

Exploring an embodiment model of intuitive eating and attunement with exercise: The mediating role of intrinsic motivation

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INTRODUCTION

Psychological well-being is promoted when individuals are in touch with and accept their bodies needs and functions (Rogers, 1961). Approaches such as intuitive eating and attunement with exercise promote psychological well-being through being connected with one's body.

- **Intuitive eating, IE**, is an anti-diet approach that focuses on following one's internal physiological hunger and satiety cues (Tribole & Resch, 1995; Tylka, 2006).
- **Attunement with exercise, AWE**, reflects adaptive and positive attitudes and behaviors towards exercise such as being mindful of how one's body feels during exercise and valuing the exercise process (Wood-Barcalow et al., 2021).

In contrast, **psychological distress** occurs when individuals ignore or denounce their body's needs and functions when they do not align with external pressures, and thereby act in ways that align with societal expectations, such as engaging in disordered eating and dysfunctional exercise.

- **Disordered eating** consists of externally regulated eating habits that create and maintain an unhealthy relationship with food (Romano et al., 2020).
- **Dysfunctional exercise** includes a variety of problematic exercise attitudes, such as exercising excessively despite being injured/in pain and not being adequately hydrated or nourished (Wood-Barcalow et al., 2021).

Comparing the psychological well-being and distress approaches to eating and exercise, there are possible influencing and mediating factors that contribute to the differing behaviors.

- **Embodiment** reflects how one engages with the world—as connected to or disconnected from—their body (Piran, 2019). Positive or high embodiment may be linked to IE and AWE in that there is an emphasis on being connected to and able to listen to one's body. Negative or low embodiment may be linked to disordered eating and dysfunctional exercise in that there is a lack of ability to listen and be connected to one's body.
- Self-determination theory suggests that our motivation to engage in behavior can be internally or externally determined (Ryan et al., 1997).
 - **Intrinsic motivation** is being moved to act to fulfill internal needs (e.g., joy, challenge) rather than because of external pressures or rewards (e.g., achieve an ideal appearance).
 - **Extrinsic motivation** is being moved to act to receive external rewards or reduce external pressures rather than to fulfill internal needs.

We developed and explored two models (see Figure 1) that organize these variables in accordance with the theory of embodiment (Piran, 2019) and self-determination theory (Ryan et al., 1997).

HYPOTHESES

- **H1:** Embodiment will be positively associated with intrinsic motivation, intuitive eating, and attuned exercise.
- **H2:** Intrinsic motivation will mediate the relationship from embodiment to intuitive eating and attuned exercise.
- **H3:** Embodiment will be negatively associated with extrinsic motivation, disordered eating, and dysfunctional exercise.
- **H4:** Extrinsic motivation will mediate the relationship from embodiment to disordered eating and dysfunctional exercise.
- **H5:** Gender will moderate these associations given that women experience stronger external pressures to align with sociocultural appearance ideals than men (Linardon, Tylka, & Fuller-Tyszkiewicz, 2021).

