Fall 16

Students and their physical activity: willingness to be (more) active, perceived barriers and stimulants in the Netherlands

Lotus Wendel (2545722)
BSc Health and Life Sciences (major Health Sciences)
September 5th – December 23rd 2016
Huisartsen Oude Turfmarkt / Bureau Studentenartsen
Dr. Gerben Hulsegge (VU supervisor)
Dr. Claudia van der Heijde (daily supervisor)
Mr Peter Vonk (director of GP)
Drs. Emmeke Eijkelkamp (medical doctor)

Table of Contents

Summary 3
Introduction 4
Method 7
Participants and procedures 7
Measurements 7
Sample 1 7
Sample 2 8
Analysis 8
Results 9
Willingness to be physically active (sample 1) 9
Perceived barriers and stimulants (sample 2) 13
Characteristics 13
Validation 14
Barriers and stimulants 14
Discussion 18
Main results and comparison with other studies 18
Strengths and limitations 20
Implications and recommendations 20
Conclusion 21
References 22
Reflection 26
Appendices 28
Tables 29
Recruitment forms 32
Email 32
Social media 32
Newsletter from the general practice: 33
Message to all five winners 33
Questionnaire 34
Especially for the general practice Oude Turfmarkt 56
Method 56
Results 56

Summary

Background Of the total world population, 31% is physically inactive causing serious health consequences. Someone's physical activity pattern is to a large extent determined during adolescence and student time, and student time is a critical phase to change this behaviour. However, only 50% of the students meet the recommendations for physical activity. It remains unclear which students want to be more active and which students do not, as reported in the Student Health Check 2013/2014, and what retains them to be physically active. The Health Belief Model can help to understand health behaviour and to detect possible barriers and stimulants as well. This has led to two research questions: *"What are personal factors, like age, gender, and psychological problems, among the students from the Student Health Check, that are associated with willing to be more physically active?"* and *"What are the perceived barriers and stimulants for students regarding physical activity?"*

Methods The study design concerned a cross-sectional observational research. Twenty demographic and personal factors of the Student Health Check, an online self-monitor, were used in the study (N=5631). The questionnaire especially developed for this study consisted of demographic data, student information (as registration at any institution, educational level, educational institution, and type of study), student's health behaviour (smoking behaviour, alcohol use and drug use), personal history in exercise, stress, psychological problems, level of physical activity, barriers and stimulants (N=257). The analyses for both samples were performed by SPSS statistics. Associations between the personal factors and willing to be more physically active were analysed by a multiple logistic regression analyses. Three items of the questionnaire about barriers and stimulants were checked for validation by using Cronbach's alphas undertaken with reliability analyses. The biggest barriers and stimulants were analysed by descriptive information.

Results Thirteen demographic and personal factors were statistically significantly associated with willing to be more physically active. Students who are female, have a higher BMI, relationship, smoke cigarettes, have the Moroccan nationality and freshmen students wanted to be more physically active, while students of the university, are Dutch or have psychological problems wanted to be less active. The biggest perceived barriers were 'being too busy (with study)', 'having other priorities', 'being too tired', 'all time and energy goes to study', 'no time', 'duties/expectations', 'no sport partner', and 'making excuses are easier'. The biggest stimulants were 'a better physical and mental condition', 'living longer in good health', 'less chances to get heart diseases', 'to become stronger', 'to get a better concentration', 'it makes me feel more confident', and 'I feel more satisfied about myself'.

Conclusion Students' willingness to be physically active was associated with their gender, BMI, relationship status, nationality, smoking behaviour, education level and study phase, and having psychological problems. Furthermore, students are often too busy (with study), have other priorities, are too tired, need all their time and energy for study, and have no time to be physically active. Though, achieving a better health status, a better self-image, and becoming stronger and more concentrated stimulates students. Thus students want to be (more) physically active, but they have other priorities and are often too busy and too tired to do so.

Introduction

In recent years there has been an increasing research interest in physical activity all over the world. Physical activity includes sport (physical activity with specific rules and a component of competition, such as soccer, tennis, hockey), exercise (physical activities without competition like yoga, recreational cycling, dancing, weight training, running), and labour activities (Kilpatrick et al., 2005). In the Netherlands the recommendations for physical activity, called the "Nederlandse Norm Gezond Bewegen", is to be at least moderately active for 30 minutes per day (Wendel-Vos, 2014). Intensity of an activity is measured using the Metabolic Equivalent of Task, MET, scale that can be divided into four categories: Sedentary (1.0-1.5 MET), Light (1.6-2.9 MET), Moderate (3.0- 6.5 MET), and Vigorous (>6.5 MET). The lowest MET score is 0.9 for sleeping and the highest 23 for running with 22.5 km/h (Ainsworth et al., 2011). According to Kohl and colleagues (2012) and the WHO, 31% of the total world population is physically inactive. The level of physical inactivity differs among the world. In the United States of America, for example, only between 5% and 10% of the population meets the recommendations for physical activity (Adamson et al, 2016), whereas in the Netherlands 40% of the population was not active enough in 2012 (Boerema et al., 2012).

Someone's physical activity pattern is to a large extent determined during adolescence and, if someone goes to university/college, during student time (Keating et al., 2010). The university or college period seems to be a critical moment for adherence to physical activity and the promotion of an active lifestyle (Arzu et al., 2006; Bray & Born, 2004; Bray & Kwan, 2006; Gyurcsik et al., 2004; Irwin, 2007; Leslie et al., 2001). Research shows that 84.7% of senior college students, who were physically active on a regular basis still were physically active five to ten years later and 81.3% who were inactive maintained this lifestyle over that period (Keating et al., 2010). In this stage in a student's life important changes take place that can be of influence on the amount of physical activity, such as the rise of health-risk factors, the increase of stress, the lack of social support, and low self-esteem (Baranowski, et al., 1997; Leslie et al., 2001; Pennebaker et al., 1990). The importance of student life is also emphasised by the fact that few students are physically active and many students become inactive between high school and college. Based on four different studies it can be concluded that around 50% of the students do not meet the recommendations for physical activity (Amuta et al., 2016; Irwin, 2004; Keating et al., 2010; Sun et al., 2015). Nowadays more students lead sedentary lives than ever before and there is also a decrease of 27% in physical activity from high school to college (Behrens et al., 2003; Keating et al., 2010; Kilpatrick et al., 2005). This risky behaviour of being physically inactive has several consequences for ones' health. It has been estimated that every year 5.3 million premature deaths all over the world can be prevented if everybody with an inactive lifestyle becomes active (Lee et al., 2012). This is due to several non-communicable diseases as colon- and breast cancer, cardiovascular diseases, diabetes mellitus, depression, hypertension, bone and joint diseases, and obesity that could be caused by physical inactivity (Warburton et al., 2006). So it becomes clear that approximately half of all students are physically inactive and that it is this period in life, student time, which is critical to maintain physical active and to promote an active lifestyle. Therefore, it is important to understand why students are physically inactive.

This behaviour can be explained by using the Health Belief Model tailored on physical inactivity, which can be seen in figure 1. Besides understanding health behaviour, the Health Belief Model, HBM, can be used to understand possible barriers leading to non-compliance and stimulants as well (Turner et al., n.d.). The three main components of the model are 'individual perceptions', 'modifying

factors', and 'likelihood of action' and each component consist of one or more constructs. 'Individual perceptions' consists of one construct, the perceived susceptibility/perceived seriousness. Students' perception on the seriousness of physical inactivity and the risk for health consequences due to physically inactivity are declared in this construct. A study called the "Student Health Check 2013/2014", which is an online self-monitor with aspects of health, health behaviour, and quality of student life, was carried out by "Student Health Service of the University of Amsterdam" (Van der Heijde et al, 2014; Van der Heijde et al., 2015). One of the results of this study was that 33% of the students wanted to be more physically active. Probably they were aware of the seriousness or the consequences for their health.

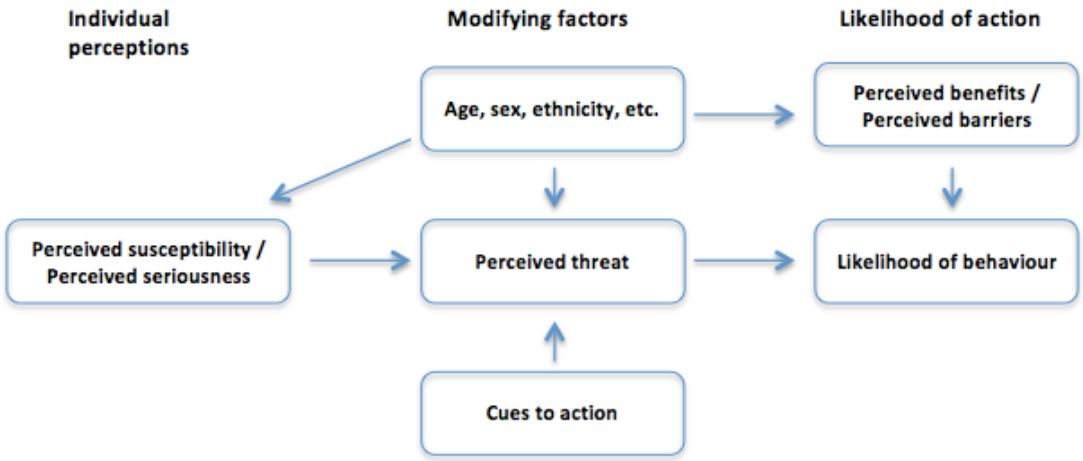

Figure 1 Health Belief Model (Strecher & Rosenstock, 1997)

The second component, modifying factors, consists of three constructs: personal factors, perceived threat, and cues to action. In previous years there have been studies focussing on different personal factors and their influence on physical activity. In total 19 factors associated with more physical activity and nine with less physical activity have been found, which can be seen in Table 1 in the appendix. Examples of factors leading to more physical activity are gender, ethnicity, education level, and personal history in exercise (Bauman et al., 2012; Dirven et al., 2012; Keating et al., 2010; RIVM, 2016; Seefeldt et al., 2016; Trost et al., 2002;), and factors related to less physical activity are stress, age, psychological problems, weight, smoking behaviour, and hours of sleep (Adamson et al., 2016; Bauman et al., 2012; Funning et al., 2016; Goodwin, 2003; Lee et al., 2016; Richardson et al., 2005; Stubbs et al., 2016; Trost et al., 2002). Besides these personal factors, there is the construct called perceived threat. If students are aware of the seriousness, the risk and the consequences of physical inactivity they possibly perceive a threat for their health. Due to a perceived threat the likelihood of changing the behaviour increases (Glanz et al., 2008). However, students are not active enough as previously mentioned so probably they do not perceive a threat caused by the construct 'individual perceptions'. Therefore it is likely that something else causes the physical inactivity among students.

Another construct of the component 'modifying factors' is cues to action, which, in this case, are people or events that stimulate students to change their behaviour (Turner et al.). This stimulation of students is used as motivation and motivating factors for physical activity. Motivation can be divided into three different types, but only autonomous motivation is associated with more physical activity. Autonomous motivation consists of intrinsic motivation (for your enjoyment), identified motivation (for the outcome) and integrated motivation (because it is in line with your values) (Ha et al., 2015). Besides motivation itself, there are factors that motivate people to increase their level of physical activity. Important factors that motivate to be more physically active are social support, easy access,

enjoyment, looking good, competence, a buddy/sport partner, and using smartphones to motivate (Al-Eisa et al., 2016; Amuta et al, 2016; Cohen et al., 2015; Crozier et al., 2016; Harries et al., 2016; Keating et al., 2010; Kilpatrick et al., 2005; Lee et al., 2016; Long et al., 2011; McNeill et al., 2006). In Table 2 in the appendix all motivating factors are shown.

The last component of the Health Belief Model is the likelihood of action and it consists of two constructs, perceived benefits/perceived barriers and likelihood of behaviour. Barriers can be divided into internal barriers, which are individual and psychologically based factors, and external barriers that are often environmental factors (Allison et al., 1999). Based on three studies (Arzu et al., 2006; Tappe et al., 1989; Trost et al., 2002) ten general internal barriers for students to physical activity can be identified such as fear of falling; too tired; lack of interest; schoolwork and worried about my looks, and six general external barriers for students towards physical activity, such as bad weather; responsibilities and not enough encouragement. All the barriers are shown in Table 3 in the appendix. However, it is possible that students with different personal factors as previously mentioned in the component of modifying factors, perceive different barriers. For example, male students reported the cost and inaccessibility, involvement in technology-related activities, lack of time, the influence of family and friends, and lower priority on physical activity as barriers, while female students reported self-consciousness about their looks during physical activity and not being motivated as barriers (Allison et al., 2005; Robbins et al., 2003). Furthermore, students with overweight reported being too fat, too lazy, too embarrassed, not being the sporty-type, and not motivated as barriers (Zabinski et al., 2003). People with mental illnesses often mentioned bad weather, feeling sad or stressed, fatigue, low social support and less confidence as their major barriers (Ussher et al., 2007). Thus the Health Belief Model can be used to understand why students are not physically active while others are physically active.

It can be concluded that people worldwide are not meeting the recommendations for physical activity and that student time is a critical phase to change this behaviour. It remains unclear which students want to be more active and which students do not, as reported in the Student Health Check 2013/2014 (Van der Heijde et al, 2014; Van der Heijde et al., 2015). Although some barriers are already found in literature, more research is needed to identify all perceived barriers and cues to action by students.

This has led to two research questions:

- *"What are personal factors, like age, gender, and psychological problems, among the students from the Student Health Check, that are associated with willing to be more physically active?"*
- *"What are the perceived barriers and stimulants for students regarding physical activity?"*

Method

The study was executed by an independent researcher commissioned at the department of Research, Development and Prevention at Bureau Studentenartsen / Huisartsen Oude Turfmarkt (a general practice) in Amsterdam. For the study no permission was needed from the medical ethical commission, METC, and from the animal experimental commission, DEC.
Two different samples were used to study to research questions, sample 1 for the first research question and sample 2 for the second research question.

Participants and procedures

The study design concerned a cross-sectional observational research. The participants included in the study were students registered at a university, graduate school/college, or academy in the Netherlands. In sample 1 participants of the Student Health Check (N = 8234) conducted at one of the following four educational institutions in Amsterdam were used: University of Amsterdam, VU University Amsterdam / ACTA, Hogeschool van Amsterdam, and Amsterdam University College (Van der Heijde et al, 2014; Van der Heijde et al., 2015). Of the 8234 participated students, 5631 (66.7%) answered a question about physical activity and were therefore included.

Sample 2 consisted of students who participated in the Student Health Check and indicated that it was allowed to approach them again for further research into higher educational students and their health, students recruited via social media, and via an online newsletter of the general practice (N = 257). Recruitment forms are shown in the appendix and after five days students were reminded on social media and after one week students received a reminder by email. On December 9th (15 days after release) five vouchers were raffled among the respondents.

The data collection differed between sample 1 and sample 2. Data for sample 1 was already available while the data for sample 2 needed to be collected. The data was collected by an online questionnaire using the software program Survalyzer/NetQ (Survalyzer, 2015). Potential participants were extensively informed in advance about the purpose of the study and could decide whether they wanted to participate or not. The online questionnaire is included in the appendix as well as the recruitment forms.

Measurements

Sample 1

The Student Health Check (van der Heijde et al., 2015), online self-monitor, was utilised in this study. It is an online questionnaire consisting of items about health, health behaviour (e.g. physical activity), and quality of student life, created by the Student Health Service of the University of Amsterdam. By receiving traffic lights (red, amber or green) students knew how they scored compared to other students on the different items. In addition they received personalised feedback including a referral to relevant interventions. Of demographic and personal factors, 20 were used in this study: gender, age, height, weight, relationship status, living situation, nationality, smoking behaviour (cds-5), alcohol use (AUDIT-C), drug use, education level, study type, study results, study phase, psychological problems, general health status (SF-36 subscale), anxiety (EK10), depression (K-6), quality of life (quality of students life) and vitality (SF-36 subscale) (Van der Heijde et al, 2014; Van der Heijde et al., 2015). From the variables height and weight a new variable was calculated (by weight/heigth^2), BMI. 'Living situation' was categorized into living with your parents or relatives; living with peers; alone; and living with your partner and 'nationality' into Dutch, Turkish, Moroccan, Surinamese, and Antillean or other. The variables smoking, alcohol and drugs were measured dichotomous (yes/no) and continuous.

'Educational level' was categorised in university (UvA) and college (HvA), and 'study phase' into six phases: 1) freshmen; 2) bachelor; 3) master; 4) doctoral; 5) medical internship; and 6) PhD. All measurement scales of the other variables were at dichotomous, interval or ratio scale level. The variables general health status, depression, anxiety, quality of life, and validity were continues and based on severity scores obtained from the scales used for the different items.

Sample 2

An online questionnaire, especially developed for this study, made with the software program Survalyzer/NetQ was utilised in this study for sample 2 (Survalyzer, 2015). The questionnaire consisted of 38 items based on the Health Belief Model including two valid questions from the Student Health Check: the cigarette dependence scale – 5, cds-5, to measure smoking and AUDIT-C to measure alcohol use (Bush et al., 1998; Etter et al., 2003; Van der Heijde et al, 2014; Van der Heijde et al., 2015). The first six questions gathered demographic data as gender, age, weight, length, ethnicity, and sleep duration and continued with four questions to know if they were registered at any institution, their educational level, educational institution, and type of study. Thereafter student's health behaviour (smoking behaviour, alcohol use and drug use) was measured with the cds-5, audit-c, and one other question used in the Student Health Check. The questionnaire continued with questions about personal history in exercise, stress and psychological problems, since previous studies showed an association between these factors and physical activity (Adamson B.C., 2016; Bauman et al., 2012; Goodwin, 2003; Stubbs B., 2016). For 'stress' and 'psychological problems' the same scale of discomfort of the Student Health Check was used (Van der Heijde et al, 2014; Van der Heijde et al., 2015). For 'stress' a part of the valid questionnaire DASS-21, consisting of seven questions about stress and which has a Cronbach's α of 0.85 and an inter-item range of 0.45 (0.32-0.74), was integrated as well (de Beurs et al., 2001). All 16 above mentioned questions are part of the construct 'modifying factors' of the HBM. Thereafter items about the 'individual perceptions' and 'perceived threat' of the HBM were asked. Furthermore the level of physical activity was measured by asking the amount of time (minutes) per week students spend on sports, exercise, weight training and domestic work, since the definition of physical activity consists of 'sport', 'exercise' including weight training, and 'labour activities'. All other questions covered the perceived barriers and benefits, and the cues to action of the Health Belief Model. The questions focused on the perceived barriers and stimulants at this moment and barriers the student perceived in the past. There were questions measuring why students were previously more active compared to now and questions that measured why students were nowadays more active than earlier. The questionnaire was included in the appendix.

