





Motive-Congruent Behavior to Regulate Life Stress: Linking Stress, Implicit Motives, and Self-Regulation

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

Introduction

Life stress can adversely affect mental and physical health, with responses to and appraisals of stressors varying according to personality traits (Sapolsky, 1994). This study investigated the link between implicit motives and life stress and whether the effect of the affiliation motive (*n*Aff) on life stress was moderated by motive-congruent (i.e, affiliative) stress-regulation behavior.

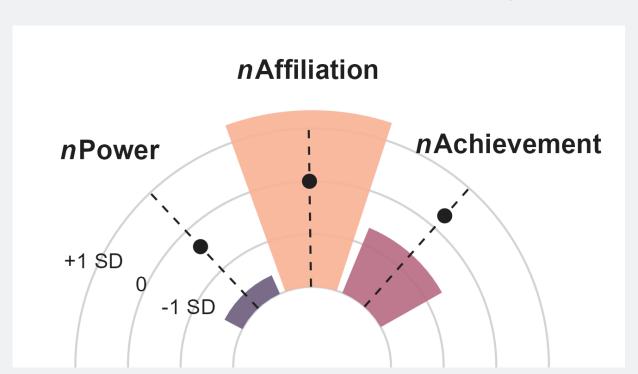


Figure 1 Example motive profile showing relative strengths of the implicit affiliation, achievement and power motive

Implicit Motives & Self-regulation

Implicit motives: Nonconscious preferences for certain classes of incentives that *orient* attention toward specific cue stimuli in the environment and *energize* behavior

- Direct behavior to satisfy personal needs, goals and values
- Generate context-specific behavioral options (Kuhl, 2018; McClelland, 1987)

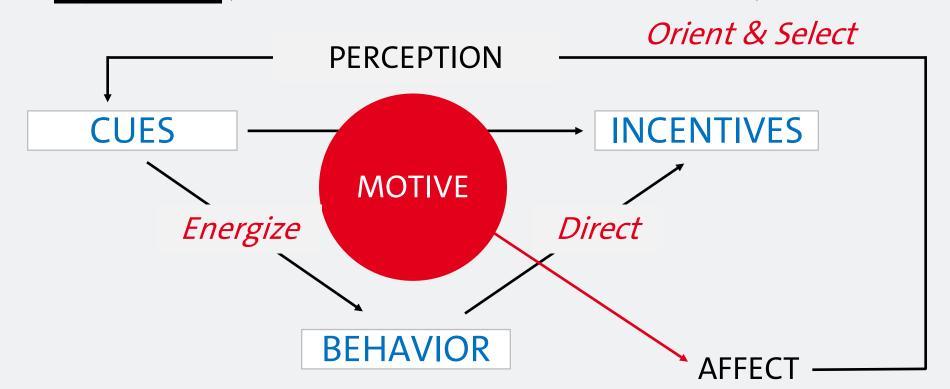


Figure 2 Functions of implicit motives (Schultheiss, 2008)

*n*Affiliation & Stress

*n*Aff: The need to establish, maintain, or restore positive social relationships with others (Atkinson et al., 1954)

- Buffers the effect of acute psychosocial stress on HPA axis (Wegner et al., 2014)
- High-affiliation individuals show better stress resistance (McClelland, 1989) and maintain better immune system function during stress (Jemmott et al., 1983)
- Congruence between nAff and behavior or environment benefits health outcomes (e.g., well-being, job-burnout) (Brandstätter et al, 2016; Schüler et al., 2008)

Sapolsky, R. M. (1994). Individual differences and the stress response. Seminars in Neuroscience, 6(4), 261–269

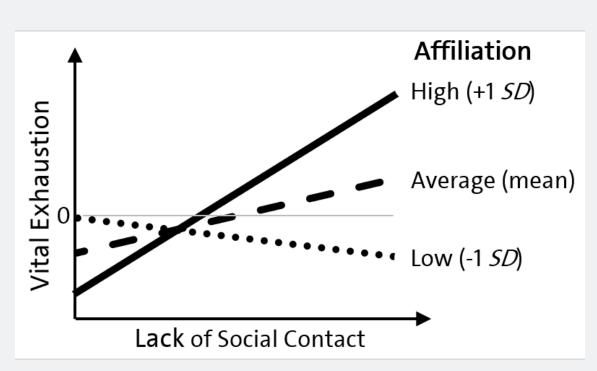


Figure 3 Moderating effect of nAff on the association between lack of social contact and vital exhaustion (adapted from Schoch et al., 2018)

