



Basel, January 15, 2018

LEARNING CONTRACT

Learning Contract within the HERO project

Subject/Offer: Fitness and health check among 500 police officers of Basel-City. Measurements include anthropometry, autonomic function, blood glucose, blood lipids, emotion recognition, functional movement screen, lung function, Åstrand fitness test, physical activity, psychological health, Burnout, occupational stress, mental toughness, and sleep. Participants will be observed in the laboratory, and in real life via ecological momentary assessment and ambulatory assessment.

Short description: Ample evidence exists that general and work-related stress increase the risk of mental ill-health (e.g. burnout, anxiety, impaired sleep quality) and physical diseases (e.g. coronary heart disease, musculoskeletal disease), and ultimately contribute to an increased risk for premature death. On the other hand, previous research has shown that regular physical activity and high levels of cardiorespiratory fitness have a positive impact on participants' ability to cope with psychosocial stress.

These stress-buffering effects might be based on underlying mechanisms such as unspecific adaptation to repeated physical stressors (physical activity). These unspecific adaptations would be beneficial when individuals are exposed to other stressful events (e.g. psychosocial stress). Validity for the cross-stressor adaptation hypothesis has mainly been provided in laboratory settings, where participants are exposed to standardized laboratory stressors such as the Trier Social Stress Test.

The present study addresses an important gap in the literature by examining whether regular physical activity and high levels of cardiorespiratory fitness are able to moderate the relationship between participants' stress perceptions and their physiological arousal and mood states experienced under real-life conditions using a combination of new technological approaches (Ecological momentary assessment and ambulatory assessment).

Your field of activity comprises performance of all measurements and data processing.

Theoretical background:

- Fuchs, R., & Gerber, M. (Eds.). (2017). Stressregulation und Sport. Heidelberg: Springer.

Specific requirements:

- For students (sport science and/or medicine) from the 3rd semester onwards;
- In the scope of 8 ETCS;
- Interest in the topic, reliability, carrying out measurements
- Personal temporal flexibility
- Start: Mid-January – End of April 2018.

If you are interested in the topic or would like more information, please contact:

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