Analysis

The analyses for both samples were performed by SPSS statistics version 22 (IBM Corp. Released 2013. IBM SPSS Statistics for Macintosh, Version 22.0. Armonk, NY: IBM Corp). In sample 1 there were independent variables of discrete (binary, nominal and ordinal) and ratio level. The outcome variable was dichotomous, *'willing to be (more) physically active'* yes or no. Associations between the personal factors and willing to be more physically active were analysed by a multiple logistic regression analyses. A variable was a confounder if the regression coefficient changed 10% or more (Bliss et al., 2012). To determine significance a p-value of 0.05 ($p \leq 0.05$) was used. Dummy variables were created for the variables living situation and studies.

In sample 2 there were discrete (binary, nominal and ordinal) and ratio level independent variables as well. Three items of the questionnaire about barriers and stimulants were checked for validation by using Cronbach's alphas undertaken with reliability analyses. The biggest barriers and stimulants were analysed by descriptive information.

Results

Willingness to be physically active (sample 1)

Of the 5631 students in sample 1, 30.8% (N=1736) were men and 69.2% (N=3895) were women. In total 2871 (51.0%) students did not want to be more physically active and 2760 (49.0%) wanted to be more physically active. Table 1 shows all characteristics of the students sorted by willingness to be physically active. Slightly more than half of the female students (52.0%) wanted to be more active and 48.0% of the women did not. The mean age of students was 23.5 years and students who wanted to be more active had a higher BMI (1.2 kg/m^2) than students who did not wanted to be more active. Students who wanted to be more physically active had more often a relationship, lived with a partner, had a Turkish, Moroccan, Surinamese, Antilleans nationality, are smokers and PhD students compared to students who did not wanted to be more active. There were no differences in living with your peers and living alone, drug users, university students, freshman and bachelor students, and the scores for anxiety, depression and quality of life between students who wanted to be more active and those who did not.

Table 1 Characteristics of the students from the Student Health Check

Characteristic	Students who don't want to be more active	Students who want to be more active	Total
	N = 2871	N = 2760	N = 5631
Gender - women	1869 (48.0%)	2026 (52.0%)	3895 (69.2%)
Age	23.5 (±4.8)	23.5 (±4.9)	5620 (99.8%)
BMI *(kg/m^2)*	22.0 (±3.6)	23.2 (±9.9)	5628 (99.9%)
Having a relationship *(yes)*	1286 (48.6%)	1358 (51.4%)	2644 (47.0%)
Living situation			
Living with your parents or relatives	1187 (53.3%)	1038 (46.7%)	2225 (39.5%)
Living with your peers	692 (50.4%)	680 (49.6%)	1372 (24.4%)
Living alone	618 (49.7%)	625 (50.3%)	1243 (22.1%)
Living with your partner	374 (47.3%)	417 (52.7%)	791 (14.0%)
Nationality - Dutch	2625 (52.1%)	2410 (47.9%)	5035 (89.4%)
Nationality - Turkish	42 (44.7%)	52 (55.3%)	94 (1.7%)
Nationality - Moroccan	33 (33.0%)	67 (67.0%)	100 (1.8%)
Nationality - Surinamese	52 (42.6%)	70 (57.4%)	122 (2.2%)
Nationality - Antilleans	14 (35.9%)	25 (64.1%)	39 (0.7%)
Smokers	1106 (47.6%)	1218 (52.4%)	2324 (41.3%)
Alcohol users	2529 (51.1%)	2420 (48.9%)	4949 (87.9%)
Drug users	952 (49.9%)	957 (50.1%)	1909 (33.9%)
Education level – university *(UvA)*	1297 (50.3%)	1281 (49.7%)	2578 (45.8%)
Study results	6.9 (±0.9)	6.9 (±0.9)	5631 (100%)
Study phase - freshmen	760 (49.2%)	785 (50.8%)	1545 (27.4%)
Study phase - bachelor	1800 (50.7%)	1748 (49.3%)	3548 (63.0%)

Study phase - master	461 (53.4%)	403 (46.6%)	864 (15.3%)
Study phase - Doctoral	5 (62.5%)	3 (37.5%)	8 (0.1%)
Study phase - Medical internship	15 (53.6%)	13 (46.4%)	28 (0.5%)
Study phase - PhD	2 (40.0%)	3 (60.0%)	5 (0.1%)
Having psychological problems *(yes)*	699 (51.4%)	660 (48.6%)	1359 (24.1%)
General health status	64.6 (±21.4)	58.3 (±21.4)	5631 (100%)
Anxiety	6.5 (±2.7)	6.6 (±2.7)	5631 (100%)
Depression	14.5 (±5.0)	14.8 (±5.1)	5631 (100%)
Quality of Life	3.7 (±0.6)	3.6 (±0.6)	5631 (100%)
Vitality	53.0 (±20.1)	47.5 (±19.8)	5631 (100%)

Table 2 shows the associations between the different demographic and personal factors, the items of the Student Health Check 2013/2014, and willing to be (more) physically active. In unadjusted analyses, 13 demographic and personal factors were statistically significantly associated with willing to be (more) physically active. Women had 1.52 times higher odds (95% CI: 1.33-1.73) to 'want to be more physically active' compared to men. For every 1 kg/m^2 increase in BMI students had a 1.09 times higher odds (95% CI: 1.07-1.11) to 'want to be more physically active'. Furthermore, students having a relationship had a 1.21 times higher odds (95% CI: 1.07-1.37) to indicate that they 'wanted to be more active' compared to students who were single. Dutch students had a 0.74 times higher odds (95% CI: 0.61-0,91) and Moroccan students had a 2.10 times higher odds (95% CI: 1.32-3.34) to 'want to be more physically active' than non-Dutch and non-Moroccan students. Students studying at a university (UvA) had a 0.38 times higher odds (95% CI: 0.24-0.60) to 'want to be more active' compared to students studying at an college/graduate school (HvA) and smokers had a 1.23 times higher odds (95% CI: 1.08-1.39) compared to non-smokers. Also freshman students had a 1.27 times higher odds (95% CI: 1.00-1.60) to 'want to be more physically active' compared to non-freshman students and students with psychological problems had a 0.77 times higher odds (95% CI: 0.67-0.89) than students without psychological problems. For every increase in score on general health status, depression, quality of life, and vitality students had a, respectively, 0.99 (95% CI: 0.99-0.99), 0.96 (95% CI: 0.94-0.98), 0.82 (95% CI: 0.72-0.92), and 0.99 (95% CI: 0.98-0.99) times higher odds to 'want to be more active' compared to students who score lower. Smoking (yes, no) was statistically significantly associated and the amount of cigarettes was significantly associated (OR 1.18; 95% CI: 1.09-1.27) with 'willing to be (more) physically active' as well. Students living with peers scored significantly different compared to students living with their parents or relatives on their 'willingness to be more active'. Further, students studying *"HvA Health sciences", "HvA Media, Creation & Information studies", "HvA Economy and Management", "UvA Physics, Mathematics & Computer sciences", "HvA Society & Law studies", and "HvA Technology studies"* scored significantly different than students studying "*HvA Exercise, Sports & Nutrition studies*" on their 'will to be more physically active'.

Twelve of the thirteen significant associations remained significant after correction for confounding. Only depression was not significantly associated with 'willing to be more active' anymore (OR: 0.10; 95% CI: 0.98-1.01) and all studies became statistically different compared to the reference study.

Table 2 Unadjusted and adjusted results of the associations between items of the Student Health Check and willingness to be more physically active

	Unadjusted results					Adjusted results				
	Odds ratio	95% C.I.		Sig.	R.E.	Odds ratio	95% C.I.		Sig.	R.E.
Gender *(female)*	**1.52**	**1.33**	**1.73**	**0.00***	**0.42**	**1.45**	**1.27**	**1.65**	**0.00***	**0.37**
Age	0.99	0.98	1.01	0.22	-0.01	1.00	0.99	1.02	0.56	0.00
BMI *(kg/m²)*	**1.09**	**1.07**	**1.11**	**0.00***	**0.08**	**1.09**	**1.07**	**1.11**	**0.00***	**0.08**
Relationship	**1.21**	**1.07**	**1.37**	**0.00***	**0.19**	**1.17**	**1.03**	**1.32**	**0.01***	**0.15**
Living situation										
Living with your parents or relatives	Ref (1.00)									
Living with your peers	**1.18**	**1.00**	**1.39**	**0.05**	**0.17**	1.13	0.97	1.32	0.11	0.12
Living alone	1.10	0.94	1.30	0.25	0.10	1.12	0.96	1.30	0.15	0.11
Living with your partner	1.16	0.94	1.43	0.17	0.15	**1.28**	**1.08**	**1.52**	**0.00***	**0.25**
Nationality - Dutch	**0.74**	**0.61**	**0.91**	**0.00***	**-0.30**	**0.74**	**0.61**	**0.91**	**0.00***	**-0.30**
Nationality - Turkish	1.16	0.74	1.82	0.52	0.15	1.31	0.86	2.01	0.21	0.27
Nationality - Moroccan	**2.10**	**1.32**	**3.34**	**0.00***	**0.74**	**2.10**	**1.31**	**3.34**	**0.00***	**0.74**
Nationality - Surinamese	1.25	0.84	1.85	0.28	0.22	1.38	0.95	2.02	0.09	0.33
Nationality - Antillean	1.51	0.74	3.12	0.26	0.42	1.80	0.89	3.67	0.10	0.59
Smoking behaviour	**1.23**	**1.08**	**1.39**	**0.00***	**0.20**	**1.26**	**1.11**	**1.43**	**0.00***	**0.23**
Alcohol use	1.07	0.88	1.30	0.51	0.07	0.99	0.84	1.64	0.87	-0.01
Drug use	1.06	0.92	1.21	0.42	0.06	1.06	0.94	1.20	0.33	0.06
Education level *(university, UvA)*	**0.38**	**0.24**	**0.60**	**0.00***	**-0.97**	**0.85**	**0.75**	**0.97**	**0.02**	**-0.16**
Study type										
HvA Exercise, Sports & Nutrition studies	Ref (1.00)									
UvA Medicine	0.78	0.45	1.35	0.38	-0.25	**1.94**	**1.17**	**3.21**	**0.01**	**0.66**
UvA Dentistry	1.73	0.96	3.12	0.07	0.55	**4.12**	**2.33**	**7.28**	**0.00***	**1.42**
UvA Child Development and Education	0.70	0.43	1.14	0.16	-0.35	**1.94**	**1.21**	**3.10**	**0.01***	**0.66**
UvA Philosophy studies	1.04	0.56	1.95	0.89	0.04	**2.60**	**1.40**	**4.79**	**0.00***	**0.95**
UvA Dutch studies	0.86	0.46	1.59	0.62	-0.16	**2.60**	**1.41**	**4.79**	**0.00***	**0.95**
UvA Arts, Religion & Culture studies	1.03	0.66	1.59	0.91	0.03	**2.79**	**1.80**	**4.31**	**0.00***	**1.02**
HvA Health studies	**1.95**	**1.30**	**2.93**	**0.00***	**0.67**	**2.18**	**1.48**	**3.22**	**0.00***	**0.78**
HvA Media, Creation & Information studies	**2.78**	**1.89**	**4.09**	**0.00***	**1.02**	**2.98**	**2.06**	**4.31**	**0.00***	**1.09**
HvA Economy and Management	**1.71**	**1.18**	**2.46**	**0.00***	**0.53**	**1.84**	**1.30**	**2.61**	**0.00***	**0.61**
UvA Social Sciences	0.86	0.59	1.24	0.41	-0.16	**2.24**	**1.54**	**3.27**	**0.00***	**0.81**
UvA Communication sciences	0.98	0.60	1.60	0.92	-0.02	**2.38**	**1.46**	**3.87**	**0.00***	**0.97**
UvA Psychology	0.72	0.48	1.07	0.11	-0.33	**1.91**	**1.28**	**2.85**	**0.00***	**0.65**
UvA Economy and Business studies	0.84	0.56	1.26	0.40	-0.18	**2.21**	**1.48**	**3.30**	**0.00***	**0.79**
UvA Jurisprudence	0.82	0.50	1.33	0.42	-0.20	**2.13**	**1.33**	**3.41**	**0.00***	**0.76**

UvA History, Archaeology & Area studies	0.77	0.51	1.16	0.21	-0.27	**2.02**	**1.34**	**3.05**	**0.00***	**0.70**
UvA Language & Literature studies	1.06	0.67	1.67	0.81	0.06	**3.00**	**1.91**	**4.72**	**0.00***	**1.10**
UvA Media studies	1.39	0.84	2.29	0.20	0.33	**3.74**	**2.28**	**6.12**	**0.00***	**1.32**
UvA ISS/Beta-gamma	0.82	0.46	1.49	0.52	-0.20	**2.06**	**1.15**	**3.71**	**0.02**	**0.72**
HvA Education & Upbringing studies	0.74	0.46	1.20	0.23	-0.30	**2.09**	**1.31**	**3.35**	**0.00***	**0.74**
UvA Physics, Mathematics & computer sciences	**1.86**	**1.27**	**2.72**	**0.00***	**0.62**	**2.33**	**1.62**	**3.34**	**0.00***	**0.85**
HvA Society & Law studies	**2.24**	**1.55**	**3.22**	**0.00***	**0.80**	**2.81**	**1.98**	**3.98**	**0.00***	**1.03**
HvA Technology studies	**2.51**	**1.65**	**3.82**	**0.00***	**0.92**	**2.44**	**1.63**	**3.64**	**0.00***	**0.89**
Study results	0.99	0.93	1.06	0.79	-0.01	0.97	0.91	1.03	0.23	-0.03
Study phase - Freshman	**1.27**	**1.00**	**1.60**	**0.05**	**0.24**	**1.26**	**0.05**	**1.00**	**0.05**	**0.23**
Study phase - Bachelor	1.06	0.94	1.20	0.34	0.06	1.07	0.94	1.20	0.30	0.06
Study phase - Master	1.00	0.91	1.11	0.93	0.00	1.00	0.91	1.10	0.97	0.00
Study phase - Doctoral	0.83	0.56	1.23	0.36	-0.18	0.90	0.61	1.31	0.57	-0.11
Study phase - Medical internship	1.02	0.85	1.22	0.87	0.02	0.98	0.84	1.15	0.80	-0.02
Study phase - PhD	1.06	0.77	1.45	0.71	0.06	1.10	0.81	1.49	0.56	0.09
Psychological problems	**0.77**	**0.67**	**0.89**	**0.00***	**-0.26**	**0.83**	**0.72**	**0.96**	**0.01***	**-0.18**
General health status	**0.99**	**0.99**	**0.99**	**0.00***	**-0.01**	**0.99**	**0.98**	**0.99**	**0.00***	**-0.01**
Anxiety	0.99	0.96	1.02	0.40	-0.01	0.90	0.81	1.01	0.08	-0.40
Depression	**0.96**	**0.94**	**0.98**	**0.00***	**-0.04**	0.10	0.98	1.01	0.70	0.00
Quality of Life	**0.82**	**0.72**	**0.92**	**0.00***	**-0.20**	**0.81**	**0.73**	**0.90**	**0.00***	**-0.21**
Vitality	**0.99**	**0.98**	**0.99**	**0.00***	**-0.01**	**0.99**	**0.98**	**0.99**	**0.00***	**-0.01**

P-values ≤0.05 are bold and p-values ≤0.01 have an asterisks; R.E. = regression coefficient

Perceived barriers and stimulants (sample 2)

Characteristics

A total of 257 students participated in the questionnaire especially developed for this study, of which 199 were women and 58 were men, as shown in Table 3. The mean age for men was 23.4 (SD ±3.6) years and for women 22.5 (SD ±3.6) years and the mean BMI was 22.6 kg/m^2 (SD ±4.0) for men and 22.2 kg/m^2 (SD ±3.5) for females. More than 90% of the students (men 93.1%; women 91.5%) had the Dutch nationality. Female students had more often a high educational level (60.3%) than an intermediate (32.2%) or low educational level (7.5%) and slightly more than half of male students were high educated (51.7%). Among the male students, 29.4% smoked, 79.4% used alcohol and 33.3% used drugs, and among the female students, 17.9% smoked, 92.3% used alcohol and 27.3% used drug. Both men and women slept 7.5 hours per night, and about 90% was physically active at least one year ago. Students perceived stress most often due to study (72.0%) and the female students scored worse on the DASS-21 stress scale compared to male students because women scored more often 'mild', 'moderate', 'severe', and 'extremely severe'. Most students did not experience any psychological problems.

Table 3 General characteristics of the students participated in the questionnaire

Variables	Men (N = 58)	Women (N = 199)	Total (N = 257)
Gender	58 (22.6%)	199 (77.4%)	257 (100%)
Age	23.4 (±3.6)	22.5 (±3.5)	257 (100%)
BMI	22.6 (±4.0)	22.2 (±3.5)	257 (100%)
Ethnicity			
Dutch	54 (93.1%)	182 (91.5%)	236 (91.8%)
Turkish	1 (1.7%)	2 (1.0%)	3 (1.2%)
Moroccan	0	1 (0.5%)	1 (0.4%)
Surinamese	0	2 (1.0%)	2 (0.8%)
Antillean	0	1 (0.5%)	1 (0.4%)
Indian	1 (1.7%)	2 (1.0%)	3 (1.2%)
Something else	5 (8.6%)	16 (8.0%)	21 (8.2%)
Education level			
Low *(MBO)*	7 (21.1%)	15 (7.5%)	22 (8.6%)
Intermediate *(HBO)*	21 (36.2%)	64 (32.2%)	85 (33.1%)
High *(WO)*	30 (51.7%)	120 (60.3%)	150 (58.4%)
Smokers*	15 (29.4%)	33 (17.9%)	48 (18.7%)
Alcohol users*	41 (79.4%)	169 (92.3%)	210 (81.7%)
Drug users*	17 (33.3%)	50 (27.3%)	67 (26.1%)
Sleep duration	7.4 (±0.8)	7.5 (±0.8)	257 (100%)
History in exercise	46 (90.2%)	164 (89.6%)	210 (81.7%)
Stress			
Study	38 (74.5%)	147 (80.3%)	185 (72.0%)
Work	15 (29.4%)	54 (27.1%)	69 (26.8%)

Financial situation	14 (27.5%)	53 (29.0%)	67 (26.1%)
Mental health	15 (29.4%)	64 (35.0%)	79 (30.7%)
Physical health	8 (15.7%)	41 (22.4%)	49 (19.1%)
Relation	8 (15.7%)	25 (13.7%)	33 (12.8%)
Social	10 (19.6%)	44 (24.0%)	54 (21.0%)
None	7 (13.7%)	20 (10.9%)	27 (10.5%)
DASS - 21 Stress scale *(scores)*			
Normal *(0-7)*	34 (70.8%)	88 (50.6%))	122 (47.5%)
Mild *(8-9)*	8 (16.7%)	32 (18.4%)	40 (15.6%)
Moderate *(10-12)*	4 (8.4%)	35 (20.1%)	39 (15.2%)
Severe *(13-16)*	2 (4.2%)	17 (9.7%)	19 (7.4%)
Extremely severe *(17+)*	0	2 (1.2%)	2 (0.8%)
Psychological problems			
Anxiety	4 (8.3%	30 (17.2%)	34 (13.2%)
Depression	5 (10.4%)	11 (6.3%)	16 (6.2%)
Gloom	14 (29.2%)	47 (27.0%)	61 (23.7%)
Drugs/alcohol use	3 (6.3%)	3 (1.7%)	6 (2.3%)
None	48 (82.8%)	174 (87.4%)	222 (86.4%)

* "Never" versus "sometimes" + "regularly" + "often" + "frequent"

Validation

Three items (perceived barriers, one-to-ten scale barriers, and one-to-ten scale stimulants) of the questionnaire developed for this study were checked for validation by using Cronbach's alpha. The Cronbach's alphas were 0.878, 0.882, and 0.875 for the first, second, and third item, respectively. So the items were valid.

