

## Publication

## Affect and subsequent physical activity: An ambulatory assessment study examining the affect-activity association in a real-life context

**JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 4486426**Author(s)** Niemann, Christina Y. N.; Herrmann, Christian; von Haaren, Birte; van Kann, Dave; Woll, Alexander**Author(s) at UniBasel** [Herrmann, Christian](#) ;**Year** 2016**Title** Affect and subsequent physical activity: An ambulatory assessment study examining the affect-activity association in a real-life context**Journal** Frontiers in Psychology**Volume** 7**Pages / Article-Number** 677

Traditionally, cognitive, motivational, and volitional determinants have been used to explain and predict health behaviors such as physical activity. Recently, the role of affect in influencing and regulating health behaviors received more attention. Affects as internal cues may automatically activate unconscious processes of behavior regulation. The aim of our study was to examine the association between affect and physical activity in daily life. In addition, we studied the influence of the habit of being physically active on this relationship. An ambulatory assessment study in 89 persons (33.7% male, 25 to 65 years,  $M = 45.2$ ,  $SD = 8.1$ ) was conducted. Affect was assessed in the afternoon on 5 weekdays using smartphones. Physical activity was measured continuously objectively using accelerometers and subjectively using smartphones in the evening. Habit strength was assessed at the beginning of the diary period. The outcomes were objectively and subjectively measured moderate-to-vigorous physical activity (MVPA) performed after work. Multilevel regression models were used to analyze the association between affect and after work MVPA. In addition, the cross-level interaction of habit strength and affect on after work MVPA was tested. Positive affect was positively related to objectively measured and self-reported after work MVPA: the greater the positive affect the more time persons subsequently spent on MVPA. An inverse relationship was found for negative affect: the greater the negative affect the less time persons spent on MVPA. The cross-level interaction effect was significant only for objectively measured MVPA. A strong habit seems to strengthen both the positive influence of positive affect and the negative influence of negative affect. The results of this study confirm previous results and indicate that affect plays an important role for the regulation of physical activity behavior in daily life. The results for positive affect were consistent. However, in contrast to previous reports of no or an inverse association, negative affect decreased subsequent MVPA. These inconsistencies may be in part explained by the different measurements of affect in our and other studies. Therefore, further research is warranted to gain more insight into the association between affect and physical activity.

**Publisher** Frontiers Media**ISSN/ISBN** 1664-1078**URL** <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4860507/>**edoc-URL** <https://edoc.unibas.ch/65748/>**Full Text on edoc** No;**Digital Object Identifier DOI** 10.3389/fpsyg.2016.00677**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/27242591>**ISI-Number** WOS:000375389600004