PROPOSED THEORETICAL MODELS

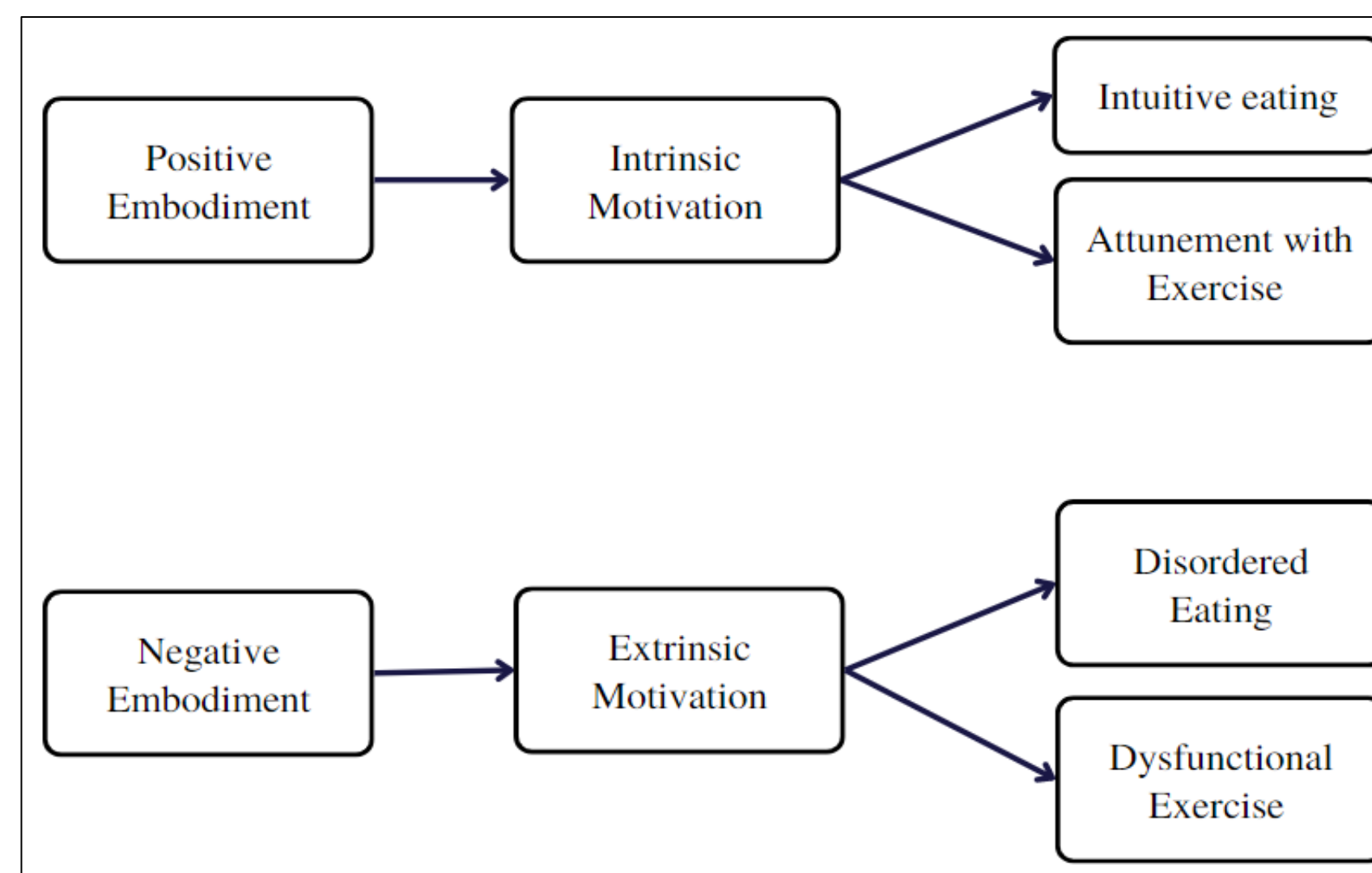


Figure 1.

METHOD

PARTICIPANTS

571 U.S. adult community members (274 female, 280 male, 17 nonbinary, 76.2% white, 23.8% minority), average age 36 ($SD = 12$), were included.

MEASURES

Intuitive Eating Scale-3, Embodiment Experience Scale, Attunement with Exercise Scale – Clinical, Dutch Eating Behavior Questionnaire-Restraint Subscale and Global Motivation Scale.

- Two validity questions were embedded to ensure that participants were paying attention.

PROCEDURE

- Gathered participants through Prolific Academic and directed them to Qualtrics.
- Participants who provided consent completed the scales and demographics form.
- Scales were counterbalanced to control for order effects.
- Compensated participants with \$3 dollars.

RESULTS

Bivariate correlations in SPSS explored the interrelationships between the study variables. To examine the models in Figure 1, we used multiple-group path analysis with gender as the group variable (women, men) in Mplus.

Results indicated:

- **Figure 2**
 - There were significant (+) paths between embodiment and IE/AWE for women and men.
 - Intrinsic motivation did not mediate the paths from positive embodiment to either IE or AWE.
 - Model paths were similar between women and men. (Gender did not moderate paths).
- **Figure 3**
 - There were significant (-) paths between embodiment and disordered eating/AWE.
 - Extrinsic motivation only mediated the paths from embodiment to disordered eating and AWE in women.
 - Gender moderated the path from embodiment to extrinsic motivation.