Barriers and stimulants

First item: perceived barriers by a 5-likert scale with answer options ranging from 'very agree' to 'very disagree'

Table 4 shows the eight biggest barriers perceived by students. The biggest barrier for the students was 'being too busy' (65.9%), followed by 'other priorities' (59.6%) and 'being too tired' (59.1%). Slightly half of the students perceived 'all time and energy is needed for my study' as a big barrier. The other four big barriers were less distinct.

Table 4 The eight biggest barriers perceived by students

Number	Question	%
1	Too busy for exercise	65.9
2	Other priorities	59.6
3	Too tired	59.1
4	All my time and energy goes to my study	46.1
5	I don't want the duties/expectations	36.3

6	I don't have a partner/buddy to join me	32.6
7	An excuse is more easy	30.5
8	It is too expensive	30.1

The percentages are based on 'very agree' (heel erg eens) and 'slightly agree' (beetje mee eens)

Second item: scored barriers by the students with a one-to-ten scale, whereby 1 is no barrier and 10 a very big barrier.

Being too busy with study was a very big barrier for the students, since it was most often scored with a ten of all barriers. Two other barriers, namely 'no time' and 'other priorities', were often chosen as a very big barrier as well. These three barriers were also most often scored by a nine of all barriers. The three most chosen barriers scored by an eight on the scale were 'no time' (27.1%), 'too tired' (20.7%), and 'other priorities' (19.7%). Being too tired was also scored a seven by 18.1% of the students, followed by 'other priorities' (16.5%) and 'duties/expectations' (14.4%). According to the students, the barriers 'other responsibilities' (68.1%), 'not the right equipment' (59.6%), 'fear of falling and/or injury' (56.4%), 'no interest' (55.3%), 'mental problems' (53.7%), and 'physical problems' (51.6%) were unimportant (score: one). All barriers and the percentages of the scores (one to ten) are shown in Table 5.

Table 5 Barriers scored one to ten by students

Barriers	1	2	3	4	5	6	7	8	9	10
No time	8.0	2.7	4.8	6.4	5.9	6.4	13.8	**27.1**	**14.4**	**10.6**
Too tired	8.0	4.3	8.0	6.4	7.4	13.3	**18.1**	**20.7**	10.1	3.7
No motivation	13.8	6.9	9.6	6.4	6.9	21.3	13.3	11.2	5.9	4.8
Too expensive	26.1	11.2	11.7	6.4	8.5	11.7	8.0	8.5	4.8	3.2
Fear of falling and/or injury	**56.4**	16.5	5.9	4.8	5.9	4.3	4.3	1.1	0.5	0.5
Feeling insecure about your body	**47.3**	15.4	11.7	10.1	5.9	2.1	3.7	0.0	2.1	1.6
No facilities in the neighbourhood	**48.9**	17.0	8.0	8.0	5.9	4.3	4.3	0.5	2.7	0.5
No interest	**55.3**	16.0	5.3	5.9	6.4	4.8	4.3	1.1	0.5	0.5
No sport partner/buddy	41.5	13.3	8.5	9.6	6.9	6.9	3.7	6.4	2.2	1.1
No encouragement/support	46.3	17.0	9.0	6.9	6.9	3.7	5.9	3.2	1.1	0.0
Other priorities	9.0	3.2	6.4	5.3	6.4	13.3	**16.5**	**19.7**	**10.6**	**9.6**
The weather is unsuitable	30.9	12.8	14.4	7.4	7.4	12.2	6.9	5.3	1.1	1.6
Mental problems	**53.7**	13.3	6.9	6.9	2.7	3.7	4.8	4.3	3.7	0.0
Physical problems	**51.6**	10.6	10.6	5.9	6.4	4.8	2.1	3.2	1.6	3.2
Too busy with study	7.4	4.3	5.9	5.3	8.5	11.2	12.8	18.1	**15.4**	**11.2**
Other responsibilities	**68.1**	7.4	8.0	2.1	5.3	2.7	3.7	1.6	0.5	0.5
Duties/expectations	23.4	4.3	9.6	10.6	11.7	8.0	**14.4**	12.2	2.7	3.2
I don't like it	46.8	12.2	13.8	6.9	8.0	6.4	4.3	1.1	0.5	0.0
Not the right equipment	**59.6**	10.1	16.0	3.2	3.7	4.3	1.6	0.0	1.6	0.0
Excuses are easier	35.6	8.5	11.7	8.0	6.4	8.5	11.2	5.9	2.1	2.1

Values are %; for every score (one to ten) the three highest percentages are bold

Third item: scored stimulants by the students with a one-to-ten scale, whereby 1 is no stimulant and 10 a very big stimulant.

A better physical condition was a very big stimulant for the students, since it was most often scored with a ten of all stimulants (30.8%). Two other stimulants, namely 'a better mental condition' (25.4%) and 'feeling more confident' (24.9%), were often chosen as a very big stimulant as well. The stimulant 'by exercising I feel more satisfied about myself' was the most often chosen stimulant scored nine on the scale, followed by 'a better physical condition' and 'living longer in good health'.

The three mostly chosen stimulants scored by an eight on the scale were 'feeling more confident' (35.4%), 'to become stronger' (27.6%), and 'better physical condition' (25.9%). To become stronger was also scored a seven by 21.1% of the students, followed by 'less changes to get heart diseases' (20.5%) and 'better concentration' (18.4%). According to the students, the stimulants 'exercise compensates unhealthy behaviour like smoking' (78.4%), 'exercise compensates unhealthy behaviour like drug use' (74.1%), 'exercise made me go out less often' (49.7%), 'exercise compensates unhealthy behaviour like alcohol use' (48.1%), 'to receive a medal' (47.0%), and 'to win a price' (46.5%) were not stimulating (score: one). All stimulants and the percentages of the scores (one to ten) are shown in Table 6.

Table 6 Stimulants scored one to ten by students

Stimulants	1	2	3	4	5	6	7	8	9	10
Better physical condition	0.0	0.5	1.1	1.1	1.1	2.2	13.5	**25.9**	**23.8**	**30.8**
Better mental condition	2.7	0.5	0.0	2.7	3.2	3.8	16.8	23.2	21.6	**25.4**
To receive a medal	**47.0**	10.8	8.6	7.0	6.5	6.5	4.9	3.8	0.5	4.3
To win a price	**46.5**	13.0	5.9	6.5	5.9	7.6	5.9	2.7	1.6	4.3
To be admired by partner	25.4	4.9	7.6	7.0	7.0	16.8	11.4	10.3	4.9	4.9
To be admired by others	17.3	5.4	9.2	7.6	7.6	14.6	16.2	11.9	6.5	3.8
I like be higher, faster, to win	24.9	6.5	4.3	3.8	5.4	10.3	10.3	13.0	12.4	9.2
To become stronger/gain muscles	1.6	1.1	2.7	2.7	4.9	7.0	**21.1**	**27.6**	16.8	14.6
To become thinner/slimmer	8.6	2.2	3.2	3.8	5.9	7.6	15.1	14.1	16.2	23.2
Living longer in good health	1.6	0.5	1.6	2.2	3.2	4.3	16.2	23.8	**22.2**	24.3
Less chance to get heart diseases	5.9	2.2	6.5	7.0	7.0	9.2	**20.5**	16.2	11.9	13.5
Less chance to get a depression	8.6	0.5	3.2	4.9	8.1	10.8	14.1	19.5	14.1	16.2
Feeling more confident	1.1	3.2	0.0	3.2	3.8	5.4	12.4	**35.4**	20.5	**24.9**
Better concentration	9.2	2.2	1.6	5.9	5.9	9.2	**18.4**	19.5	14.6	13.5
For better study results	23.8	5.4	9.2	8.1	10.3	10.3	13.0	9.2	4.9	5.9
Social interaction	23.8	4.9	9.2	9.2	6.5	14.1	8.6	11.9	8.1	3.8
Exercising makes me go out less often	**49.7**	5.9	11.9	5.9	6.5	7.0	3.8	4.3	2.2	2.7
Due to exercise I study better	21.1	3.8	4.9	10.8	9.7	13.0	17.8	9.2	4.9	4.9
Exercising compensates unhealthy behaviour like alcohol use	**48.1**	4.3	7.0	4.9	6.5	7.6	9.2	5.9	2.7	3.8
Exercising compensates unhealthy behaviour like drug use	**74.1**	5.9	4.9	1.6	1.6	2.2	2.7	1.6	2.2	3.2

Exercising compensates unhealthy behaviour like smoking	**78.4**	6.5	3.8	1.1	1.1	0.5	2.2	2.2	1.1	3.2
By exercising I feel more satisfied about myself	2.2	0.5	2.2	1.6	3.2	7.6	11.9	22.2	**24.9**	23.8

Values are %; for every score (one to ten) the three highest percentages are bold

Discussion

Main results and comparison with other studies

The results of the first research question (*What are personal factors that are associated with willing to be more physically active?*) show 12 significant associations (after correction for confounding) between personal factors and students' will to be more active. These personal factors were: being female, BMI, having a relationship, being Dutch and being Moroccan, smoking cigarettes, studying at a university, being a freshman, having psychological problems, and the score on general health status, quality of life and vitality. The results of the second research question (*"What are the perceived barriers and stimulants for students regarding physical activity?)* show the perceived barriers and stimulants of the students regarding physical activity. The biggest perceived barriers were: being too busy (with study), other priorities, being too tired, all time and energy goes to study, no time, duties/expectations, no sport partner, and making excuses are easier. Students were stimulated by: a better physical and mental condition, living longer in good health, less chances to get heart diseases, to become stronger, to get a better concentration, it makes me feel more confident, and I feel more satisfied about myself.

Students who wanted to be more physically active had a higher BMI and for every 1 kg/m^2 increase in BMI students had a 1.09 times higher odds to want to be more active. Other studies also observed a negative influence or inverse relation between overweight (BMI > 30 kg/m^2) and physical activity (Bauman et al., 2012; Trost et al., 2002). In several other countries the level of physical activity was higher among the normal weighted youth than overweight youth (Janssen et al., 2005). Since men and high educated students were already more active compared to women and lower educated students, it may explain why women had a 1.52 times higher odds and high educated students a 0.38 times higher odds to want to be more active than men and lower educated students (Bauman et al., 2009; Haskell et al., 2007; van der Horst et al., 2007; Keating et al., 2010; Gordon-Larsen et al., 2006). As approximately half of all students are physically inactive and male and high educated students are already more physically active, it could be possible that multiple female and lower educated students are inactive and wish to become more active. Moroccan students wanted to be more physically active and that corresponds to the influence of ethnicity on physical activity (Bauman et al., 2012; Seefeldt et al., 2002). For the Moroccan students being part of a non-western population in a western country (the Netherlands) could be the cause of their will to be more active, since those populations are in general more inactive than the host population (Hosper et al., 2008). This study of Hosper and colleagues (2008) also observed that three-quarter of the Moroccan women in the study did not participate in sports, and this high rate of inactive Moroccan women may explain why the Moroccan students in this study (whereof 70% was female) wanted to be more physically active. Smokers want to be more active than non-smokers and other studies observed a negative relation between physical active and smoking (Kaczynski et al., 2008; Trost et al., 2002). So, the more cigarettes students smoke, the less active they are and this inactivity could be the reason why they have a higher odds to want to be active than non-smokers and less frequent smokers. Furthermore, another study observed that first-year students gain weight due to less physical activity (Jung et al., 2008). This could explain why freshman had a higher chance to want to be more active compared to non-freshman students, because they want to control their weight or loss the gained weight. Students with psychological problems wanted to be less often physical active and it increased by higher severity scores. Other studies observed associations between being (regularly) physical active and fewer symptoms of anxiety and depression, and less likelihood of mental illness (as depression and psychosis) (Adamson et al., 2016; Goodwin 2003; Stubbs et al., 2016). Further,

people having schizophrenia were never vigorous physically active and those with severe mental illnesses are less active compared to people without a mental illness (Richardson et al., 2005; Robson & Gray, 2007). It would have been more likely that worse mental health was associated with a higher chance to want to be more physically active. Possibly the mental illness and the severity prevent them to be more active and make them to want to be less physically active. So most of the associations observed in this study are comparable to other studies or could be explained by other studies.

The three barriers 'too busy', 'too tired', and 'other priorities' could all be caused by study, because 72% of the students perceived stress caused by their study. Due to this 'study stress' the students are too busy to be active, have another priority (their study) that is more important than physical activity, and are too tired because of their study and stress to be also physically active. This possibility is supported by the fact that slightly half of the students perceive 'all time and energy is needed for my study' as a big barrier. Of the one-to-ten scored barriers by students, the biggest three barriers were 'being too busy with study', 'no time', and 'other priorities', which are almost the same as the previously mentioned barriers. Again study plays an important role. Besides these three barriers, other often chosen big barriers were 'too tired' and 'duties/expectations'. Other studies observed being too tired, having time constraints and school or schoolwork as internal barrier and the external barrier no time due to lesson schedule, which are comparable to the biggest barriers found in this study (Arzu et al., 2006; Tappe et al., 1989; Trost et al., 2002). However, it could also still be possible that these barriers are partly caused by other aspects of student time, such as a busy social life or partying too much. Of the other four big barriers found in the study, 'having no sport partner' was also observed as an internal barrier in another study (Trost et al., 2002). On the other hand, having a partner/buddy was a stimulant that could increase the frequency and the time of an exercise. So, not having a buddy can be a barrier as well and leading to less physical inactivity. The barrier 'I don't want the duties/expectations of sports' was observed in this study by both barrier measuring methods. Five of the least perceived barriers in this study were contrariwise observed in other studies as barriers. Fear of falling and/or injury and no interest were found as internal barriers, mental and physical problems as the internal barrier 'to weak', and having other responsibilities was observed as an external barrier (Arzu et al., 2006; Tappe et al., 1989; Trost et al., 2002). A reason for these differences could be that Tappe and colleagues (1989) focused on adolescents and Trost and colleagues (2002) focused on adults in general instead of students and only Arzu and colleagues (2006) focused particularly on university students. So, the biggest barriers are being too busy (with study), too tired, and other priorities and are probably related to study and the least perceived barriers in this study were observed as barriers in other studies.

Although students would exercise more for a better physical condition they would not exercise more to compensate any unhealthy behaviour causing a poorer physical condition. However, physical condition can also interpreted as better fitness and not the body health itself. None of the biggest stimulants and smallest stimulants were comparable to the motivating aspects shown in table 2 in the appendix. However, another study of Kilpatrick and colleagues (2005) observed that among other things, exercising for a positive health, to feel good about yourself, and for your strength were stimulants. These were also observed in this study. So, the biggest stimulants of students were for a better physical and mental condition and because it makes them feel more confident and more satisfied about themselves.

Strengths and limitations

The strengths of this study lie in the fact that a lot of barriers and stimulants were analysed by the questionnaire, which was made for this study and particularly focused on students. Especially this focus on students was important since student time is a critical moment in life to maintain physical activity and to promote an active lifestyle. Another strength of this study was the connection to the Student Health Check wherein students' will to be more physically active is remarkable. Another strength was the examination of the associations between items of the Student Health Check and willingness to be more physically active. Hereby students that need special attention were identified (target group), because they more often wanted to be active.

Several limitations of this study should also be taken into account when interpreting the results. For example, the associations between female students and their willingness to be more active could be influenced by BMI. Thereby the target group could have been more specified as for example females with a BMI above 27 kg/m^2. Another limitation was the unequal division of men and women in both samples, 68.2% and 77.4% females, respectively, and in sample two most of the students were high educated. Therefore it is not completely representable for the whole student population. Another limitation was the generalizability for other countries, because in, for example, America sports are extremely important and students can retrieve scholarships because of their sport. Barriers and stimulants could be completely different in other countries. Another limitation was that only three items of the questionnaire were validated in this study and because of this it remained unclear if all other questions measured what they should have measured. However, three valid questionnaires were included, a valid scale of discomfort and most barriers and stimulants were also observed or could be explained by other studies. Finally, not all aspects of the Health Belief Model were analysed in this study. By analysing the whole model it would have given a clearer understanding of all aspects causing physical inactivity among the students. Though, the results of this study gave insight of an important aspect of the model, namely the perceived barriers and stimulants, and the modifying factors.

Implications and recommendations

The study suggest that promotion of physical activity needs to focus on students who are female, have a high BMI or overweight, have a relationship, live with their peers or partner, have a Moroccan nationality, intermediate educated (HBO) students, smokers, freshman students, and students having psychological problems (the target group). Intervention should take into account that students feel that they are too busy (with study), have other priorities, are too tired, need all their time and energy for study, have no time, do not want the duties/expectations, do not have a buddy to join them, find making excuses easier and find it too expensive. The results further suggest that interventions to stimulate students could integrate components of achieving a better health status, a better self-image and become stronger and more concentrated. The general practice Oude Turfmarkt could ask supplementary questions to the target groups about a possible wish to be more active. Furthermore, they can inform the target group about the stimulants observed in this study and in this way try to make them more active.

Future studies needs to develop new interventions to increase students' physical activity level and to see if addressing these barriers and stimulants leads to more physical activity among the students and ultimately a better health. Furthermore, the questionnaire especially developed for this study includes all aspects of the Health Belief Model and with this further research can be done by the general practice Oude Turfmarkt or others.

