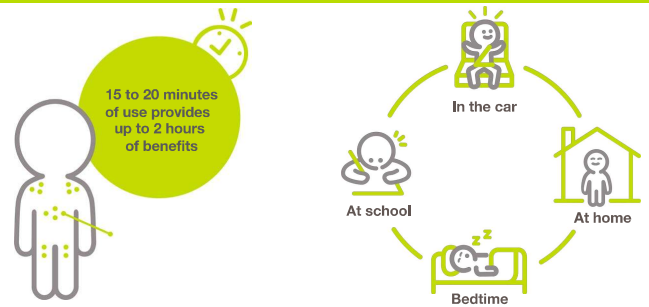
7 models



manimo - Who is it for?



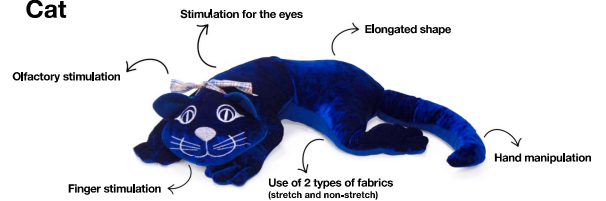
manimo - How and when to use it?



manimo – stimulates the senses

- Visual input (sight)
- Tactile input (touch)
- Auditory input (sound/hearing)
- Olfactory input (smell)
- Vestibular input (balance)
- Proprioceptive input (movement)

Cat



Weights available: 1kg and 2kg

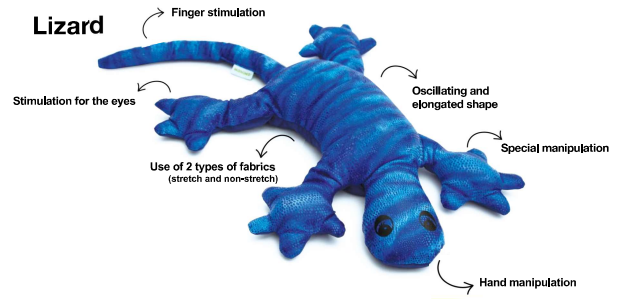
Where you can place it: shoulders, chest, thighs and back

Dog



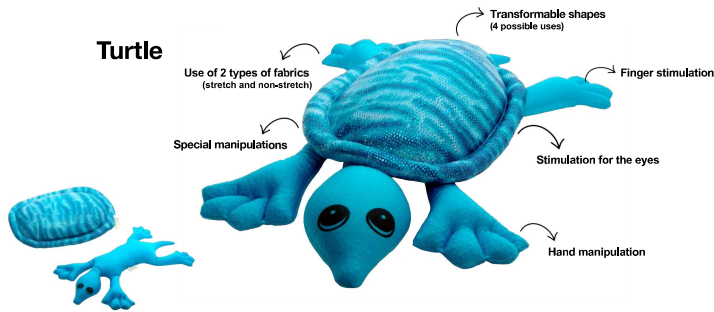
Weights available: 1kg and 2kg
Where you can place it: shoulders, chest, thighs and back

Lizard



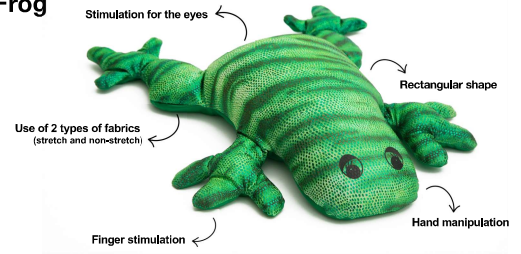
Weights available: 2kg
Where you can place it: shoulders, chest, thighs and back

Turtle



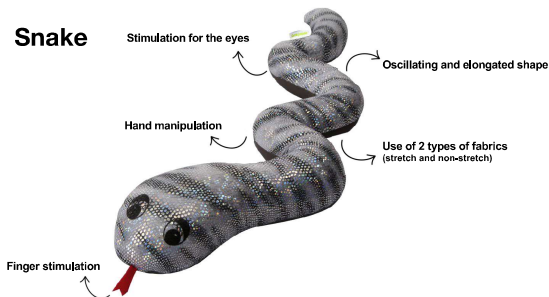
Weights available: 2kg
Where you can place it: shoulders, chest, thighs and back

Frog



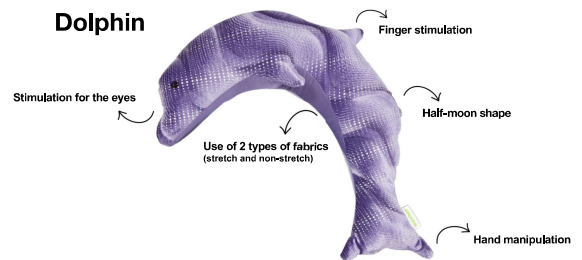
Weights available: 2.5kg
Where you can place it: chest, thighs and back

Snake



Weights available: 1kg and 1.5kg
Where you can place it: shoulders, arms and thighs

Dolphin



Weights available: 1kg and 2kg
Where you can place it: shoulders and thighs

REASONS TO ADOPT A MANIMO



SCIENTIFICALLY PROVEN

Soothes excess energy
Improves focus and concentration
Helps to cope with stress and anxiety



VERSATILE

Can be positioned on shoulders, thighs or torso



ATTRACTIVE TO ALL KIDS

Gender neutral
Perfect tool for any K-12 classroom



MORE THAN 250k KIDS EXPERIENCED MANIMO

manimo celebrates its 20th anniversary this year.
More than 250 000 units have been sold



HYGIENIC

Washable
Hypoallergenic and odorless material



BREADTH OF LINE

Several designs, colors and weights available



References

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Thank you!

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