

## **Multisensory integration alterations in eating disorders.**

*Wednesday, September 25, 2024 10:00 AM (20 minutes)*

Individuals with eating disorders, particularly Anorexia Nervosa (AN), often experience distortions in bodily self-awareness, possibly due to difficulties integrating multisensory information. In this symposium, I will present evidence supporting the existence of this deficit underlying alterations in the corporeal self. We examined 22 women with AN alongside 22 healthy controls using the Mirror Box Illusion to assess the congruency of visual (exteroceptive), spatial (proprioceptive), and physiological (interoceptive) components when modulating the corporeal self. In healthy subjects, these components aligned, but participants with AN exhibited discrepancies, such as decreased hand temperature and enhanced sense of agency over their hand reflection, even under control conditions. I will also provide evidence that alterations in multisensory integration of the corporeal self in eating disorders extend to the acting self. AN and obesity (OB) represent extremes on the weight spectrum, both involving risks to bodily integrity, often influenced by distorted perception of internal signals. We investigated risky decision-making in AN and OB using body-related and non-body-related cues in two versions of the Balloon Analogue Risk Task (BART). Across 160 participants (AN, OB, normal-weight controls), risk propensity decreased with increasing BMI, only in the body-related task. Healthy individuals showed a correlation between risk propensity and interoception, which was absent in AN. OB participants displayed varied interactions between interoception and decision-making in both tasks. These findings contribute to understanding alterations in the corporeal and acting self in eating disorders, suggesting potential avenues for tailored interventions.

**If you're submitting a poster, would you be interested in giving a blitz talk?**

No

**If you're submitting a symposium talk, what's the symposium title?**

Food challenge to neurocognitive functions: evidence from healthy and pathological populations with eating disorders.

**If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?**

No

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