Psychosocial correlates of objectively measured physical activity in higher and lower educated Belgian adults at risk for type 2 diabetes

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Purpose. Individuals with an increased risk for the development of type 2 diabetes (T2D) are an important target group for the prevention of diabetes. Their risk can be decreased by increasing their physical activity (PA) levels. However, studies show that socioeconomically deprived individuals are less likely to engage in PA. To tackle low levels of PA in low socioeconomic groups with an increased risk for the development of T2D in preventive interventions, it is important to gain insight in the correlates of this behavior. Nevertheless, literature on those correlates in this target group is inconclusive and to date, no studies used objectively measured PA. Therefore, the main aim of the present study was to investigate the moderating effects of socioeconomic status (SES) on the relationship between psychosocial factors and objectively measured PA in individuals with an increased risk on T2D. **Methods**. In Flanders, Belgium, adults with an increased risk for T2D (based on the Finnish Diabetes Risk Score) were selected in 11 low SES neighborhoods. Data were collected between March and August 2016. Participants filled out a questionnaire on socio-demographic variables, health behavior and psychosocial correlates and wore an ActiGraph accelerometer for 5 consecutive days. The final sample consisted of 164 adults (mean age: 38; 13,4% men). Statistical analyses were performed using ANCOVA models. **Results.** Descriptive results showed that low SES adults had less moderate to vigorous PA, more light PA and more overall total PA than high SES adults. SES was only a significant moderator of the associations between weight perception and light PA on weekend days ($p = 0.017$) and total PA on weekend days ($p = 0.049$). In low SES participants, adults who perceived their weight as underweight or normal were more physically active and in high SES participants, adults who perceived their weight as overweight were more physically active. SES was no significant moderator of the associations between all other psychosocial correlates and PA-variables. **Conclusion.** It is not necessary to tailor

interventions targeting psychosocial correlates of PA in adults with a higher risk for the development of T2D to specific SES-groups.