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)

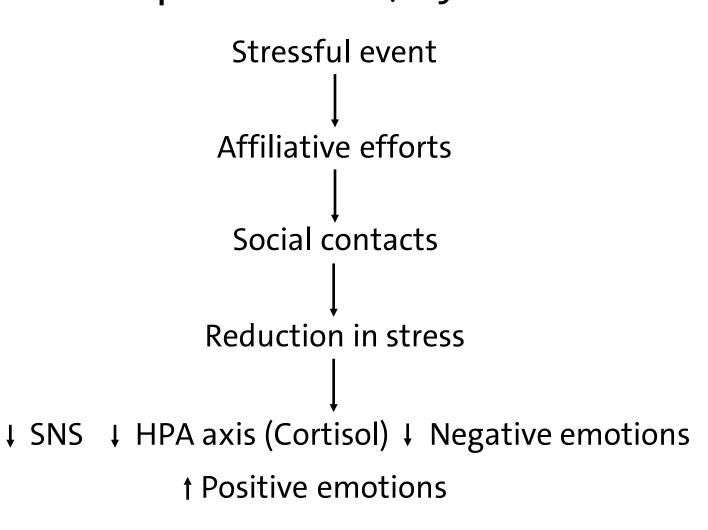


Figure 4 *Biological signaling system of tend-and-befriend behavior (adapted from Taylor, 2012)*

Research Question

a) Is the stress-buffering effect of the affiliation motive, relative to the achievement and power motive, reflected in lower self-reported life stress, and, b) is this effect amplified by motive-congruent stress-regulation (i.e., tend-and-befriend)?

Methods

Participants

N= 290 health science students and people working in health care

 $M_{\text{age}} = 33.7$, $SD_{\text{age}} = 12.43$; 77.59 % women

Measures

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

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

- "When I'm stressed, I talk to friends to let off steam."
- "Tending to others helps reduce my stress."

General life stress: Self-regulation Inventory (SSI-K3, Kuhl & Fuhrmann, 2004)

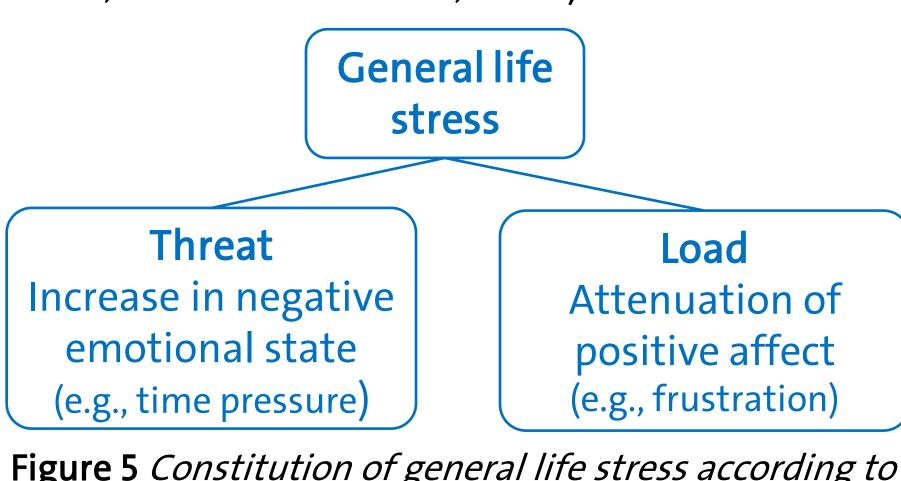


Figure 5 Constitution of general life stress according to the SSI-K3 (Kuhl & Fuhrmann, 2004)





