

# Affiliation under stress: Investigating the link between implicit motives and stress-regulation

Ludwig Piesch, Ariane S. Marion-Jetten, & Mirko Wegner

## Implicit Motives

Nonconscious, nonverbally represented, affect-based preferences for certain classes of incentives that orient attention toward specific cue stimuli in the environment and energize behavior (McClelland, 1987)

### nAffiliation

Need to establish, maintain, or restore positive social relationships with others

### nPower

Need to exert physical, psychological, or emotional influence over others

### nAchievement

Need to increase or maintain one's own proficiency in an activity

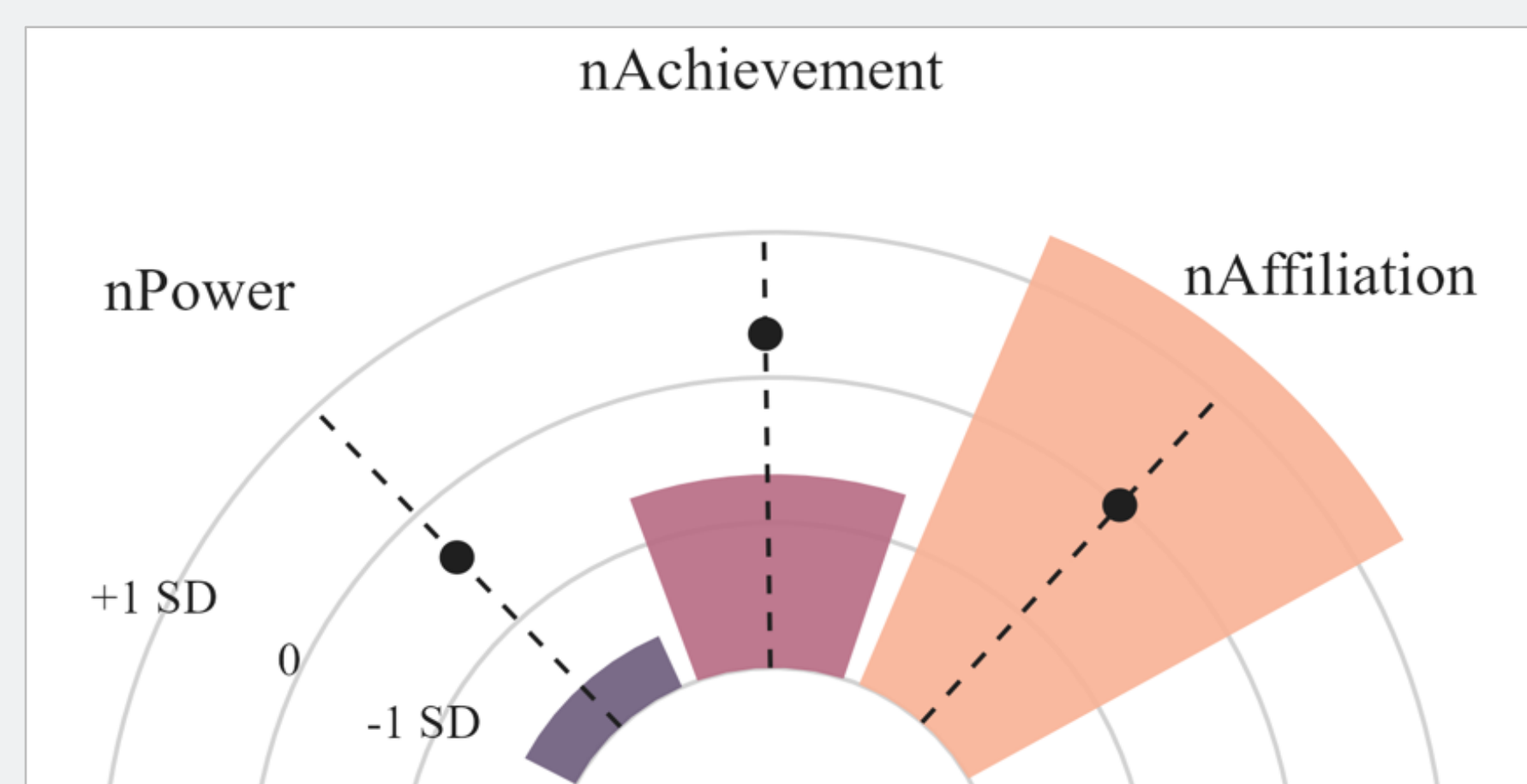
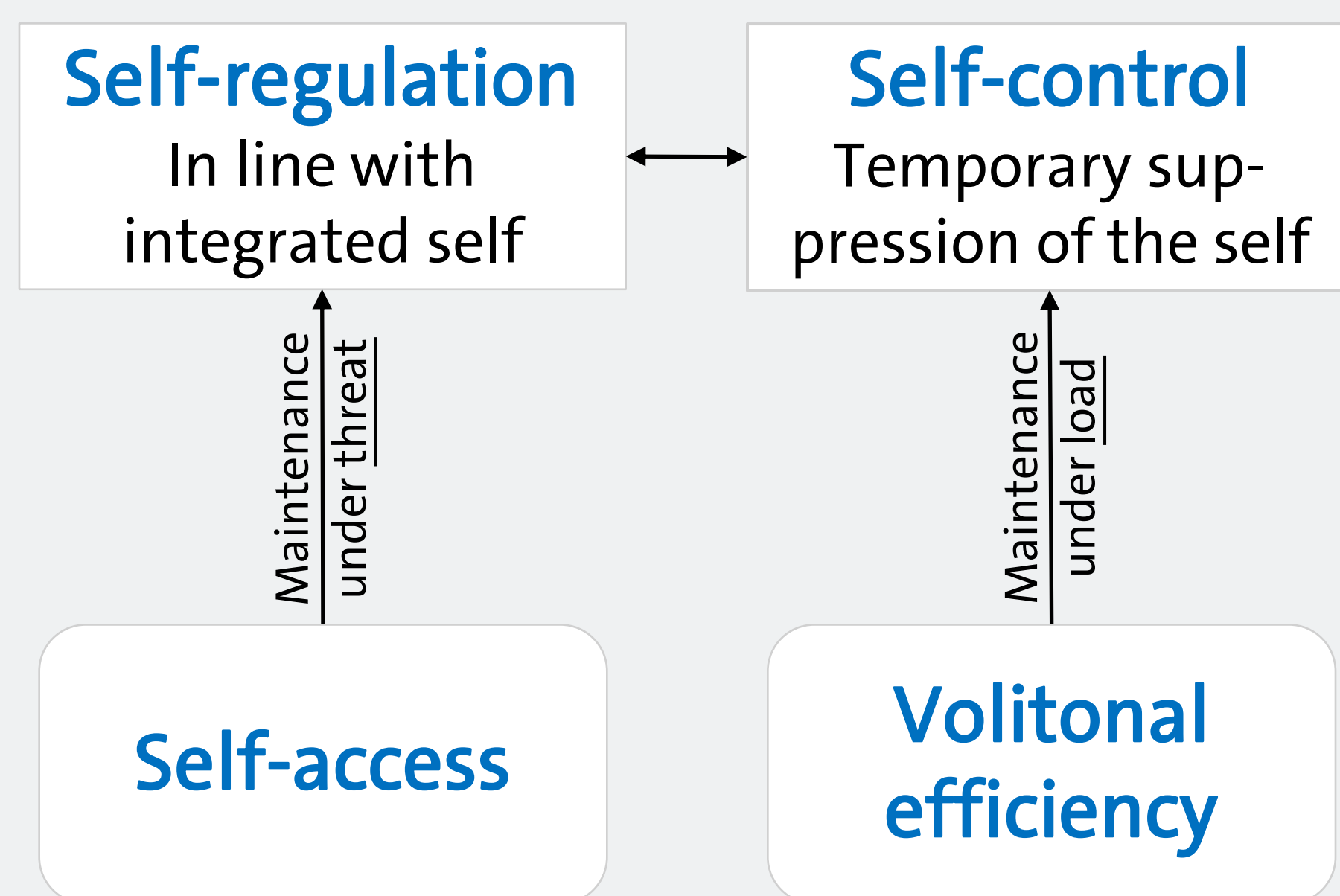


