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GENDER AND SOCIAL INFLUENCES ON PHYSICAL ACTIVITY

MASTER PROJECT SOCIAL POLICY AND PUBLIC HEALTH

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Abstract

Physical activity (PA) is protective for health, but many Dutch people do not exercise regularly. This study investigated possible gender differences in recreational PA, and whether these gender differences can be explained by social network characteristics. The study aimed to answer the question: To what extent do gender differences in recreational PA levels exist, and can these differences be explained by social network characteristics (perceived social support, network homogeneity, and network size)? Survey data from the GLOBE study from 2014 were used to answer the research question, resulting in a sample of 2,812 Dutch adults. Linear regression and mediation analyses were performed to answer the research question. The analyses showed that women walk and bike more than men, but men work around the house and practice sports more. Network homogeneity and network size are significantly associated with walking, biking, and practicing sports for leisure. Men have more homogeneous, but smaller networks than women, and women perceive more social support than men. Network homogeneity partly mediates the relationship between gender and walking, but no other network characteristics mediate a relationship between gender and PA. The findings from this study prove that the social network is a protective factor for PA and can be used as a tool in exercise promotion programs tailored to men and women.
Keywords: *physical activity*, *gender*, *social networks*

Introduction

During the coronavirus pandemic, the number of Dutch people who exercise frequently has decreased. To prevent spreading of the coronavirus, people have to stay at home as much as possible, and social contacts and opportunities for exercise are limited. As such, physical activity (PA) has declined quite drastically. Among people who have to work from home, PA has decreased with 20% (RTL Nieuws, 2020). Since the restrictive coronavirus measures were implemented, 38% of people decreased their exercise compared to before the pandemic, and 18% of people quit exercising entirely (Van den Dool, 2020). Low PA has detrimental consequences for health, such as weight gain and higher risk of chronic non-communicable diseases (Booth et al., 2011).

Given the adverse health consequences of physical inactivity, it is important that people exercise regularly. To stimulate people to exercise frequently, the Dutch Health Council has set a requirement of at least 2.5 hours of PA per week for adults (CBS, 2020), yet in 2019, only 49% of Dutch people met this required level (CBS, 2020). There are gender differences in PA: 51% of Dutch men and 47% of Dutch women meet the required level of physical exercise (CBS, 2020), this is in line with international research on gender differences in PA (Ivanović & Ivanović, 2018; Luque-Casado et al., 2021).

Several factors can account for differences in PA, including an individual's social network, which is defined as a "web of social relationships that surrounds people" (Heaney & Israel, 2008, p. 190). The size of social networks, as well as the similarity of social network members and the amount of support people receive from their social networks, may be important characteristics in explaining how social networks affect an individual's PA (McNeill et al., 2006). For example, Scarapicchia et al.'s (2017) systematic review showed evidence of social support influencing PA. Furthermore, having supportive friends or a partner is associated with increased PA (McNeill et al., 2006). Exercise is socially contagious, and having a bigger network increases individual PA (Aral & Nicolaides, 2017; Josey & Moore, 2018).

As mentioned above, both PA and a social network are beneficial for health. Aside from their individual influence on health, the social network and PA can also reinforce each other. Social networks provide an incentive for PA, and more PA might lead to a bigger social network because of the social benefits that come with exercising (Gilchrist & Wheaton, 2017).

Given the beforementioned gender differences in PA, the current study attempts to investigate how men and women differ in recreational PA levels, and how social network characteristics affect this relationship. This study will focus on recreational PA, defined as exercising and engaging in

sports for leisure, because it is common in countries like the Netherlands and is beneficial for health (Burton et al., 2003). Though nonrecreational PA can have the same effects, the study focuses on recreational PA because of the voluntary aspect of this type of PA. Examining nonrecreational PA (such as walking or biking for transport purposes) is beyond the scope of this study.

The study focuses on the sociocultural construct of gender, as opposed to the biological concept of sex. Sex refers to the innate physical, biological and reproductive differences between men and women, whereas gender is a psychosocial and cultural construct that is shaped by individuals' experiences of being male or female, largely learned from the (social) environment (Winter, 2015), which can differ from an individual's sex. Gender is tied to the sociocultural environment. More specifically it is tied to environmental expectations, 'gender roles' or stereotypes: the belief that certain attributes differentiate men and women, for instance role behaviors such as taking care of children or working around the house (Eisend, 2019). Given these stereotypes and societal expectations attached to the sociocultural construct of gender, it is important to differentiate gender from sex.

The social network characteristics included in this research are network homogeneity, network size, and perceived social support, because of their influence on PA. Social support is a strong, protective function of a social network and is related to health (Heaney & Israel, 2008). Greater network homogeneity indicates that a person is more attracted to people who are similar than them, and network size represents a person's social engagement, which is related to good health behaviors and outcomes, through setting group norms and observing others' activity (Stevens et al., 2017).

By taking into account gender differences and social factors in PA, which each have their own mechanisms of influencing and stratifying individual behavior, a more in-depth look is taken at the determinants of individuals' PA. In doing so, this study aims to make a valuable contribution to the existing research in this field.

Theoretical framework

PA and gender

Women and men have different opportunities and needs regarding PA, their PA is influenced by different factors, and they derive different health benefits according to the level, mode, and intensity of PA (Hands et al., 2016; Sjögren & Stjernberg, 2010). Multiple studies find that men engage more in PA than women (Halliday et al., 2019; Ivanović & Ivanović, 2018; Kantomaa et al., 2016; Matud & Diaz, 2020; Olson et al., 2017), but few studies have investigated gender differences in specific forms of PA. There is clear evidence that women walk for leisure more frequently than men. However, gender differences in PA seem to decline with age and reverse in the oldest age groups: more older men than older women walk for leisure (Pollard & Wagnild, 2017).

Considering health promotion behavior in general, research indicated that social networks are more important determinants for PA in women than in men, as women tend to perform many health promoting behaviors, such as PA, within a social context (Van Uffelen et al., 2017; Wilson et al., 2020). Similar results were found with respect to adolescent girls, who are more motivated to participate in PA if they receive social support (Eskiler & Küçükibiş, 2019; Laird et al., 2019). Little research has looked into gender differences in the relationship between social network characteristics and PA, and as such, it is important that this is addressed in further research.

Social networks

A social network is a "web of social relationships that surround[s] individuals" (Heaney & Israel, 2008, p. 190). Social networks serve various functions, such as social influence, social control, social comparison, and social support. The structure of social networks can be described in terms of characteristics of the relationships between the individual and other people in their network, or in terms of the network as a whole. Examples of characteristics of a network include the extent to which members are similar (network homogeneity), or the amount of reciprocity between network members. Networks can be close-knit or loose. Homogeneous, close-knit networks, and those with more reciprocal links between members, are more effective at providing support (Heaney & Israel, 2008). An individual's position in a network determines their opportunities within the network. Networks play an important role in understanding and explaining behavior (Kim & Yim, 2017).

Social networks are studied in various social science disciplines, including health promotion (McKenzie et al., 2017), and are associated with positive outcomes in various domains of life, including health (Heaney & Israel, 2008; McKenzie et al., 2017). While it is clear that belonging to

a social network is related to better health (McKenzie et al., 2017), ambiguity remains around what characterizes ‘good’ networks that improve health.

Berkman et al. (2000) identified several critical network characteristics, among which network size (the number of people in a network) and network homogeneity (the extent to which network members are similar to each other). These network characteristics give an indication of an individual’s degree of social integration, which is associated with positive health outcomes (Berkman et al., 2000). Another critical social network characteristic is social support, which is a multidimensional concept that refers to the extent to which an individual experiences that they are loved, valued, and can count on others in times of need. It has generally been found to have positive effects on physical, mental, and social health outcomes (Berkman & Glass, 2000; Heaney & Israel, 2008).

Positive health outcomes may occur because these critical social network characteristics increase an individual’s likelihood to adopt positive health behaviors such as PA. However, the association between social relationships and health is not linear. Instead, very low levels of social integration are most detrimental to health, while higher levels of social integration become less advantageous once a threshold level has been reached (House, 2001).

Studies about the effects of social relationships on health have focused mainly on social support, but a broader network approach has several advantages, as it can incorporate all functions and characteristics of a social network, and allows for a study of how changes in one social relationship affect other relationships, as these factors may all influence health (Heaney & Israel, 2008).

Empirical findings on network characteristics related to health are mixed. Some studies find no significant relationship between social contact and mortality (Shor & Roelfs, 2015) or between social networks and health (Israel, 1982), while others find that having stronger relationships increases likelihood of survival (Holt-Lunstad et al., 2010). Social support is a strong, protective function of a social network and is related to health (Heaney & Israel, 2008). Greater social engagement is related to good health behaviors and outcomes, through setting group norms and observing others’ activity (Stevens et al., 2017).

There are gender differences in social networks and social preferences. Women have significantly larger social networks than men. Being separated, divorced or single has a bigger impact on men’s social networks than it does on women’s social networks (McLaughlin et al., 2010). This shows that marital status can influence men and women’s networks differently. Furthermore, women tend to prefer intimate relationships with a few other women, whereas men favor larger, all-male friend groups (David-Barrett et al., 2015).

Social (dis)connection shapes health and health behavior. Supportive relationships promote health both by helping people cope with stress and by enabling them to fulfill basic needs for social connection (Cohen & McKay, 2020; Pietromonaco et al., 2013). Social support can moderate stressful life events, and as such, it can influence individual vulnerability to illness (Ell, 1984).

Social networks and PA

The relationship between social networks and PA is well-documented, and research clearly shows that the social environment has an influence on health (McNeill et al., 2006). For instance, friends influence adolescents' PA. Youth are more physically active in the presence of peers, and friendships are more likely among adolescents who engage in greater PA and who are similar to one another in PA (Simpkins et al., 2013).

Social networks influence PA through encouragement, norms, positive interaction, positive, supportive relationships, and social support (Ashida et al., 2012; Belanger & Patrick, 2018; Divine et al., 2019; Fitzgerald et al. 2012; Hamilton et al., 2017; Josey & Moore, 2018; Salvy et al., 2012; Simpkins et al., 2013; Yin, 2019). A bigger social network is also a protective factor for PA (Josey & Moore, 2018). Interpersonal relationships may further influence PA by providing social support and establishing social norms around PA (Heaney & Israel, 2008). Through social networks, individuals form a sense of attachment and connectedness to others, providing access to resources and goods that can support PA (McNeill et al., 2006).

PA can have a strong social function, such as giving a sense of a shared identity, bonding, and feeling associated with others (Bruner et al., 2017). Most of the research on PA and social networks was done on team sports, as opposed to individual PA or sports that can be practiced either alone or together, such as walking or biking. It can be hypothesized that the influence of social networks is stronger when engaging in (potentially) social types of PA such as walking or biking, as opposed to individually-practiced types of PA like gardening or working around the house.

Gender, social networks and PA

The association between social interactions and health varies between sexes (Caetano et al., 2013). However, for both sexes, exercise can be socially contagious. This contagiousness is influenced by friends' activity and platonic same-sex relationships. Both men and women influence men's likelihood to exercise, while only women influence other women in this respect (Aral & Nicolaides, 2017). Low social network involvement is associated with poor health in older men, whereas low perceived social support is associated with poor health in older women. Social support is more

strongly associated with women's PA than with men's, indicating that women benefit more from social support with respect to PA than men (Scarapicchia et al., 2017). Women prefer to exercise with others more than men do. They prefer to exercise with people of the same gender and age as them (Van Uffelen et al., 2017), thus network homogeneity seems to be a contributing factor for women's PA.

Given the abovementioned evidence, it is clear that men and women's social networks are different, and their social networks influence their PA differently. As such, it can be hypothesized that various social network characteristics mediate the relationship between gender differences and PA.

Current research

As previously described, some literature gaps remain surrounding PA. The current study aims to answer the question: To what extent do gender differences in recreational PA levels exist, and can these differences be explained by social network characteristics? In this research, the concepts social support, network homogeneity, and network size are included, because numerous empirical studies, systematic reviews and theoretical models showed that these concepts have an influence on PA. Based on prior research, the following hypotheses are proposed:

H1: Men are more physically active than women (Matud & Diaz, 2020).

H2: Network homogeneity, a bigger network, and more perceived social support have a positive effect on PA (Laird et al., 2017).

H3: Women have a bigger, more homogeneous network and perceive more social support than men (McLaughlin et al., 2010**)**.

