

Coping with Stress: The Implicit Affiliation Motive Promotes Stress Regulation through Tend-and-Befriend when Using Content-coded and Software-based Motive Scores

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

Introduction

Implicit motives are 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). This study investigated the link between the implicit affiliation motive and affiliation behavior under stress (i.e., tend-and-befriend) using two different motive coding methods.

Implicit Motives

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

Implicit Motives & Self-regulation

Implicit motives are need-relevant components of the implicit self-system that

- direct behavior to satisfy personal needs, goals and values
- generate context-specific behavioral options (Kuhl, 2018)

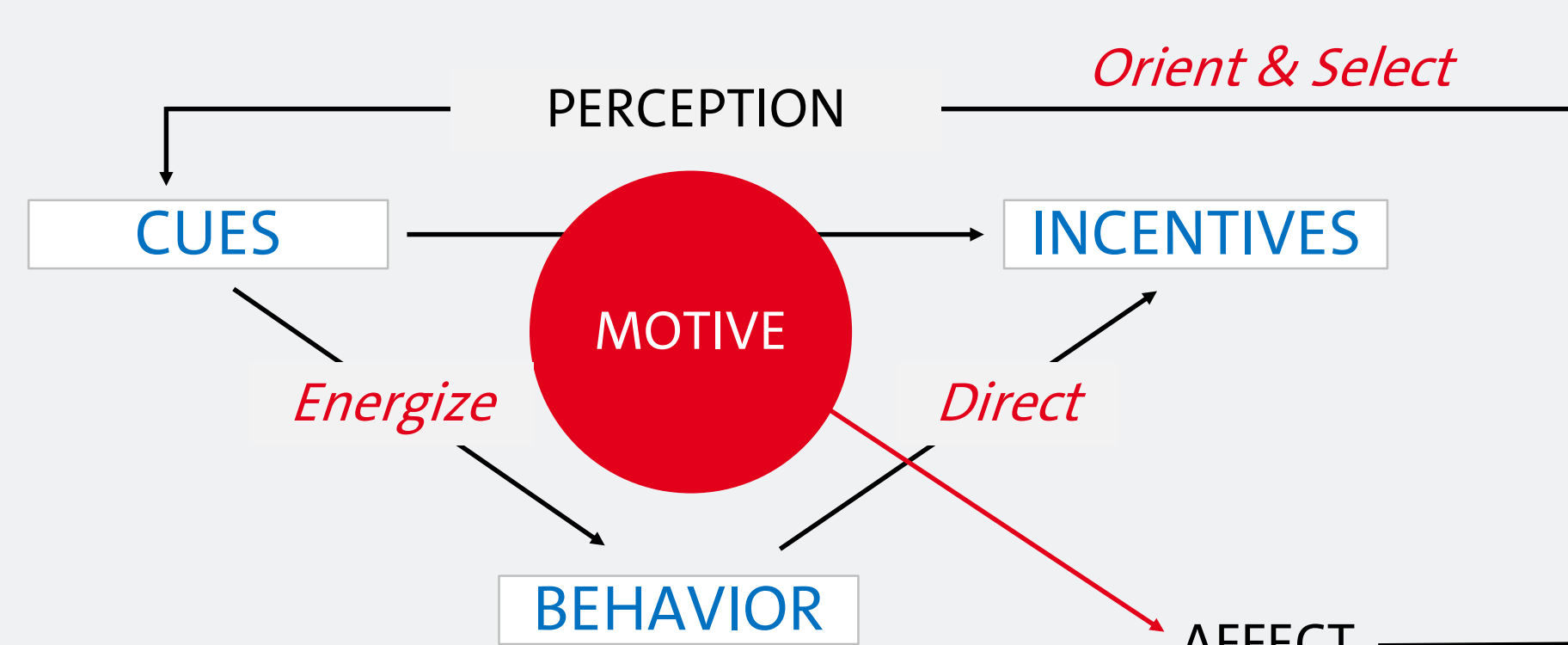


Figure 1 Functions of implicit motives (Schultheiss, 2008)

Affiliation under stress: Tend-and-befriend

Tend-and-befriend: Biobehavioral response to stress characterized by **tending** to offspring and **affiliating** with others who provide resources and protection (Taylor et al., 2000)