Conclusion

Students' willingness to be physically active is associated with their gender, BMI, relationship status, nationality, smoking behaviour, education level and study phase, and having psychological problems. Furthermore, students are too busy (with study), have other priorities, are too tired, need all their time and energy for study, have no time, do not want the duties/expectations, do not have a buddy to join them, and find making excuses easier which causes non-compliance to physical activity. Though, students are stimulated to be physical active by getting 'a better physical and mental condition', 'living longer in good health' and 'less chances to get heart diseases', 'to become stronger', 'to get a better concentration', and because it makes them feel more confident and more satisfied about themselves. Thus students want to be (more) physically active, but they have other priorities and are often too busy and too tired to do so.

References

Admason, B., Yang, Y., & Motl, R. W. (2016). Association between compliance with physical activity guidelines, sedentary behaviour and depressive symptoms. *Preventive Medicine , 91*, 152 - 157.

Ainsworth, B. E., Herrmann, S. E., Meckes, N., Bassett, D. R., & Tudor Locke, C. (2011). 2011 Compendium of physical activities: a second update of codes and MET values. *Medicine & Science in Sports & Exercise , 48* (8), 1575 - 1581.

Al-Eisa, E., Al-Rushud, A., Anwer, S., Al-Harbi, B., Al-Sughaier, N., & et al. (2016). Effect of motivation by Instragram on adherence to physical activity among female college students. *BioMed Research International , 2016*, 1 - 6.

Allison , K. R., Dwyer, J. J., Goldenberg, E., Fein, A., Yoshida, K. K., & Boutilier, M. (2005). Male adolescents' reasons for participating in physical activity, barriers to participation, and suggestions for increasing participation. *Adolescence , 40*, 155 - 170.

Allison K., J., Dwyer, J., & Makin, S. (1999). Perceived barriers to physical activity among high school students. *Preventive medicine , 28*, 608 - 615.

Amuta, O. A., Jacobs, W., & Barry, A. E. (2016). An examination of family, healthcare professionals, and peer advice on physical activity behaviours among adolescents at high risk for type 2 diabetes. *Health communication , 19*, 1 - 7.

Arzu, D., Tuzun, E. H., & Eker, L. (2006). Perceived barriers to physical activity in university students. *Journal of sports science & medicine , 5*, 615 - 620.

Bauman A.E., R. R., Bauman, A. E., Rei, R. S., Sallis, J. F., Welles, J. C., Loos, R. J., et al. (2012). Correlates of physical activity: why are some people physically active and others not? *Lancet , 380*, 258-271.

Bauman, A. E., Bull, F., Chey, T., Craig, C. L., Ainsworth, B. E., Sallis, J. F., et al. (2009). The international prevalence study on physical activity: results from 20 countries. *International Journal of Behavioural Nutrition and Physical Activity , 6* (1), 1.

Bauman, A. E., Sallis, J. F., Dzewaltowski, D. A., & Neville, O. (2002). Toward a better understanding of the influences on physical activity. *Preventive Medicine , 23* (2S), 5 - 14.

Behrens, T. K., & Dinger, M. K. (2003). A preliminary investigation of college students' physical activity patterns. *American Journal of Health Studies , 18* (2/3), 169 - 172.

Bernaards, C. (2014). *Bewegen in Nederland 2000-2013.* TNO, Gezond Leven. Leiden: TNO.

Bliss, R., Weinberg, J., Webster, T., & Vieira, V. (2012). Determining the probability distribution and evaluating sensitivity and false positive rate of a confounder detection method applied to logistic regression. *Journal of Biomedic Biostatistic , 3* (4), 142.

Boerema, S. T., Klaassen, R., op den Akker, H., & Hermens, H. J. (2012). Glance ability evaluation of a physical activity feedback system for office workers. *Proceedings of EHST* , 52 - 57.

Branowski, T., Cullen, K. W., Basen-Engquist, K., Wetter, D. W., Cummings, S., Martineau, D. S., et al. (1997). Transitions out of high school. *Preventive medicine , 26* (5), 694 - 703.

Bray, S. R., & Born, H. A. (2004). Transition to university and vigorous physical activity: implications for health and psychological well-being. *Journal of American College Health , 52* (4), 181 - 188.

Bray, S. R., & Kwan, M. Y. (2006). Physical activity is associated with better health and psychological well-being during transition to university life. *Journal of American College Health , 55* (2), 77 - 92.

Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. *Archived of internal medicine , 158* (16), 1789 - 1795.

Cohen, D. A., Derose, K. P., Marsh, T., Williamson, S., & Loy, S. (2015). Effectiveness of a free exercise program in a neighbourhood park. *Preventive Medicine Reports , 2*, 225 - 258.

Crozier, A. J., & Spink, K. S. (2016). Effect of manipulating descriptive norms and positive outcome expectations on physical activity of university students during exams. *Health communication , 15*, 1 - 7.

de Beurs, E., van Dyck, R., Marquenie, L. A., Lange, A., & Blonk, R. W. (2001). De DASS: een vragenlijst voor het meten van depressie, angst en stress. *Gedragstherapie , 34*, 35 - 53.

Dirven, H. J., & van der Mooren, F. (2012, 05 15). *Drinken, roken, bewegen en overgewicht en de onderwijsloopbaan.* Opgeroepen op 09 13, 2016, van Centraal Bureau voor de statistiek: https://www.cbs.nl/nl-nl/achtergrond/2012/20/drinken-roken-bewegen-en-overgewicht-en-de-onderwijsloopbaan

Etter, J. F., Le Houezec, J., & Perneger, T. V. (2003). A self-administered questionnaire to measure dependence on cigarettes: the cigarette dependence scale. *Neuropsychopharmacology , 28* (2), 359 - 370.

Funning, J., Mackenzie, M., Roberts, S., Crato, I., Ehlers, D., & McAuley, E. (2016). Physical activity, mind wandering, affect, and sleep: an ecological momentary assessment. *JMIR mhealth and uhealth , 4* (3), 1 - 11.

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). Health behaviour and health education: theory, research, and practice. San Francisco: John Wiley & Sons.

Goodwin, R. (2003). Association between physical activity and mental disorders among adults in the United States. *Preventive Medicine , 36*, 698 - 703.

Gordon-Larsen, P., Nelson, M. C., Page, P., & Popkin, B. M. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics , 117* (2), 417 - 424.

Gyurcsik, N. C., Bray, S. R., & Brittain, D. R. (2004). Coping with barriers to vigorous physical activity during transition to university. *Family and community health , 27*, 130 - 142.

Ha, A. S., & Ng, J. Y. (2015). Autonomous motivation predicts 7-day physical activity in Hong Kong students. *Applied psychology: health and well-being , 7* (2), 214 - 229.

Han, B., Cohen, D. A., Derose, K. P., Marsh, T., Williamson, S., & Loy, S. (2015). Effectiveness of a free exercise program in a neighbourhood park. *Preventive Medicine Reports , 2*, 225 - 258.

Harries, T., Eslambolchilar, P., Stride, C., Walton, S., & van Woerden, H. C. (2016). Effectiveness of a smartphone app in increasing physical activity amongst male adults: a randomised controlled trial. *BMC Public Health , 16* (925), 1 - 10.

Haskell, W. L., Lee, I. M., Pate, R. R., Powel, K. E., Blair, S. N., Franklin, B. A., et al. (2007). Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation , 116* (9), 1081.

Hosper, K., Nierkens, V., van Valkengoed, I., & Stronks, K. (2008). Motivational factors mediating the association between acculturation and participation in sport among young Turkish and Moroccan women in the Netherlands. *Preventive Medicine , 47* (1), 95 - 100.

Irwin, J. (2004). Prevalence of university students sufficient physical activity: a systematic review. *Perceptual and motor skills , 98*, 927 - 943.

Janssen, I., Katzmarzyk, P. T., Boyce, W. F., Vereecken, C., Mulvihill, C., Roberts, C., et al. (2005). Comparison of overweight and obesity prevalence in school-aged youth from 34 countries and their relationships with physical activity and dietary patterns. *Obesity reviews , 6* (2), 123 - 132.

Jung, M. E., Bray, S. R., & Ginis, K. A. (2008). Behaviour change and the freshman 15: tracking physical activity and dietary patterns in 1st-year university women. *Journal of American College Health , 56* (5), 523 - 530.

Kaczynski, A. T., Maske, S. R., Manneli, R. C., & Grewal, K. (2008). Smoking and physical activity: a systematic review. *American Journal of Health Behaviour , 32* (1), 93 - 110.

Keating, X. D., Guan, J., Pinero, J. C., & Bridges, D. M. (2010). A meta-analysis of college students' physical activity behaviours. *Journal of American College Health , 52* (2), 116 - 126.

Kilpatrick , M., Hebert, E., & Bartholomew, J. (2005). College students' motivation for physical activity: differentiating men's and women's motives for sport participation and exercise. *Journal of American College Health , 52* (2), 87 - 94.

Kohl, H. W., Craig, C. L., Lambert, E. V., Inoue, S., Alkandari, J. R., & Leetongin, G. (2012). The pandemic of physical inactivity: global action for public health. *Lancet , 380*, 294 - 305.

Lee, I. M., Shiroma, E. J., Lobelo, F., Puska, P., Blair, S. N., & Katzmarzyk, P. T. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet , 280*, 219 - 229.

Lee, S. A., Ju, Y. J., Lee, J. E., Hyun, I. S., Nam, J. Y., Han, K. T., et al. (2016). The relationship between sports facility accessibility and physical activity among Korean adults. *BMC Public Health , 16* (893), 1 - 8.

Leslie, E., Sparling, P. B., & Owen, N. (2001). University campus settings and the promotion of physical activity in young adults: lessons from research in Australia and the USA. *Health education , 101* (3), 116 - 125.

Lizandra, J., Devis-Devis, J., Perez-Gimeno, E., Valencia-Peris, A., & Peiro-Velert, C. (2016). Does sedentary behaviour predict academic performance in adolescents or the other way round? *PLOS one , 11* (4), 1 - 13.

Long, X., Pauws, S., Pijl, M., Lacroix, J., Goris, A. H., & Aarts, R. M. (2011). Predicting daily physical activity in a lifestyle intervention program. In A. H. Gottfried B., *Behaviour Monitoring and Interpretation -BMI* (pp. 131 - 146). Amsterdam: IOS Press.

McNeill, L. H., Kreuter, M. W., & Subramanian, S. V. (2006). Social environment and physical activity: a review of concepts and evidence. *Social Science & Medicine , 63*, 1011 - 1022.

Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of personality and social psychology , 58* (3), 528.

Rhodes, R. E., Quinlan, A., & Mistry, C. D. (2016). Do other goals influence physical activity? A systematic review examining the relationship between other goals and physical activity behaviour. *Preventive Medicine , in press*.

Richardson, C. R., Faulkner, G., McDevitt, J., Skrinar, G. S., Hutchinson, D. S., & Piette, J. D. (2005). Integrating physical activity into mental health services for persons with serious mental illness. *Psychiatric services , 56* (3), 324 - 331.

RIVM. (2016, 07 11). *Nederlanders zitten veel, jongeren het meest.* Opgeroepen op 09 13, 2016, van Rijksinstituut voor Volksgezondheid en Milieu: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Nieuwsberichten/2016/Nederlanders_zitten_veel_jongeren_het_meest

Robbins, L. B., Pender, N. J., & Kazanis, A. S. (2003). Barriers to physical activity perceived by adolescent girls. *Journal of midwifery and women's health , 48*, 206 - 212.

Robson, D., & Gray, R. (2007). Serious mental illness and physical health problems: a discussion paper. *International Journal of Nursing Studies , 44* (3), 457 - 466.

Seefeldt, V., Malina, R. M., & Clark, M. A. (2002). Factors affecting levels of physical activity in adults. *Sports Med , 32* (3), 143 - 168.

Simchon, Y., Turetsky, O., & Cameli, E. (2016). Characterization of physical activity in undergraduate students in Israel. *International journal adolescent medical health* .

Standage, M., Gillison, F. B., Ntoumanis, N., & Treasure, D. C. (2012). Predicting students' physical activity and health-related well-being: a prospective cross-domain investigation of motivation across school physical education and exercise settings. *Journal of Sports & Exercise Psychology , 2012* (34), 37 - 60.

Stewart-Brown, S., Evans, J., Patterson, J., Petersen, S., Doll, H., Balding, J., et al. (2000). The health of students in institutes of higher education: an important and neglected public health problem? *Journal of Public Health Medicine , 22* (4), 492 - 449.

Strecher, V., & Rosenstock, I. M. (1997). The Health Belief Model. In K. Glanz , F. M. Lewis, & B. K. Rimer, *Health behaviour and health education: theory, research and practice.* San Francisco: Jossey-Bass.

Stubbs, B., Williams, J., Gaughran, F., & Craig, T. (2016). How sedentary are people with psychosis? A systematic review and meta-analysis. *Schizophrenia Research , 171*, 103 - 109.

Sun, G., Acheampong, A., Lun, H., & Pun, V. C. (2015). Understanding walking behaviour among university students using theory of planned behaviour. *International Journal of Environmental Research and Public Health , 12* (11), 13794 - 13806.

Survalyzer. (2015). Survalyzer AG. Switserland.

Tappe, M. K., Duda, J. L., & Ehrnwald, P. M. (1989). Perceived barriers to exercise among adolescents. *Journal of school health , 59* (4), 153 - 155.

Trost, S. G., Neville, O., Bauman, A. E., Sallis, J. F., & Brown, W. (2002). Correlates of adults' participation in physical activity: review and update. *Medicine and science in sports and exercise , 34* (12), 1996 - 2001.

Turner, L. W., Hunt, S. B., Dibrezzo, R., & Jones, C. Health Belief Model. Jones and Bartlett Publishers.

Ussher, M., Stanbury, L., Cheeseman, V., & Faulkner, G. (2007). Physical activity preference and perceived barriers to activity among persons with severe mental illness in the UK. *Psychiatric services , 58* (3), 405 - 408.

van der Heijde, C. M., Vonk, P., & Meijman, F. J. (2015). Self-regulation for the promotion of student health. Traffic lights: the development of a tailored web-based instrument providing immediate personalized feedback. *Health Psychology and Behavioural Medicine , 3* (1), 169 - 189.

van der Heijde, C. M., Vonk, P., & Meijman, F. J. (2014). *Stoplichten: projectresultaten Studentengezondheidstest 2013-2014.* Amsterdam: Bureau Studentenartsen/UvA.

van der Horst, K., Paw, M. J., Twisk, J. W., & van Mechelen, W. (2007). A brief review on correlates of physical activity and sedentariness in youth. *Medicine and science in sports and exercise , 39* (8), 1241.

Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: the evidence. *Canadian Medical Association Journal , 174* (6), 801 - 809.

Wendel-Vos, G. (2014, 06 23). *Normen van lichamelijke (in)activiteit*. Opgeroepen op 08 29, 2016, van Nationaal Kompas Volksgezondheid: http://www.nationaalkompas.nl/gezondheidsdeterminanten/leefstijl/lichamelijke-activiteit/normen-van-lichamelijke-in-activiteit/

WHO. (sd). *Physical inactivity: a global public health problem*. Opgeroepen op 09 20, 2016, van Global strategy on diet, physical activity and health: http://www.who.int/dietphysicalactivity/factsheet_inactivity/en/

Zabinski, M. F., Saelens, B. E., Stein, R. I., Hayden-Wald, H. A., & Wilfley, D. E. (2003). Overweight children's barriers to an support for physical activity. *Obesity , 11* (2), 238 - 246.

Reflection

I can still remember searching for internships on the Internet. I wanted an internship in the field of global health or international public health, however it was difficult to find an internship in this period (September – December) and meeting the requirements of the VU. Suddenly my eye caught the research topic about physical activity among student of the general practice Oude Turfmarkt. I immediately thought this is an internship I would like to do, although the topic was different than I was looking for. I contacted Claudia van der Heijde (senior researcher) about my interest in an internship at the general practice. Shortly thereafter I received the opportunity to choose between four different topics, but I already knew I wanted to research physical activity. Luckily, I was allowed to make a research proposal for the topic I wanted. After a conversation in the summer of 2016 I had the internship I wanted. In the research proposal I included the following learning objectives:

- "I want to perform a quantitative research from research proposal until reporting the obtained results in a scientific research report/article by myself within four months"

- "I want to recruit 100 to 150 respondents for the self-made questionnaire within four weeks."

- "I want to learn how to make a professional and representative questionnaire, learn how to recruit respondents and how to analyse the findings within two months."

I have learned that writing a research proposal and writing an article is more difficult than I expected. Although I had to write several reports in the bachelor and especially in the minor, they were not comparable to this research. Starting a research all by myself from scratch, not knowing which side it would go on was hard, but on the other hand challenging. I was allowed to decide the direction of this study. I learned how to find the right literature among all those previous studies already done for physical activity. I have also learned the importance of a model in your article, since it gives more structure to your article. Todat, December 23rd, I have completed the whole process of writing a scientific article by myself. So, I achieved my first learning objective.

Furthermore, I have learned that designing a professional questionnaire is not that easy and it takes a lot of work. You cannot just make up a question you think would be good. The questions need to be based on found literature or other valid questionnaires. In addition an item cannot be measured by only one question, it needs to be analysed by at least three different questions to make it reliable. The questionnaire needed to be improved repeatedly, but I am especially thankful to Claudia for all her adjustments and advices, because by doing so I could make this representative questionnaire. Herewith I achieved the first part of the third learning objective. Although the time management was critical, due to all improvements, more students were recruited than I expected in my learning objective. The goal was to recruit 100-150 students within four weeks, but I recruited 257 students within one week. So, I also achieved my second learning objective, although it was within one week instead of four. Besides the amount of students, I had also learned how to recruit them. I had only thought of social media, but most students were recruited by email. I have learned how to write a recruitment form and that vouchers are a good motivator for students. Thus, the second part of the third learning objective is also achieved. Despite the fact that I have had two courses on methodology and the statistics program SPSS, I have learned in this internship when, why and how to use certain analyses. Especially why you use a specific method or test was an eye opener for me, since I had never really understood this part. Gerben and Claudia, huge thanks for that. So, also the third and last part of the third learning objective is achieved.

Moreover, I have learned how to manage the feedback of three different supervisors, Gerben, Claudia and Peter, with three different backgrounds. In the bachelor you receive feedback on your reports from just one person, whereby it is easier to improve your article or report because there is only one perspective and no other opinions you need to take into account. However, due to these different perspectives and opinions I was challenged to think about the topic within the different perspectives, since Claudia is a psychologist, Gerben an epidemiologist and Peter a general practitioner. Thereby, I have learned to make my own decision which adjustments I thought were most important, independently of whose adjustment it was naturally and to look at a topic with difference perspectives.