H4: The social network is a more important encouraging factor for women's PA than for men's PA (Laird et al., 2017).

Methods

The research objective was to describe and explain possible gender differences in PA, and how social network characteristics mediate this relationship. The research had a cross-sectional, quantitative design, using data from the GLOBE study dataset from 2014, a cohort study about socioeconomic inequalities in health in the Netherlands. Participants were recruited using the municipal registries of the city of Eindhoven and surrounding villages, and data were collected using postal surveys. Eindhoven and its surroundings was chosen as the location because it is reasonably representative for the Netherlands. In the study, participants were asked about their socioeconomic position, a range of potential explanatory factors including physical and social environmental factors, and health behaviors and outcomes (Van Lenthe et al., 2014). The survey that was used in the GLOBE study, can be found in Appendix B.

Measures

PA – dependent variables. The outcome variable of this research was recreational PA. Several types of recreational PA were included in the survey: walking, biking, gardening, working around the house, and practicing sports. These PA types were analyzed separately, to assess their individual relationship with gender and social network characteristics. Examples of questions about PA include: “Please list a maximum of 4 sports you engage in”, and: “On average, how many days per week do you spend at least half an hour engaging in the following activities: walking, biking, gardening, exercising, working around the house?”. PA was operationalized as the average amount of days per week participants spent at least half an hour practicing the selected type of PA. In the analyses, continuous variables were used for each PA type.

Network homogeneity – mediator. An example of a question on network homogeneity is “How many of your friends are the same gender as you?”. The same question was asked about participants’ family members. The variable network homogeneity was constructed by taking a sum score of the questions about similarity of network members. This resulted in a continuous variable for network homogeneity.

Perceived social support – mediator. Examples of questions about social support include “If you needed advice on any of the following subjects, would you be able to reach out to someone?”. Answer options to this question include increasing physical activity. Another question about social support is “How often are the following types of support available to you?”. Answer options include “Someone who offers love and support”, “Someone you can confide in”, “Someone who loves you and makes you feel worthwhile”. Questions were asked about both friends and

family members. The variable social support was constructed by creating sum scores of the questions about perceived social support from friends and family. This resulted in a continuous variable for social support. The variable was positively skewed, and as such it was recoded into 3 categories: low social support (scores 0-15), intermediate social support (scores 16-30), and high social support (scores 30-45), to ensure a more even distribution of scores. Subsequently, dummy variables were constructed for low, medium, and high social support to use in the analyses.

Network size – mediator. An example of a question about network size is: "How many good friends do you have?". Network size was constructed by taking sum scores of the questions about how many friends and family members respondents had good contact with. This resulted in a continuous variable for network size.

Gender – independent variable. The variable gender had two categories: male and female, using men as the reference category.

Age – confounder. The discrete variable 'age' was included as a confounder.

Marital status – confounder. Dummy variables were created for the variable 'marital status', consisting of the categories "Married", "Unmarried", "Divorced", and "Widowed".

Education level – confounder. Dummy variables were created for the variable 'education level', consisting of the categories "No education", "Primary school", "Lower vocational education", "Post-secondary vocational education", "Secondary education", "Higher vocational education", "University", "Other, please specify", and "Not applicable/I don't know".

Employment status – confounder. Employment status was the last confounder that was included. Dummy variables were created for this variable, consisting of the categories "Employed", "Unemployed", "Retired", and "Nonemployed".

Analysis

Analyses were performed using SPSS Statistics 26. First, descriptive analyses were performed on the demographic variables to gain insight in the research sample composition. In order to test the hypotheses and examine a mediation effect, first, the relationship between the dependent and independent variables was established (H1) using regression analyses, followed by the relationship between the dependent variables and mediators (H2) which was established through linear regression. As a third step, the relationship between the mediators and the independent variables was established (H3) using independent samples *t*-tests and a chi-square test. Finally, SPSS PROCESS was used to perform a mediation analysis (H4). The syntax used in the analysis and the output from SPSS PROCESS can be found in Appendix C and D respectively.

Results

Composition of the research sample

The sample consisted of 2,812 Dutch adults, with a mean age of 48.89 years old (*SD* = 15.61) and consisting of 1,260 men (44.8% of the sample) and 1,552 women (55.2% of the sample). 60.1% of the sample was married, 28.1% was unmarried, 8.4% was divorced, and 3.2% of the sample was widowed. The majority, 46.9% of the sample, was high educated (*N* = 1318), 24.7% had a middle level education (*N* = 694) and 27.6% of the sample was low educated (*N* = 776). 60.1% of the research sample was employed, 7.9% was unemployed, 22.1% was retired and 8% was not working. Table 1 provides descriptive statistics for the variables used in this research.

Table 1.
Sociodemographic, network, and PA characteristics of the sample (N = 2812)

Variable	*Mean or %*	*SD*	*Range*
Average number of days walking	2.55	2.40	7
Average number of days biking	1.98	2.08	7
Average number of days gardening	.68	1.04	7
Average number of days working around the house	.86	1.36	7
Average number of days practicing sports	1.86	1.35	7
Network homogeneity	2.17	.73	4
Network size	6.08	1.76	10
Perceived social support			
Group 1: High	6.9%	-	-
Group 2: Medium	27.7%	-	-
Group 3: Low	42.7%	-	-
Gender: female	55.2%	-	-
Gender: male	44.8%	-	-
Age	48.89	15.61	50
Education level			
Group 1: high education level	46.9%	-	-
Group 2: Middle education level	24.7%	-	-
Group 3: Low education level	27.6%	-	-
Marital status			
Group 1: Married	60.1%	-	-
Group 2: Unmarried	28.0%	-	-
Group 3: Divorced	8.4%	-	-
Group 4: Widowed	3.2%	-	-
Employment			
Group 1: Employed	60.2%	-	-
Group 2: Unemployed	7.9%	-	-
Group 3: Retired	22.1%	-	-
Group 4: Nonemployeed	8.0%	-	-

Testing the hypotheses: gender differences in PA

Before running the regression analyses to test the hypotheses, first, the assumptions for regression and data quality were checked. The results can be found in Appendix A. Subsequently, significant confounders were identified that should be included in the analysis. The confounders age, marital status, education level, and employment status were included in preliminary regression analyses to observe possible significant effects. All confounders were found to be significantly associated with PA and as such, they were included in the main analyses.

Using linear regression analyses, it was established that gender was significantly associated with walking, biking, working around the house, and practicing sports. There were no significant gender differences in the prevalence of gardening. The analysis indicated women walk and bike more than men, but men work around the house and practice sports more than women. Some of the confounders were found to be associated to the various types of PA.

Gender was a significant predictor for various forms of PA, and men were found to engage more in some types of PA than women. As such, Hypothesis 1 was partly confirmed. The effects of all predictors and confounders and the proportion of the variance explained by the different regression models can be found in Tables 2 to 6.

Table 2.
The effect of predictors on days spent walking

Variable	*Days spent walking*		
	B	SE (B)	*β*
Model 1			
Constant	2.410	.084	
Gender (ref – male)	.223	.112	.046*
R^2	.002		
Adjusted R^2	.002		
Model 2			
Constant	.792	.189	
Gender (ref – male)	.265	.109	.055*
Age	.034	.004	.216**
R^2	.049		
Adjusted R^2	.048		
Model 3			
Constant	.792	.342	
Gender (ref – male)	.253	.109	.053*
Age	.030	.004	.186**
High education (ref – low/medium)	-.444	.115	-.093**

Unemployed (ref – employed/retired)	.584	.208	-.065*
Divorced (ref – married/widowed)	-.405	.212	-.045
Medium social support (ref – low social support)	-.082	.117	-.016
High social support (ref – low social support)	-.218	.216	-.025
Network homogeneity	.196	.080	.058*
Network size	.011	.034	.008
R^2	.068		
Adjusted R^2	.064		

* $p \leq .05$, ** $p \leq .01$

Table 3.
The effect of predictors on days spent biking

Variable	*Days spent biking*		
	B	SE (B)	β
Model 1			
Constant	1.746	.071	
Gender (ref – male)	.270	.095	.066*
R^2	.004		
Adjusted R^2	.004		
Model 2			
Constant	.408	.160	
Gender (ref – male)	.306	.093	.075*
Age	.028	.003	.212**
R^2	.049		
Adjusted R^2	.048		
Model 2			
Constant	.944	.338	
Gender (ref – male)	.263	.092	.065*
Age	.016	.004	.116**
High education (ref – low/middle)	.205	.098	.051*
Employed (ref – unemployed/retired)	-.855	.119	-.198**
Medium social support (ref – low social support)	.148	.098	.035
High social support (ref – low social support)	.297	.181	.040
Network homogeneity	.044	.068	.015
Network size	.061	.029	.049*
R^2	.083		

Adjusted R^2	.079

* $p \leq .05$, ** $p \leq .01$

Table 4.
The effects of predictors on days spent gardening

Variable	*Days spent gardening*		
	B	SE (B)	*β*
Model 1			
Constant	.658	.035	
Gender (ref – male)	-.043	.047	-.022
R^2	.000		
Adjusted R^2	.000		
Model 2			
Constant	-.337	.077	
Gender (ref – male)	-.014	.044	-.007
Age	.021	.001	.326**
R^2	.107		
Adjusted R^2	.105		
Model 3			
Constant	-.241	.159	
Gender (ref – male)	-.016	.044	-.008
Age	.019	.002	.293**
Employed	-.122	.057	-.059*
Medium social support (ref – low social support)	-.039	.047	-.019
High social support (ref – low social support)	.000	.089	.000
Network homogeneity	.014	.032	.010
Network size	.011	.014	.019
R^2	.110		
Adjusted R^2	.106		

* $p \leq .05$, ** $p \leq .01$

Table 5.
The effect of predictors on days spent working around the house

Variable	*Days spent working around the house*		
	B	SE (B)	*β*
Model 1			
Constant	1.108	.047	
Gender (ref – male)	-.472	.063	-.177**
R^2	.031		

Adjusted R^2	.031		
Model 2			
Constant	.460	.108	
Gender (ref – male)	-.448	.062	-.168**
Age	.014	.002	.155**
R^2	.055		
Adjusted R^2	.054		
Model 3			
Constant	.206	.184	
Gender (ref – male)	-.452	.062	-.169**
Age	.014	.002	.157**
Unemployed (ref – employed/retired)	.485	.123	.093**
Medium social support (ref – low social support)	-.041	.067	-.015
High social support (ref – low social support)	-.096	.123	-.019
Network homogeneity	.034	.046	.018
Network size	.026	.019	.033
R^2	.065		
Adjusted R^2	.061		

* $p \leq .05$, ** $p \leq .01$

Table 6.
The effect of predictors on days spent sporting

Variable	*Days spent practicing sports*		
	B	SE (B)	*β*
Model 1			
Constant	1.960	.053	
Gender (ref – male)	-.160	.071	-.061*
R^2	.004		
Adjusted R^2	.003		
Model 2			
Constant	2.398	.282	
Gender (ref – male)	-.154	.071	-.059*
Age	-.005	.003	-.053
Employed (ref – unemployed/retired)	-.338	.094	-.119**
Unmarried (ref – married/divorced/widowed)	.113	.094	.041
Medium social support (ref – low social support)	-.047	.077	-.017

High social support (ref – low social support)	-.128	.154	-.024
Network homogeneity	.140	.055	.072*
Network size	-.047	.023	-.059*
R^2	.024		
Adjusted R^2	.018		

* $p \leq .05$, ** $p \leq .01$

Social network characteristics, gender, and PA

To test Hypothesis 2, regression analyses were performed. No network characteristics were significantly associated with gardening or working around the house, whereas network homogeneity and size were significantly associated to practicing sports. Additionally, network size was significantly associated with biking, and network homogeneity was significantly associated with walking. As such, Hypothesis 2 was confirmed.

To test Hypothesis 3, independent-samples *t*-tests and a chi-square test were performed with gender as the grouping variable and network homogeneity and network size as independent variables. On average, men have more homogeneous networks, $t(2567) = 3.030$, $p < .05$, but also smaller networks, $t(2761) = -2.135$, $p < .05$, compared to women. A chi-square test was performed to test for gender differences in perceived social support, revealing that women perceived more social support than men, χ^2 (2, 2174) = = 6.19, $p < .05$. Based on these findings, Hypothesis 3 was partly confirmed.

Do social network characteristics mediate the gender-PA relationship?