RESULTS (continued)

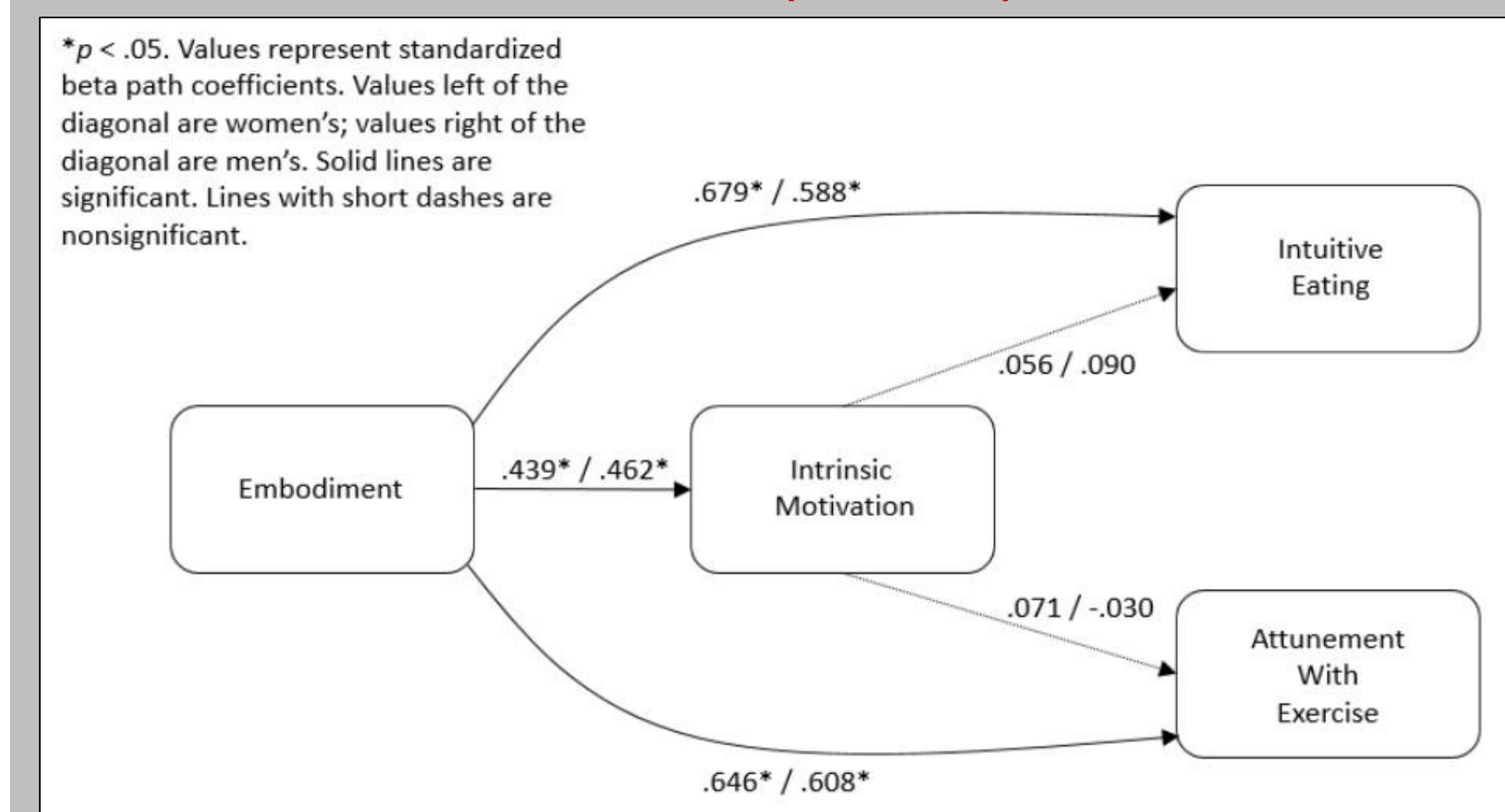


Figure 2. Intrinsic motivation correlation values compared to embodiment, IE, and AWE

