

# Multidimensional Assessment of Interoceptive Awareness Youth Card Deck (MAIA-YCD): Five Regulatory Dimensions

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The five regulatory dimensions of interoceptive awareness, as measured by the MAIA-Y Card Deck, are the ones expected to change the most in response to sensory based, body-mind interventions (Bornemann et al., 2015; Mehling, 2016). For this reason, it is recommended these dimensions be used in research studies and interventions designed to assess improvements in interoceptive awareness. We are not suggesting the elimination of the other three scales (Noticing, Not-Distracting and Not-Worrying) which are important aspects of interoceptive awareness. Instead, we recommend assessing self-reported changes in interoceptive awareness using the five regulatory dimensions: Attention Regulation, Emotional Awareness, Self-Regulation, Body Listening and Trusting (Appendix A). Because interoceptive awareness is both state and trait dependent, it will vary naturally, to some degree, across time and life circumstances.

The Five Regulatory Dimensions format is an adaptation of the MAIA-YCD which contains thirty-two cards and measures eight dimensions of interoceptive awareness in children and youth, ages 7 to 17 years. The Five Regulatory Dimensions format focuses on twenty-two aspects of interoceptive awareness most closely linked with self-regulation. Instructions for administering the Five Regulatory Dimensions format are provided in the Scoring and Instructions sheet contained in this packet. The card deck can be completed as a self-administered assessment, in which a youth completes the deck without assistance, or in an interview-administered format. It is recommended the deck be completed in an interview-administered format with young children and when used to evaluate changes in interoceptive awareness associated with clinical interventions.

Interoceptive awareness is multidimensional and each of the scales measure separate aspects of interoceptive awareness. For this reason, calculating a summary score for the eight scales is inferior to keeping them separate (Mehling et al., 2012). This allows users to drop scales less relevant to their aims and permits the deck to be administered in more than one session when administration time is a concern.

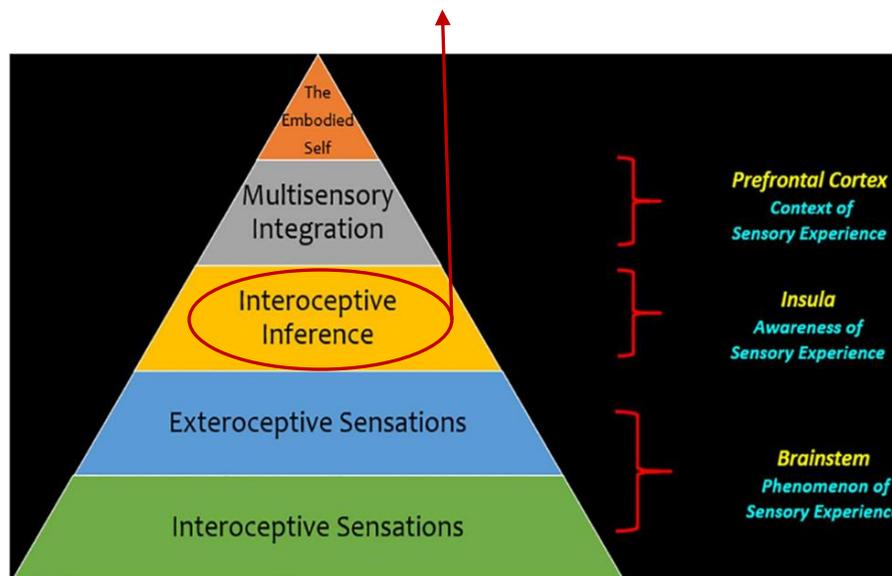
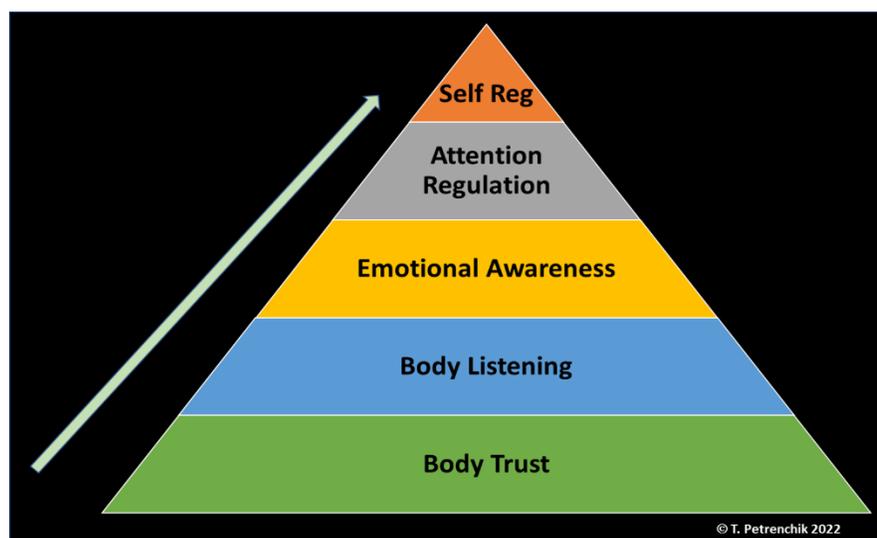
The five regulatory scales have acceptable internal consistency reliability ( $\alpha = .69 - .78$ ), however the Noticing, Not-Distracting and Not-Worrying scales have poor internal consistency reliability (Jones et al., 2021). Still, these scales have been important in studies of pain management (Mehling et al., 2014) and depression (Fissler et al., 2016). They have also been valuable in discriminating between clinical groups (Mehling et al., 2011, 2013). The three scales are valid measures of aspects of interoceptive awareness and are well suited to documenting and teaching the Noticing, Not-Distracting and Not-Worrying aspects of interoceptive awareness.