Additionally I would like to thank my supervisors for being such wonderful and important people for me this past four months. First of all, I would like to thank Gerben Hulsegge, my VU supervisor, for all the things he taught me about writing all aspects of a proper scientific article, from introduction to correct scientific rendition of references and tables. I would like to thank him for his patience and that he always remained calm and positive as well. Secondly, I would like to thank Claudia van der Heijde, my daily supervisor, for her expertise on developing questionnaires and her statistical knowledge. Although she was busy with her own research, I could always interrupt her for questions and even for just a talk. A special thanks for her criticism on the questionnaire, because without her help it would not have been the questionnaire it has become. Finally, I would like to thank Peter Vonk, the director of the general practice, for making this internship possible at his general practice. Furthermore, I would like to thank him for his knowledge on such big projects on a general practice and the possibility to stimulate students to fill in the questionnaire by vouchers.

Unfortunately another student (Youssra), with whom I established a good relationship, needed to stop her research at the GP, whereupon I was the only student. Nevertheless I enjoyed my time as a research trainee on the general practice Oude Turfmarkt. Especially knowing that your research has a real purpose for the general practice made this internship special. I would thank everybody for this experience of being a researcher in the health sciences.

Appendices

Tables

Table 1 Factors related to physical activity

Positive relation				Inverse relation	
Intention to exercise	Occupational status	Healthy diet	Perceived behavioural control	Stress	Psychological disorders
Health status	Action planning	Living in an urban area	Socioeconomic status	Age	Time (study period)
Personal history in exercise	Education level	Having family/spouse	Ethnic origin	Perceived effort	Smoking
Self-efficacy	Gender	Academic performance	Social support	Overweight	Work factors
Educational attainment	Male sex	Mind wandering		Sleep (> 9 hours)	

Adamson et al., 2016; Bauman et al., 2012; Dirven et al., 2012; Funning et al., 2016; Goodwin, 2003; Keating et al., 2010; Lee et al., 2016; Lizandra et al., 2016; McNeill et al., 2006; RIVM, 2016; Seefeldt et al., 2002; Stubbs et al., 2016; Trost et al., 2002

Table 2 Motivating aspects of physical activity

Goal facilitation	Social support	Buddy system, walking groups, contract with sport partners	Observing others
Enjoyment/having fun	Looking good	Competence	Easy access
Folders/posters	School curriculum	Park use	Smartphones

Al-Eisa et al., 2016; Amuta et al, 2016; Cohen et al., 2015; Crozier et al., 2016; Harries et al., 2016; Keating et al., 2010; Kilpatrick et al., 2005; Lee et al., 2016; Long et al., 2011; McNeill et al., 2006; Rhodes et al., 2016; Richardson et al., 2005; Simchon et al., 2016

Table 3 Internal and external barriers to physical activity

Internal barriers			
Fear of falling	No contracts with exercise partner	Lack of interest or desire	School and schoolwork
Too tired / no energy	Time constraints	Worried about my looks	Not thought about positive aspects
Too weak	Too difficult		
External barriers			
Bad weather	(Parents) give academic success priority	No time because of social/family responsibilities	
Not enough encouragement	No time because of busy lesson schedule	No facilities	

Arzu et al., 2006; Tappe et al., 1989; Trost et al., 2002

Table 4 Full table of the top eight barriers

Barriers	**Very agree %**	**Slightly agree %**	Neither %	Slightly disagree %	Very disagree %	**Percentage first 2 options**
A	**24.4**	**41.5**	7.8	10.9	15.5	**65.9**
B	**2.1**	**13.0**	5.7	17.6	61.7	**51.1**
C	**16.1**	**43.0**	10.4	17.6	61.7	**59.1**
D	**6.2**	**26.4**	13.5	15.0	38.9	**32.6**
E	**1.6**	**7.8**	8.3	25.4	57.0	**9.4**
F	**13.5**	**32.6**	18.1	22.8	13.0	**46.1**
G	**3.1**	**11.4**	12.4	21.8	51.3	**14.5**
H	**3.6**	**13.5**	15.0	23.3	35.8	**17.1**
I	**3.1**	**16.6**	20.7	23.8	35.8	**19.7**
J	**16.1**	**43.5**	11.9	17.1	11.4	**59.6**
K	**1.0**	**7.8**	8.3	17.1	65.8	**8.8**
L	**2.1**	**7.3**	8.8	19.2	62.7	**9.4**
M	**2.6**	**7.3**	8.8	15.5	65.8	**9.9**
N	**2.6**	**11.9**	8.3	13.5	63.7	**14.5**
O	**5.7**	**24.4**	19.7	19.7	30.6	**30.1**
P	**10.4**	**25.9**	9.8	17.1	36.8	**36.3**
Q	**6.2**	**18.7**	14.0	18.7	42.5	**24.9**
R	**5.7**	**13.5**	6.7	14.5	59.6	**19.2**
S	**1.6**	**7.8**	14.0	21.8	54.9	**9.4**
T	**x**	**6.2**	6.7	23.3	63.7	**6.2**
U	**6.7**	**23.8**	17.6	20.7	31.1	**30.5**
V	**x**	**2.6**	5.7	18.7	73.1	**2.6**

The top eight as presented in the results is based on the last column of the table (bold)

Table 5 All confounders: Green is a change in R.E. of 10% or more, red is a change of less than 10%.

	Left out	Gender		Age		BMI		Relationship		Living situation		Nationality		Smoking behaviour		Alcohol use		Drugs use		Education level		Studies		Study results		Phases		Psychological problems		General health status		Anxiety		Depression		Quality of life		Vitality	
	None	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ	New	Δ
Gender (female)	0,42	x	x	0,43	3%	0,37	11%	0,43	3%	0,43	3%	0,43	3%	0,41	2%	0,42	0%	0,41	2%	0,42	0%	0,42	0%	0,42	0%	0,41	2%	0,41	1%	0,45	7%	0,41	0%	0,38	8%	0,39	7%	0,43	4%
Age	-0,01	-0,01	56%	x	x	0,00	100%	-0,01	11%	-0,01	44%	-0,01	22%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	33%	-0,01	11%	-0,01	0%	-0,01	0%	-0,01	22%	-0,01	33%	-0,01	11%
BMI (kg/m2)	0,08	0,08	5%	0,08	4%	x	x	0,08	1%	0,08	0%	0,08	0%	0,08	0%	0,08	0%	0,08	0%	0,08	0%	0,08	1%	0,08	0%	0,08	0%	0,08	0%	0,08	0%	0,08	0%	0,08	1%	0,09	1%	0,08	2%
Relationship	0,19	0,21	12%	0,19	3%	0,17	12%	x	x	0,20	6%	0,18	5%	0,19	2%	0,19	1%	0,19	1%	0,19	0%	0,19	3%	0,19	0%	0,18	4%	0,19	1%	0,21	9%	0,19	1%	0,18	6%	0,15	20%	0,21	7%
Living situation																																							
Living with your parents or relatives																																							
Living with your peers	0,17	0,20	20%	0,15	9%	0,15	7%	0,16	5%	x	x	0,16	2%	0,19	14%	0,17	3%	0,18	5%	0,17	0%	0,17	2%	0,17	0%	0,15	10%	0,16	5%	0,16	7%	0,17	1%	0,15	7%	0,14	17%	0,17	2%
Living alone	0,10	0,12	26%	0,07	27%	0,09	4%	0,09	6%	x	x	0,11	8%	0,11	13%	0,10	2%	0,10	6%	0,10	0%	0,12	27%	0,10	0%	0,09	12%	0,09	9%	0,08	15%	0,10	1%	0,09	6%	0,09	11%	0,11	13%
Living with your partner	0,15	0,19	28%	0,10	34%	0,17	20%	0,25	71%	x	x	0,16	8%	0,16	8%	0,15	2%	0,15	1%	0,15	0%	0,16	8%	0,14	1%	0,13	8%	0,14	7%	0,13	13%	0,15	0%	0,14	2%	0,12	15%	0,17	14%
Nationality - Dutch	-0,30	-0,31	3%	-0,28	4%	-0,29	1%	-0,30	0%	-0,31	4%	x	x	-0,31	3%	-0,29	2%	-0,30	0%	-0,30	0%	-0,31	4%	-0,30	0%	-0,28	4%	-0,31	5%	-0,30	1%	-0,29	2%	-0,31	6%	-0,32	7%	-0,31	4%
Nationality - Turkish	0,15	0,16	11%	0,14	3%	0,23	56%	0,14	5%	0,13	9%	x	x	0,17	18%	0,12	21%	0,14	4%	0,15	0%	0,13	9%	0,15	2%	0,14	3%	0,13	12%	0,18	22%	0,15	3%	0,13	13%	0,12	16%	0,17	12%
Nationality - Maroccan	0,74	0,76	3%	0,73	2%	0,72	3%	0,72	3%	0,73	2%	x	x	0,74	0%	0,70	6%	0,74	0%	0,74	0%	0,75	0%	0,75	1%	0,72	4%	0,75	1%	0,79	6%	0,75	0%	0,71	5%	0,72	4%	0,76	2%
Nationality - Surinamese	0,22	0,27	24%	0,20	9%	0,28	29%	0,21	6%	0,19	11%	x	x	0,22	2%	0,21	3%	0,22	1%	0,22	0%	0,25	16%	0,22	2%	0,24	8%	0,22	0%	0,20	10%	0,22	0%	0,23	5%	0,23	5%	0,23	3%
Nationality - Antilleans	0,42	0,46	11%	0,43	3%	0,55	33%	0,41	1%	0,43	4%	x	x	0,40	4%	0,42	0%	0,41	0%	0,42	0%	0,38	8%	0,42	0%	0,43	3%	0,43	4%	0,44	7%	0,41	1%	0,45	9%	0,43	3%	0,40	4%
Smoking behaviour	0,20	0,19	7%	0,21	1%	0,21	3%	0,20	1%	0,22	6%	0,21	2%	x	x	0,21	3%	0,22	10%	0,20	0%	0,22	9%	0,20	0%	0,21	3%	0,20	1%	0,23	15%	0,20	0%	0,20	2%	0,20	2%	0,20	4%
Alcohol use	0,07	0,07	3%	0,06	11%	0,04	32%	0,08	18%	0,08	26%	-0,07	206%	0,11	75%	x	x	0,07	11%	0,07	0%	0,06	12%	0,07	0%	0,06	9%	0,07	9%	0,05	29%	0,07	6%	0,05	20%	0,06	8%	0,06	9%
Drug use	0,06	0,00	104%	0,06	2%	0,03	41%	0,06	7%	0,07	29%	0,05	9%	0,13	139%	0,06	7%	x	x	0,06	0%	0,05	4%	0,06	0%	0,06	7%	0,05	14%	0,06	0%	0,06	0%	0,06	2%	0,05	4%	0,05	13%
Education level	-0,97	-0,94	3%	-1,00	3%	-0,95	3%	-0,96	2%	-1,03	6%	-1,10	13%	-0,99	2%	-0,98	0%	-0,98	1%	x	x	-0,16	83%	-0,96	1%	-0,97	1%	-0,98	1%	-0,96	1%	-0,97	0%	-1,03	6%	-0,98	1%	-1,05	8%
Study type																																							
HvA Exercise, Sports & Nutrition studies																																							
UvA Medicine	-0,25	-0,27	7%	-0,26	6%	-0,22	13%	-0,23	8%	-0,25	0%	-0,36	43%	-0,26	6%	-0,25	1%	-0,25	1%	0,72	391%	x	x	-0,24	3%	-0,28	14%	-0,26	4%	-0,22	10%	-0,24	2%	-0,30	22%	-0,26	3%	-0,36	45%
UvA Dentistry	0,55	0,55	1%	0,52	5%	0,54	1%	0,57	5%	0,51	6%	0,44	20%	0,54	2%	0,54	1%	0,54	1%	1,52	178%	x	x	0,56	2%	0,47	14%	0,52	5%	0,55	0%	0,55	1%	0,48	11%	0,51	7%	0,49	10%
UvA Child Development and Education	-0,35	-0,27	22%	-0,41	16%	-0,36	1%	-0,33	7%	-0,38	9%	-0,49	40%	-0,35	0%	-0,35	1%	-0,36	1%	0,62	277%	x	x	-0,34	2%	-0,38	7%	-0,37	4%	-0,32	8%	-0,35	1%	-0,40	14%	-0,36	1%	-0,42	21%
UvA Philosophy studies	0,04	-0,02	153%	0,01	70%	0,00	102%	0,06	40%	0,03	35%	-0,06	233%	0,07	51%	0,04	5%	0,04	2%	1,02	2263%	x	x	0,05	14%	0,05	21%	-0,01	114%	0,06	33%	0,05	7%	0,00	109%	0,04	0%	-0,02	153%
UvA Dutch studies	-0,16	-0,09	45%	-0,18	13%	-0,09	45%	-0,15	5%	-0,17	10%	-0,29	82%	-0,15	4%	-0,16	1%	-0,16	3%	0,82	620%	x	x	-0,15	3%	-0,17	9%	-0,19	21%	-0,14	14%	-0,15	5%	-0,24	50%	-0,17	8%	-0,21	34%
UvA Art, Religion & Culture studies	0,03	0,09	240%	-0,01	156%	0,05	80%	0,05	100%	0,01	76%	-0,11	524%	0,03	12%	0,02	16%	0,03	0%	1,00	3896%	x	x	0,03	28%	0,01	64%	0,00	84%	0,02	20%	0,03	16%	-0,05	280%	0,02	24%	-0,06	320%
HvA Health studies	0,67	0,70	5%	0,67	0%	0,70	4%	0,68	1%	0,66	1%	0,69	2%	0,69	3%	0,67	0%	0,67	0%	0,67	0%	x	x	0,67	0%	0,68	1%	0,66	1%	0,69	4%	0,67	0%	0,67	0%	0,66	2%	0,67	1%
HvA Media, Creation & Information studies	1,02	1,01	2%	1,03	0%	1,00	3%	1,02	1%	1,03	1%	1,04	2%	1,06	3%	1,02	0%	1,03	0%	1,02	0%	x	x	1,02	0%	1,03	0%	1,02	0%	1,06	3%	1,02	0%	1,02	1%	1,02	1%	1,02	0%
HvA Economy and Management	0,53	0,46	13%	0,53	1%	0,55	4%	0,54	1%	0,53	1%	0,59	11%	0,57	6%	0,53	0%	0,54	0%	0,53	0%	x	x	0,53	0%	0,54	1%	0,55	2%	0,55	2%	0,53	0%	0,55	2%	0,53	0%	0,54	1%
UvA Social Sciences	-0,16	-0,14	8%	-0,18	15%	-0,13	15%	-0,13	14%	-0,17	8%	-0,26	65%	-0,15	6%	-0,16	1%	-0,15	2%	0,82	624%	x	x	-0,15	6%	-0,19	22%	-0,17	12%	-0,15	6%	-0,15	1%	-0,20	31%	-0,17	7%	-0,26	65%
UvA Communication sciences	-0,02	0,03	238%	-0,05	108%	-0,03	42%	-0,01	42%	-0,05	88%	-0,14	483%	-0,01	75%	-0,03	21%	-0,03	17%	0,95	4054%	x	x	-0,02	33%	-0,07	204%	-0,05	100%	0,00	88%	-0,02	8%	-0,06	142%	-0,04	71%	-0,15	508%
Uva Psychology	-0,33	-0,28	15%	-0,36	8%	-0,33	2%	-0,31	7%	-0,35	7%	-0,44	32%	-0,32	2%	-0,33	1%	-0,33	1%	0,64	294%	x	x	-0,32	2%	-0,36	9%	-0,35	5%	-0,32	5%	-0,32	3%	-0,39	17%	-0,34	2%	-0,43	30%
UvA Economy & Business studies	-0,18	-0,25	43%	-0,19	10%	-0,18	0%	-0,16	7%	-0,19	9%	-0,20	14%	-0,18	2%	-0,18	1%	-0,18	3%	0,80	556%	x	x	-0,17	5%	-0,24	37%	-0,17	1%	-0,14	22%	-0,18	0%	-0,21	20%	-0,19	6%	-0,25	44%
UvA Jurisprudence	-0,20	-0,17	17%	-0,23	16%	-0,22	9%	-0,17	14%	-0,22	12%	-0,30	49%	-0,22	8%	-0,20	2%	-0,20	1%	0,77	487%	x	x	-0,19	6%	-0,25	25%	-0,21	2%	-0,16	18%	-0,19	4%	-0,27	35%	-0,20	2%	-0,32	61%
UvA History, Archeology & Area studies	-0,27	-0,28	6%	-0,30	12%	-0,26	4%	-0,25	7%	-0,30	10%	-0,40	48%	-0,25	9%	-0,27	1%	-0,27	1%	0,71	363%	x	x	-0,26	3%	-0,29	9%	-0,27	1%	-0,24	10%	-0,27	0%	-0,33	24%	-0,27	0%	-0,35	32%
UvA Language & Literature studies	0,06	0,11	95%	0,02	65%	0,07	14%	0,07	21%	0,03	44%	-0,05	184%	0,07	21%	0,05	5%	0,05	9%	1,03	1707%	x	x	0,06	11%	0,06	2%	0,03	46%	0,06	2%	0,06	0%	0,00	104%	0,06	2%	-0,02	132%
UvA Media studies	0,33	0,37	13%	0,24	25%	0,34	5%	0,35	6%	0,30	9%	0,21	35%	0,32	2%	0,33	1%	0,33	1%	1,30	298%	x	x	0,34	2%	0,33	2%	0,31	6%	0,36	9%	0,33	1%	0,26	20%	0,32	2%	0,24	27%
UvA ISS/Beta-gamma	-0,20	-0,24	23%	-0,21	9%	-0,23	15%	-0,17	11%	-0,21	6%	-0,31	60%	-0,21	8%	-0,20	1%	-0,19	1%	0,78	499%	x	x	-0,19	3%	-0,19	3%	-0,18	6%	-0,21	5%	-0,19	3%	-0,25	28%	-0,19	4%	-0,24	21%
Hva Education & Upbringing studies	-0,30	-0,34	15%	-0,31	5%	-0,27	10%	-0,29	2%	-0,34	14%	-0,41	38%	-0,30	0%	-0,30	1%	-0,30	0%	0,68	327%	x	x	-0,29	3%	-0,35	17%	-0,29	3%	-0,22	25%	-0,30	0%	-0,33	12%	-0,28	5%	-0,36	20%
UvA Physics, Mathematics & Computer sciences	0,62	0,64	3%	0,60	3%	0,69	11%	0,63	1%	0,62	1%	0,64	4%	0,65	5%	0,62	0%	0,62	0%	0,62	0%	x	x	0,62	1%	0,64	3%	0,62	1%	0,65	4%	0,62	0%	0,62	0%	0,61	1%	0,65	4%
HvA Society & Law studies	0,80	0,84	4%	0,80	0%	0,85	6%	0,81	1%	0,80	1%	0,84	5%	0,85	5%	0,80	0%	0,81	0%	0,80	0%	x	x	0,80	0%	0,81	1%	0,81	0%	0,82	2%	0,80	0%	0,81	1%	0,81	0%	0,82	2%
HvA Technology studies	0,92	0,79	15%	0,92	0%	0,92	0%	0,92	0%	0,92	1%	0,95	3%	0,95	3%	0,92	0%	0,92	0%	0,92	0%	x	x	0,92	0%	0,95	3%	0,91	1%	0,93	1%	0,92	0%	0,92	0%	0,92	0%	0,95	3%
Study results	-0,01	0,00	111%	-0,01	0%	-0,02	89%	-0,01	0%	-0,01	22%	-0,02	133%	-0,02	89%	-0,01	11%	-0,01	0%	-0,01	0%	0,01	178%	x	x	-0,03	222%	-0,01	11%	-0,02	111%	-0,01	11%	0,01	189%	-0,01	11%	-0,01	44%
Study phase - freshmen	0,24	0,22	5%	0,24	3%	0,24	3%	0,23	2%	0,23	3%	0,21	11%	0,24	3%	0,23	0%	0,24	0%	0,24	0%	0,25	4%	0,24	2%	x	x	0,23	3%	0,26	10%	0,23	1%	0,24	2%	0,23	3%	0,23	3%
Study phase - bachelor	0,06	0,06	2%	0,06	5%	0,06	5%	0,06	7%	0,06	3%	0,05	12%	0,06	0%	0,06	0%	0,06	2%	0,06	0%	0,06	2%	0,06	2%	x	x	0,05	10%	0,07	12%	0,06	0%	0,06	5%	0,06	7%	0,07	10%
Study phase - master	0,00	0,01	125%	0,00	200%	0,01	25%	0,01	100%	0,01	100%	0,00	50%	0,00	25%	0,01	25%	0,00	0%	0,00	0%	0,00	175%	0,00	0%	x	x	0,00	0%	0,01	25%	0,00	0%	0,01	100%	0,00	25%	0,01	75%
Study phase - Doctoral	-0,18	-0,18	2%	-0,19	3%	-0,13	30%	-0,19	2%	-0,18	0%	-0,19	3%	-0,18	2%	-0,18	0%	-0,19	1%	-0,18	0%	-0,20	7%	-0,18	1%	x	x	-0,19	5%	-0,16	12%	-0,18	1%	-0,18	1%	-0,18	1%	-0,18	3%
Study phase - Medical internship	0,02	0,03	93%	0,01	20%	0,02	7%	0,02	13%	0,01	40%	0,01	53%	0,02	20%	0,02	0%	0,02	7%	0,02	0%	0,00	113%	0,02	0%	x	x	0,02	0%	0,00	100%	0,02	0%	0,02	33%	0,02	13%	0,02	60%
Study phase - PhD	0,06	0,04	25%	0,06	0%	0,07	15%	0,06	5%	0,06	7%	0,07	20%	0,07	14%	0,06	2%	0,06	2%	0,06	0%	0,04	31%	0,06	2%	x	x	0,05	10%	0,08	34%	0,06	2%	0,06	5%	0,04	27%	0,08	27%
Psychological problems	-0,26	-0,25	3%	-0,26	2%	-0,26	0%	-0,26	0%	-0,25	2%	-0,27	5%	-0,26	1%	-0,26	0%	-0,26	1%	-0,26	0%	-0,24	7%	-0,26	0%	-0,26	1%	x	x	-0,22	15%	-0,27	5%	-0,29	12%	-0,24	7%	-0,23	10%
General health status	-0,01	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	9%	x	x	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	27%
Anxiety	-0,01	-0,01	25%	-0,01	0%	-0,02	67%	-0,01	8%	-0,01	0%	-0,01	17%	-0,01	8%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	17%	-0,01	0%	-0,01	0%	-0,02	75%	0,00	75%	x	x	-0,04	258%	-0,01	8%	-0,01	0%
Depression	-0,04	-0,04	15%	-0,04	2%	-0,04	2%	-0,04	2%	-0,04	2%	-0,04	0%	-0,04	2%	-0,04	0%	-0,04	0%	-0,04	0%	-0,04	2%	-0,04	0%	-0,04	0%	-0,04	7%	-0,04	2%	-0,04	7%	x	x	-0,03	20%	-0,02	49%
Quality of Life	-0,20	-0,15	27%	-0,20	3%	-0,23	15%	-0,17	16%	-0,19	7%	-0,21	4%	-0,20	2%	-0,20	0%	-0,20	0%	-0,20	0%	-0,19	5%	-0,20	0%	-0,20	1%	-0,19	7%	-0,21	4%	-0,20	0%	-0,12	40%	x	x	-0,28	36%
Vitality	-0,01	-0,01	0%	-0,01	0%	-0,01	8%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	0%	-0,01	8%	-0,01	8%	-0,02	31%	-0,01	0%	-0,01	23%	-0,01	8%	x	x