Sample images from the Picture Story Exercise

Analyses

Multiple regression analyses were computed in RStudio to predict self-reported life stress based on implicit motives (*Model 1*) and based on an interaction between *n*Aff and tend-and-befriend (*Model 2*), controlling for age and gender in both models

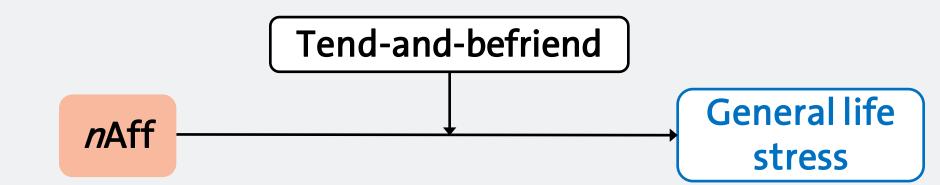


Figure 6 Interaction effect modelled in Model 2

Results

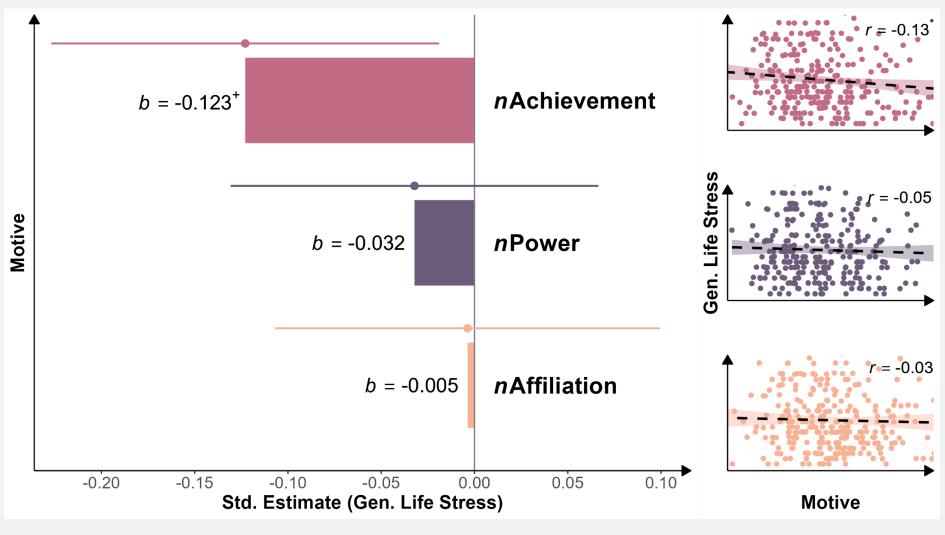


Figure 7 *Left: Std. beta weights of Model 1 with 95% CI Right: Association between motives and life stress*

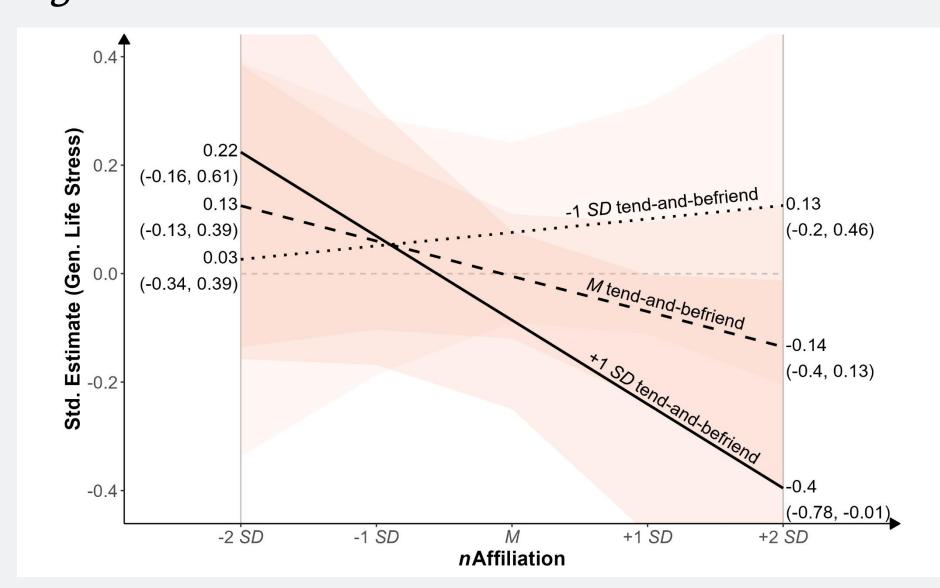


Figure 8 *Std. beta weights with 95% CI of Model 2 for low (-1 SD), average (M) and high (+1 SD) tend-and-befriend at -2 SD and +2 SD of nAff*