## Scaffolding Interoceptive Awareness

Interoceptive awareness, a teachable form of meta-awareness, is a vital ingredient of emotional and behavioral regulation in children and adolescents and is fundamental to mental health (Khalsa et al, 2018). However, connecting with bodily experience means connecting with sensations and emotions which are potentially dysregulating. Careful titration and scaffolding of body focus and emotional awareness is imperative for keeping clients safely grounded in the matrix of their own mental, emotional, and bodily experience. This is especially important when working with children who have experienced trauma because they can quickly become dysregulated and automatically shift into fight-flight-freeze reactions.

From both an affective neuroscience and traumatology standpoint (Frewen & Lanius, 2015; Hanley et al., 2017; Harricharan et al., 2021; Perry, 2009; Solomon & Siegel, 2003) bottom-up scaffolding of regulatory aspects of interoceptive awareness (Figure 1) is important for gradually strengthening affect tolerance and sensory modulation within a youth’s window of tolerance (Ogden & Fisher, 2015; Siegel, 2020). Body trust, experiencing one’s body as safe and trustworthy is fundamental to self-regulation and a felt sense of safety is a precondition of emotional regulation, social engagement, and higher order executive functions (Porges, 2003). Self-Regulation is especially reliant upon a child’s capacity to tolerate, be present with, and accepting of daily sensations and emotions. Scaffolding embodied self-awareness in this way is a phase-oriented approach to widening a child’s window of tolerance for everyday sensations and emotions without becoming overly dysregulated.

**Figure 1. Trauma informed, bottom-up regulatory scaffolding of interoceptive awareness skills training.**



Source: Harricharan, McKinnon & Lanius, 2021

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## Appendix A

### Five Regulatory Dimensions with 22 card statements

**Attention Regulation:** Ability to sustain and control attention to body sensations. (Cards 11-17;  $\alpha = .78$ )

- I can focus on how I breathe without thinking about anything else.
- I can focus on the feelings in my body, even when there is a lot going on around me.
- When I am talking to someone, I can focus on the way I am standing or sitting.
- Even if I am distracted, I can go back to thinking how my body feels.
- I can return my focus from thinking about things to feeling my body.
- I can pay attention to my whole body even when a part of it is in pain.
- I can focus on my entire body when I try.

**Emotional Awareness:** Awareness of the connection between body sensations and emotional states (Cards 18-22;  $\alpha = .70$ )

- I can feel how my body changes when I am angry.
- When something is wrong in my life I can feel it in my body.
- After a peaceful moment, I can feel my body is different.
- I can feel that my breathing becomes free and easy when I am comfortable.
- I can feel how my body changes when I feel happy.

**Self-Regulation:** Ability to regulate distress by attention to body sensations. (Cards 23-26;  $\alpha = .70$ )

- I can feel calm even if there is a lot going on
- When I focus on how I feel in my body, I calm down
- I can use my breath to help me calm down and relax
- When I am thinking too much, I can calm my mind by focusing on my body/breathing

**Body Listening:** Active listening to the body for insight. (Cards 27-29;  $\alpha = .69$ )

- I listen for clues from my body about my emotions.
- When I am upset, I take time to check how my body feels.
- I listen to my body to help me choose what to do.