To test Hypothesis 4, mediation analyses were performed. Since gardening was not significantly associated with gender or any network characteristics, gardening was not included in the mediation analyses. Furthermore, though network homogeneity was significantly associated with practicing sports, no mediation analysis could be performed for this association, because of the direction of the relationship. Analyses showed that men practiced sports more than women, but women perceived more network homogeneity than men, and as such, network homogeneity could not mediate the relationship between gender and practicing sports. Given these findings, mediation analyses were performed to assess whether the relationship between gender and walking, biking or practicing sports was mediated by network homogeneity in the case of walking and network size in the case of biking and practicing sports.

The first mediation analysis tested whether network homogeneity mediates the relationship between gender and walking. The analysis showed that the relationship between gender and walking was partly mediated by network homogeneity. As illustrated in Figure 1, the relationship

between gender and network homogeneity was significant, as well as the relationship between network homogeneity and walking. The indirect effect of gender on walking was statistically significant (*B* = -.039, 95% C.I. [-.07, -.01], as well as the direct effect of gender on walking. Next, it was tested whether network size mediates the relationship between gender and biking, but this model showed no mediation effect for network size.

A third mediation analysis, testing if network size mediates the relationship between gender and practicing sports, showed no mediation effect for network size. An overview of the coefficients can be seen in Figures 1 to 3.

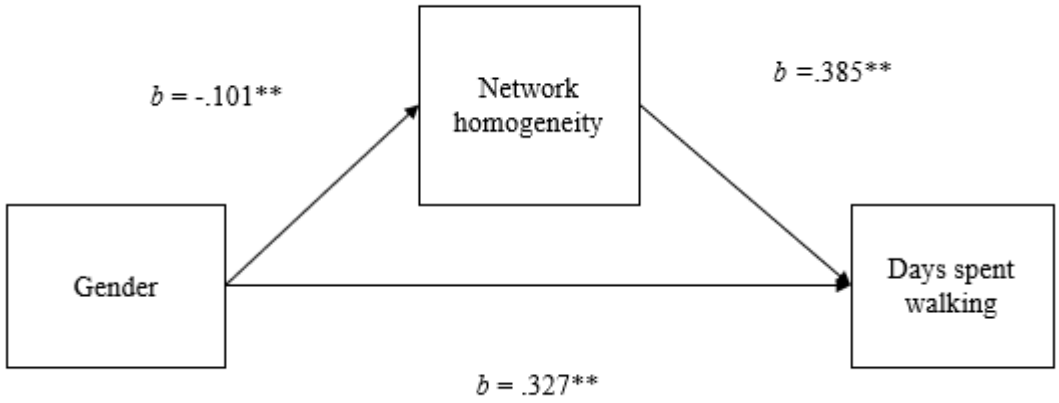

Figure 1. Coefficients of mediation analysis 1. Note: * $p \leq .05$, ** $p \leq .01$.

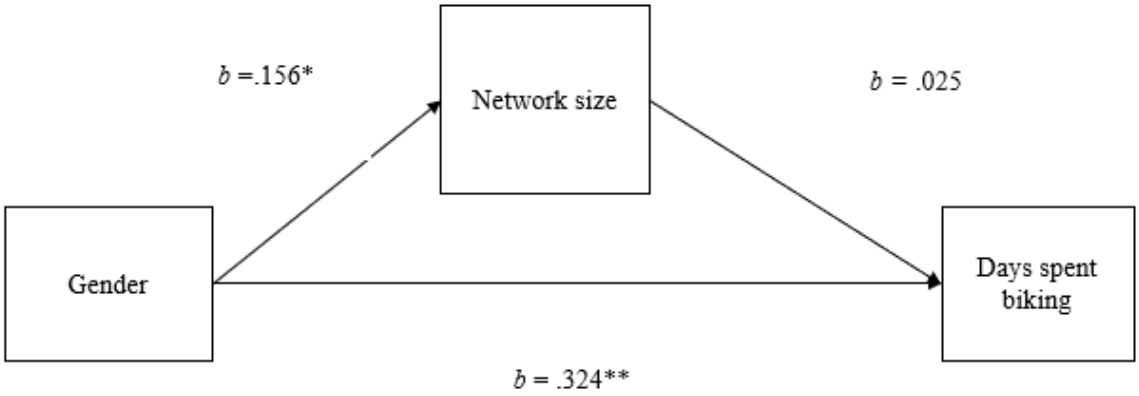

Figure 2. Coefficients of mediation analysis 2. Note: * $p \leq .05$, ** $p \leq .01$.

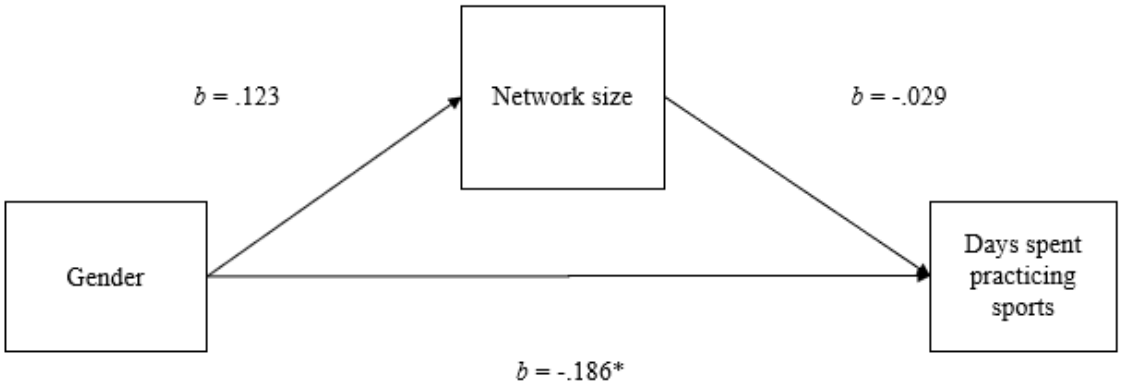

Figure 3. Coefficients in mediation analysis 3. Note: * $p \leq .05$, ** $p \leq .01$.

Discussion

Although knowledge about the benefits of PA is widespread, and many factors have been identified that contribute to an individual's likelihood to engage in PA, some gaps in the literature remain. This study attempted to investigate gender differences in PA and assess the possible mediating influence of social network characteristics.

The results indicated significant gender differences in PA: women walk and bike more often than men, whereas men work around the house more and practice sports more often than women. Men have smaller and more homogeneous networks than women, but women perceive more social support than men. Furthermore, social network characteristics were found to play a small role in explaining men and women's PA levels. Network homogeneity is positively associated with days spent walking, network size is positively associated with days spent biking, and both network homogeneity and size are related to days spent practicing sports. Network homogeneity partly mediates the relationship between gender and days spent walking. As men experience more network homogeneity, and network homogeneity is positively associated with walking, network homogeneity partly explained higher walking levels among men.

Some of the findings from this study are in contrast with previous empirical research on gender differences in PA, which found that men engage more in PA than women (e.g. Halliday et al., 2019; Ivanović & Ivanović, 2018). These differences may be due to the fact that previous studies did not investigate separate types of PA, but rather PA as one measure.

The gender difference in PA can also be explained by the nature of the activities. Working around the house tends to be more physically straining, and is traditionally considered a 'male' activity. Gender remains a stratifying factor in housework division (Thébaud et al., 2019), and this can explain why men were found to work around the house more than women.

The current study found that men had more homogeneous networks than women. This can be explained by the fact that women prefer to have intimate friendships with a few others, whereas men prefer to have larger, all-male friend groups, which are more homogeneous than women's networks (David-Barrett et al., 2015).

Findings were consistent with previous research regarding the influence of the social network on PA, showing that network homogeneity and size have a positive influence on PA (e.g. Josey & Moore, 2018; Simpkins et al., 2013). Social support was not found to have an influence on PA, this may be due to the skewedness of the scores on social support in this study and the low amount of people in the sample who perceived medium or high social support from their network.

The findings on the social network characteristics in relation to gender were in contrast with previous research. Previous research found the social network to be a more important factor in determining women's PA than men's, whereas the current study found it was more influential for men. This could be explained by the fact that previous studies included different social network characteristics than the current study. For example, Aral and Nicolaides (2017) investigated the social contagion of exercise, which was a more influential factor for men's PA, whereas Scarapicchia et al. (2017) investigated social support, which was more influential for women's PA. This can explain why the findings from the current study are not in line with those from previous studies.

Findings on the association between social networks and different PA outcomes were mixed. Days spent walking, biking, and practicing sports were associated with network characteristics, whereas no significant relationship was found between network characteristics and gardening or working around the house. This can be explained by the nature of the PA types that were examined in this study. Some types of PA, like walking or biking, are more suitable to do together than others, like gardening or working around the house. As such, the more social nature of walking and biking can explain the influence of social network characteristics on those PA types.

When interpreting the results of this study, a number of limitations should be addressed. First, since the study was done with an existing dataset as opposed to newly collected data, the study was data-driven instead of theory-driven and the scope of the study was limited. The selection of PA types was limited to those that were included in the GLOBE dataset. If new data could have been collected, other PA types might have been included in the study, such as specific team sports or individual sports, and other social network characteristics might have been included, for instance network reciprocity.

Another important limitation of this study that should be noted, is that the questions about participants' PA were self-report questions and as such are susceptible to bias. People are motivated to give socially desirable answers, and tend to overestimate their PA behavior (Brown & Werner, 2008). As such, participants' answers to the questions about PA should be interpreted with caution and results from this study regarding the prevalence of participants' PA should also be interpreted with caution.

The current study also has several strengths. First, the study examined several types of PA separately, as such being able to observe separate effects of the different types of PA. This has not been done in many previous studies and provides a more in-depth, thorough look at PA. Another strength of the study is that it had a representative sample, including people from many different backgrounds. Because of this, the results from this study can be generalized to other (Dutch)

contexts. The last notable strength of this study is that it examined the effects of understudied social network characteristics on health behavior. The influence of the specific network characteristics included in this study on PA has not been researched frequently and as such, the current study contributed meaningfully to the emerging research on social influences on PA.

However, it is important that more research is done on the topic of gender differences and social influences on PA. For example, it can be useful to investigate other social network characteristics, such as the influence of family members and friends on PA separately, and network differences between older and younger people with regards to PA. It could also be useful to investigate possible gender differences in exercise intensity. Furthermore, future research could assess different types of PA than were included in this study, for example team sports. Lastly, a thorough social network analysis could also prove useful in providing insight on the social influences of PA, for instance insight on the possible influence of network density or network reciprocity on PA.

Despite the limitations and need for further research on the topic, this study yielded some useful findings for public policy. The study showed that there are gender differences in type of exercise performed, and the study demonstrated the important role of the social environment in determining one's likelihood to engage in PA. The results from this study suggest that a bigger, more homogeneous network can play an important supportive role in increasing PA. The knowledge provided by this study can be used to design effective exercise-promoting policies and exercise programs, for instance by encouraging the creation of a homogeneous network to encourage men to exercise, and to offer exercise opportunities in a group setting to encourage women to exercise. The social network is a protective factor for PA, and can be used to strengthen men and women's motivation for exercise. The importance of PA is clearer than ever, and the findings from this study can be used to promote and increase individual PA.

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Appendix A. Checking the assumptions for regression

Before running the multiple regression analyses used to test Hypothesis 1 and 2, assumptions were tested with regards to the quality of the data. Several assumptions must be met when performing regression analyses (Field, 2009).

Skewness and Kurtosis statistics indicated that the distributions on the variables for gardening and working around the house were right skewed, indicating that participants generally did not garden or work around the house often. The other variables were slightly positively skewed. Shapiro-Wilk's test was significant for all dependent variables ($p < .001$), thereby indicating that the dependent variables were not normally distributed.

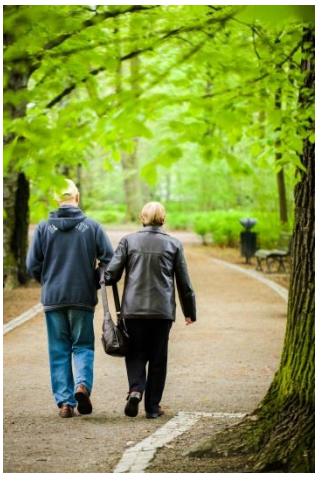
Pearson correlations were conducted to gain insight in the correlations between the dependent and independent variables. All dependent and independent variables were correlated significantly ($p < .001$), except for gardening and sex. Because the variables were associated significantly with each other, regression analyses were performed.