Figure 1 Example implicit motive profile of a subject

## Volitional Components

(Kuhl & Fuhrmann, 1998)



## Implicit Motives & Self-regulation

Implicit motives are need-relevant components of the implicit self-system that direct behavior to satisfy personal needs, goals, values, and other self-defining characteristics (Kuhl, 2018)

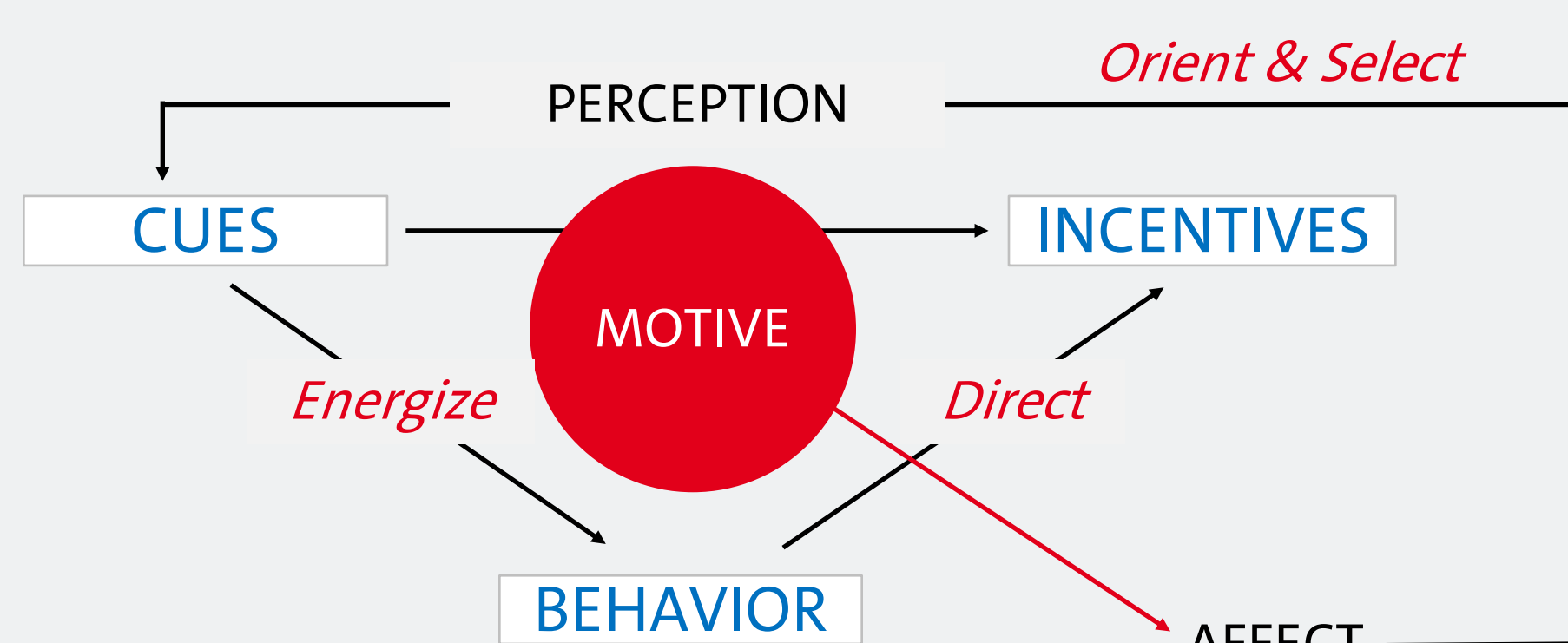


Figure 2 Functions of implicit motives (Schultheiss, 2008)

## Stress-Regulation

Psychological or behavioral responses to stressful situations or events

- **Fight-or-flight:** Overcome the stressors or try to flee it (Cannon, 1932)
- **Tend-and-befriend:** Tending to offspring and affiliating with others who provide resources and protection (Taylor et al., 2002)