**Trusting:** Experience of one's body as safe and trustworthy (Cards 30-32;  $\alpha = .78$ )

- I feel good in my body
- I feel my body is a safe place
- I trust the way my body feels

## **Additional Resources**

### *Websites*

[Multidimensional Assessment of Interoceptive Awareness](#)

[Well & Ready Kids](#)

### *Articles*

[Interoception and Mental Health: A Roadmap](#)

[Introduction to the Special Issue on Interoception and Suicidality](#)

[Interoception in anxiety and depression](#)

[Interoception and emotion](#)

[Interoception and stress](#)

[Interoception, Contemplative Practice, and Health](#)

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** For each card statement write one response that is most true for you. How often do you do what the statement says? Never? Always? Or somewhere in between? Choose a number between 0 (never) and 5 (always) to show how often you do what the statement says. Use the marble jar rating scale to help you pick the answer that applies to you most. Calculate average scores for each of the five dimensions then use the Interoceptive Wellness Wheel to chart your scores.

**Attention Regulation:** Q11 \_\_\_\_ + Q12 \_\_\_\_ + Q13 \_\_\_\_ + Q14 \_\_\_\_ + Q15 \_\_\_\_ + Q16 \_\_\_\_ + Q17 \_\_\_\_ /7 = \_\_\_\_\_

**Emotional Awareness:** Q18 \_\_\_\_ + Q19 \_\_\_\_ + Q20 \_\_\_\_ + Q21 \_\_\_\_ + Q22 \_\_\_\_ /5 = \_\_\_\_\_

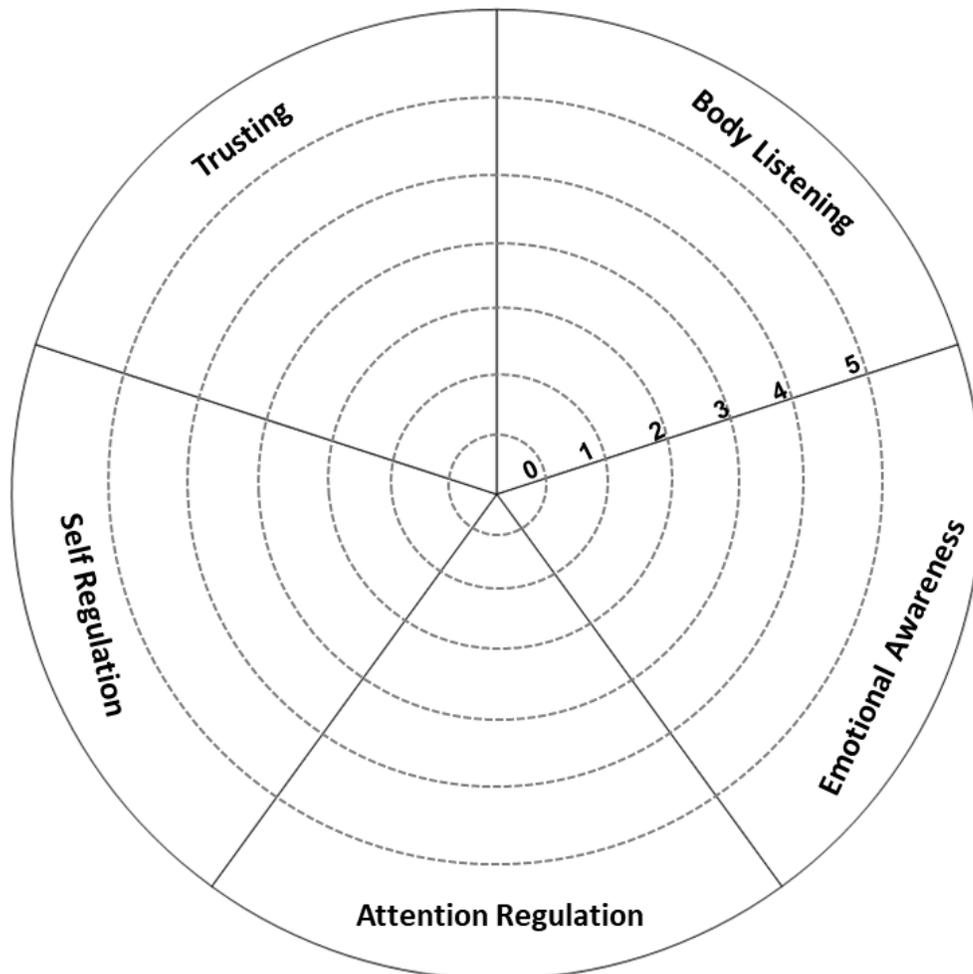
**Self-Regulation:** Q23 \_\_\_\_ + Q24 \_\_\_\_ + Q25 \_\_\_\_ + Q26 \_\_\_\_ /4 = \_\_\_\_\_