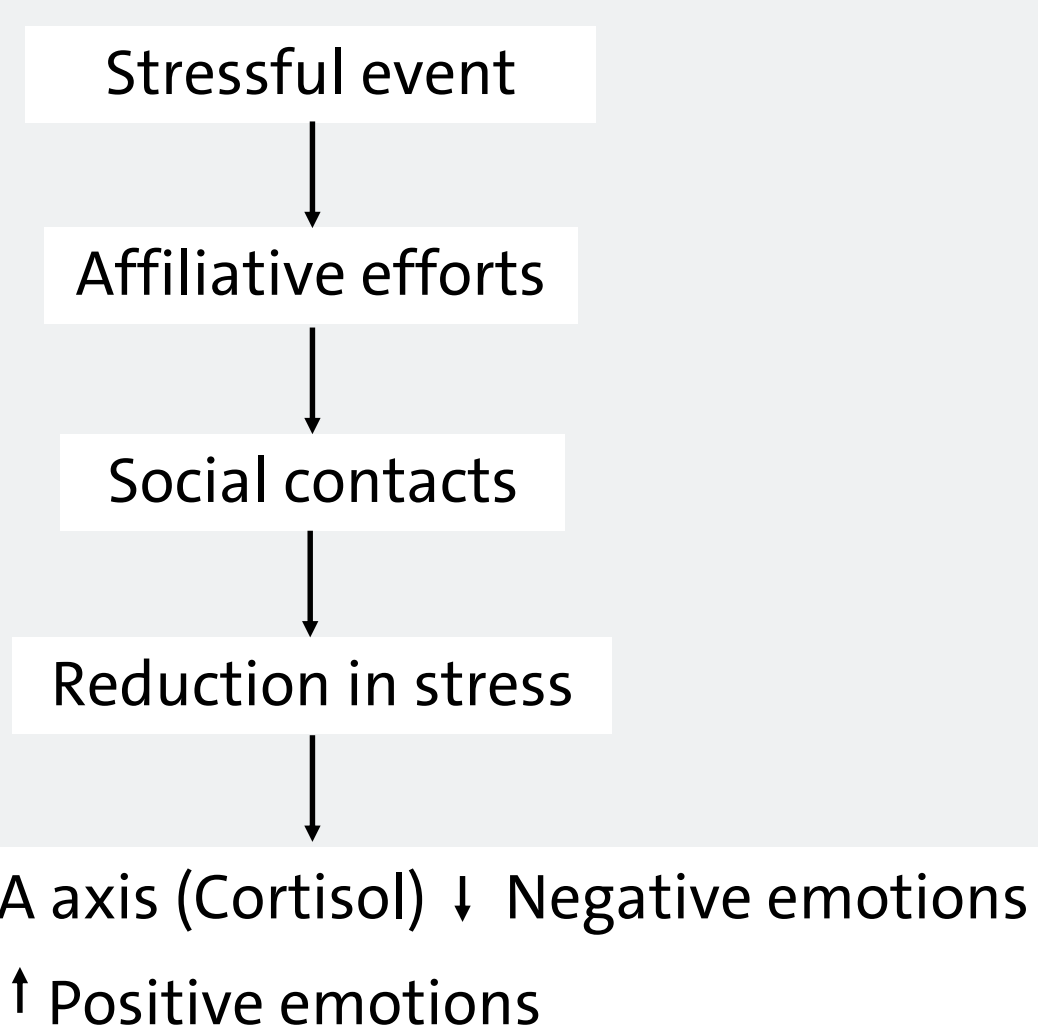


Figure 2 Biological signaling system of tend-and-befriend behavior (adapted from Taylor, 2012)

Implicit Motive Assessment

Due to their non-conscious nature, implicit motives are measured using projective procedures where respondents write stories about ambiguous pictures which are coded by their content to the three motives

Coding Methods

Method	Advantages/ Disadvantages
<i>Semantic analysis using Winter's coding system (1994)</i>	(+) State-of-the-art (+) Satisfactory interscorer agreement, test-retest reliability, causal, discriminant and predictive validity (-) Resource- and time-intensive training and coding (-) Low internal consistency (-) Evaluation objectivity depends on coder
<i>Computer-based analysis using the marker word hypothesis (Schultheiss, 2013)</i>	(+) Resource- and time-efficient (+) Satisfactory internal consistency, causal, discriminant and predictive validity (-) Only small to medium correlation with motive scores from Winter (1994)

Research Question

- Does the implicit affiliation motive, compared to the achievement and power motive, predict tend-and-befriend, and,
- does this association depend on the motive coding method?