A normal P-P plot showed that the dependent variables were not normally distributed, they were slightly positively skewed. Concerning the assumption of collinearity, the highest Variance Inflation Factor was 1.417, as such that there was no multicollinearity in the data. Finally, a scatterplot indicated homoscedasticity of residuals. One outlier was identified and removed from the dataset. Cook's distance and Leverage did not exceed any critical values, indicating that there were no further outliers or influential cases in the dataset.

Appendix B. GLOBE survey

Gezondheid en Leefomstandigheden

GLOBE 2014



Toelichting op de vragenlijst

Achtergrondinformatie bij het onderzoek

In de GLOBE-studie wordt onderzoek gedaan naar verschillen in gezondheid en oorzaken van gezondheidsproblemen. Dit onderzoek is in 1991 gestart en loopt dus al meer dan 20 jaar. Hierdoor krijgen wij een steeds beter beeld van de oorzaken van gezondheidsproblemen en kunnen we de gezondheid van de huidige en toekomstige generaties blijven verbeteren. Met de resultaten van de GLOBE-studie worden belangrijke aanbevelingen gedaan voor het terugdringen van gezondheidsproblemen. In samenwerking met de GGD en het Ministerie van Volksgezondheid, Welzijn en Sport worden initiatieven bedacht ter verbetering van de volksgezondheid en ter stimulering van een gezonde leefomgeving.

Uw deelname aan deze studie is daarom van groot belang en wordt zeer gewaardeerd!

- Het is belangrijk dat de vragenlijst wordt ingevuld door de persoon die op de begeleidende brief vermeld staat.
- Alle gegevens die u ons verstrekt worden anoniem verwerkt en blijven strikt geheim.

Invulinstructie

Deze vragenlijst wordt ingevuld door duizenden mensen en zal daarom automatisch worden verwerkt met een scanner. Wij vragen u daarom dringend om:

- De vragenlijst in te vullen met een zwarte of blauwe pen (géén viltstift).
- Duidelijk een kruisje te zetten in het vakje van uw keuze (het vakje niet helemaal inkleuren).

De meeste vragen kunt u beantwoorden door een kruisje te zetten bij het door u gekozen antwoord, bijvoorbeeld:

1. Rookt u? ☒ ja (het gegeven antwoord is 'ja')
☐ nee

Als u per ongeluk het verkeerde vakje hebt aangekruist, kunt u het goede vakje helemaal inkleuren en het kruisje van het verkeerde antwoord laten staan. Dat gaat bijvoorbeeld zo:

1. Rookt u? ☒ja
■nee (het gegeven antwoord is 'nee')

Soms wordt u gevraagd een getal in te vullen. Wilt u dan één cijfer per vakje schrijven en binnen de hokjes blijven, anders kan de scanner de cijfers niet lezen. Bijvoorbeeld:

2. Hoe lang bent u? (zonder schoenen) Ik ben | *1* | *6* | *3* | cm lang

Let op:

- Wilt u bij iedere vraag slechts één hokje aankruisen? Wanneer u meerdere antwoorden mag aankruisen staat dit apart vermeld.
- Het is belangrijk dat u alle vragen beantwoordt. Ook wanneer u het moeilijk vindt een antwoord te geven. Alleen wanneer bij een antwoord apart staat vermeld dat u kunt

doorgaan naar een vraag verderop in de vragenlijst, kunt u de tussenliggende vragen overslaan.

- Er zijn geen goede of foute antwoorden. Het gaat steeds om *uw* situatie en *uw* mening.
- Als u opmerkingen heeft, schrijft u deze dan a.u.b. in het vak op de laatste pagina. Als u de opmerkingen bij de vragen schrijft, kan de scanner die niet lezen.

Veel succes met invullen en alvast hartelijk bedankt!

De eerste vragen gaan over uzelf en uw familie

1. Bent u:

[vrouw
[man

2. Wat is uw leeftijd

[ ] [ ] [ ] jaar

3. Hoeveel weegt u? (zonder kleren)

[ ] [ ] [ ] kilo

4. Wat is uw lengte? (zonder schoenen)

[ ] [ ] [ ] centimeter

5. Wat is uw burgerlijke staat?

[gehuwd of geregistreerd partnerschap
[ongehuwd (en nooit gehuwd geweest)
[gescheiden
[weduwe/weduwnaar

6. Woont u momenteel samen met uw partner of echtgenoot?

[ja
[nee

7. Wilt u voor de genoemde personen aangeven in welk land hij/zij geboren is?

	a. u zelf ↓	b. uw partner ↓	c. uw vader ↓	d. uw moeder ↓
Nederland	☐	☐	☐	☐
Turkije	☐	☐	☐	☐
Marokko	☐	☐	☐	☐
Nederlandse Antillen/Aruba	☐	☐	☐	☐
Suriname	☐	☐	☐	☐
elders, namelijk				

Niet van toepassing/weet ik niet	☐	☐	☐	☐

8. Wilt u voor de genoemde personen aankruisen wat de hoogste opleiding is die hij/zij met een diploma heeft afgerond?

	a. u zelf ↓	b. uw partner ↓	c. uw vader ↓	d. uw moeder ↓
geen opleiding	☐	☐	☐	☐
lager onderwijs/basisonderwijs	☐	☐	☐	☐
lager beroepsonderwijs (bijv. VMBO, LTS, LHNO, huishoudschool, LEAO)	☐	☐	☐	☐
middelbaar algemeen onderwijs (bijv. LAVO, MULO/MAVO, 3-jaar HBS)	☐	☐	☐	☐
middelbaar beroepsonderwijs, MBO (bijv. MTS, MEAO)	☐	☐	☐	☐
voortgezet algemeen onderwijs (bijv. HAVO, VWO, HBS, MMS)	☐	☐	☐	☐
hoger beroepsonderwijs, HBO (bijv. HTS, HEAO, MO)	☐	☐	☐	☐
wetenschappelijk onderwijs, WO (bijv. universiteit)	☐	☐	☐	☐
anders, namelijk				
Niet van toepassing/weet ik niet	☐	☐	☐	☐

9. Hoeveel kinderen heeft u? ☐☐ kinderen

10. Hoeveel thuiswonende kinderen heeft u? ☐☐ kinderen

11. Hoeveel kleinkinderen heeft u? ☐☐ kleinkinderen

12. Welke werksituatie is voor u het meest van toepassing?

- ☐ betaald werk, fulltime (36 uur of meer)
- ☐ betaald werk, parttime
- ☐ betaald werk, op oproepbasis
- ☐ werkloos, werkzoekend
- ☐ anders, namelijk
- ☐ gepensioneerd (AOW, VUT, vroegpensioen)
- ☐ arbeidsongeschikt (WAO, WIA)
- ☐ huisvrouw, huisman
- ☐ scholier, student

De volgende vragen gaan over uw gezondheid

13. Hoe is over het algemeen uw gezondheid?

Uitstekend ↓	Zeer goed ↓	Goed ↓	Matig ↓	Slecht ↓
☐	☐	☐	☐	☐

14. In welke mate vindt u zichzelf een gelukkig mens?

Erg gelukkig	Gelukkig	Niet gelukkig, niet ongelukkig	Niet zo gelukkig	Ongelukkig
☐	☐	☐	☐	☐

15. Deze vragen gaan over hoe u zich in de **afgelopen 4 weken** voelde. Wilt u bij elke vraag aankruisen welk antwoord het best aansluit bij hoe u zich voelde?

	Voortdurend	Meestal	Vaak	Soms	Zelden	Nooit
a. Voelde u zich erg zenuwachtig?	☐	☐	☐	☐	☐	☐
b. Zat u zo in de put dat niets u kon opvrolijken?	☐	☐	☐	☐	☐	☐
c. Voelde u zich kalm en rustig?	☐	☐	☐	☐	☐	☐
d. Voelde u zich erg energiek?	☐	☐	☐	☐	☐	☐
e. Voelde u zich neerslachtig en somber?	☐	☐	☐	☐	☐	☐

16. Hoe vaak hebben uw lichamelijke gezondheid of emotionele problemen gedurende de afgelopen 4 weken uw sociale contacten belemmerd? (zoals bezoek aan vrienden of naaste familieleden)

Voortdurend	Meestal	Soms	Zelden	Nooit
☐	☐	☐	☐	☐

De volgende vragen gaan over uw mondgezondheid

17. Hoe beoordeelt u de gezondheid van uw mond?

Uitstekend	Goed	Redelijk	Slecht	Zeer slecht
☐	☐	☐	☐	☐

18. Wat is voor u meestal de reden om naar de tandarts te gaan?

- ☐ Regelmatig voor controle
- ☐ Incidenteel voor controle
- ☐ Regelmatig voor behandeling
- ☐ Alleen als er problemen zijn met uw mond, uw gebit en/of uw prothese
- ☐ U gaat nooit naar de tandarts

19. Volwassenen kunnen 32 tanden en (verstands)kiezen hebben, maar deze kunnen over de tijd verloren gaan. Hoeveel eigen tanden en kiezen heeft u? (graag een getal tussen de 0 en 32 invullen) ☐☐

20. Hoe vaak heeft u in de **afgelopen 3 maanden** last gehad van de onderstaande klachten?

	Nooit	Minder dan 1 keer per maand	Ongeveer 1-3 keer per maand	Ongeveer 1-2 keer per week	Ongeveer 3-4 keer per week	Bijna iedere dag / dagelijks

	↓	↓	↓	↓	↓	↓
a. Kiespijn	☐	☐	☐	☐	☐	☐
b. Gevoelige tanden	☐	☐	☐	☐	☐	☐
c. Bloedend of gezwollen tandvlees	☐	☐	☐	☐	☐	☐
d. Slechte adem	☐	☐	☐	☐	☐	☐
e. Droge mond	☐	☐	☐	☐	☐	☐

21. De volgende vraag gaat over problemen die u kunt ervaren door uw klachten van uw mond, uw gebit en/of uw prothese. Hoeveel invloed hebben de onderstaande problemen gehad op uw dagelijkse leven **in de afgelopen 3 maanden** op een schaal van 0 tot 5 (0 is helemaal geen invloed en 5 is extreem veel invloed).

0 → 5

Helemaal geen invloed — **Extreem veel invloed**

	0 ↓	1 ↓	2 ↓	3 ↓	4 ↓	5 ↓
a. Problemen met kauwen	☐	☐	☐	☐	☐	☐
b. Problemen met eten	☐	☐	☐	☐	☐	☐
c. Problemen met spreken / praten	☐	☐	☐	☐	☐	☐
d. Problemen met het reinigen van uw gebit / prothese	☐	☐	☐	☐	☐	☐
e. Problemen met uitgaan, bijvoorbeeld naar de winkel gaan of op bezoek gaan bij iemand	☐	☐	☐	☐	☐	☐
f. Problemen met ontspannen (inclusief slapen)	☐	☐	☐	☐	☐	☐
g. Problemen met (glim)lachen en het laten zien van uw gebit zonder schaamte	☐	☐	☐	☐	☐	☐

22. Hoe belangrijk is de gezondheid van uw mond in uw dagelijks leven? (op een schaal van 0 tot 10: 0 is helemaal niet belangrijk; 10 is zeer belangrijk) ☐☐

De volgende vragen gaan over uw leefstijl

23. Hoe vaak gemiddeld heeft u zelf onderstaande producten gegeten of gedronken in de afgelopen maand?	**nooit** ↓	**minder dan 1 dag per week** ↓	**1-2 dagen per week** ↓	**3-4 dagen per week** ↓	**5-6 dagen per week** ↓	**elke dag** ↓	Hoeveel nam u gemiddeld van dit product op een dag dat u het at of dronk?	
a. Groenten	☐	☐	☐	☐	☐	☐	☐☐	opscheplepels (= 50 gram)
b. Fruit	☐	☐	☐	☐	☐	☐	☐☐	stuks (een bakje met

								bijv. druiven telt ook als 1 stuk)
c. Vlees	☐	☐	☐	☐	☐	☐		gram
d. Kraanwater of bronwater	☐	☐	☐	☐	☐	☐		liter
e. Alcoholvrij bier	☐	☐	☐	☐	☐	☐		Flesje(s)
f. Alcoholarm bier (bv. Radler)	☐	☐	☐	☐	☐	☐		Flesje(s)