### Affiliation under stress

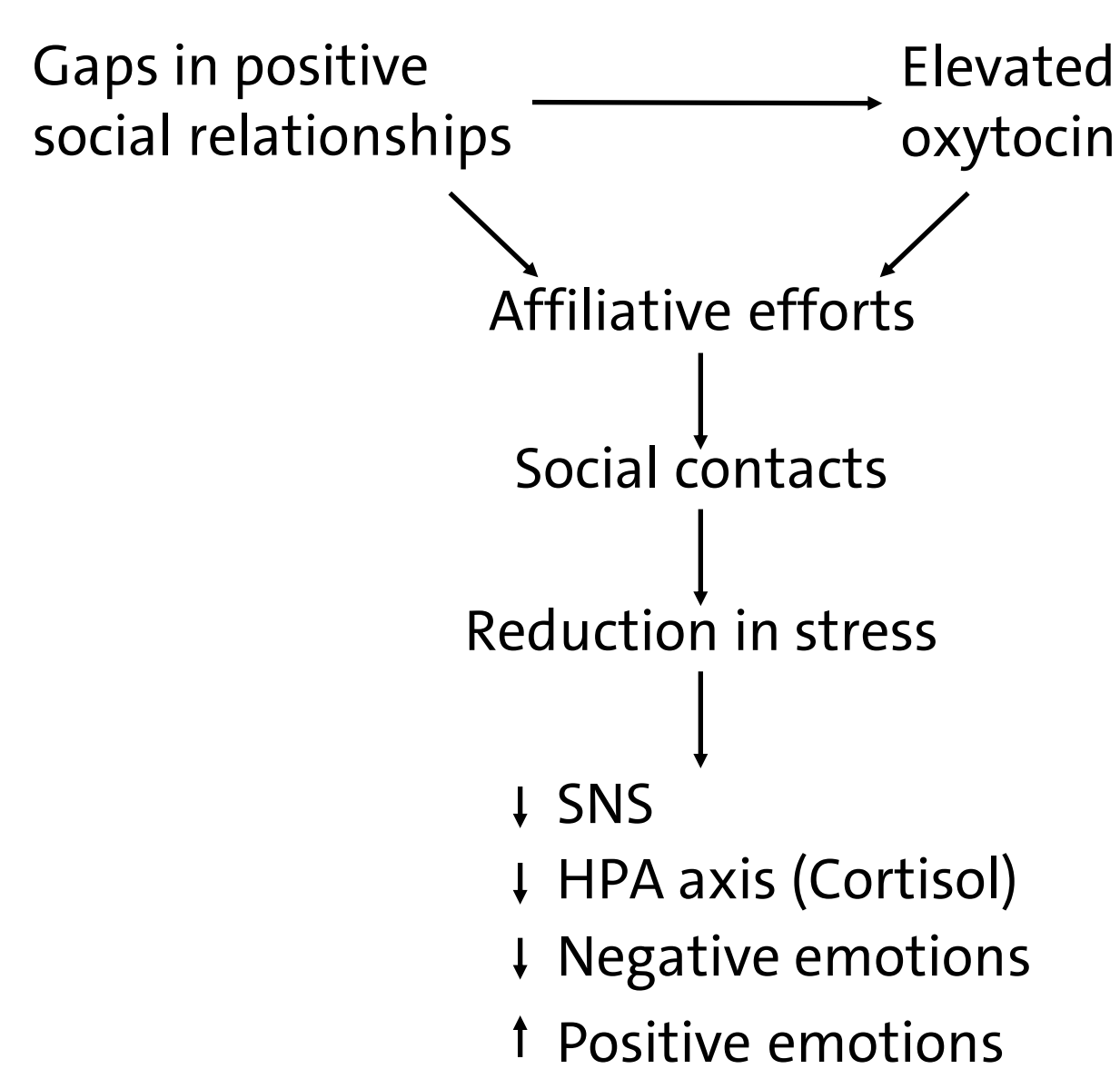


Figure 3 Biological signaling system of tend-and-befriend behavior (Taylor, 2012)

High-affiliation individuals show enhanced stress resistance (McClelland, 1989) — promoted by affiliative behavior during threat?

## Research question

Does the implicit affiliation motive predict tend-and-befriend rather than fight-or-flight responses, in comparison to the achievement and power motive?