Methods

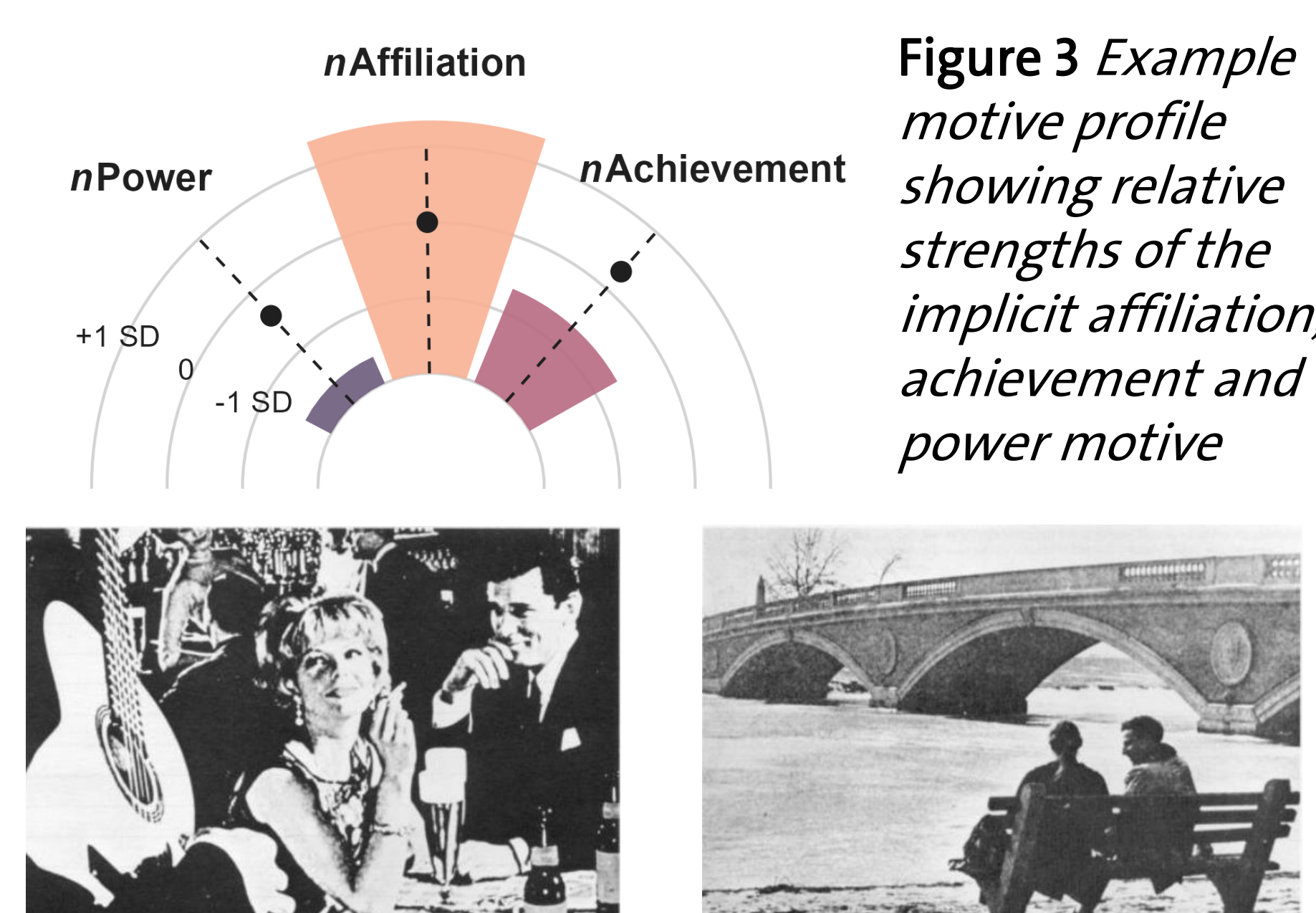
Participants

$N = 29$ health science students and people working in health care
 $M_{age} = 33.7$, $SD_{age} = 12.41$; 77.59 % women

Measures

Implicit motives: Picture Story Exercise (Winter, 1994) coded for $nAff$, $nAch$, and $nPow$
a) using a trained coder (Winter, 1994), and,
b) Linguistic Inquiry and Word Count (LIWC; Pennebaker et al., 2001) software

Tend-and-befriend: Tend-and-Befriend Questionnaire (Levy et al., 2019)



Sample images from the Picture Story Exercise

Analyses

- LIWC- and Winter-derived motives scores were correlated according to Pearson (word count was residualized on Winter motive scores)
- Path analyses using the *lavaan* package (Rosseel, 2012) in R were used to predict tend-and-befriend based on an interaction between motives and coding method (controlling for age and gender)

