



The mind wanders to dark places: Mind-wandering predicts subsequent rumination



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Background

- **Rumination** has been well-established as a **cognitive risk factor for major depressive disorder (MDD)**.
- Recent work has proposed that **mind-wandering may facilitate rumination** and thus risk for MDD.
- However, the **temporal relationship between these processes remains unclear**.
- We investigated the temporal relationship between mind-wandering and rumination.

Methods

PARTICIPANTS

- 82 young adults with remitted MDD or no mental disorder

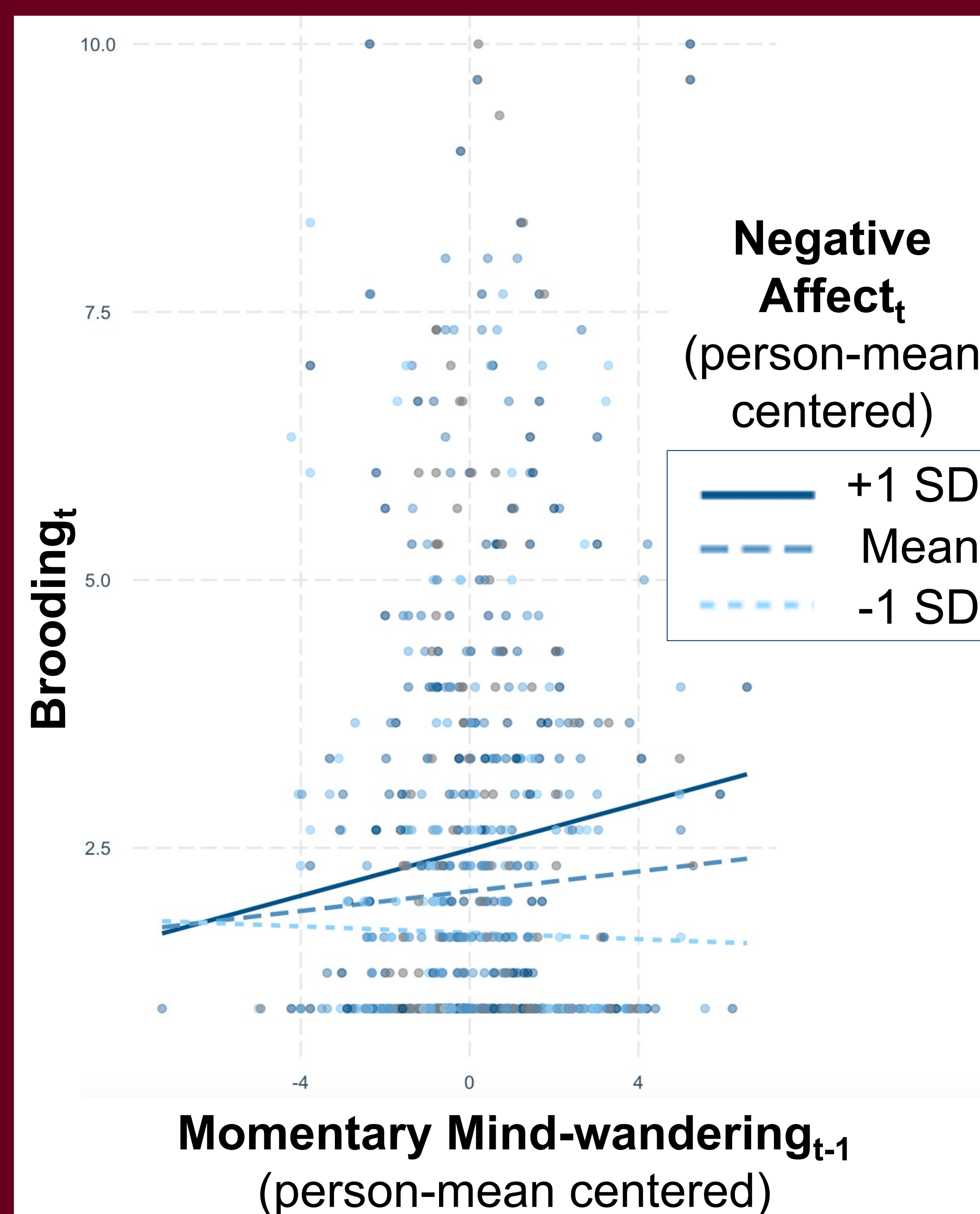
PROCEDURE

- **Ecological momentary assessment** of mind-wandering and rumination **3x/day for 1 week**

