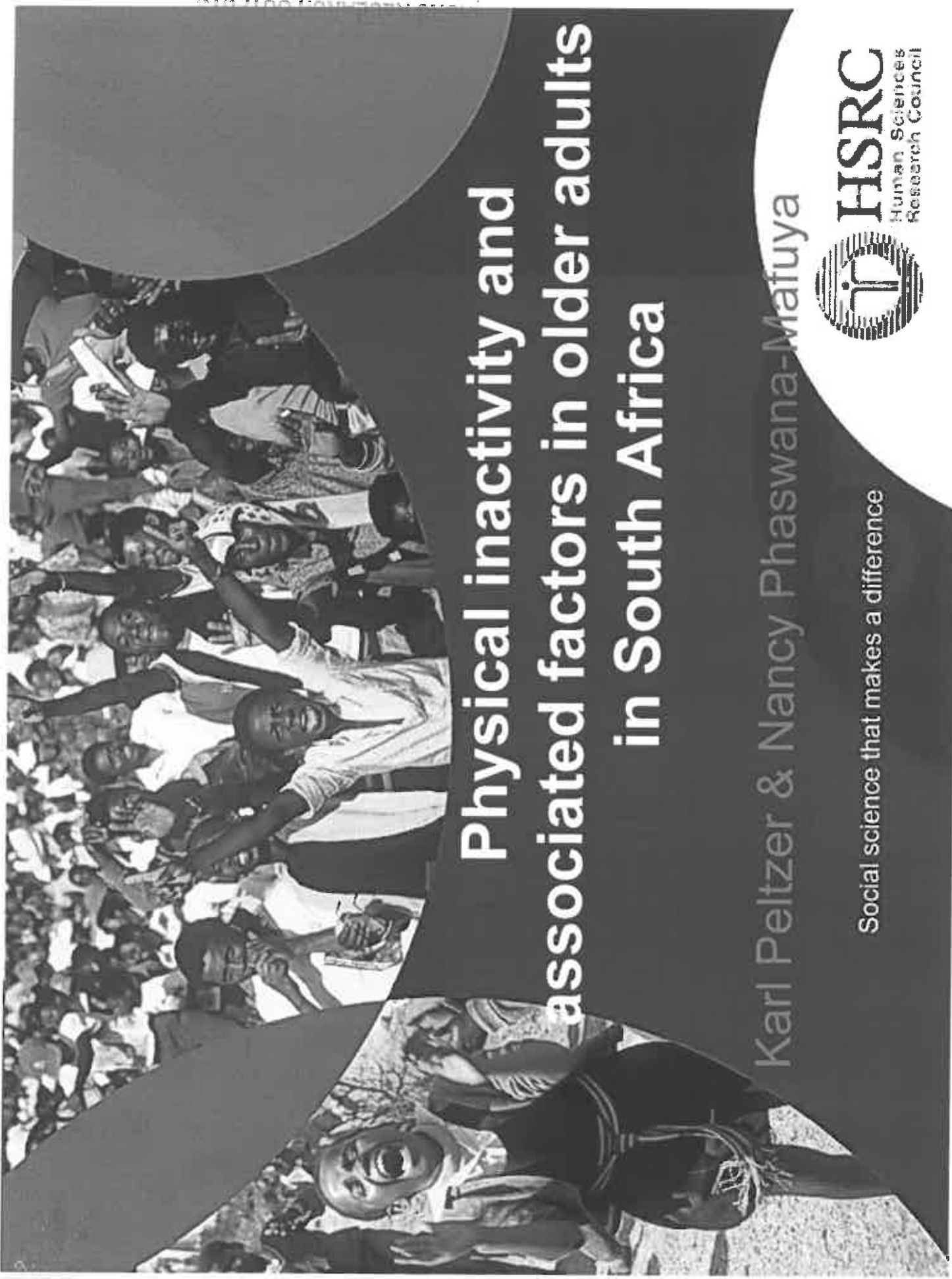


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Physical inactivity and associated factors in older adults in South Africa

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Introduction

- Physical inactivity is associated with increased morbidity and mortality and is a key component of healthy aging.
- There is little research on physical activity and associated factors among older adults in Africa.
- Study aims to investigate the prevalence and associated factors of physical activity in a national sample of older South Africans who participated in the Study of Global Ageing and Adults Health (SAGE) in 2008

Methods

- National population-based cross-sectional study with a sample of 3840 aged 50 years or older in South Africa in 2008.
- The SAGE sample design entails a two-stage probability sample that yields national and sub-national estimates to an acceptable precision at provincial level, by locality type (urban and rural), and by population group (including black, coloured, Indian or Asian and white).

Measures

- *Physical activity* was measured using the General Physical Activity Questionnaire (GPAQ).
- *Fruit and vegetable consumption*
- *Blood pressure*
- *Tobacco and Alcohol use*
- *BMI*
- *Depression*
- *Quality of Life*
- *Social cohesion*

Table 1: Sample characteristics and prevalence of physical activity among older South Africans