**Body Listening:** Q27 \_\_\_\_ + Q28 \_\_\_\_ + Q29 \_\_\_\_ /3 = \_\_\_\_\_

**Trusting:** Q30 \_\_\_\_ + Q31 \_\_\_\_ + Q32 \_\_\_\_ /3 = \_\_\_\_\_

**INTEROCEPTIVE AWARENESS WELLNESS WHEEL**

Place a dot on the ring corresponding to each of the 5-dimension scores then connect the dots to see the shape of your interoceptive awareness wheel. You may also color in the rings. The shortest spokes of the wheel are the areas with the greatest opportunities for growth. Use the wheel to set goals, focusing on one area at a time. Come back to this tool occasionally to see how your interoceptive awareness changes over time. Record new scores in a different color to see the progress you are making towards your self-awareness goals.



The Five Regulatory Dimensions format is an adaptation of the Multidimensional Assessment of Interoceptive Awareness Youth Card Deck (MAIA-YCD) which contains 32 cards and measures eight dimensions of interoceptive awareness in children and youth, ages 7 to 17 years. The 22 card Five Regulatory Dimensions format focuses on aspects of interoceptive awareness most closely linked with self-regulation. Interoceptive awareness is multidimensional and refers to sensing the state of the inner body and its ever-fluctuating needs. Interoception plays a key role in energy regulation, self-awareness, emotional experience, self-regulation, a sense of self, and mental health.

#### Five Regulatory Dimensions:

- **Attention Regulation:** Ability to sustain and control attention to body sensations.
- **Emotional Awareness:** Awareness of the connection between body sensations and emotional states.
- **Self-Regulation:** Ability to regulate distress by attention to body sensations.
- **Body Listening:** Active listening to the body for insight.
- **Trusting:** Experience of one's body as safe and trustworthy.

The card deck can be completed as a self-administered assessment, in which a youth completes the deck without assistance, or in an interview-administered format. It is recommended the deck be completed in an interview-administered format with young children and when used to evaluate changes in interoceptive awareness associated with clinical interventions. Because each of the scales are designed to be used separately and not combined for a global score the assessment may be completed over several sessions.

**Material set-up:** Place the card deck, organized in numerical sequence from 11 to 32, in front of the youth. Layout the visual rating scale and score card, including a pencil.

**Administration:** Start by explaining the purpose and process of completing the card deck. Complete the first statement together to ensure the youth understands the process, the visual rating scale and how to enter scores on the score sheet. Ask older youth whether they prefer to complete the card deck on their own or together. Administration time is approximately 30 minutes.

**Script:** *This card deck contains 22 illustrated cards with statements about the ways you notice feelings inside your body in different situations - like when you feel calm, happy, upset, comfortable or have pain. Everyone is different and there are no right or wrong answers. Start by reading the card and rating how often the statement applies to you in your daily life. Then, work your way through the entire deck at your own pace. To get started, let's answer the first question together.*

Point to the first card and read the first question together. Using the visual rating scale point to the answer choices, "Never" through "Always".

**Script:** *For each statement pick one response that is most true for you. How often do you do what the sentence says? Never? Always? Or somewhere in between? Choose a number between 0 (never) and 5 (always) to show often you do what the sentence says. Write your answer on the score sheet next to the question number (point to Q1 on the score card). Use the rating scale sheet to help with scoring your answers. Remember, there are no right, or wrong answers and you may ask questions at any time.*

**Scoring:** Calculate average scores for each of the five dimensions. To retain the psychometric properties of the dimension subscales be sure to include scores for all questions within each dimension. Record dimension scores on the *Interoceptive Awareness Wellness Wheel* on the back of the score sheet.

**Resources:** Research on the development and psychometric properties of the Multidimensional Assessment of Interoceptive Awareness in Youth questionnaire is available here: <https://osher.ucsf.edu/research/maia>

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- Card statements by Alexander Jones, Jonathan Silas, Jennifer Todd, Anita Stewart, Michael Acree, Mark Coulson, Wolf E. Mehling.