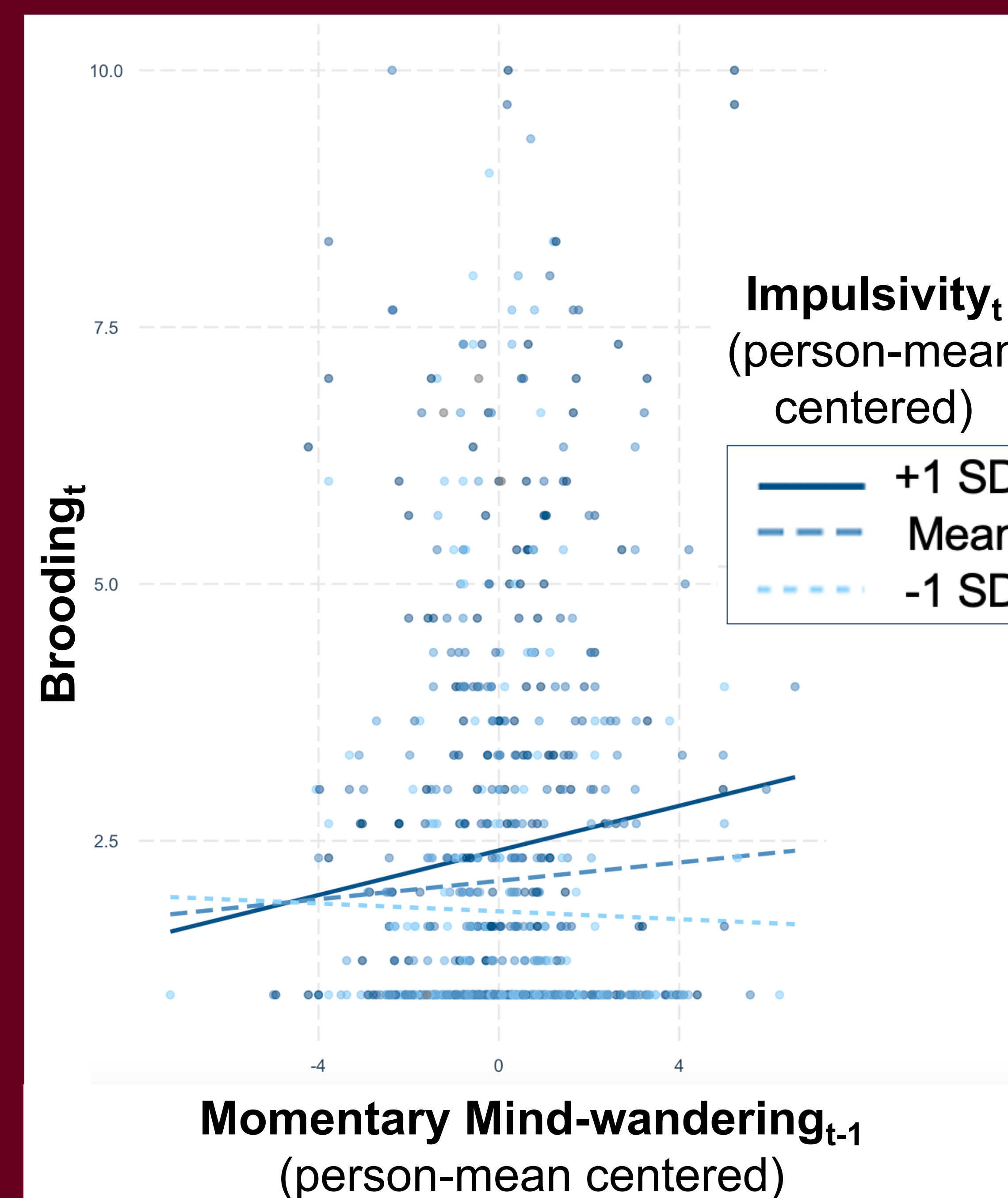
DATA ANALYSIS

- Investigated whether **mind-wandering predicted subsequent increases in rumination or vice versa**
- Examined moderators of this relationship
 - Depression history
 - Intensity of negative affect
 - Momentary impulsivity (e.g., “I made a ‘spur of the moment’ decision”)

Mind-wandering predicted subsequent increases in rumination ($\beta=.11$), whereas rumination did not predict increased mind-wandering ($\beta=.08$).



When individuals **experienced greater negative affect** compared to usual, they showed a **stronger association between mind-wandering and subsequent rumination** ($\beta=.06$).



When individuals **acted more impulsively** compared to usual, they showed a **stronger association between mind-wandering and subsequent rumination** ($\beta=.07$).

Results

- Compared to healthy volunteers, **individuals with remitted MDD showed no difference in the relationship between mind-wandering and rumination**, in either direction ($ps > .16$).
- Compared to healthy volunteers, **individuals with remitted MDD showed similar mean levels of brooding, but higher mean levels of mind-wandering** ($p < .05$).

Conclusion

- **Spontaneous mind-wandering may transition into rumination**, particularly when individuals are experiencing more negative affect or behaving more impulsively than usual.
- When **negative affective states** are present, the mind may be **more likely to dwell on salient negative content**.

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