Recruitment forms

Email

Beste student,

Eerder heb je meegedaan aan de Studentengezondheidstest en hierbij heb je aangegeven dat we je nog mochten benaderen voor extra onderzoek aangaande de gezondheid van studenten. Alvast bedankt hiervoor.

Momenteel wordt er een onderzoek gedaan naar het beweeggedrag onder studenten. Uit de Studentengezondheidstest 2013/2014 is namelijk naar voren gekomen dat 33% van de studenten meer wil bewegen. In dit onderzoek zal er gekeken worden wat de verschillen zijn tussen de groep studenten die meer willen bewegen en die dit niet hebben aangegeven in de Studentengezondheidstest. Vervolgens wordt er via een online vragenlijst onderzocht wat de ervaren barrières zijn van studenten om toch niet meer te gaan bewegen en factoren die studenten motiveren om wel meer te gaan bewegen. Voor het laatste onderdeel heb ik jouw hulp hard nodig.

Ik wil je dan ook vragen of je mee wil doen aan dit onderzoek door de onderstaande vragenlijst in te vullen.

https://bureaustudentenartsen.survey.datacoll.nl/nq.cfm?q=35688864-2161-401c-8263-bc6c149cb936

Het invullen duurt circa 10 minuten, afhankelijk van de door jou gekozen antwoorden. Je maakt daarnaast kans op een van de 5 waardebonnen van bol.com t.w.v. €20,- euro die worden verloot onder de deelnemers!

Bedankt voor de medewerking en hartelijke groet,
Lotus Wendel
Bureau Studentenartsen

Social media

Beste student,

Om mijn bachelor af te kunnen ronden heb ik jouw hulp nodig!
Momenteel doe ik onderzoek naar het beweeggedrag onder studenten, omdat in voorgaande studies is gebleken dat 33% van de studenten eigenlijk meer wil bewegen. Om dit beweeggedrag (met de daarbij behorende barrières en stimulansen) te kunnen onderzoeken wil ik je vragen of je a.u.b. onderstaande vragenlijst voor mij zou willen invullen. Het duurt circa 10 minuten om de vragenlijst in te vullen, afhankelijk van de door jou gekozen antwoorden. JE MAAKT DAARBIJ KANS OP EEN VAN DE 5 WAARDEBONNEN VAN BOL.COM T.W.V. €20,- DIE WORDEN VERLOOT ONDER DE DEELNEMERS!!
Alvast bedankt!

https://bureaustudentenartsen.survey.datacoll.nl/nq.cfm?q=714e1f3b-9f17-4825-9df1-86adcfef1049

Newsletter from the general practice:

Ben jij student en wil je meedoen aan een onderzoek? Lees dan snel verder!

Op jouw huisartsenpraktijk, Studentenartsen/Huisartsen Oude Turfmarkt, wordt momenteel onderzoek gedaan naar het beweeggedrag van studenten. Uit voorgaand onderzoek door bureau studentenartsen is gebleken dat 33% van de studenten meer wil bewegen, maar blijkbaar lukt dit toch niet altijd. Daarom wordt er nu onderzoek gedaan naar de ervaren barrières van studenten waardoor ze (toch) niet voldoende bewegen en wordt er onderzocht wat studenten dan wel stimuleert.

Wil jij meehelpen aan dit onderzoek? Vul dan de vragenlijst in via deze link:

https://bureaustudentenartsen.survey.datacoll.nl/nq.cfm?q=3cb93290-abc7-48c8-b49b-3bf10c3017c6

Daarbij maak je ook nog eens kans op **een van de 5 waardebonnen van bol.com t.w.v. €20,- euro** die worden verloot onder de deelnemers!! Wees er snel bij want op vrijdag 9 december zullen de waardebonnen worden verloot.

Message to all five winners

Beste student,

Kort geleden heb je een vragenlijst ingevuld over lichamelijke activiteit en hierbij aangegeven dat je kans wilde maken op een van de 5 waardebonnen.

JIJ BENT EEN VAN DE 5 WINNAARS!!

Hierbij ontvang je de waardebon van bol.com t.w.v. €20,- euro.

Bedankt voor het invullen!

Hartelijke groet,
Lotus Wendel

Questionnaire

Beste student,

Beweeg jij wel genoeg? Zit jij ook de hele dag achter je laptop en neem je graag de lift? Je bent niet de enige!

Momenteel wordt er bij de Studentenartsen / Huisartsen Oude Turfmarkt in Amsterdam onderzoek gedaan naar het beweeggedrag van studenten. Uit eerder onderzoek is gebleken dat 33% van de studenten meer wil bewegen, maar blijkbaar lukt dit toch niet altijd. Met dit onderzoek willen wij achterhalen wat de ervaren barrières van studenten zijn met betrekking tot hun beweeggedrag. Tevens zijn we opzoek naar factoren die studenten motiveren om meer te gaan bewegen. Om dit goed in kaart te brengen hebben wij jouw hulp nodig!

Ik wil je dan ook vragen of je mee wil doen aan dit onderzoek door de onderstaande vragenlijst in te vullen. Het invullen duurt circa 10 minuten, afhankelijk van de door jou gegeven antwoorden. **Je maakt kans op een van de 5 waardebonnen van bol.com t.w.v. €20,- euro die worden verloot onder de deelnemers!!**

Verder

Eerst wat persoonsgegevens

Ben je een man of vrouw?

0 man

0 vrouw

Hoe oud ben je? *(in jaren)*

Hoe lang ben je? *(in cm)*

Wat is je huidige gewicht? *(in kg)*

Wat is je etnische/culturele achtergrond? *(meerder opties mogelijk)*

0 Nederlands

0 Turks

0 Marokkaans

0 Surinaams

0 Antilliaans

0 Indisch

0 Anders, namelijk:

Hoeveel uur slaap je gemiddeld per nacht?

Verder

De volgende vragen gaan over jou als student

Sta je ingeschreven als student bij een onderwijsinstelling in Nederland?

0 Nee *(-> sprong naar het einde van de vragenlijst)*

0 Ja

Verder

De volgende vragen gaan over jou als student

Studeer je aan het MBO/HBO/WO?

0 MBO *(-> sprong naar het einde van de vragenlijst)*

0 HBO

0 WO

Bij welke onderwijsinstelling sta je ingeschreven?

0 Universiteit van Amsterdam

0 Hogeschool van Amsterdam

0 Vrije Universiteit Amsterdam

0 Anders, namelijk:

Welke studie doe je?

Verder

De volgende vragen gaan over je gezondheidsgedrag: Roken

Ik rook

0 Nooit *(-> sprong naar het alcohol)*

0 Soms

0 Regelmatig

0 Vaak

0 Heel vaak

Verder

Hoeveel sigaretten rook je gemiddeld genomen op een dag?

0 0

0 1-5

0 6-10

0 11-20

0 21-29

0 30 of meer

Hoeveel sigaren rook je gemiddeld genomen in een week?

0 0

0 1-5

0 6-10

0 11-20

0 21-29

0 30 of meer

Hoeveel pakjes pijptabak (van 50 gram) rook je gemiddeld genomen in een week?

0 0

0 0-1

0 2

0 3

0 4

0 5 of meer

Kun je aangeven in welke mate je tabaksverslaafd bent op een schaal van 1 tot 100? *(hierbij is 0 niet verslaafd en 100 heel erg verslaafd)*

0 0-20

0 21-40

0 41-60

0 61-80

0 80-100

Hoeveel minuten na het opstaan steek je je eerste sigaret/sigaar/pijp op?

0 Ik rook niet elke dag

0 31-60 minuten

0 16-30 minuten

0 6-15 minuten

0 0-5 minuten

Voorgoed stoppen met roken is voor mij:

0 Heel gemakkelijk

0 Redelijk gemakkelijk

0 Redelijk moeilijk

0 Heel moeilijk

0 Onmogelijk

Na een paar uur niet roken voel ik een onweerstaanbare drang om te roken

0 Helemaal oneens

0 Oneens

0 Neutraal

0 Mee eens

0 Helemaal mee eens

Verder

De volgende vragen gaan over je gezondheidsgedrag: Alcohol

Ik gebruik alcohol

0 Nooit *(-> sprong naar het drugs)*

0 Soms

0 Regelmatig

0 Vaak

0 Heel vaak

Verder

Hoe vaak gebruik je alcoholhoudende drank?

0 nooit

0 1x per maand of minder

0 2-4x per maand

0 3x per week

0 4x per week

Als je alcohol drinkt, hoeveel glazen drink je dan gemiddeld?

0 1-2

0 3-4

0 5-6

0 7-9

0 10 of meer

Hoe vaak gebruik je 4 of meer (vrouwen) of 6 of meer (mannen) alcoholhoudende drankjes per week?

0 Nooit

0 Minder dan 1x per maand

0 Maandelijks

0 Wekelijks

0 Dagelijks of bijna altijd

Verder

De volgende vragen gaan over je gezondheidsgedrag: Drugs

Ik gebruik drugs

0 Nooit *(-> sprong naar voldoende bewegen)*

0 Soms

0 Regelmatig

0 Vaak

0 Heel vaak

Verder

Hoe vaak heb je in de laatste vier weken onderstaande middelen gebruikt? *(vink alleen aan wat op jou van toepassing is)*

	Niet in het afgelopen jaar, maar wel (in de jaren) daarvoor	Niet in de afgelopen 4 weken, maar wel in het afgelopen jaar	1-3x	4-9x	10-20x	>20x
A. Hasj/wiet	0	0	0	0	0	0
B. XTC (ecstasy, MDMA)	0	0	0	0	0	0
C. Cocaïne (coke of wit)	0	0	0	0	0	0
D. Hallucinogene paddenstoeltjes paddo's of magic mushrooms	0	0	0	0	0	0
E. Amfetaminen (uppers, pep, speed)	0	0	0	0	0	0
F. Heroïne (horse, smaack of bruin)	0	0	0	0	0	0
G. LSD	0	0	0	0	0	0
H. Ritalin of Cencerta (methylfenidaat)	0	0	0	0	0	0
I. Slaap en kalmeringsmiddelen (benzodiazepines, bv Valium of Seresta)	0	0	0	0	0	0
J. GHB	0	0	0	0	0	0
K. Fenethylamine (o.a. 2C-B, 2C-E)	0	0	0	0	0	0
L. Ketamine	0	0	0	0	0	0
M. Lachgas	0	0	0	0	0	0
N. Poppers	0	0	0	0	0	0
O. Designer drugs/research chemicals	0	0	0	0	0	0
P. Cafeïne in hoge doseringen	0	0	0	0	0	0
Q. Anders, namelijk:	0	0	0	0	0	0

Verder

De volgende vraag gaat over je gezondheidsgedrag: Voldoende bewegen

Je beweegt voldoende als je meer dan 30 minuten per dag lichamelijk actief bent. Onder lichamelijk actief valt sporten (met onder andere hartslagverhoging, zweten en cardio), bewegen

(zoals wandelen, fietsen, yoga, etc.), krachttraining en huishoudelijk werk (zoals stofzuigen, dweilen, etc.)

Heb je vroeger (minstens 1 jaar geleden) voldoend bewogen?

0 Nee

0 Ja

Verder

De volgende vragen gaan over je mentale gezondheid: Stress

Ervaar je stress op een van de volgende gebieden? *(meerdere opties mogelijk)*

0 Studie

0 Werk/bijbaan

0 Financiële situatie

0 Mentale gezondheid

0 Fysieke gezondheid

0 Relatie

0 Sociale contacten

0 Nee *(sprong naar andere vraag over stress met de getallen)*

0 Anders, namelijk:

Verder

Deze stress hindert mij bij:

	Bijna nooit	Soms	Regelmatig	Vaak	Bijna altijd
A. De dagelijkse dingen (huishouden, mobiliteit, recreëren, uitgaan, hobby's, etc.)	0	0	0	0	0
B. Het studeren	0	0	0	0	0
C. Werk	0	0	0	0	0
D. Sociale contacten (familie,	0	0	0	0	0

vriendschappen, relaties)

Verder

Kun je met een getal van 0 t/m 3 aangeven of de volgende stellingen op jou van toepassing zijn?

	0 = nooit	1 = soms	2 = vaak	3 = bijna altijd
A. Ik had volstrekt geen geduld met dingen die mij hinderen bij iets dat ik wilde doen	0	0	0	0
B. Ik merkte dat ik nogal lichtgeraakt was	0	0	0	0
C. Ik vond het moeilijk om mij te ontspannen	0	0	0	0
D. Ik was erg opgefokt	0	0	0	0
E. Ik merkte dat ik erg onrustig was	0	0	0	0
F. Ik vond het moeilijk mijzelf te kalmeren	0	0	0	0
G. Ik had de neiging om overdreven te reageren op situaties	0	0	0	0

Verder

De volgende vragen gaan over je mentale gezondheid: Psychische gezondheid

Heb je last een of meerdere van de volgende psychische problemen? *(meerdere opties mogelijk)*

0 Angst

0 Depressie

0 Somberheid

0 Drugs en/of alcohol gebruik

0 Nee *(sprong naar lichamelijke activiteit)*

0 Anders, namelijk:

Verder

Deze psychische problemen hinderen mij bij:

	Bijna nooit	Soms	Regelmatig	Vaak	Bijna altijd
A. De dagelijkse dingen (huishouden,	0	0	0	0	0

mobiliteit, recreëren, uitgaan, hobby's, etc.)					
B. Het studeren	0	0	0	0	0
C. Werk	0	0	0	0	0
D. Sociale contacten (familie, vriendschappen, relaties)	0	0	0	0	0

Verder

De volgende vragen gaan over lichamelijke activiteit

Geef aan wat voor volgens jou de consequenties zijn

	Zeer voordelige	Enigszins voordelige	Geen noemens waardige	Enigszins nadelige	Zeer nadelige
Niet voldoende bewegen heeft … consequenties voor de algemene gezondheid	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor de lichamelijke gezondheid	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor de mentale gezondheid	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor het vergroten van de kans op het krijgen van overgewicht	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor het vergroten van de kans op het krijgen van hart- en vaatziekten	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor het vergroten van de kans op het krijgen van kanker	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties voor het	0	0	0	0	0

verslechteren van de conditie					
Niet voldoende bewegen heeft … consequenties voor de vatbaarheid voor een depressie	0	0	0	0	0
Niet voldoende bewegen heeft … consequenties op de uiterlijke verschijning	0	0	0	0	0

Verder

Hoe groot schat jij de kans in voor jezelf om de volgende resultaten te krijgen door niet voldoende te bewegen?