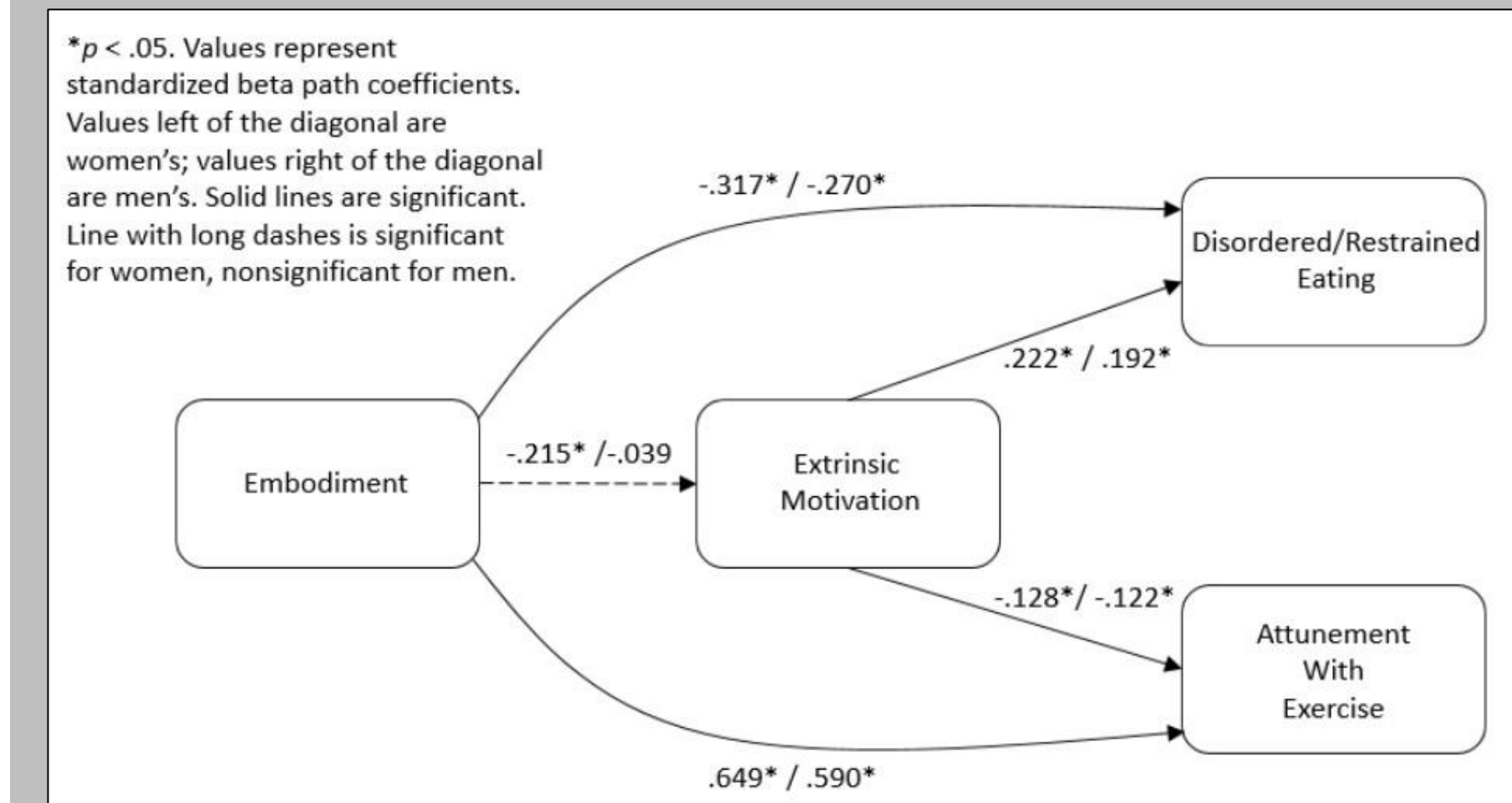


Figure 3. Extrinsic motivation correlation values compared to embodiment, disordered eating, and AWE

DISCUSSION

- **H1, H3, and H5** were supported for women and men, and **H4** was supported for women.
- **H2** was not supported. The paths from embodiment to IE and AWE were quite strong; intrinsic motivation had a small margin for variance in IE and AWE.
- **Limitations and Future Directions:**
 - Correlational design
 - Sample is predominantly white
 - Nonbinary participants were excluded from the moderation analysis

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