

## **Motivational regulations and physical activity among Norwegian 4<sup>th</sup>-graders**

**Michael S. Reinboth<sup>1</sup>, Inger M. Oellingrath<sup>1</sup> & Martin V. Svendsen<sup>2</sup>**

**<sup>1</sup>Telemark University College, Telemark, Norway**

**<sup>2</sup>Telemark Hospital, Telemark, Norway**

Grounded in self-determination theory (SDT) (Deci & Ryan, 2000), the purpose of this study was to a) validate a Norwegian version of the pictorial motivation scale (PMS)(Reid, Vallerand, Poulin & Crocker, 2009) among Norwegian 4<sup>th</sup>-graders without disability and b) to examine the relationship between children's motivational regulations and their levels of leisure-time physical activity/inactivity.

Participants were 470 female and 487 male Norwegian 4th-graders (9 years of age) from Telemark, Norway. Questionnaires consisted of an adapted translated Norwegian version of the PMS (Reid et al., 2009), frequency and duration of leisure-time physical activity, inactivity (Playstation, dvd, TV), as well as social background variables (e.g.,parent educational level, parent body mass index).

Results supported the 4-factor structure of the PMS as well as the simplex pattern of correlations between the four subscales. Moreover, participant's intrinsic and self-determined extrinsic motivation to be physically active in their free-time was positively associated with leisure-time physical activity and negatively associated with the use of transport to school during winter-time, as well as amount of time spent on playing Playstation, watching TV or dvd. The above mentioned relationships were reversed with regards to amotivation and non-self-determined extrinsic motivation.

Regression analysis showed that amotivation and non-self-determined extrinsic motivation emerged as significant negative predictors of leisure-time physical activity when social background variables were controlled for. The findings are discussed in light of SDT as well as the measurement of motivation among young children without disability.