Discussion

nAff alone did not predict lower selfreported life stress but, albeit not significant, high affiliation individuals who affiliate under stress (i.e., tend-and-befriend) reported to experience lower life stress

- nAff must be paired with a corresponding motive-congruent behavior to elicit stress-related benefits
- A congruent explicit motive (e.g., Schüler et al. 2008) or volitional components that support behavior in line with the integrated self (i.e., in line with ones motives) under threat (self-access; Kuhl & Fuhrmann, 2004) may be further needed

Future Directions

Investigate which volitional components promote stress-related benefits of tend-and-befriend in affiliation-motivated individuals

References

Atkinson, J. W., Heyns, R. W., & Veroff, J. (1954). The effect of experimental arousal of the affiliation motive on thematic apperception. The Journal of Abnormal and Social Psychology, 49(3), 405.

Brandstätter, V., Job, V., & Schulze, B. (2016). Motivational incongruence and well-being at the workplace: Person-job fit, job burnout, and physical symptoms. Frontiers in Psychology, 7, 205328.

Jemmott, J. B., Borysenko, J. Z., Borysenko, M., McClelland, D. C., Chapman, R., Meyer, D. (1983). Academic stress, power motivation, and decrease in secretion rate of salivary secretory immunoglobulin A. Lancet, 8339, 1400–1402.

Kuhl, J. (2018). Individuelle Unterschiede in der Selbststeuerung. In J. Heckhausen & H. Heckhausen (Eds.), Motivation und Handeln (pp. 389–422). Springer-Verlag.

Kuhl, J., & Fuhrmann, A. (2004). Selbststeuerungs-Inventar: SSI-K3 (Kurzversion). Universität Osnabrück. Unpubliished manuscript.

Levy, K. N., Hlay, J. K., Johnson, B. N., & Witmer, C. P. (2019). An attachment theoretical perspective on tend-and-befriend stress reactions. Evolutionary Psychological Science, 5, 426–439.

McClelland, D. C. (1987). Human Motivation. Cambridge University Press.

McClelland, D. C. (1989). Motivational factors in health and disease. American Psychologist, 44(4), 675.

Schoch, J., Noser, E., & Ehlert, U. (2018). Do implicit motives influence perceived chronic stress and vital exhaustion? *Frontiers in Psychology*, *9*, 375711.

Schüler, J., Job, V., Fröhlich, S. M., & Brandstätter, V. (2008). A high implicit affiliation motive does not always make you happy: A corresponding explicit motive and corresponding behavior are further needed. *Motivation and Emotion*, *32*, 231–242.

Schultheiss, O. C. (2008). Implicit motives. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research* (3rd ed., pp. 603–633). Guilford Press.

Schultheiss, O. C., & Pang, J. S. (2007). Measuring implicit motives. In R. W. Robins, R. C. Fraley & R. Krueger (Eds.), *Handbook of Research Methods in Personality Psychology* (pp. 322–344). Guilford.

Taylor, S. E. (2012). Tend and befriend theory. In P. A. M. Van Lange, A. W. Kuglanski & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 3249). Sage Publications Ltd.

Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R., & Updegraff, J. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107, 411–429. Wegner, M., Schüler, J., & Budde, H. (2014). The implicit affiliation motive moderates cortisol responses to acute psychosocial stress in high school students. *Psychoneuroendocrinology*, *48*, 162–168.

Winter, D. G. (1994). *Manual for scoring motive imagery in running text* (4 ed.). Unpublished manuscript, Department of Psychology, University of Michigan, Ann Arbor.