Results

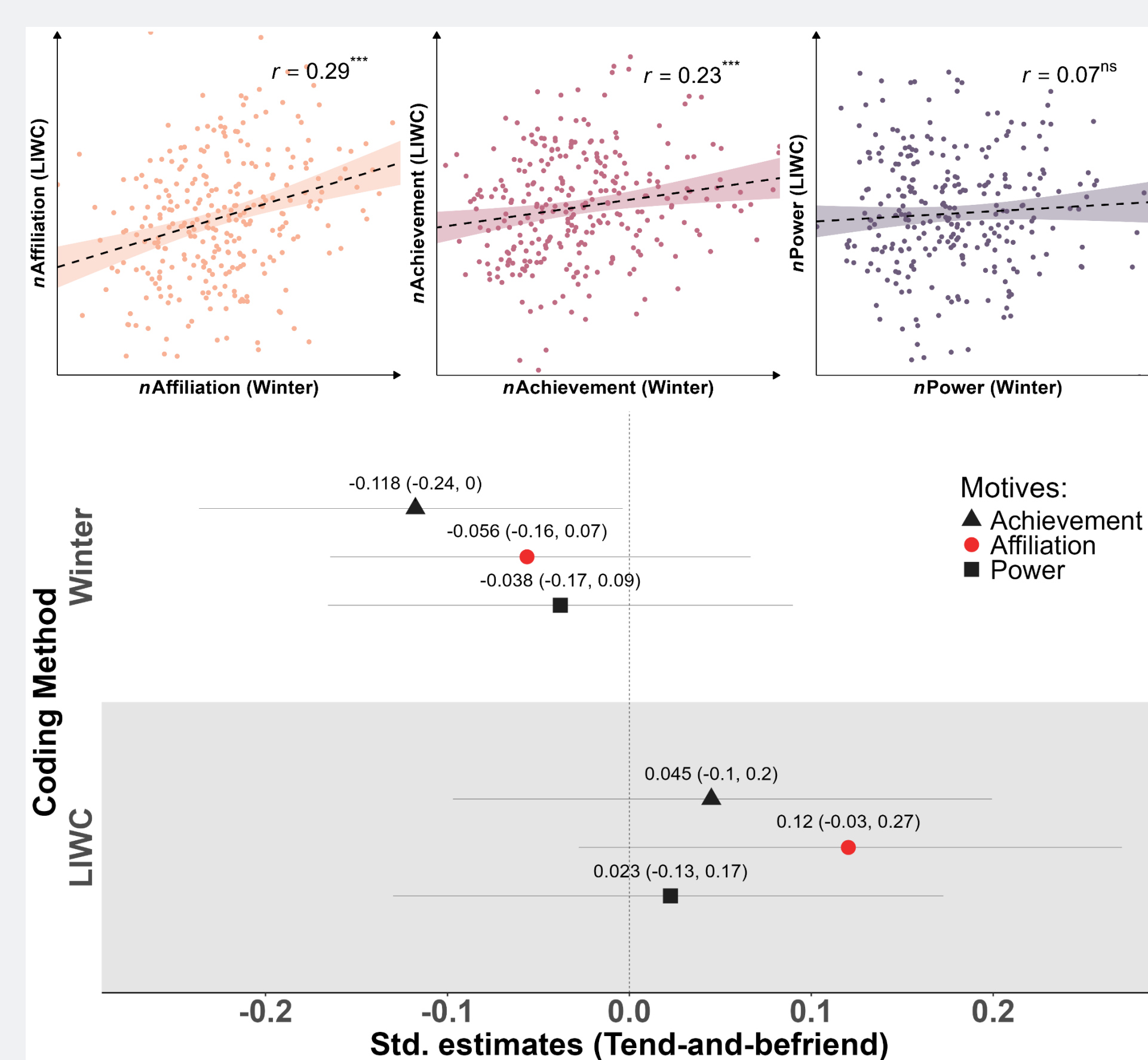


Figure 4 Top: Correlation (Pearson) between Winter and LIWC scores for each motive

Bottom: Std. beta weights with 95% CI predicting tend-and-befriend using Winter and LIWC motive scores

Discussion

- In line with Schultheiss (2013), Winter and LIWC scores showed small to medium correlation coefficients, which was smallest for $nPow$
- The effect of motive on tend-and-befriend did not depend on coding method
- In stressful situations, $nAff$ (but also $nPow$) may direct behavior towards affiliative efforts to form social networks
- 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 (Schüler et al. 2008)

Future Directions

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