## Methods

### Participants

$N = 291$  health science students and people working in health care

$M_{age} = 33.68$ ,  $SD_{age} = 12.41$ ; 77.66 % women

### Measures

**Implicit motives:** Picture Story Exercise (Schultheiss & Pang, 2007; Winter, 1994)

**Volitional components:** Self-regulation Inventory (SSI-K3, Kuhl & Fuhrmann, 2004)

**Tend-and-befriend/fight-or-flight:** Tend-and-Befriend Questionnaire (Levy et al., 2019; Turton & Campbell, 2007)



Sample images from the Picture Story Exercise

## Analyses

- Implicit motives were scored according to the marker word hypothesis (Schultheiss, 2013) using Linguistic Inquiry and Word Count software (age and gender were residualized on motive scores)
- Path analyses using the *lavaan* package (Rosseel, 2012) in R were used to predict tend-and-befriend, fight and flight based on implicit motives

## Results

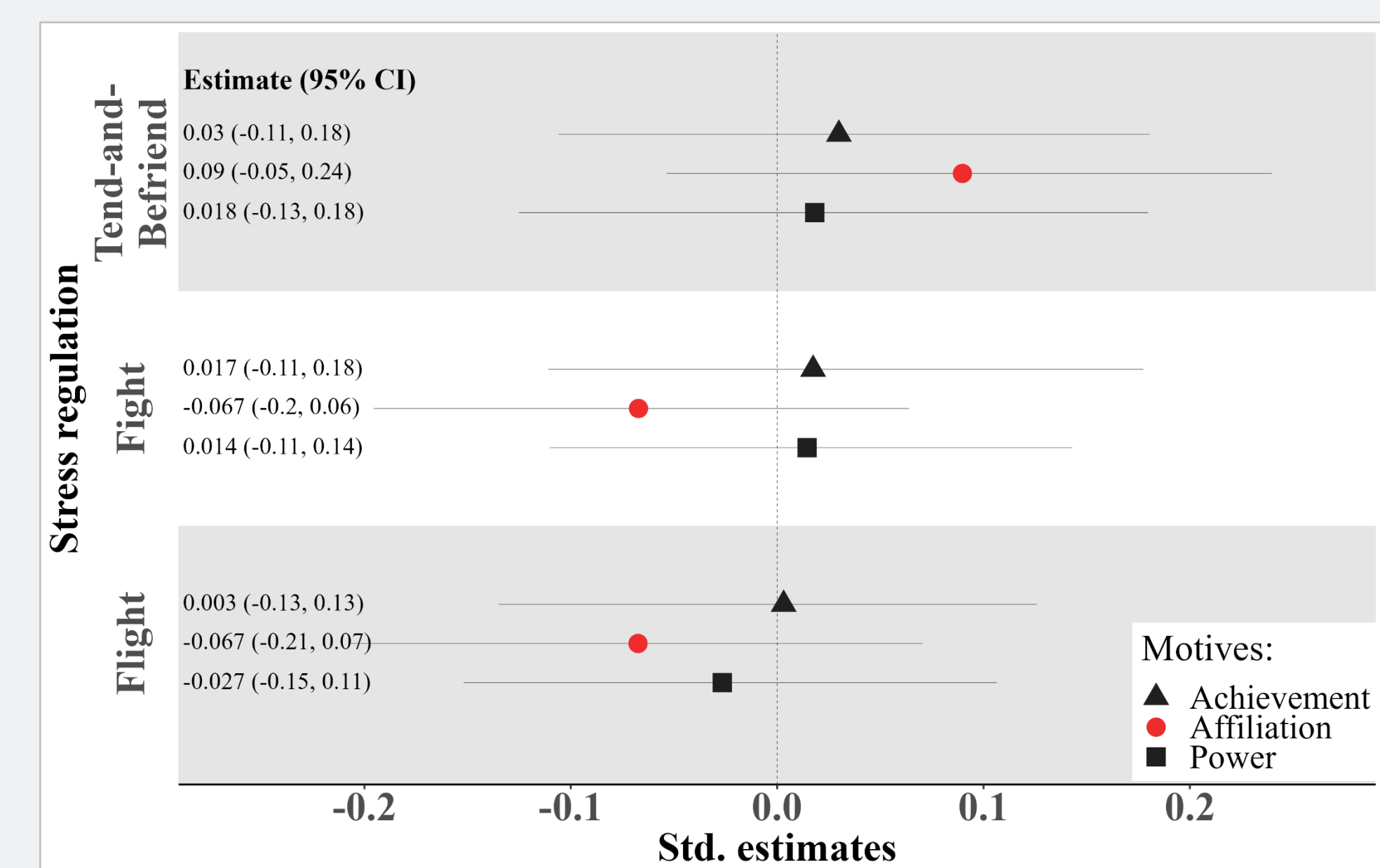


Figure 4 Estimates of the path analyses with 95% CI predicting stress-regulation based on implicit motives