	Heel erg groot	Redelijk groot	Niet groot/niet klein	Redelijk klein	Heel erg klein
Een verslechterde algemene gezondheid	0	0	0	0	0
Een verslechterde lichamelijke gezondheid	0	0	0	0	0
Een verslechterde mentale gezondheid	0	0	0	0	0
Het krijgen van hart- en vaatziekten	0	0	0	0	0
Overgewicht	0	0	0	0	0
Een verslechterde conditie	0	0	0	0	0
Het krijgen van kanker	0	0	0	0	0
De vatbaarheid voor een depressie	0	0	0	0	0
Er minder goed uitzien	0	0	0	0	0

Verder

Geef voor de volgende stellingen aan of je het als een risico ervaart

	Heel erg eens	Beetje mee eens	Niet eens/niet oneens	Beetje oneens	Heel erg oneens

Niet voldoende bewegen zie ik als risico voor het verslechteren van mijn algemene gezondheid	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het verslechteren van mijn lichamelijke gezondheid	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het verslechteren van mijn mentale gezondheid	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het krijgen van overgewicht	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het verslechteren van mijn conditie	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het er minder goed uitzien	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het krijgen van hart- en vaatziekten	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor het krijgen van kanker	0	0	0	0	0
Niet voldoende bewegen zie ik als risico voor de vatbaarheid voor een depressie	0	0	0	0	0

Verder

Hoe groot is de kans dat jij meer gaat bewegen of je huidige gezondheid beweeggedrag in stand houdt?

0 Heel erg groot

0 Redelijk groot

0 Niet groot/niet klein

0 Redelijk klein

0 Heel erg klein

Zou je (meer) willen bewegen?

0 Nee

0 Ja

Gedurende een week, hoeveel minuten ben je dan lichamelijk actief? Onder lichamelijk actief valt sporten (met onder andere hartslagverhoging, zweten en cardio), bewegen (zoals wandelen, fietsen, yoga, etc.), krachttraining en huishoudelijk werk (zoals stofzuigen, dweilen, etc.) *(alle regels invullen)*

minuten per week sport ik

minuten per week beweeg ik

minuten per week doe ik krachttraining

minuten per week doe ik huishoudelijk werk

Hoe lang heb je het hierboven genoemde beweeggedrag al?

0 Langer dan 2 jaar

0 Ongeveer 1 tot 2 jaar

0 Minder dan een jaar

Is je beweeggedrag veranderd sinds je bent gaan studeren?

0 Nee

0 Ja

Verder

De volgende vragen gaan over door jou ervaren barrières omtrent lichamelijke activiteit (I)

	Heel erg eens	Beetje mee eens	Niet eens/niet oneens	Beetje oneens	Heel erg oneens
A. Ik heb het te druk om te bewegen/sporten	0	0	0	0	0
B. Als ik beweeg of sport ben ik bang om te vallen en/of een blessure op te lopen	0	0	0	0	0

C. Ik ben te moe	0	0	0	0	0
D. Ik heb geen sportpartner/niemand om het mee samen te doen	0	0	0	0	0
E. Sporten/bewegen interesseert mij niet	0	0	0	0	0
F. Al mijn tijd en energie gaat zitten in studie/school	0	0	0	0	0
G. In schaam mij voor mijn uiterlijk	0	0	0	0	0
H. Het weer in Nederland is niet geschikt (te heet, te koud, regen, donker, etc.)	0	0	0	0	0
I. Niemand moedigt mij aan om (meer) te gaan sporten/bewegen	0	0	0	0	0
J. Andere dingen hebben de prioriteit boven (meer) sporten/bewegen	0	0	0	0	0
K. Ik heb andere (familiaire) verantwoordelijkheden die gedaan moeten worden (bv. Mantelzorger)	0	0	0	0	0
L. Er zijn geen faciliteiten dicht bij mijn huis	0	0	0	0	0
M. Vanwege mijn lichamelijke gezondheid	0	0	0	0	0
N. Vanwege mijn mentale gezondheid	0	0	0	0	0
O. Ik vind het te duur	0	0	0	0	0
P. Ik wil niet vast zitten aan bepaalde afspraken/verplichtingen (bv. In een voetbalteam moet je verplicht komen trainen)	0	0	0	0	0
Q. Door de verandering van school (van middelbare school naar universiteit, HBO naar universiteit etc.)	0	0	0	0	0
R. Ik ben uit huis gegaan/verhuisd	0	0	0	0	0
S. Ik vind het niet leuk	0	0	0	0	0
T. Ik heb niet de juist sportuitrusting/spullen	0	0	0	0	0
U. Een excuus verzinnen om het (toch) niet te doen vind ik makkelijker	0	0	0	0	0
V. Ik had nooit nagedacht over de positieve aspecten van bewegen/sporten	0	0	0	0	0
W. Iets anders, namelijk:	0	0	0	0	0

Verder

Je hebt zojuist aangegeven dat *'te druk'* een barrière is voor jou. De volgende vraag gaat hier over:

Wat is/zijn de voornaamste reden(en) waarom je te druk bent? *(meerdere opties mogelijk)*

0 Werk/bijbaan/vrijwilligerswerk

0 Studie

0 Druk sociaal leven (betrokken bij verenigingen, comités, etc.)

0 Behandeling voor psychische problemen

0 Huishouden/schoonmaken/mantelzorger

0 Anders, namelijk

Verder

Je hebt zojuist aangegeven dat *'te moet zijn'* een barrière is voor jou. De volgende vraag gaat hier over:

Wat is/zijn de voornaamste reden(en) waarom je te moe bent? *(meerdere opties mogelijk)*

0 Werk/bijbaan/vrijwilligerswerk

0 Studie

0 Druk sociaal leven (betrokken bij verenigingen, comités, etc.)

0 Psychische problemen

0 Mantelzorger

0 Anders, namelijk

Verder

De volgende vragen gaan over door jou ervaren barrières omtrent lichamelijke activiteit (II)

Kun je met een getal tussen de 1 en 10 aangeven of dit een door jou ervaren barrière is om niet (meer) te gaan bewegen en/of sporten. Hierbij is 1 geen barrière en 10 een grote barrière.

1 2 3 4 5 6 7 8 9 10

A. Geen tijd	0	0	0	0	0	0	0	0	0	0
B. Te moe	0	0	0	0	0	0	0	0	0	0
C. Geen motivatie	0	0	0	0	0	0	0	0	0	0
D. Te duur	0	0	0	0	0	0	0	0	0	0
E. Angst om te vallen en/of blessure	0	0	0	0	0	0	0	0	0	0
F. Onzekerheid over je lichaam	0	0	0	0	0	0	0	0	0	0
G. Er zijn geen faciliteiten en/of clubs dichtbij	0	0	0	0	0	0	0	0	0	0
H. Geen interesse in bewegen/sporten	0	0	0	0	0	0	0	0	0	0
I. Geen (sport) partner/maatje	0	0	0	0	0	0	0	0	0	0
J. Geen support/ondersteuning	0	0	0	0	0	0	0	0	0	0
K. Andere dingen hebben prioriteit	0	0	0	0	0	0	0	0	0	0
L. Het weer is niet geschikt	0	0	0	0	0	0	0	0	0	0
M. Mentale gezondheid/psychische problemen	0	0	0	0	0	0	0	0	0	0
N. Lichamelijke problemen	0	0	0	0	0	0	0	0	0	0
O. Te druk met studie	0	0	0	0	0	0	0	0	0	0
P. Andere verantwoordelijkheden, zoals bv mantelzorger	0	0	0	0	0	0	0	0	0	0
Q. Vaste afspraken/verplichtingen	0	0	0	0	0	0	0	0	0	0
R. Niet leuk	0	0	0	0	0	0	0	0	0	0
S. Niet de juist spullen/uitrusting	0	0	0	0	0	0	0	0	0	0
T. Excuses verzinnen is makkelijker	0	0	0	0	0	0	0	0	0	0
U. Anders, namelijk	0	0	0	0	0	0	0	0	0	0

Verder

De volgende vragen gaan over door jou ervaren stimulansen omtrent lichamelijke activiteit (II)

Kun je met een getal tussen de 1 en 10 aangeven of dit een door jou ervaren <u>stimulans</u> is om <u>wel</u> (meer) te gaan bewegen en/of sporten. Hierbij is 1 geen stimulans en 10 een grote stimulans.

	1	2	3	4	5	6	7	8	9	10
A. Een betere fysieke conditie	0	0	0	0	0	0	0	0	0	0

B. Een betere mentale conditie	0	0	0	0	0	0	0	0	0	0
C Voor een medaille	0	0	0	0	0	0	0	0	0	0
D. Om een prijs te winnen	0	0	0	0	0	0	0	0	0	0
E. Om bewondering van je partner te krijgen	0	0	0	0	0	0	0	0	0	0
F. Om bewondering van anderen te krijgen	0	0	0	0	0	0	0	0	0	0
G. Ik vind het fijn om te winnen, hoger, harder, sneller te zijn	0	0	0	0	0	0	0	0	0	0
H. Om sterker te worden	0	0	0	0	0	0	0	0	0	0
I. Om dunner/slanker te worden	0	0	0	0	0	0	0	0	0	0
J. Langer leven in goede gezondheid	0	0	0	0	0	0	0	0	0	0
K. Minder kans op hartziekten	0	0	0	0	0	0	0	0	0	0
L. Minder kans op depressie	0	0	0	0	0	0	0	0	0	0
M. Mij zelfverzekerd(er) voelen	0	0	0	0	0	0	0	0	0	0
N. Beter kunnen concentreren	0	0	0	0	0	0	0	0	0	0
O. Door te bewegen/sporten haal ik hogere cijfers	0	0	0	0	0	0	0	0	0	0
P. Aanspraak hebben/sociale contacten	0	0	0	0	0	0	0	0	0	0
Q. Door meer te sporten/bewegen ga ik minder uit	0	0	0	0	0	0	0	0	0	0
R. Door meer te bewegen/sporten studeer ik beter	0	0	0	0	0	0	0	0	0	0
S. Door te sporten/bewegen compenseer ik slechte gewoonten, zoals drankgebruik	0	0	0	0	0	0	0	0	0	0
T. Door te sporten/bewegen compenseer ik slechte gewoonten, zoals drugsgebruik	0	0	0	0	0	0	0	0	0	0
U. Door te sporten/bewegen compenseer ik slechte gewoonten, zoals roken	0	0	0	0	0	0	0	0	0	0
V. Door te sporten/bewegen voel ik mij meer tevreden over mijzelf	0	0	0	0	0	0	0	0	0	0
W. Anders, namelijk	0	0	0	0	0	0	0	0	0	0

Verder

Minder actief

Is er een periode in je leven geweest waarin je <u>MINDER</u> lichamelijk actief was dan je nu bent?

0 Nee *(sprong naar meer actief)*

0 Ja

Verder

Hoe oud was je toen je MINDER actief was dan nu?

0 Basisschoolleeftijd (4-12 jaar)

0 Middelbare schoolleeftijd, namelijk: jaar

0 Studententijd, namelijk : jaar

Ik was gaan **jaar oud toen ik na een periode van verminderde activiteit MEER ben bewegen**

Verder

Je was eerder dus MINDER lichamelijk actief dan nu. De volgende vragen gaan hier over:

Waarom was je toen minder lichamelijk actief?

	Heel erg eens	Beetje mee eens	Niet eens/niet oneens	Beetje oneens	Heel erg oneens
A. Ik had het te druk om te bewegen/sporten	0	0	0	0	0
B. Ik was bang om te vallen en/of een blessure te krijgen	0	0	0	0	0
C. Ik was te moe	0	0	0	0	0
D. Ik had geen sportpartner/niemand om het mee samen te doen	0	0	0	0	0
E. Sporten/bewegen interesseerde mij niet	0	0	0	0	0
F. Ik had nooit nagedacht over de positieve aspecten van bewegen/sporten	0	0	0	0	0
G. Al mijn tijd en energie ging zitten in studie/school	0	0	0	0	0
H. Ik schaamde mij voor mijn uiterlijk	0	0	0	0	0
I. Het weer in Nederland was niet geschikt (te heet, te koud, regen, donker, etc.)	0	0	0	0	0
J. Niemand moedigde mij aan om (meer) te gaan sporten/bewegen	0	0	0	0	0

K. Andere dingen hadden prioriteit	0	0	0	0	0
L. Ik had andere (familiaire) verantwoordelijkheden die gedaan moeten worden (bv. Mantelzorger)	0	0	0	0	0
M. Er waren geen faciliteiten dicht bij mijn huis	0	0	0	0	0
N. Vanwege mijn mentale gezondheid toen	0	0	0	0	0
O. Vanwege mijn lichamelijke gezondheid toen	0	0	0	0	0
P. Ik vond het te duur	0	0	0	0	0
Q. Ik wilde niet vast zitten aan bepaalde afspraken/verplichtingen (bv. In een voetbalteam moet je verplicht komen trainen)	0	0	0	0	0
R. Door de verandering van school	0	0	0	0	0
S. Ik ben uit huis gegaan/verhuisd	0	0	0	0	0
T. Ik vond het niet leuk	0	0	0	0	0
U. Ik had niet de juist sportuitrusting/spullen	0	0	0	0	0
V. Een excuus verzinnen om het (toch) niet te doen vond ik makkelijker	0	0	0	0	0
W. Iets anders, namelijk:	0	0	0	0	0

Verder

Je was eerder minder actief dan nu. Waarom ben je dit beweeggedrag gaan veranderen door (daarna) meer te gaan sporten/bewegen?

	Heel erg eens	Beetje mee eens	Niet eens/niet oneens	Beetje oneens	Heel erg oneens
A. Omdat mijn lichamelijke gezondheid verbeterde	0	0	0	0	0
B. Omdat mijn mentale gezondheid verbeterde	0	0	0	0	0
C. Omdat ik geen (familiaire) verplichtingen meer had (zoals mantelzorger)	0	0	0	0	0
D. Omdat ik iets heb gevonden wat ik leuk vind	0	0	0	0	0
E. Omdat ik meer (vrije) tijd kreeg	0	0	0	0	0
F. Omdat ik uit huis ben gegaan/verhuisd ben	0	0	0	0	0
G. Omdat een vriend mij heeft gevraagd om met hem/haar samen te sporten en/of bewegen	0	0	0	0	0

H. Omdat ik er goed uit wilde zien	0	0	0	0	0
I. Omdat er een faciliteit dichtbij mijn huis kwam/was	0	0	0	0	0
J. Omdat ik meer geld kreeg	0	0	0	0	0
K. Omdat ik van school ben veranderd	0	0	0	0	0
L. Omdat ik gesteund werd om (meer) te sporten/bewegen	0	0	0	0	0
M. Omdat ik wilde afvallen	0	0	0	0	0
N. Omdat ik de competitie behorende bij sporten leuk vind	0	0	0	0	0
O. Omdat ik leerde over de positieve aspecten van lichamelijke activiteit	0	0	0	0	0
P. Omdat niet al mijn tijd en energie meer ging zitten in studie/school	0	0	0	0	0
Q. Omdat mijn prioriteiten zijn veranderd	0	0	0	0	0
R. Een andere reden, namelijk	0	0	0	0	0

Verder

Meer actief

Is er een periode in je leven geweest waarin je MEER lichamelijk actief was dan je nu bent?

0 Nee *(sprong naar einde)*

0 Ja

Verder

Hoe oud was je toen je MEER actief was dan nu?

0 Basisschoolleeftijd (4-12 jaar)

0 Middelbare schoolleeftijd, namelijk: jaar

0 Studententijd, namelijk : jaar

Ik was gaan **jaar oud toen ik na een periode van verhoogde activiteit MINDER ben bewegen**

Verder

Je was eerder dus MEER lichamelijk actief dan nu. De volgende vragen gaan hier over:

Waarom ben je nu minder lichamelijk actief?

	Heel erg eens	Beetje mee eens	Niet eens/niet oneens	Beetje oneens	Heel erg oneens
A. Ik heb het te druk gekregen om te bewegen/sporten	0	0	0	0	0
B. Ik beweeg of sport van ik bang geworden om te vallen en/of een blessure te krijgen	0	0	0	0	0
C. Ik ben te moe	0	0	0	0	0
D. Ik heb geen sportpartner/niemand om het mee samen te doen	0	0	0	0	0
E. Sporten/bewegen interesseert mij niet meer	0	0	0	0	0
F. Al mijn tijd en energie gaat zitten in studie/school	0	0	0	0	0
G. Ik schaam mij voor mijn uiterlijk	0	0	0	0	0
H. Het weer in Nederland is niet geschikt (te heet, te koud, regen, donker, etc.)	0	0	0	0	0
I. Ik heb andere (familiaire) verantwoordelijkheden die gedaan moeten worden (bv. Mantelzorger)	0	0	0	0	0
J. Andere dingen hebben nu de prioriteit boven (meer) sporten en/of bewegen	0	0	0	0	0
K. Er zijn geen faciliteiten dicht bij mijn huis	0	0	0	0	0
L. Vanwege mijn lichamelijke gezondheid	0	0	0	0	0
M. Vanwege mijn mentale gezondheid	0	0	0	0	0
N. Ik vind het te duur	0	0	0	0	0
O. Ik wil niet vast zitten aan bepaalde afspraken/verplichtingen	0	0	0	0	0
P. Door de verandering van school	0	0	0	0	0
Q. Ik ben uit huis gegaan/verhuisd	0	0	0	0	0
R. Ik vind het niet leuk meer	0	0	0	0	0

S. Ik heb niet de juist sportuitrusting/spullen	0	0	0	0	0
T. Een excuus verzinnen om het (toch) niet te doen vind ik makkelijker	0	0	0	0	0
U. Ik had nooit nagedacht over de positieve aspecten van bewegen/sporten	0	0	0	0	0
V. Niemand moedigt mij aan om (meer) te gaan sporten/bewegen	0	0	0	0	0
W. Iets anders, namelijk:	0	0	0	0	0

Verder

Dit is het einde van de vragenlijst.

Bedankt voor het invullen!

