Correlates of Community-Based Physical Activity Levels: Examination of Age and Rural-Urban Differences

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Purpose

- Document age variations in physical activity

- Investigate rural-urban influences

- Examine personal and environmental correlates of meeting PA recommendations

Setting

The Brazos Valley
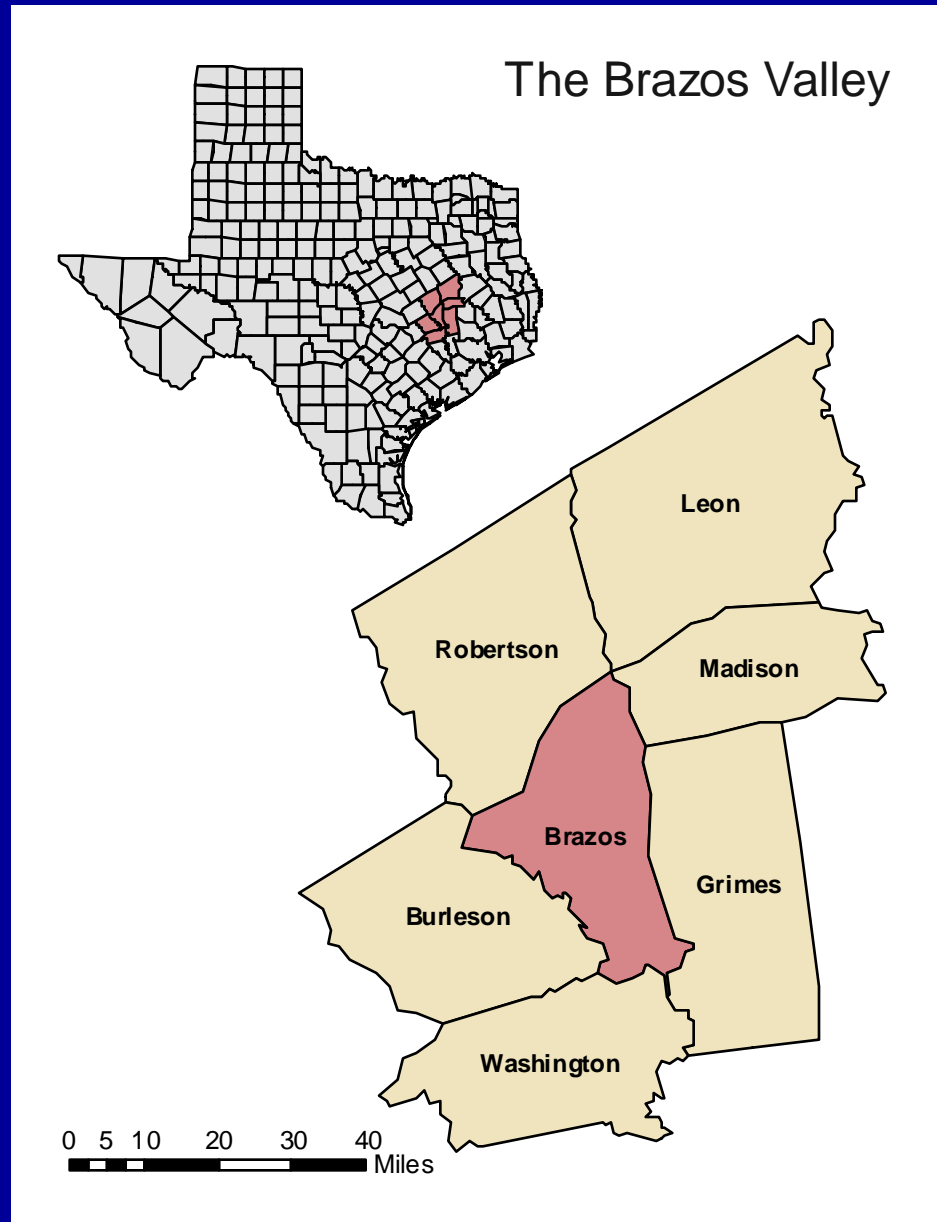
Methods and Measures

- Telephone-screened mail-out health assessment to adults 18 and older

- Community assessment to identify current status and set priorities

- Broad focus on demographics, health, health habits, health care, community and environment

Population Characteristics (N=2503)

- Mean age 43 years

- 50% women

- 24 % minority

- 36% less than high-school

- 29 % low income/poverty

- 65 % overweight/obese

- 48% live in rural counties

Rapid Assessment of Physical Activity

Examples of physical activity intensity levels:

Light activities
- your heart beats slightly faster than normal
- you can talk and sing

Walking Leisurely

Stretching

Sweeping or Light Yard Work

Moderate activities
- your heart beats faster than normal
- you can talk but not sing