24. Hoe vaak heeft u de volgende zogenoemde superfoods gegeten in de afgelopen maand?	**nooit van gehoord en nooit gegeten** ↓	**wel van gehoord, maar nooit gegeten** ↓	**minder dan 1 dag per week** ↓	**1-2 dagen per week** ↓	**3-4 dagen per week** ↓	**5-6 dagen per week** ↓	**elke dag** ↓
a. Speltproducten	☐	☐	☐	☐	☐	☐	☐
b. Gojibessen	☐	☐	☐	☐	☐	☐	☐
c. Chiazaad	☐	☐	☐	☐	☐	☐	☐
d. Quinoa	☐	☐	☐	☐	☐	☐	☐
e. Tarwegras	☐	☐	☐	☐	☐	☐	☐

25. Rookt u?

[Ja, ik rook ongeveer [ ] sigaretten/shaggies per dag

[Ja, ik rook ongeveer [ ] pijpen/sigaren per dag

[Ja, ik rook ongeveer [ ] keer een elektronische sigaret per dag

[Ja, maar ik rook niet elke dag, ik rook ongeveer [ ] sigaretten/sigaren per week

[Nee, maar ik heb vroeger wel dagelijks gerookt

[Nee, maar ik rookte vroeger wel af en toe

[Nee, ik heb nooit dagelijks gerookt

26. Hoe vaak drinkt u alcoholhoudende drank?

[nooit → **gaat u door naar vraag 28**

[1x per maand of minder

[2-4 keer per maand

[2-3 keer per week

	[4-5 keer per week [meer dan 5 keer per week
27. Hoeveel glazen alcohol drinkt u op een normale dag wanneer u drinkt?	[1of 2 glazen [3 of 4 glazen [5 of 6 glazen [7 tot 9 glazen [10 of meer glazen

Neem in gedachten een normale week in de afgelopen maanden. Wilt u aankruisen:

- hoeveel dagen per week u de hieronder genoemde activiteiten verrichtte en,
- hoeveel uren en minuten u daar gemiddeld op zo'n dag mee bezig was en,
- hoe inspannend deze activiteit was.

→ Als u een activiteit niet hebt verricht, vult u dan een 0 in bij het aantal dagen. U hoeft de andere vragen over deze activiteit dan niet in te vullen.

28. Woon-werkverkeer (in totaal, dus heen en terug).	aantal dagen **per week**	gemiddelde tijd **per dag**	inspanning (één aankruisen) **langzaam**	**gemiddeld**	**snel**
a. Lopen van/naar werk of school	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐
b. Fietsen van/naar werk of school	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐

29. Vrije tijd	aantal dagen **per week**	gemiddelde tijd **per dag**	inspanning (één aankruisen) **langzaam**	**gemiddeld**	**snel**
a. Wandelen	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐
b. Fietsen	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐
c. Tuinieren	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐
d. Klussen / doe-het-zelven	[ ] dagen	[ ] uur [ ][ ] min	☐	☐	☐

30. Sport

			inspanning (één aankruisen)

Vul maximaal 4 sporten in die u beoefent, bijvoorbeeld voetbal, fitness, hardlopen.	aantal dagen **per week**		gemiddelde tijd **per dag**				**langzaam**	**gemiddeld**	**snel**
a.		dagen		uur		min	☐	☐	☐
b.		dagen		uur		min	☐	☐	☐
c.		dagen		uur		min	☐	☐	☐
d.		dagen		uur		min	☐	☐	☐

Ik heb niet aan sport gedaan

31. Beweging op werk en school (per week)

	gemiddelde tijd **per week**			
a. Licht en matig inspannend werk: (zittend/staand werk met af en toe lopen, zoals bureauwerk of lopend werk met lichte lasten)		uren		min
b. Zwaar inspannend werk: (lopend werk, waarbij regelmatig zware dingen moeten worden opgetild)		uren		min

Niet van toepassing

32. Huishoudelijke activiteiten

	aantal dagen **per week**		gemiddelde tijd **per dag**			
a. Licht en matig inspannend werk (staand werk, zoals koken, afwassen, strijken, kind eten geven / in bad doen, en lopend werk zoals stofzuigen, boodschappen doen)		dagen		uur		min
b. Zwaar inspannend huishoudelijk werk (vloer schrobben, tapijt uitkloppen, met zware boodschappen lopen)		dagen		uur		min

Niet van toepassing

Voor de volgende vraag denkt u aan een normale week in de afgelopen maanden en telt u alle activiteiten bij elkaar op.

33. Op gemiddeld hoeveel dagen bent u, alle activiteiten bij elkaar opgeteld, ten minste een half uur bezig met lopen, fietsen, klussen, tuinieren, sporten, huishoudelijk werk en dergelijke?

[ ] dagen per week

34. Hoe vaak gebruikt u mobiele applicaties (op bijv. uw smartphone) om uw eetgedrag bij te houden?

- [ ] vaak
- [ ] soms
- [ ] nooit
- [ ] ik heb geen smartphone

35. Hoe vaak gebruikt u mobiele applicaties (op bijv. uw smartphone) tijdens sporten of bewegen? (bv. een hardloop podcast of trackingapp)

- [ ] vaak
- [ ] soms
- [ ] nooit
- [ ] ik heb geen smartphone

De volgende vragen gaan over de mensen met wie u omgaat

Om te beginnen willen we u wat vragen stellen over familieleden met wie u goed contact heeft

36. Met hoeveel familieleden heeft u goed contact, dat wil zeggen familieleden bij wie u zich op uw gemak voelt, met wie u over persoonlijke dingen kan praten, en kan bellen voor hulp? *(uw partner of thuiswonende kinderen niet meerekenen)*

- [ ] Geen → **gaat u door naar vraag 42**
- [ ] 1 of 2
- [ ] 3 tot 5
- [ ] 6 tot 10
- [ ] 11 tot 20
- [ ] Meer dan 20

37. Hoeveel van deze familieleden wonen in dezelfde stad of dorp als u?

- [ ] Allemaal
- [ ] De meeste
- [ ] Ongeveer de helft
- [ ] Enkele
- [ ] Geen

38. Hoeveel van deze familieleden wonen minder dan 1 uur reistijd bij u vandaan?

- [ ] Allemaal
- [ ] De meeste
- [ ] Ongeveer de helft
- [ ] Enkele
- [ ] Geen

39. Hoe vaak ziet u deze familieleden ongeveer?

- [ ] Elke dag
- [ ] Een paar keer per week
- [ ] Een paar keer per maand / 1 keer per week
- [ ] 1 keer per maand
- [ ] Minder dan 1 keer per maand

40. Hoe vaak heeft u met deze familieleden contact (bellen, mailen, sms'en etc.)?

- [ ] Elke dag
- [ ] Een paar keer per week
- [ ] Een paar keer per maand / 1 keer per week
- [ ] 1 keer per maand
- [ ] Minder dan 1 keer per maand

41. Zou u deze familieleden graag vaker, ongeveer hetzelfde, of minder vaak willen zien?

- [ ] Vaker
- [ ] Ongeveer hetzelfde
- [ ] Minder vaak

Na familieleden willen we u nu enkele vragen stellen over goede vrienden

42. Hoeveel goede vrienden heeft u ongeveer, dat wil zeggen: vrienden bij wie u zich op uw gemak voelt, met wie u over persoonlijke dingen kan praten, en kan bellen voor hulp?

- [ ] Geen → **gaat u door naar vraag 54**
- [ ] 1 of 2
- [ ] 3 tot 5
- [ ] 6 tot 10
- [ ] 11 tot 20
- [ ] Meer dan 20

43. Hoeveel van deze goede vrienden wonen in dezelfde stad of dorp als u?

- ☐ Allemaal
- ☐ De meeste
- ☐ Ongeveer de helft
- ☐ Enkele
- ☐ Geen

44. Hoeveel van deze goede vrienden wonen minder dan 1 uur reistijd bij u vandaan?

- ☐ Allemaal
- ☐ De meeste
- ☐ Ongeveer de helft
- ☐ Enkele
- ☐ Geen

45. Hoe vaak ziet u deze goede vrienden ongeveer?

- ☐ Elke dag
- ☐ Een paar keer per week
- ☐ Een paar keer per maand / 1 keer per week
- ☐ 1 keer per maand
- ☐ Minder dan 1 keer per maand

46. Hoe vaak heeft u met deze goede vrienden contact (bellen, mailen, sms'en etc.)?

- ☐ Elke dag
- ☐ Een paar keer per week
- ☐ Een paar keer per maand / 1 keer per week
- ☐ 1 keer per maand
- ☐ Minder dan 1 keer per maand

47. Hoe lang kent u de meeste van deze goede vrienden al?

- [ ] Minder dan 1 jaar
- [ ] 1-4 jaar
- [ ] 5-9 jaar
- [ ] 10-14 jaar
- [ ] 15-19 jaar
- [ ] 20 of meer jaar

48. Hoeveel van deze goede vrienden kennen elkaar?

- [ ] Allemaal
- [ ] De meeste
- [ ] Ongeveer de helft
- [ ] Enkele
- [ ] Geen

49. Hoeveel van deze goede vrienden hebben hetzelfde geslacht als u?

- ☐ Allemaal
- ☐ De meeste
- ☐ Ongeveer de helft
- ☐ Enkele
- ☐ Geen

50. Hoeveel van deze goede vrienden hebben ongeveer dezelfde leeftijd als u?

- ☐ Allemaal
- ☐ De meeste
- ☐ Ongeveer de helft
- ☐ Enkele
- ☐ Geen

51. Hoeveel van deze goede vrienden hebben ongeveer hetzelfde opleidingsniveau als u?

- ☐ Allemaal
- ☐ De meeste

52. Hoeveel van deze goede vrienden hebben ongeveer hetzelfde inkomensniveau als u?

- ☐ Allemaal
- ☐ De meeste

☐ Ongeveer de helft	☐ Ongeveer de helft
☐ Enkele	☐ Enkele
☐ Geen	☐ Geen

53. Zou u deze goede vrienden graag vaker, ongeveer hetzelfde, of minder vaak willen zien?

- [ ] Vaker
- [ ] Ongeveer hetzelfde
- [ ] Minder vaak

54. Hoeveel buurtbewoners kent u goed genoeg dat u af en toe bij elkaar langsgaat of samen ergens heengaat?

- [ ] Geen → **gaat u door naar vraag 56**
- [ ] 1 of 2
- [ ] 3 tot 5
- [ ] 6 tot 10
- [ ] 11 tot 20
- [ ] Meer dan 20

55. Hoe vaak spreekt u deze buren gemiddeld?

- [ ] Elke dag
- [ ] Een paar keer per week
- [ ] Een paar keer per maand / 1 keer per week
- [ ] 1 keer per maand
- [ ] Minder dan 1 keer per maand

56. Bij welke van de volgende organisaties bent u betrokken? Dat betekent dat u lid bent, of u inzet voor de organisatie of vereniging
→ *U mag meerdere antwoorden aankruisen*

- [ ] Sportvereniging
- [ ] Hobbyvereniging, gezelligheidsvereniging
- [ ] Vakbond, werkgeversorganisatie, beroepsorganisatie
- [ ] Politieke partij
- [ ] Kerk, moskee, synagoge, of andere religieuze organisatie
- [ ] Buurtvereniging, Oranjevereniging, Carnavalsvereniging
- [ ] Vrijwilligersorganisatie
- [ ] Ik ben nergens bij betrokken → **gaat u door naar vraag 58**
- [ ] anders, namelijk _____

57. Alles bij elkaar genomen, hoe vaak neemt u deel in groepsactiviteiten of bijeenkomsten van deze organisatie(s)?
(één antwoord)

- [ ] Tenminste 1 keer per week
- [ ] Een paar keer per maand
- [ ] 1 keer per maand
- [ ] Een paar keer per jaar
- [ ] 1 keer per jaar of minder

58. Stel dat u advies of hulp nodig heeft bij één van de volgende onderwerpen, kunt u dan gemakkelijk bij iemand aankloppen?
→ *U mag meerdere*

a. nee ↓	b. familie/ partner ↓	c. vriend ↓	d. collega ↓	e. kennis ↓	f. n.v.t. ↓

antwoorden aankruisen.						
a. als u gewicht zou willen verliezen?	☐	☐	☐	☐	☐	☐
b. als u meer zou willen bewegen?	☐	☐	☐	☐	☐	☐
c. als u zou willen stoppen met roken?	☐	☐	☐	☐	☐	☐
d. als u minder alcohol zou willen drinken?	☐	☐	☐	☐	☐	☐
e. als u gezonder zou willen eten?	☐	☐	☐	☐	☐	☐
f. als u medisch advies nodig hebt als u niet tevreden bent met uw dokter?	☐	☐	☐	☐	☐	☐