Variables	Total sample N (%)	Prevalence of physical activity		
		Low %	Moderate %	High %
All	3840	60.5	10.9	28.6
Age (years)				
50-59	1695 (49.9)	53.2	12.5	34.3
60-69	1233 (30.6)	65.4	9.8	24.8
70-79	661 (14.0)	70.3	8.0	21.7
80 and over	251 (5.5)	73.7	10.6	15.6
Gender				
Male	1638 (44.1)	57.2	11.1	31.7
Female	2202 (55.9)	63.1	10.8	26.1
Population group				
African Black	2053 (74.0)	57.7	11.9	30.5
White	269 (9.3)	55.7	11.2	33.2
Coloured	655 (12.8)	76.9	6.9	16.1
Indian or Asian	307 (3.8)	52.3	11.0	36.7
Marital status				
Single	512 (14.3)	60.9	8.7	30.3
Married	2007 (55.9)	58.2	11.8	30.0
Separated/Divorced	230 (5.9)	61.8	6.9	31.3
Widow	1020 (23.9)	65.4	10.5	24.1
Educational level				
No schooling	854 (25.2)	56.8	10.4	32.8
Less than primary	803 (24.0)	59.5	12.8	27.7
Primary	779 (22.4)	64.4	10.9	24.7
Secondary	923 (28.3)	59.6	10.0	30.5
Wealth				
Low	1482 (40.6)	59.8	12.2	28.1
Medium	731 (18.2)	58.1	11.2	30.6
High	1608 (41.2)	62.3	9.3	28.4
Geolocality				
Rural	1276 (35.1)	58.1	11.8	30.1
Urban	2561 (64.9)	61.8	10.4	27.8

Table 2: Level of physical inactivity in different domains of activities

Domains of physical inactivity	Total %	Men %	Women %
No vigorous activity at work	83.6 (79.3-88.1)	81.5 (76.9-86.6)	85.3 (79.6-91.0)
No moderate activity at work	58.4 (47.9-68.9)	59.3 (49.8-68.8)	57.6 (45.9-69.3)
No vigorous or moderate activity at work	55.0 (44.1-65.9)	54.3 (44.3-64.4)	55.5 (43.7-67.3)
No vigorous activity during leisure	95.8 (94.4-97.3)	94.6 (92.6-97.0)	96.5 (95.1-98.1)
No moderate activity during leisure	91.5 (87.6-95.5)	90.9 (87.1-95.1)	91.8 (87.6-96.0)
No vigorous or moderate activity during leisure	89.2 (84.9-93.5)	87.8 (83.2-92.8)	90.1 (85.7-94.5)
Did not walk or cycle from places to places	57.5 (48.8-66.3)	53.9 (45.8-62.0)	60.3 (50.6-70.1)

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Table 3: Multiple logistic regression of low physical activity prevalence in older South Africans

	Unadjusted Odds Ratio (95% Confidence Interval=CI)	Adjusted Odds Ratio (95% CI)
Gender		
Female	1.00	1.00
Male	0.78 (0.63-0.97)*	0.90 (0.69-1.15)
Age		
50-59	1.00	1.00
60-69	0.92 (0.51-1.68)	1.69 (1.21-2.73)**
70 -79	2.08 (1.23-3.50)**	1.79 (1.17-2.72)**
80 and over	2.47 (1.56-3.90)***	2.88 (2.02-4.09)***
Population group		
African Black	1.00	1.00
White	0.92 (0.51-1.68)	1.05 (0.60-1.83)
Coloured	2.45 (1.51-3.98)***	2.68 (1.62-4.45)***
Indian or Asian	0.81 (0.50-1.30)	0.76 (0.42-1.38)
Marital status		
Single	1.00	---
Married	0.89 (0.55-1.44)	---
Separated/Divorced	1.04 (0.52-2.08)	---
Widow	1.21 (0.67-2.18)	---
Educational level		
No schooling	1.00	---
Less than primary	0.99 (0.67-1.48)	---
Primary	1.22 (0.84-1.78)	---
Secondary	1.00 (0.57-1.74)	---
Wealth		
Low	1.00	---
Medium	0.93 (0.59-1.49)	---
High	1.11 (0.53-2.33)	---
Geolocality		
Rural	1.00	---
Urban	1.16 (0.56-2.42)	---

Multiple logistic regression of low physical activity prevalence

Other conditions			
Hypertension	1.21 (0.91-1.61)		---
Symptom-based depression	1.35 (0.85-2.14)		---
Diabetes	1.32 (0.85-2.07)		---
Obesity	1.76 (1.38-2.23)***		1.94 (1.42-2.65)***
Arthritis	1.69 (1.20-2.39)**		1.01 (0.77-1.29)
Daily tobacco use	1.01 (0.65-1.57)		---
Alcohol use (past month)	0.73 (0.48-1.11)		---
Insufficient fruits and vegetables	0.85 (0.52-1.40)		---
Activity limitation			
None	1.00		1.00
Mild	1.81 (1.15-2.87)*		1.57 (0.85-2.89)
Moderate/Severe/extreme	3.20 (2.02-5.06)***		2.54 (1.31-4.94)**
Social cohesion index	0.96 (0.93-0.99)*		0.96 (0.94-0.99)**
Quality of life			
Low	1.00		1.00
Medium	0.77 (0.51-1.15)		0.70 (0.46-1.05)
High	0.48 (0.27-0.83)**		0.70 (0.29-1.68)

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Discussion

- The study found that the largest proportion of low physical activity was during leisure compared to physical activity at work and walking or cycling from places to places.
- In many low and middle-income countries, occupational and transport-related activities contribute more to overall physical activity compared to leisure time activities (Armstrong & Bull, 2006; Ng et al., 2009)

Discussion

- In terms of health variables, the study found that being obese was associated with low physical activity, consistent with a study by Mummery et al. (2007).
- Unlike in some other studies this study did not find any association between hypertension, diabetes, depression symptoms, arthritis, tobacco use, inadequate fruit and vegetable consumption and low physical activity

Discussion

- Consistent with other studies, the present study found lack of social cohesion (Shibatta et al., 2009) and
- lack of quality of life was associated with low physical activity among older adults in the present study.

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