

## EFFECT OF COMPASSION MEDITATION ON SELF-OTHER INTERACTIONS

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**Background:** Mindfulness and compassion-based meditation have been shown, both experimentally and anecdotally, to modify self-representation. Previous work by our research team has demonstrated that such modifications can be captured through changes in peripersonal space (PPS), a multisensory representation of the space immediately surrounding the body where interactions with objects and other individuals take place. Because compassion meditation specifically targets social attitudes and interpersonal sensitivity, investigating its effects on PPS may provide novel insights into how meditative practices shape self–other relationships.

**Aims:** The project aims to develop a theoretically grounded instrument for assessing compassion, based on the Pattern Theory of Compassion (PTC), and to investigate whether compassion meditation modulates PPS and interpersonal distance, thereby reshaping self–other representation.

**Methods:** Two studies have been conducted so far. Study 1 focused on the development and validation of a new self-report measure of compassion grounded in the PTC framework. An initial pool of items was submitted to exploratory and confirmatory factor analyses in two samples: non-meditators ( $N = 332$ ) and experienced meditators ( $N = 117$ ). Study 2 investigated the state effects of a brief compassion meditation on self–other representation. Participants completed a multisensory audio–tactile task assessing PPS boundaries and a stop-distance task assessing interpersonal distance, before and after a 15-minute compassion meditation. Data have been collected from 20 non-meditators and, to date, 6 experienced meditators.

**Preliminary Results:** Results from Study 1 indicate that the PTC-based items consistently cluster into three factors across meditators and non-meditators: Empathic connection, Compassionate motivation, and Emotional balance. As theoretically expected, the first two factors were strongly correlated, whereas the third emerged as an orthogonal dimension. Preliminary analyses from Study 2 suggest that compassion meditation does not directly alter PPS boundaries, but is associated with a reduction in preferred interpersonal distance, as indexed by the stop-distance task, indicating increased perceived social connectedness. Ongoing data collection will clarify whether meditation expertise moderates these effects and whether longer or repeated training impacts PPS more directly.

**Keywords:** Meditation, Compassion, Self, Peripersonal space, Social interaction

### Publication:

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