59. Kunt u voor onderstaande vormen van ondersteuning aankruisen hoe vaak deze beschikbaar voor u zijn als u het nodig heeft?	**altijd** ↓	**meestal** ↓	**regelmatig** ↓	**soms** ↓	**nooit** ↓	**n.v.t.** ↓
a. Iemand die u liefde en genegenheid geeft	☐	☐	☐	☐	☐	☐
b. Iemand waarmee u een leuke dag kunt hebben	☐	☐	☐	☐	☐	☐
c. Iemand die u in vertrouwen kunt nemen om over uzelf of uw problemen te kunnen praten	☐	☐	☐	☐	☐	☐
d. Iemand waarmee u afspreekt als ontspanning	☐	☐	☐	☐	☐	☐
e. Iemand die voor u kookt als u het niet zelf kunt	☐	☐	☐	☐	☐	☐
f. Iemand die u helpt met uw dagelijkse werkzaamheden als u ziek bent	☐	☐	☐	☐	☐	☐
g. Iemand met wie u uw meest vertrouwelijke zorgen en angsten kunt delen	☐	☐	☐	☐	☐	☐
h. Iemand naar wie u toe kunt gaan voor suggesties hoe u om kunt gaan met een persoonlijk probleem	☐	☐	☐	☐	☐	☐
i. Iemand van wie u houdt en die u het gevoel geeft de moeite waard te zijn	☐	☐	☐	☐	☐	☐

60. Gebeurt het wel eens dat iemand met wie u omgaat, dus een familielid, vriend, kennis, buur of collega..	**zelden of nooit** ↓	**af en toe** ↓	**regelmatig** ↓	**erg vaak** ↓
. Koel reageert	☐	☐	☐	☐
. Een afspraak met u niet nakomt	☐	☐	☐	☐

. Afkeurende opmerkingen tegen u maakt	☐	☐	☐	☐
. U dingen verwijt	☐	☐	☐	☐
. U onrechtvaardig behandelt	☐	☐	☐	☐
Onredelijke eisen aan u stelt	☐	☐	☐	☐
. Zich teveel met u bemoeit	☐	☐	☐	☐

61. Wilt u bij iedere stelling aankruisen in hoeverre u het met de stelling eens of oneens bent?	zeker ↓	ja ↓	min of meer ↓	nee ↓	zeker niet ↓
a. Ik ervaar een leegte om mij heen	☐	☐	☐	☐	☐
b. Er zijn genoeg mensen op wie ik in geval van narigheid kan terugvallen	☐	☐	☐	☐	☐
c. Ik heb veel mensen op wie ik volledig kan vertrouwen	☐	☐	☐	☐	☐
d. Er zijn genoeg mensen met wie ik mij nauw verbonden voel	☐	☐	☐	☐	☐
e. Ik mis mensen om me heen	☐	☐	☐	☐	☐
f. Vaak voel ik me in de steek gelaten	☐	☐	☐	☐	☐

62. In hoeverre bent u het eens met de onderstaande stellingen over de mensen die belangrijk voor u zijn? **De meeste mensen die belangrijk voor mij zijn…**	helemaal mee eens ↓	mee eens ↓	niet mee eens / niet mee oneens ↓	mee oneens ↓	helemaal mee oneens ↓	n.v.t. ↓
a. bewegen regelmatig	☐	☐	☐	☐	☐	☐
b. eten gezond	☐	☐	☐	☐	☐	☐
c. drinken niet te veel alcohol	☐	☐	☐	☐	☐	☐
d. roken niet	☐	☐	☐	☐	☐	☐
e. vinden dat je regelmatig moet bewegen	☐	☐	☐	☐	☐	☐

f. vinden dat je gezond moet eten	☐	☐	☐	☐	☐	☐
g. vinden dat je niet te veel alcohol moet drinken	☐	☐	☐	☐	☐	☐
h. vinden dat je niet moet roken	☐	☐	☐	☐	☐	☐
i. stimuleren mij om regelmatig te bewegen	☐	☐	☐	☐	☐	☐
j. stimuleren mij om gezond te eten	☐	☐	☐	☐	☐	☐
k. stimuleren mij om niet te veel alcohol te drinken	☐	☐	☐	☐	☐	☐
l. stimuleren mij om niet te roken	☐	☐	☐	☐	☐	☐

63. In hoeverre bent u het eens met de onderstaande stellingen over de Nederlandse bevolking? **De meerderheid van de Nederlandse bevolking...**	**helemaal mee eens** ↓	**mee eens** ↓	**niet mee eens / niet mee oneens** ↓	**mee oneens** ↓	**helemaal mee oneens** ↓
a. beweegt regelmatig	☐	☐	☐	☐	☐
b. eet gezond	☐	☐	☐	☐	☐
c. drinkt niet te veel alcohol	☐	☐	☐	☐	☐
d. rookt niet	☐	☐	☐	☐	☐
e. vindt dat je regelmatig moet bewegen	☐	☐	☐	☐	☐
f. vindt dat je gezond moet eten	☐	☐	☐	☐	☐
g. vindt dat je niet te veel alcohol moet drinken	☐	☐	☐	☐	☐
h. vindt dat je niet moet roken	☐	☐	☐	☐	☐

De volgende vragen gaan over twee belangrijke personen in uw leven

Neemt u twee belangrijke personen (ouder dan 18 jaar) in gedachten, met wie u vaak contact heeft en die belangrijk voor u zijn (*niet uw partner of thuiswonende kinderen*). Kunt u voor beide personen de onderstaande vragen beantwoorden?

De door u gekozen naam dient alleen als geheugensteuntje voor uzelf, de naam zal niet in ons onderzoek worden opgenomen

Kies een naam als geheugensteuntje	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - -
64. Geslacht	vrouw man	vrouw man
65. Leeftijd	☐☐☐ jaar	☐☐☐ jaar
66. Etniciteit	Nederlands Antilliaans Turks Surinaams Marokkaans Anders	Nederlands Antilliaans Turks Surinaams Marokkaans Anders
67. Hoe bent u aan elkaar gerelateerd?	Familie Collega Buur Vriend(in)	Familie Collega Buur Vriend(in)
68. Heeft deze persoon ongeveer hetzelfde opleidingsniveau als u?	Hij/zij heeft een lager opleidingsniveau Ongeveer hetzelfde Hij/zij heeft een hoger opleidingsniveau	Hij/zij heeft een lager opleidingsniveau Ongeveer hetzelfde Hij/zij heeft een hoger opleidingsniveau
69. Heeft deze persoon ongeveer hetzelfde inkomen als u?	Hij/zij heeft een lager inkomen Ongeveer hetzelfde Hij/zij heeft een hoger inkomen	Hij/zij heeft een lager inkomen Ongeveer hetzelfde Hij/zij heeft een hoger inkomen
70. Werkstatus	Fulltime werkzaam Parttime werkzaam Gepensioneerd Niet werkend	Fulltime werkzaam Parttime werkzaam Gepensioneerd Niet werkend
71. Hoe ver woont deze persoon bij u vandaan?	Zelfde straat of wijk Zelfde stad of dorp Binnen 1 uur reisafstand	Zelfde straat of wijk Zelfde stad of dorp Binnen 1 uur reisafstand

	Binnen 3 uur reisafstand Meer dan 3 uur reisafstand	Binnen 3 uur reisafstand Meer dan 3 uur reisafstand
72. Hoe vaak ziet u elkaar?	Elke dag Een paar keer per week Een paar keer per maand / 1x per week 1 keer per maand Minder dan 1 keer per maand	Elke dag Een paar keer per week Een paar keer per maand / 1x per week 1 keer per maand Minder dan 1 keer per maand
73. Hoe vaak heeft u contact met elkaar (bellen, mailen, sms'en etc.)?	Elke dag Een paar keer per week Een paar keer per maand / 1x per week 1 keer per maand Minder dan 1 keer per maand	Elke dag Een paar keer per week Een paar keer per maand / 1x per week 1 keer per maand Minder dan 1 keer per maand
Vervolg:	**Persoon 1)** ----------	**Persoon 2)** ----------
74. Hoe lang kent u elkaar?	Minder dan 1 jaar 1 – 4 jaar 5 – 9 jaar 10 – 14 jaar 15 – 19 jaar 20 jaar of meer	Minder dan 1 jaar 1 – 4 jaar 5 – 9 jaar 10 – 14 jaar 15 – 19 jaar 20 jaar of meer
75. Hoe vaak sport hij/zij?	2x per week of vaker 1x per week Minder dan 1x per week (Bijna) nooit Weet ik niet	2x per week of vaker 1x per week Minder dan 1x per week (Bijna) nooit Weet ik niet
76. Rookt hij/zij?	Ja Nee Gestopt met roken Weet ik niet	Ja Nee Gestopt met roken Weet ik niet
77. Drinkt hij/zij vaak alcohol?	(Bijna) elke dag 2-4 dagen per week Minder dan 2x per week (Bijna) nooit Weet ik niet	(Bijna) elke dag 2-4 dagen per week Minder dan 2x per week (Bijna) nooit Weet ik niet

78. Eet hij/zij vaak groente en fruit?	Elke dag Af en toe (Bijna) nooit Weet ik niet	Elke dag Af en toe (Bijna) nooit Weet ik niet
79. Is roken of stoppen met roken een onderwerp van gesprek met deze persoon?	Vaak Regelmatig Soms Nooit	Vaak Regelmatig Soms Nooit
80. Is gezond eten een onderwerp van gesprek met deze persoon?	Vaak Regelmatig Soms Nooit	Vaak Regelmatig Soms Nooit
81. Is het drinken van alcohol een onderwerp van gesprek met deze persoon?	Vaak Regelmatig Soms Nooit	Vaak Regelmatig Soms Nooit
82. Is beweging en sporten een onderwerp van gesprek met deze persoon?	Vaak Regelmatig Soms Nooit	Vaak Regelmatig Soms Nooit
83. Is afvallen of diëten een onderwerp van gesprek met deze persoon?	Vaak Regelmatig Soms Nooit	Vaak Regelmatig Soms Nooit
84. Kennen de twee personen die door u genoemd zijn elkaar?	Ja Nee	Niet persoonlijk Weet ik niet
85. Hoe vaak zien zij elkaar ongeveer?	Elke dag Een paar keer per week Een paar keer per maand	1 keer per maand Minder dan 1 keer per maand Weet ik niet/n.v.t.
86. Hoe vaak hebben zij ongeveer contact?	Elke dag Een paar keer per week Een paar keer per maand	1 keer per maand Minder dan 1 keer per maand Weet ik niet/n.v.t.