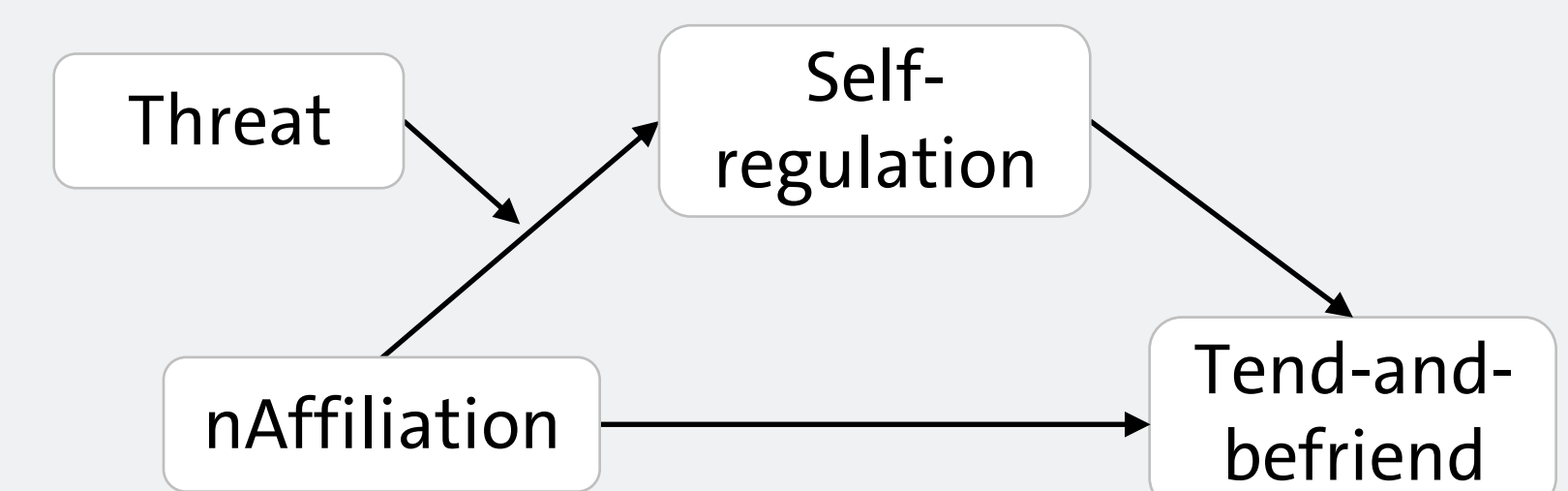
## Discussion

People with an implicit affiliation motive showed a tendency to regulate stress using tend-and-befriend over fight-or-flight

- Higher levels of affiliation motivation are preceded by greater increases of progesterone which exerts anxiolytic effects in the brain and may thereby down-regulate fight-flight responses and up-regulate tend-and-befriend responses (Wirth & Schultheiss, 2006)
- A congruent explicit motive and/or self-congruent goals (self-regulation) may be further needed to promote the association between implicit affiliation and tend-and-befriend (e.g., Schüler et al. 2008)

## Future Directions

- Investigate which volitional components (under threat) promote tend-and-befriend behavior of high-affiliation individuals



- Study operant (vs. respondent) measures of affiliative self- and stress-regulation and associated biopsychological correlates