UNIVERSITÄT ZU LÜBECK
PRÄVENTION UND UNIVERSITÄRES GESUNDHEITSMANAGEMENT

Lübeck University Student Trial

Moving Towards Health: Physical Activity as a Resource for Healthy Academic Engagement in University Students

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Aim & Background

University students face elevated health risks from academic demands. While stress consequences are well-studied, less is known about the role of physical activity (PA) and sedentary time (ST) in coping. This study examines how physical activity and sedentary time influence transitions between academic behavior and experience patterns in university students over time.

Method

Design: 2022- 2025: Prospective longitudinal cohort study (LUST: Lübeck University Student Trial)

Patricipants: *N* = 785 (1965 observations)
university students (M_{age} = 20.81 ± 3.33, 80.3 % female)

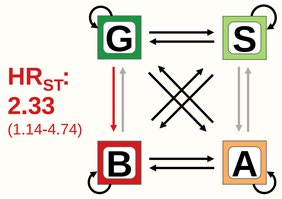
Measures:

- **Physical activity:** Moderate to vigorous intensity physical activity in metabolic equivalent of task minutes per week (International Physical Activity Questionnaire, Craig et al., 2003)
- **Sedentary time:** Daily time spent sitting in minutes
- **Academic coping behavior and experience patterns:** Coping style of dealing with professional demands (Schaarschmidt & Fischer, 1997, 2008)

G	**Good health:** Health promoting attitutde to work, optimal professional motivation, no health risks
S	**Sparing personal investment:** Resource efficient attitude to work, protection, no health risk
A	**Ambitious:** Excessive engagement, workaholism, over-motivation, vulnerability to health risks
B	**Burnout:** Burnout syndrome, low motvation, resignation, high vulnerability and health risks

Results & Discussion

Markov multi-state model analyses revealed that ST was associated with an increased hazard of direct transition from pattern G (Good health) to B (Burnout, HR = 2.33, 95% CI: 1.14 - 4.74). PA was not significantly associated with transition hazard ratios between coping patterns. Reducing structurally-mandated sitting could foster long-term healthier coping in academic contexts.



Sedentary time increases the risk of direct transition from healthy to burnout-related coping patterns within one year of study.

Reducing sedentary time could support academic well-being.