De volgende vragen gaan over uw woning en de buurt waarin u woont

87. Hoe lang woont u in de buurt waar u nu woont? *A.u.b. afronden op hele jaren.*	Ik woon hier	☐☐ jaar

88. Woont u in een eigen huis of in een huurhuis?	☐ Eigen huis ☐ Huurhuis (vrije sector) ☐ Huurhuis (sociale huurwoning)

89. Hoeveel personen wonen er in deze woning? (uzelf meegeteld)	Er wonen	☐☐ personen

90. Hieronder staan stellingen over de mensen in uw buurt. Wilt u bij iedere stelling aankruisen in hoeverre u het met de stelling eens of oneens bent?	**hele maal mee eens** ↓	**mee eens** ↓	**niet mee eens / niet mee oneens** ↓	**mee oneens** ↓	**hele maal mee oneens** ↓
a. De mensen in deze buurt kennen elkaar nauwelijks	☐	☐	☐	☐	☐
b. Ik bezoek mijn buren vaak in hun huis	☐	☐	☐	☐	☐
c. Ik voel me vaak alleen in deze buurt	☐	☐	☐	☐	☐
d. Mijn buren komen bij mij op bezoek als ik jarig ben	☐	☐	☐	☐	☐
e. Mensen in deze buurt hebben dezelfde normen en waarden	☐	☐	☐	☐	☐
f. Ik voel me thuis in deze buurt	☐	☐	☐	☐	☐
g. Als ik de kans krijg, verhuis ik uit deze buurt	☐	☐	☐	☐	☐
h. De meeste mensen in deze buurt zijn te vertrouwen	☐	☐	☐	☐	☐
i. De mensen in deze buurt gaan op een prettige manier met elkaar om	☐	☐	☐	☐	☐
j. Mensen in deze buurt zijn bereid elkaar te helpen	☐	☐	☐	☐	☐
k. Ik leen spullen aan of van mijn buren	☐	☐	☐	☐	☐
l. Als ik advies nodig heb over iets, kan ik bij mijn buren terecht	☐	☐	☐	☐	☐
m. Mijn buren helpen mij in een noodsituatie	☐	☐	☐	☐	☐

De volgende vragen gaan over uzelf

91. De volgende uitspraken gaan over hoe u tegen uzelf aankijkt. Het is de bedoeling dat u aangeeft in hoeverre de uitspraken op u van toepassing zijn.	helemaal mee eens ↓	mee eens ↓	niet mee eens / niet mee oneens ↓	mee oneens ↓	helemaal mee oneens ↓
a. Slechte gewoontes leer ik moeilijk af	☐	☐	☐	☐	☐
b. Ik ben lui	☐	☐	☐	☐	☐
c. Ik zeg soms ongepaste dingen	☐	☐	☐	☐	☐
d. Ik doe soms dingen die slecht voor me zijn, gewoon omdat ik ze leuk vind	☐	☐	☐	☐	☐
e. Ik weiger dingen die slecht voor me zijn	☐	☐	☐	☐	☐
f. Ik wou dat ik meer zelfdiscipline had	☐	☐	☐	☐	☐
g. Ik kan gemakkelijk verleidingen weerstaan	☐	☐	☐	☐	☐
h. Mensen vinden dat ik een grote zelfdiscipline heb	☐	☐	☐	☐	☐
i. Plezier en vermaak zorgen er soms voor dat ik niet aan werken toekom	☐	☐	☐	☐	☐
j. Ik kan me moeilijk concentreren	☐	☐	☐	☐	☐
k. Ik kan effectief toewerken naar lange termijn doelstellingen	☐	☐	☐	☐	☐
l. Soms kan ik het niet laten bepaalde dingen te doen, ook al weet ik dat ze verkeerd zijn	☐	☐	☐	☐	☐
m. Ik doe vaak dingen zonder eerst alle alternatieven te overwegen	☐	☐	☐	☐	☐

92. Hoe vaak zoekt u naar informatie over de volgende onderwerpen? (bv. op internet)	vaak ↓	soms ↓	nooit ↓
a. Gezond leven	☐	☐	☐
b. Roken/stoppen met roken	☐	☐	☐
c. Drinken van alcohol	☐	☐	☐
d. Sport en beweging	☐	☐	☐
e. Gezond eten	☐	☐	☐
f. Afvallen	☐	☐	☐

De laatste vragen gaan over uw financiën en culturele activiteiten

93. Wilt u aankruisen hoe hoog het netto inkomen van uw huishouden is?	ongeveer 0 – 1200 euro per maand

Het gaat in deze vraag om uw eigen inkomen PLUS dat van uw eventuele partner.

- *Onder inkomen valt het salaris, het pensioen, de uitkering en/of de ontvangen alimentatie van u en uw eventuele partner. Inkomsten als studiefinanciering, kindertoeslag en huurtoeslag tellen niet mee.*
- *Met netto wordt bedoeld wat u 'schoon', na aftrek van belastingen en premies, in handen krijgt.*

- ongeveer 1200 – 1800 euro per maand
- ongeveer 1800 – 2600 euro per maand
- ongeveer 2600 – 4000 euro per maand
- meer dan 4000 euro per maand
- weet ik niet / wil ik niet zeggen

94. Hoeveel personen moeten er van dit inkomen leven (binnen en buiten uw huishouden)? [ ] [ ] personen

95. Hebt u in het afgelopen jaar moeite gehad om met het inkomen van uw huishouden uw eten, huur, aflossing, elektriciteitsrekening en dergelijke te betalen?

- [ ] nee, geen enkele moeite
- [ ] soms met enige moeite
- [ ] ja, grote moeite

96. Als u het totale maandelijkse inkomen van uw huishouden beschouwt, hoe kan het huishouden dan rondkomen?

- [ ] Met grote moeite
- [ ] Met enige moeite
- [ ] Redelijk gemakkelijk
- [ ] Gemakkelijk

97. Vergeleken met een jaar geleden, is de financiële situatie van mijn huishouden er nu…

- [ ] Erg op vooruit gegaan
- [ ] Enigszins op vooruit gegaan
- [ ] Ongeveer hetzelfde gebleven
- [ ] Ietwat op achteruit gegaan
- [ ] Erg op achteruit gegaan

98. Hoe vaak gaat u naar de volgende instellingen/activiteiten?

	nooit ↓	ongeveer 1 keer per jaar ↓	meerdere keren per jaar ↓
a. Kunstmuseum	☐	☐	☐
b. Historisch museum	☐	☐	☐
c. Opera of ballet	☐	☐	☐
d. Klassiek concert	☐	☐	☐
e. Theatervoorstelling (toneelstuk of cabaret)	☐	☐	☐
f. Architectuur (een gebouw/bouwwerk, zoals een kerk, gaan bekijken)	☐	☐	☐
g. Populair concert (pop, rock), festival	☐	☐	☐

99. Hoeveel boeken heeft u ongeveer? *(Reken e-boeken, tijdschriften, kranten en schoolboeken niet mee)*

- ☐ Geen of zeer weinig (0-10 boeken)
- ☐ Genoeg om 1 boekenplank te vullen (11-25 boeken)
- ☐ Genoeg om 1 boekenkast te vullen (26-100 boeken)
- ☐ Genoeg om 2 boekenkasten te vullen (101-200 boeken)
- ☐ Genoeg om meer dan 2 boekenkasten te vullen (meer dan 200 boeken)

100. Hoe vaak leest u een boek in uw vrije tijd?	1 boek per week of meer 1 boek per maand 1 boek per half jaar 1 boek per jaar of minder Nooit

101. Om een zo goed mogelijk beeld te krijgen van de relatie tussen gezondheid en leefomstandigheden, willen wij in de toekomst misschien een koppeling maken met gegevens van instellingen als Dutch Hospital Data (waarin gegevens staan over ziekenhuisopnames), het Integraal Kankercentrum Nederland en het Centraal Bureau voor de Statistiek. Een dergelijke koppeling wordt uitgevoerd op basis van een persoonsnummer dat wordt gebruikt in de gemeentelijke basisadministratie. Bij de verwerking van de onderzoeksresultaten wordt dit persoonsnummer volledig losgekoppeld van de rest van de gegevens en zullen geen identificeerbare gegevens gebruikt worden waaruit iemand kan afleiden dat deze op u betrekking hebben. Zoals ook in het privacyreglement van de GLOBE-studie beschreven staat, zullen de gegevens alleen voor wetenschappelijk onderzoek gebruikt worden en nooit voor andere doeleinden. Geeft u toestemming voor een eventuele koppeling van uw antwoorden met gegevens van deze instellingen?

☐ **Ja, ik geef toestemming** ☐ **Nee, ik geef geen toestemming**

Eventuele vragen of opmerkingen kunt u hier opschrijven:

-- Dit is het einde van de vragenlijst. –

Wij danken u hartelijk voor uw medewerking!

De vragenlijst kunt u in bijgevoegde retourenvelop terugsturen. U hoeft er geen postzegel op te plakken.

Type enquête:

