

# Human, Health and Physical activity

## A research theme in Research for Innovation

– the overarching strategic research theme of  
Halmstad University, supported by The Knowledge Foundation

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### Partners:

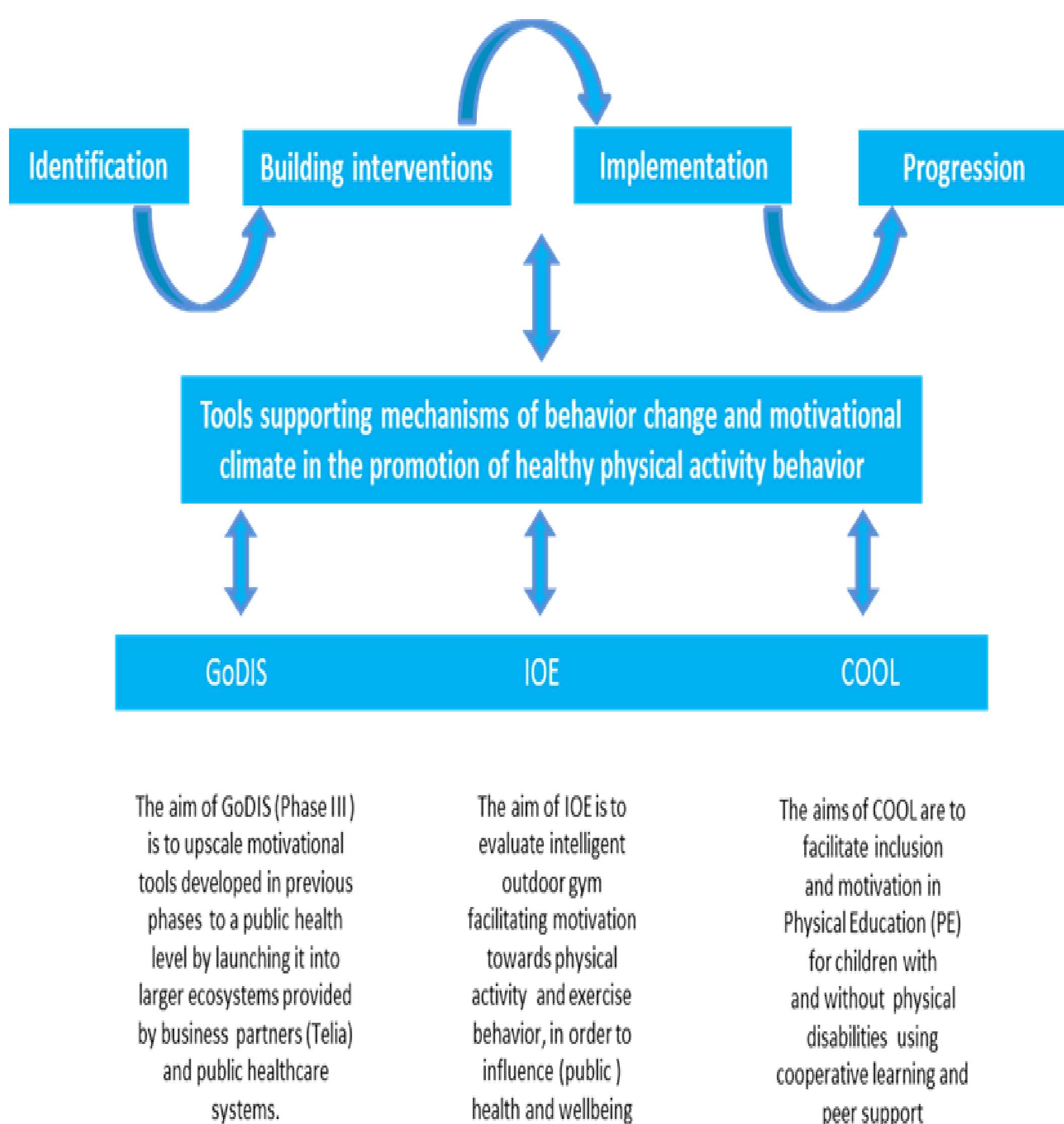
Tappa Service AB, HPI-Health Profile Institute AB, Telia Sonera AB (Telia Healthcare), Kairos Future AB, Eleiko Sport AB, Swedish Adrenaline, Exceed Performance AB and Rantzows Sports AB

### Research idea and Outcome

The overall research idea is to develop tools supporting mechanisms of behaviour change and motivational climate in the promotion of healthy physical activity behaviour - Tailoring intelligent and sustainable interventions. Outcomes of presented synergy project have potential to be both practical and theoretical in nature and distributed in various forms, and as commercialized services and products.

### Presentation of Research Problem and Approach

In the below presented figure an overview of a potential synergy collaborative process and objectives is outlined.



- GoDIS (Digital innovations in Self-determined Exercise Motivation), IOE (Intelligent Outdoor Exercise equipment), COOL (Cooperative Oriented Learning).

### Results so Far

At present we have no results from the synergy collaboration belonging to IOE and COOL. However, the pilot data collection of GoDIS Phase 1 has recently been completed and preliminary results from initial analyses show motivational regulations, goal orientations and psychological need satisfaction to be (inter)related according to theory. In the next step, advanced mediation variable analyses and latent growth curve models will be used to explore motivational processes, changes and profiles in relation to exercise behaviour.

The prototype is currently further tested and developed in the nine months RCT of GoDIS Phase 2. The working process will be conducted in a user experience (UX) design oriented process, using interviews, contextual observations and surveys to build actionable design models, such as personas, context scenarios, key-path scenarios, and service requirements specifications. The industrial partners contribute with expertise, design, service platforms, and bases for user centered testing and evaluating.



### Publications

- Weman-Josefsson, A. K., Halila F, Johnson U, Lindwall M, Wickström M, & Wärnestål P. (2014) Digital innovations and self-determined exercise motivation: a person-centred perspective. VITALIS - Nordens ledande eHälsomöte; 2014; Göteborg. Göteborgs universitet; 2014. <http://hdl.handle.net/2077/35435>
- Weman-Josefsson, A. K., Halila F, Johnson U, Lindwall M, Wickström M, Wärnestål P. (2015). *Digital Innovations and Self-determined exercise motivation: an interdisciplinary approach*. Proceedings of The 6th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC March 2015. Orlando, Florida.
- Weman-Josefsson, A.K., Ebbesson, E. Halila, F., Johnson, U., Lund, J., Wickström, N., & Wärnestål, P. (accepted). *Digital interventions in self-determined exercise motivation – interdisciplinary innovations*. International Society for Behavioral Nutrition and Physical Activity (ISBNPA) 14<sup>th</sup> Congress, June 2015 Edinburgh, Scotland.
- Weman-Josefsson, A.K., Ebbesson, E. Halila, F., Johnson, U., Lund, J., Wickström, N., & Wärnestål, P. (accepted). *Application of self-determination theory in the e-health industry – promoting sustainable exercise motivation*. Fepsac 14:th European congress on sport psychology, July 2015, Bern, Switzerland.

Relevant publications related to the research projects are:

- Klavina, A., Jerlinder, K., Kristén, L., Hammar, L., & Soulie, T. (2013). Cooperation Directed Learning in Inclusive Physical Education. *European Journal of Special Needs Education*, 29 (2), 119-134.

Part of the content of the research theme is published in the Halmstad University journal *Qualitative studies of Health and Well-being and its thematic cluster 2015* "Health, Physical Activity and Lifestyle".

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