Indien je kans wilt maken op een **van de 5 waardebonnen van bol.com t.w.v. €20,- euro** kun je hier je emailadres achterlaten:

Indien je te zijner tijd op de hoogte gebracht wilt worden over de uitkomsten van dit onderzoek, kun je hier je emailadres achterlaten:

Heb je nog op- en/of aanmerkingen?

Especially for the general practice Oude Turfmarkt

Especially for the general practice two more analyses were done, but these were not part of the article and only attached in the appendix.

Method

Correlations between characteristics and minutes of activity per week and correlations between four characteristics (gender, BMI, stress, and psychological problems) and the barriers were analysed by bivariate correlate. To determine significance two p-values were used, p≤0.05 and p≤0.01.

Results

Correlations between characteristics and minutes of activity per week

A total of 177 (sports), 196 (exercise), 144 (weight training), and 173 (domestic work) students answered the question about their minutes of activity per week. Seven of the characteristics of the students were significantly correlated with minutes of activity for a type of activity. These correlates are shown in table 6. Four of the seven characteristics were significantly correlated to minutes of domestic work per week, while none of the characteristics were correlated with the minutes of exercise per week. Gender and education level were significantly correlated to minutes of weight training and domestic work per week.

Table 1 Correlations between characteristics and minutes of activity per week per type of activity

		Sports	Exercise	Weight training	Domestic work
Gender	Pearson Correlation	0.05	0.03	**-0.31***	**0.15**
	Sig. (2-tailed)	0.55	0.64	**0.00**	**0.05**
Age	Pearson Correlation	-0.12	-0.05	0.09	**0.21***
	Sig. (2-tailed)	0.13	0.49	0.27	**0.01**
Ethnicity: Turkish	Pearson Correlation	-0.05	-0.04	0.06	**0.16**
	Sig. (2-tailed)	0.52	0.56	0.47	**0.03**
Sleep duration	Pearson Correlation	**0.16**	-0.08	0.07	0.02
	Sig. (2-tailed)	**0.04**	0.24	0.38	0.78
Education level	Pearson Correlation	0.02	0.14	**0.22***	**0.18**
	Sig. (2-tailed)	0.77	0.06	**0.01**	**0.02**
Alcohol use	Pearson Correlation	-0.01	0.02	**-0.20**	-0.03
	Sig. (2-tailed)	0.88	0.79	**0.02**	0.68
Drugs use	Pearson Correlation	**-0.15**	-0.03	-0.03	0.02
	Sig. (2-tailed)	**0.03**	0.67	0.72	0.76

Significant associations are bold (p≤0.05); p-values ≤0.01 have an asterisks

Correlations between 'gender', 'BMI', 'stress', 'psychological problems' and barriers

The characteristic gender (being female) was statistically significantly correlated to four barriers. These four barriers were being too tired, having no interest in physical activity, no facilities in the neighbourhood and making an excuse is easier than exercising. The BMI of students was significantly correlated to feeling ashamed about your appearance, bad weather in the Netherlands and making an excuse is easier than exercising. Stress caused by study was significantly correlated to seven barriers and stress caused by work was correlated to two barriers. Nine barriers were significantly correlated to stress due to one's financial situation, and mental health leading to stress was correlated to nine barriers and physical health to twelve barriers. Stress caused by one's relation was

significantly correlated to just one barrier and social contact to seven barriers. All barriers and their associations with the four characteristics are shown in table 7, 8 and 9. Besides these seven aspects causing stress, also the DASS-21 score was significantly correlated to six different barriers. The last characteristic psychological problems was categorised into anxiety, depression, and gloom. Anxiety was significantly correlated to feeling ashamed about your appearance, mental health problems, and changing schools. The category depression was correlated to two barriers, namely being too tired and having physical health problems. The last category analysed had four significant correlations and these barriers were the fear of an injury, feeling ashamed about your appearance, no facilities in the neighbourhood, and having physical health problems.

Table 2 Correlations between Gender, BMI, Stress, Psychological problems and the barriers A-H

		A	B	C	D	E	F	G	H
Gender	Pearson Correlation	-0.05	-0.05	**-0.21***	0.01	**0.16**	-0.08	-0.07	-0.01
	Sig. (2-tailed)	0.50	0.49	**0.00**	0.94	**0.03**	0.24	0.34	0.85
BMI	Pearson Correlation	0.03	-0.07	-0.02	-0.12	0.03	-0.06	**-0.22***	**0.14**
	Sig. (2-tailed)	0.69	0.33	0.79	0.09	0.72	0.42	**0.00**	**0.05**
Stress: study	Pearson Correlation	-0.09	-0.08	**-0.17**	-0.08	0.00	**-0.24***	**-0.22***	-0.11
	Sig. (2-tailed)	0.21	0.27	**0.02**	0.26	0.96	**0.00**	**0.00**	0.13
Stress: work	Pearson Correlation	-0.12	0.05	-0.11	-0.08	0.04	**-0.19***	-0.10	-0.09
	Sig. (2-tailed)	0.10	0.52	0.12	0.24	0.61	**0.01**	0.19	0.19
Stress: financial situation	Pearson Correlation	-0.13	0.08	**-0.15**	-0.08	-0.08	**-0.17**	**-0.15**	-0.10
	Sig. (2-tailed)	0.07	0.29	**0.03**	0.25	0.28	**0.02**	**0.03**	0.18
Stress: mental health	Pearson Correlation	-0.08	**-0.17**	**-0.25***	**-0.16**	-0.02	**-0.15**	**-0.26***	**-0.18***
	Sig. (2-tailed)	0.28	**0.02**	**0.00**	**0.03**	0.77	**0.04**	**0.00**	**0.01**
Stress: physical health	Pearson Correlation	**-0.19***	**-0.14**	**-0.28***	-0.13	-0.05	**-0.21***	**-0.35***	-0.12
	Sig. (2-tailed)	**0.01**	**0.05**	**0.00**	0.07	0.50	**0.00**	**0.00**	0.10
Stress: relation	Pearson Correlation	-0.03	-0.02	-0.07	-0.01	0.03	-0.09	0.01	-0.09
	Sig. (2-tailed)	0.66	0.74	0.37	0.93	0.73	0.21	0.86	0.21
Stress: social	Pearson Correlation	-0.03	**-0.15**	**-0.22***	-0.07	0.01	-0.10	**-0.16**	**-0.16**
	Sig. (2-tailed)	0.64	**0.04**	**0.00**	0.34	0.94	0.17	**0.03**	**0.03**
DASS-21	Pearson Correlation	-0.05	-0.14	**-0.24***	-0.11	0.05	**-0.19***	**-0.29***	-0.13
	Sig. (2-tailed)	0.48	0.05	**0.00**	0.13	0.45	**0.01**	**0.00**	0.07
Psychological problems: Anxiety	Pearson Correlation	0.05	-0.11	-0.04	-0.10	-0.04	-0.08	**-0.18**	-0.07
	Sig. (2-tailed)	0.51	0.12	0.62	0.18	0.55	0.26	**0.02**	0.34
Psychological problems: Depression	Pearson Correlation	-0.05	-0.08	**-0.20***	-0.03	-0.06	-0.04	-0.13	-0.09
	Sig. (2-tailed)	0.46	0.29	**0.01**	0.69	0.39	0.62	0.07	0.20
Psychological problems: Gloom	Pearson Correlation	0.00	**-0.27***	-0.12	-0.10	-0.04	-0.10	**-0.16**	-0.08
	Sig. (2-tailed)	0.96	**0.00**	0.11	0.19	0.56	0.15	**0.02**	0.30

A=too busy; B=fear for injury; C=too tired; D=no buddy; E=not interested; F=time and energy needed for study; G=ashamed for appearance; H=the weather
Significant correlations are bold (p≤0.05); p-values ≤0.01 have an asterisks

Table 3 Correlations between Gender, BMI, Stress, Psychological problems and the barriers I - O

		I	J	K	L	M	N	O
Gender	Pearson Correlation	0,13	0,02	-0,07	0,08	**-0,17**	-0,07	-0,11
	Sig. (2-tailed)	0,08	0,81	0,33	0,29	**0,02**	0,33	0,14
BMI	Pearson Correlation	-0,10	0,01	0,01	-0,02	-0,03	-0,01	0,02
	Sig. (2-tailed)	0,16	0,87	0,89	0,76	0,73	0,92	0,81
Stress: study	Pearson Correlation	**-0,15**	-0,12	-0,06	-0,10	-0,14	-0,11	**-0,18***
	Sig. (2-tailed)	**0,04**	0,10	0,37	0,16	0,05	0,13	**0,01**
Stress: work	Pearson Correlation	-0,05	-0,01	-0,10	**-0,18***	-0,12	-0,13	-0,06
	Sig. (2-tailed)	0,53	0,86	0,18	**0,01**	0,10	0,06	0,42
Stress: financial situation	Pearson Correlation	-0,04	-0,11	**-0,27***	-0,14	**-0,15**	**-0,19***	**-0,27***
	Sig. (2-tailed)	0,54	0,13	**0,00**	0,06	**0,03**	**0,01**	**0,00**
Stress: mental health	Pearson Correlation	-0,10	-0,04	-0,05	-0,03	**-0,25***	**-0,46***	-0,10
	Sig. (2-tailed)	0,17	0,59	0,49	0,67	**0,00**	**0,00**	0,18
Stress: physical health	Pearson Correlation	-0,03	-0,11	**-0,19***	**-0,17**	**-0,35***	**-0,27***	**-0,15**
	Sig. (2-tailed)	0,72	0,13	**0,01**	**0,02**	**0,00**	**0,00**	**0,03**
Stress: relation	Pearson Correlation	-0,01	-0,04	0,05	-0,05	0,00	-0,06	-0,07
	Sig. (2-tailed)	0,86	0,56	0,45	0,49	0,99	0,40	0,35
Stress: social	Pearson Correlation	-0,08	0,00	-0,04	-0,09	**-0,16**	**-0,28****	-0,13
	Sig. (2-tailed)	0,26	0,97	0,60	0,21	**0,02**	**0,00**	0,07
DASS-21	Pearson Correlation	-0,09	0,01	-0,07	-0,09	**-0,29***	**-0,32***	-0,13
	Sig. (2-tailed)	0,19	0,91	0,35	0,24	**0,00**	**0,00**	0,08
Psychological problems: Anxiety	Pearson Correlation	0,07	0,05	0,02	-0,05	-0,07	-0,13	**-0,14**
	Sig. (2-tailed)	0,33	0,52	0,82	0,52	0,37	0,06	**0,05**
Psychological problems: Depression	Pearson Correlation	-0,11	-0,01	0,00	-0,13	-0,11	**-0,51***	-0,03
	Sig. (2-tailed)	0,12	0,89	0,96	0,07	0,12	**0,00**	0,72
Psychological problems: Gloom	Pearson Correlation	-0,07	-0,04	0,14	0,09	**-0,19***	**-0,34***	0,05
	Sig. (2-tailed)	0,31	0,54	0,06	0,21	**0,01**	**0,00**	0,52

J=no encouragement; K=other priorities; L=other responsibilities; M=no facilities; N=physical health; O=mental health
Significant correlations are bold (p≤0.05); p-values ≤0.01 have an asterisks

Table 4 Correlations between Gender, BMI, Stress, Psychological problems and the barriers P-W

		P	Q	R	S	T	U	V	W
Gender	Pearson Correlation	-0,07	-0,07	-0,06	0,00	0,01	-0,08	**0,14**	-0,07
	Sig. (2-tailed)	0,37	0,36	0,38	0,96	0,87	0,30	**0,05**	0,37
BMI	Pearson Correlation	0,06	-0,05	-0,12	0,03	0,04	-0,07	**-0,24***	0,06
	Sig. (2-tailed)	0,39	0,51	0,09	0,66	0,54	0,36	**0,00**	0,39
Stress: study	Pearson Correlation	-0,04	**-0,25***	**-0,26***	-0,08	-0,11	-0,08	0,06	-0,04

	Sig. (2-tailed)	0,55	**0,00**	**0,00**	0,28	0,12	0,27	0,39	0,55
Stress: work	Pearson Correlation	0,03	0,01	-0,12	-0,01	0,05	0,10	0,03	0,03
	Sig. (2-tailed)	0,65	0,88	0,09	0,91	0,48	0,17	0,71	0,65
Stress: financial situation	Pearson Correlation	-0,14	-0,12	-0,11	**-0,18***	**-0,16**	-0,07	0,02	-0,14
	Sig. (2-tailed)	0,06	0,11	0,12	**0,01**	**0,03**	0,31	0,79	0,06
Stress: mental health	Pearson Correlation	-0,10	-0,14	**-0,16**	-0,10	-0,09	-0,09	-0,03	-0,10
	Sig. (2-tailed)	0,15	0,06	**0,03**	0,19	0,21	0,22	0,64	0,15
Stress: physical health	Pearson Correlation	-0,13	**-0,18***	**-0,23***	-0,12	-0,10	-0,12	0,00	-0,13
	Sig. (2-tailed)	0,08	**0,01**	**0,00**	0,11	0,18	0,11	0,98	0,08
Stress: relation	Pearson Correlation	-0,07	-0,13	**-0,23***	-0,01	0,04	0,00	0,04	-0,07
	Sig. (2-tailed)	0,35	0,07	**0,00**	0,85	0,63	0,97	0,58	0,35
Stress: social	Pearson Correlation	-0,13	-0,08	**-0,19***	-0,13	-0,07	-0,09	0,10	-0,13
	Sig. (2-tailed)	0,07	0,26	**0,01**	0,07	0,37	0,24	0,18	0,07
DASS-21	Pearson Correlation	-0,07	**-0,16**	-0,08	0,01	-0,13	-0,09	-0,07	-0,07
	Sig. (2-tailed)	0,34	**0,03**	0,26	0,86	0,07	0,23	0,36	0,34
Psychological problems: Anxiety	Pearson Correlation	-0,02	-0,06	**-0,16**	-0,04	-0,11	-0,02	0,14	-0,02
	Sig. (2-tailed)	0,75	0,42	**0,02**	0,59	0,13	0,79	0,06	0,75
Psychological problems: Depression	Pearson Correlation	0,02	0,03	-0,09	-0,08	-0,08	-0,04	-0,04	-0,04
	Sig. (2-tailed)	0,80	0,67	0,20	0,29	0,26	0,57	0,62	0,62
Psychological problems: Gloom	Pearson Correlation	0,04	-0,08	-0,06	-0,05	-0,09	-0,10	-0,04	-0,04
	Sig. (2-tailed)	0,59	0,26	0,39	0,53	0,19	0,16	0,56	0,56

P=too expensive; Q=duties/expectations; R=school change; S=moving; T=not fun; U=no equipment; V= excuse is easier; W=positive aspects Significant correlations are bold (p≤0.05); p-values ≤0.01 have an asterisks

Table 5 Correlations between characteristics and minutes of activity per week per activity

		Sports	Exercise	Weight training	Domestic work
Gender	Pearson Correlation	0,05	0,03	**-0,31***	**0,15**
	Sig. (2-tailed)	0,55	0,64	**0,00**	**0,05**
	N	177	196	**144**	**173**
Age	Pearson Correlation	-0,12	-0,05	0,09	**0,21***
	Sig. (2-tailed)	0,13	0,49	0,27	**0,01**
	N	177	196	144	**173**
BMI	Pearson Correlation	-0,02	0,02	0,05	-0,13
	Sig. (2-tailed)	0,84	0,75	0,52	0,10
	N	177	196	144	173
Ethnicity - Dutch	Pearson Correlation	-0,10	-0,11	0,00	0,11
	Sig. (2-tailed)	0,17	0,13	1,00	0,15
	N	177	196	144	173

Ethnicity - Turkish	Pearson Correlation	-0,05	-0,04	0,06	**0,16**
	Sig. (2-tailed)	0,52	0,56	0,47	**0,03**
	N	177	196	144	**173**
Ethnicity - Moroccan	Pearson Correlation	c	-0,03	c	0,03
	Sig. (2-tailed)	0,00	0,66	0,00	0,68
	N	177	196	144	173
Ethnicity - Surinamese	Pearson Correlation	-0,06	-0,06	-0,07	-0,05
	Sig. (2-tailed)	0,40	0,43	0,38	0,50
	N	177	196	144	173
Ethnicity - Antilleans	Pearson Correlation	-0,09	-0,03	-0,06	0,00
	Sig. (2-tailed)	0,26	0,64	0,49	0,97
	N	177	196	144	173
Ethnicity - Indian	Pearson Correlation	-0,02	0,04	-0,06	0,04
	Sig. (2-tailed)	0,78	0,60	0,49	0,59
	N	177	196	144	173
Sleep duration	Pearson Correlation	**0,16**	-0,08	0,07	0,02
	Sig. (2-tailed)	**0,04**	0,24	0,38	0,78
	N	**177**	196	144	173
Education level	Pearson Correlation	0,02	0,14	**0,22***	**0,18**
	Sig. (2-tailed)	0,77	0,06	**0,01**	**0,02**
	N	177	196	**144**	**175**
Smoking behaviour	Pearson Correlation	-0,11	0,03	-0,07	0,15
	Sig. (2-tailed)	0,14	0,67	0,42	0,05
	N	177	196	144	173
Alcohol use	Pearson Correlation	-0,01	0,02	**-0,20**	-0,03
	Sig. (2-tailed)	0,88	0,79	**0,02**	0,68
	N	177	196	**144**	173
Drugs use	Pearson Correlation	-0,15	-0,03	-0,03	0,02
	Sig. (2-tailed)	0,03	0,67	0,72	0,76
	N	177	196	144	173
History in exercise	Pearson Correlation	0,06	0,07	-0,04	-0,12
	Sig. (2-tailed)	0,40	0,31	0,67	0,11
	N	177	196	144	173
DASS-21	Pearson Correlation	-0,05	-0,09	-0,15	0,05
	Sig. (2-tailed)	0,51	0,20	0,08	0,55
	N	177	196	144	173
Psychological problems Anxiety	Pearson Correlation	-0,04	-0,03	-0,06	0,03
	Sig. (2-tailed)	0,58	0,69	0,47	0,68
	N	196	196	144	173
Psychological problems Depression	Pearson Correlation	-0,14	0,04	0,07	-0,06
	Sig. (2-tailed)	0,07	0,60	0,40	0,42

	N	177	196	144	173
Psychological problems Gloom	Pearson Correlation	-0,11	-0,07	0,04	-0,11
	Sig. (2-tailed)	0,16	0,34	0,60	0,15
	N	177	196	144	173
Psychological problems Drug and/or alcohol use	Pearson Correlation	-0,01	0,00	-0,05	0,10
	Sig. (2-tailed)	0,93	0,98	0,54	0,19
	N	177	196	144	173

Significant correlations are bold (p≤0.05); p-values ≤0.01 have an asterisks