Appendix C. Syntax used for the analyses

```
* Encoding: UTF-8.


**Educationsklassen obv ISCED categorieen maken met: 1 = High; 2 = Middle; 3 = High**

RECODE G14v8_opl1 (1 thru 4=3) (5 thru 6=2) (7 thru 8=1) (ELSE=SYSMIS) INTO
Education_ISCED.
VARIABLE LABELS  Education_ISCED 'Education ISCED categories'.
value labels Education_ISCED 3 'Low' 2 'Middle' 1 'High'.
EXECUTE.


** Geslacht**

recode G14v1 (1=1) (2=0) (else=sysmis) into Sex.
variable labels  Sex 'Sex: reference=men'.
value labels Sex 0 'Men' 1 'Women'.
execute.

**Leeftijd**

RECODE
  G14v2
  (ELSE=Copy)  INTO  Age .
VARIABLE LABELS Age 'Age'.
EXECUTE .

** 10-jaars leeftijdscategorieen**

recode G14v2 (25 thru 34=1) (35 thru 44=2) (45 thru 54=3) (55 thru 64=4) (65 thru 75=5)
into Age_groups.
variable labels Age_groups '10 year age groups'.
value labels Age_groups 1 '25-34' 2 '35-44' 3 '45-54' 4 '55-64' 5 '65-75'.
execute.


** Burgerlijke staat**

recode G14v5 (1=1) (2=2) (3=3) (4=4) (else=sysmis) into Marital_status.
variable labels  Marital_status 'Marital status'.
value labels Marital_status 1 'Married/partnership' 2 'Unmarried' 3 'Divorced' 4 'Widowed'.
execute.

** Employement **

recode G14v12 (1 thru 3=1) (4=2) (5=3) (6=2) (7 thru 9=4) (10=1) into Employement.
```

```
variable labels Employement 'Employement'.
value labels Employement 1 'Employed' 2 'Unemployed' 3 'Retired' 4 'Nonemployed'.
execute.


** Extra dummy variables

recode Education_ISCED (1=1) (2 thru 3=0) into High.
value labels High 0 'Other' 1 'High'.
recode Education_ISCED (1=0) (2=1) (3=0) into Middle.
value labels Middle 0 'Other' 1 'Middle'.
recode Education_ISCED (1 thru 2=0) (3=1) into Low.
value labels Low 0 'Other' 1 'Low'.
recode Age_groups (1=1) (2 thru 5=0) into Age1.
value labels Age1 0 'Other' 1 '25-34'.
recode Age_groups (1=0) (2=1) (3 thru 5=0) into Age2.
value labels Age2 0 'Other' 1 '35-44'.
recode Age_groups (1 thru 2=0) (3=1) (4 thru 5=0) into Age3.
value labels Age3 0 'Other' 1 '45-54'.
recode Age_groups (1 thru 3=0) (4=1) (5=0) into Age4.
value labels Age4 0 'Other' 1 '55-64'.
recode Age_groups (1 thru 4=0) (5=1) into Age5.
value labels Age5 0 'Other' 1 '65-75'.
recode Marital_status (1=1) (2 thru 4=0) into Married.
value labels Married 0 'Other' 1 'Married'.
recode Marital_status (1=0) (2=1) (3 thru 4=0) into Unmarried.
value labels Unmarried 0 'Other' 1 'Unmarried'.
recode Marital_status (1 thru 2=0) (3=1) (4=0) into Divorced.
value labels Divorced 0 'Other' 1 'Divorced'.
recode Marital_status (1 thru 3=0) (4=1) into Widowed.
value labels Widowed 0 'Other' 1 'Widowed'.
recode Employement (1=1) (2 thru 4=0) into Employed.
value labels Employed 0 'Other' 1 'Employed'.
recode Employement (1=0) (2=1) (3 thru 4=0) into Unemployed.
value labels Unemployed 0 'Other' 1 'Unemployed'.
recode Employement (1 thru 2=0) (3=1) (4=0) into Retired.
value labels Retired 0 'Other' 1 'Retired'.
recode Employement (1 thru 3=0) (4=1) into Nonemployed.
value labels Nonemployed 0 'Other' 1 'Nonemployed'.
execute.

*leeftijd frequentietabel.
DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES=Age
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*sex descriptives.
DESCRIPTIVES VARIABLES=Sex
```

```
  /STATISTICS=MEAN STDDEV MIN MAX.

* Custom Tables verdeling geslacht.
CTABLES
  /VLABELS VARIABLES=Sex DISPLAY=LABEL
  /TABLE BY Sex [C][COUNT F40.0]
  /CATEGORIES VARIABLES=Sex ORDER=A KEY=VALUE EMPTY=INCLUDE
  /CRITERIA CILEVEL=95.

*frequentietabel burgerlijke staat.
FREQUENCIES VARIABLES=Marital_status
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*frequentietabel opleidingsniveau.
FREQUENCIES VARIABLES=Education_ISCED
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*frequentietabel arbeidsstatus.
FREQUENCIES VARIABLES=Employement
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*variabele social support aanmaken.
IF
(NMISS(G14v59_a,G14v59_b,G14v59_c,G14v59_d,G14v59_e,G14v59_f,G14v59_g,G14v5
9_h,G14v59_i)  < 1)
   SocialSupport=MEAN(G14v59_a + G14v59_b + G14v59_c + G14v59_d + G14v59_e +
G14v59_f + G14v59_g +
   G14v59_h + G14v59_i).
EXECUTE.

*variabele network homogeneity aanmaken.
IF  (NMISS(G14v49,G14v50,G14v51) <1)
NetworkHomogeneity=MEAN(G14v49,G14v50,G14v51).
EXECUTE.

*variabele network size aanmaken.
DATASET ACTIVATE DataSet1.
COMPUTE networksize=MEAN(G14v42 + G14v36).
EXECUTE.

*frequenties checken van vragen over beweging.
DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES=G14v29_a_dag G14v29_a_uur G14v29_a_min
G14v29_b_dag G14v29_b_uur
   G14v29_b_min G14v29_c_dag G14v29_c_uur G14v29_c_min G14v29_d_dag
G14v29_d_uur
```

```
    G14v29_d_min
  /ORDER=ANALYSIS.

*frequenties checken van sportvragen.
FREQUENCIES VARIABLES=G14v30_a_dag G14v30_a_uur G14v30_a_min G14v30ains
G14v30_b_dag G14v30_b_uur
    G14v30_b_min G14v30bins G14v30_c_dag G14v30_c_uur G14v30_c_min G14v30cins
G14v30_d_dag G14v30_d_uur
    G14v30_d_min G14v30dins
  /ORDER=ANALYSIS.


*freuqenties checken variabelen social network.
FREQUENCIES VARIABLES=SocialSupport NetworkHomogeneity
    /ORDER=ANALYSIS.

*variable labels toevoegen.
VARIABLE LAbELS SocialSupport 'Social support'
*variable labels toevoegen..
 VARIABLE LAbELS NetworkHomogeneity 'Network homogeneity'
EXECUTE.

*social support omzetten in categorieën hoog-middel-laag.
RECODE SocialSupport (Lowest thru 15=1) (16 thru 30=2) (30 thru Highest=3).
VALUE LABELS SocialSupport 1 'Low social support' 2 'Medium social support' 3 'High
social support'.
EXECUTE.

*frequenties soci support checken.
FREQUENCIES VARIABLES=SocialSupport
  /ORDER=ANALYSIS.

*dummy social support aanmaken.
DO REPEAT dummy=lowsup mediumsup highsup /categorie=1 to 3.
IF SocialSupport EQ categorie dummy=1.
IF SocialSupport NE categorie dummy=0.
END REPEAT.

*gemiddelde en SD van alle variabelen opvragen.
DESCRIPTIVES VARIABLES=NetworkHomogeneity networksize SocialSupport
Education_ISCED
    Sex Age Marital_status Employement G14v30_a_dag G14v29_a_dag G14v29_b_dag
G14v29_c_dag G14v29_d_dag
  /STATISTICS=MEAN STDDEV RANGE.

*normaliteit afhankelijke variabelen checken.

DATASET ACTIVATE DataSet1.
PPLOT
```

```
  /VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag
  /NOLOG
  /NOSTANDARDIZE
  /TYPE=P-P
  /FRACTION=BLOM
  /TIES=MEAN
  /DIST=NORMAL.


*assumpties checken voor t test.
EXAMINE VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag BY Sex
  /PLOT BOXPLOT HISTOGRAM NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.

*skewness en kurtosis checken.
DATASET ACTIVATE DataSet1.
DESCRIPTIVES VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag
G14v29_d_dag G14v30_a_dag
  /STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.

*shapiro-wilkes test.
EXAMINE VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag
  /PLOT BOXPLOT HISTOGRAM NPPLOT
  /COMPARE GROUPS
  /STATISTICS NONE
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.

*pearson correlaties voor assumpties normaliteit.
CORRELATIONS
  /VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag Sex
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.

*t-test verschil sekse op PA.
T-TEST GROUPS=Sex(0 1)
  /MISSING=ANALYSIS
  /VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag
  /CRITERIA=CI(.95).
```

```
*regressie sekse op PA.

DATASET ACTIVATE DataSet1.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_a_dag
  /METHOD=ENTER Sex.


DATASET ACTIVATE DataSet1.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_b_dag
  /METHOD=ENTER Sex.

DATASET ACTIVATE DataSet1.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_c_dag
  /METHOD=ENTER Sex.


DATASET ACTIVATE DataSet1.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_d_dag
  /METHOD=ENTER Sex.

DATASET ACTIVATE DataSet1.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v30_a_dag
  /METHOD=ENTER Sex.
```

```
*stepwise regressie van PA met alle onafhankelijke variabelen en confounders.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_a_dag
  /METHOD=STEPWISE Sex  High Middle Low  Age lowsup mediumsup highsup
    NetworkHomogeneity networksize Married Unmarried Divorced Widowed Employed
Unemployed Retired Nonemployed
  /SAVE MAHAL COOK LEVER.

*stepwise regressie van PA met alle onafhankelijke variabelen en confounders.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_b_dag
  /METHOD=STEPWISE Sex High Middle Low Age lowsup mediumsup highsup  Age
    NetworkHomogeneity networksize Married Unmarried Divorced Widowed Employed
Unemployed Retired Nonemployed
  /SAVE MAHAL COOK LEVER.

*stepwise regressie van PA met alle onafhankelijke variabelen en confounders.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_c_dag
  /METHOD=STEPWISE Sex High Middle Low Age lowsup mediumsup highsup Age
    NetworkHomogeneity networksize Married Unmarried Divorced Widowed Employed
Unemployed Retired Nonemployed
  /SAVE MAHAL COOK LEVER.

*stepwise regressie van PA met alle onafhankelijke variabelen en confounders.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_d_dag
  /METHOD=STEPWISE Sex High Middle Low Age lowsup mediumsup highsup  Age
    NetworkHomogeneity networksize Married Unmarried Divorced Widowed Employed
Unemployed Retired Nonemployed
  /SAVE MAHAL COOK LEVER.
```

```
*stepwise regressie van PA met alle onafhankelijke variabelen en confounders.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v30_a_dag
  /METHOD=STEPWISE Sex High Middle Low Age lowsup mediumsup highsup  Age
    NetworkHomogeneity networksize Married Unmarried Divorced Widowed Employed
Unemployed Retired Nonemployed
  /SAVE MAHAL COOK LEVER.

*t-test om sekseverschillen te zien per individuele sport/beweging.
T-TEST GROUPS=Sex(0 1)
  /MISSING=ANALYSIS
  /VARIABLES=G14v29_a_dag G14v29_b_dag G14v29_c_dag G14v29_d_dag
G14v30_a_dag
  /CRITERIA=CI(.95).

*regressie per bewegingstype.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_a_dag
  /METHOD=ENTER Sex
  /METHOD=ENTER Age Sex
   /METHOD=ENTER Age Sex High Unemployed Divorced lowsup mediumsup highsup
NetworkHomogeneity networksize.


*regressie per bewegingstype.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_b_dag
  /METHOD=ENTER Sex
  /METHOD=ENTER Sex Age
   /METHOD=ENTER Age Sex High Employed lowsup mediumsup highsup
NetworkHomogeneity networksize.


*regressie per bewegingstype.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
```

```
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_c_dag
  /METHOD=ENTER Sex
  /METHOD=ENTER Sex Age
    /METHOD=ENTER Sex Age Employed lowsup mediumsup highsup
NetworkHomogeneity networksize.

*regressie per bewegingstype.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v29_d_dag
  /METHOD=ENTER Sex
  /METHOD=ENTER Age Sex
    /METHOD=ENTER Age Sex Unemployed lowsup mediumsup highsup
NetworkHomogeneity networksize.


*regressie per bewegingstype.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT G14v30_a_dag
  /METHOD=ENTER Sex
    /METHOD=ENTER Age Sex Employed Unmarried lowsup mediumsup highsup
NetworkHomogeneity networksize.

*t-test om verschillen in netwerkkenmerken te zien tussen seksen.
DATASET ACTIVATE DataSet1.
T-TEST GROUPS=Sex(0 1)
  /MISSING=ANALYSIS
  /VARIABLES=NetworkHomogeneity networksize
  /CRITERIA=CI(.95).

*chi square test sex-social support.
CROSSTABS
  /TABLES=Sex BY SocialSupport
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ PHI
  /CELLS=COUNT EXPECTED
  /COUNT ROUND CELL.
```

Appendix D. SPSS PROCESS output

Mediation sex → network homogeneity → walking
Run MATRIX procedure:

```
**************** PROCESS Procedure for SPSS Version 3.00 *****************

        Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
   Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
   Y  : G14v29_a
   X  : Sex
   M  : NetworkH

Sample
Size:  2377

**************************************************************************
OUTCOME VARIABLE:
 NetworkH

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,0696      ,0048      ,5194    11,5492     1,0000  2375,0000      ,0007

Model
              coeff         se          t          p       LLCI       ULCI
constant     2,2170      ,0221   100,1557      ,0000     2,1736     2,2604
Sex          -,1011      ,0297    -3,3984      ,0007     -,1594     -,0427

**************************************************************************
OUTCOME VARIABLE:
 G14v29_a

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,1307      ,0171     5,6142    20,6292     2,0000  2374,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1,5197      ,1663     9,1364      ,0000     1,1935     1,8458
Sex           ,3267      ,0980     3,3333      ,0009      ,1345      ,5189
NetworkH      ,3852      ,0675     5,7093      ,0000      ,2529      ,5175

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y
*****************
```

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
,3267	,0980	3,3333	,0009	,1345	,5189

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
NetworkH	-,0389	,0136	-,0679	-,0147

********** ANALYSIS NOTES AND ERRORS **********

Level of confidence for all confidence intervals in output:
95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.
Shorter variable names are recommended.

------ END MATRIX -----

Mediation sex → network size → biking
Run MATRIX procedure:

```
**************** PROCESS Procedure for SPSS Version 3.00 *****************

         Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : G14v29_b
    X  : Sex
    M  : networks

Sample
Size:  2493

**************************************************************************
OUTCOME VARIABLE:
 networks

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,0448      ,0020     3,0148     5,0072     1,0000  2491,0000      ,0253

Model
              coeff         se          t          p       LLCI       ULCI
constant     6,0044      ,0515   116,5540      ,0000     5,9034     6,1054
Sex          ,1562      ,0698     2,2377      ,0253      ,0193      ,2932

**************************************************************************
OUTCOME VARIABLE:
 G14v29_b

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,0812      ,0066     4,3183     8,2618     2,0000  2490,0000      ,0003

Model
              coeff         se          t          p       LLCI       ULCI
constant     1,6482      ,1566    10,5233      ,0000     1,3411     1,9554
Sex          ,3241      ,0837     3,8743      ,0001      ,1601      ,4881
networks     ,0253      ,0240     1,0553      ,2914     -,0217      ,0723

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y ******************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
```

```
     ,3241      ,0837     3,8743      ,0001      ,1601      ,4881

Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
networks      ,0040      ,0046     -,0038      ,0146

********************** ANALYSIS NOTES AND ERRORS
************************

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
     Shorter variable names are recommended.

------ END MATRIX -----
```

Mediation sex → network size → sport
Run MATRIX procedure:

```
**************** PROCESS Procedure for SPSS Version 3.00 *****************

        Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
   Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
   Y  : G14v30_a
   X  : Sex
   M  : networks

Sample
Size:  1773

**************************************************************************
OUTCOME VARIABLE:
 networks

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,0362      ,0013     2,8884     2,3246     1,0000  1771,0000      ,1275

Model
              coeff         se          t          p       LLCI       ULCI
constant     6,1722      ,0594   103,9322      ,0000     6,0557     6,2886
Sex           ,1234      ,0810     1,5247      ,1275     -,0353      ,2822

**************************************************************************
OUTCOME VARIABLE:
 G14v30_a

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,0795      ,0063     1,7957     5,6274     2,0000  1770,0000      ,0037

Model
              coeff         se          t          p       LLCI       ULCI
constant     2,1351      ,1248    17,1135      ,0000     1,8904     2,3798
Sex          -,1860      ,0639    -2,9122      ,0036     -,3113     -,0607
networks     -,0292      ,0187    -1,5590      ,1192     -,0660      ,0075

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y ******************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
```

```
    -,1860      ,0639    -2,9122      ,0036     -,3113     -,0607

Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
networks     -,0036      ,0038     -,0127      ,0019

********************** ANALYSIS NOTES AND ERRORS
************************

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
     Shorter variable names are recommended.

------ END MATRIX -----
```