Fast Walking

Aerobics Class

Strength Training

Dancing

Vigorous activities
- your heart rate increases a lot
- you can't talk or your talking is broken up by large breaths

Stair Machine

Jogging or Running

Football

University of Washington

Physical Activity in Each Category

Category	Sub-category	%*
Sedentary	Rarely or never physical active	13.9
Under-active		
	Some light or moderate /less than weekly	39.5
	Some light /weekly	81.0
Under-active regular		
	Moderate weekly /less than recommended	48.9
	Vigorous weekly /less than recommended	23.2
Active		
	Moderate /recommended 30/5	31.4
	Vigorous /recommended 20/3	23.4
Strength/Flexibility		
	Strength	31.2
	Flexibility	30.0

A Sense of Urban

Wolf Pen Creek Corridor

A Sense of Rural

%Meeting PA Recommendation by Age

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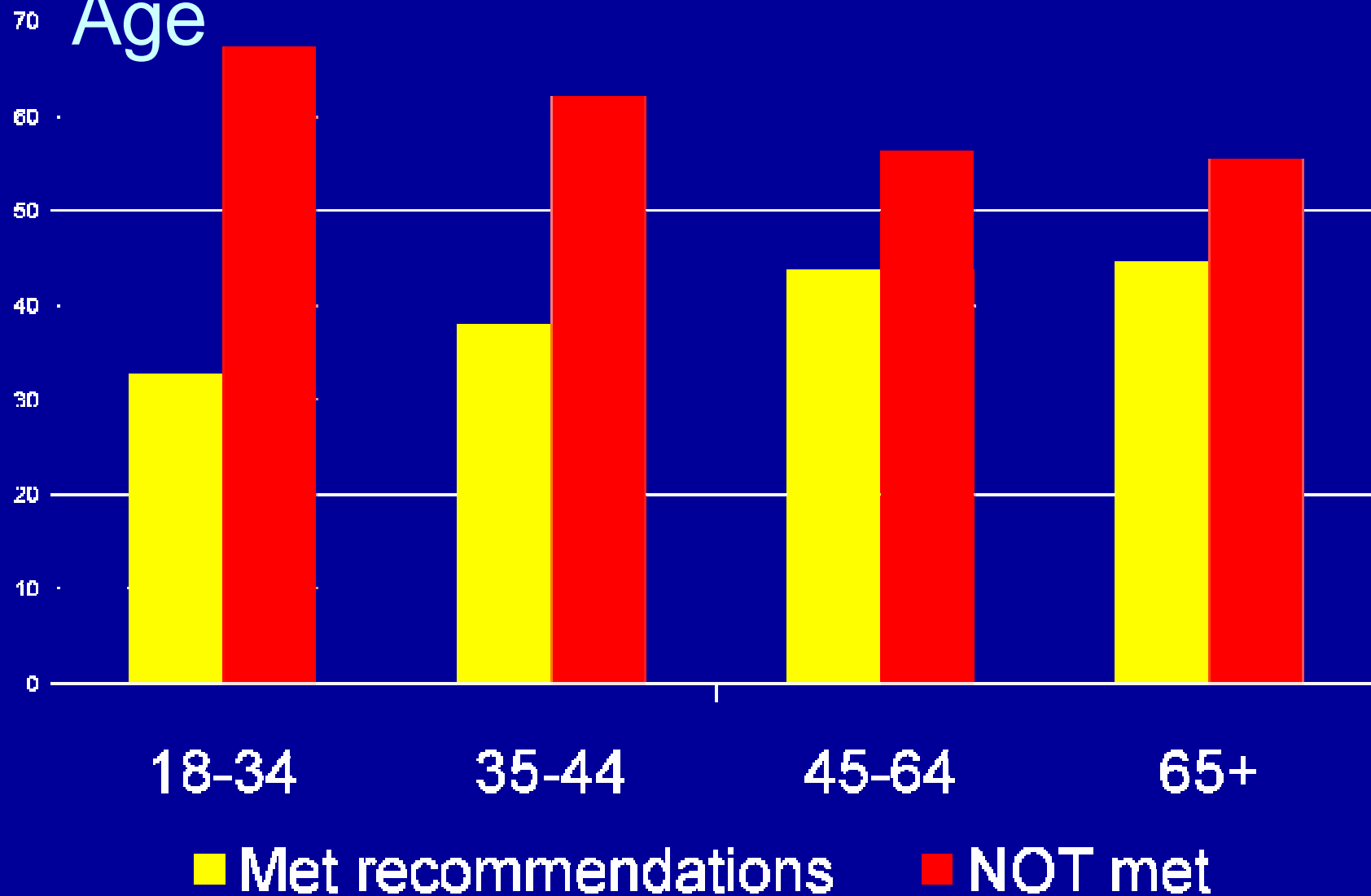
% Meeting PA Recommendation by County
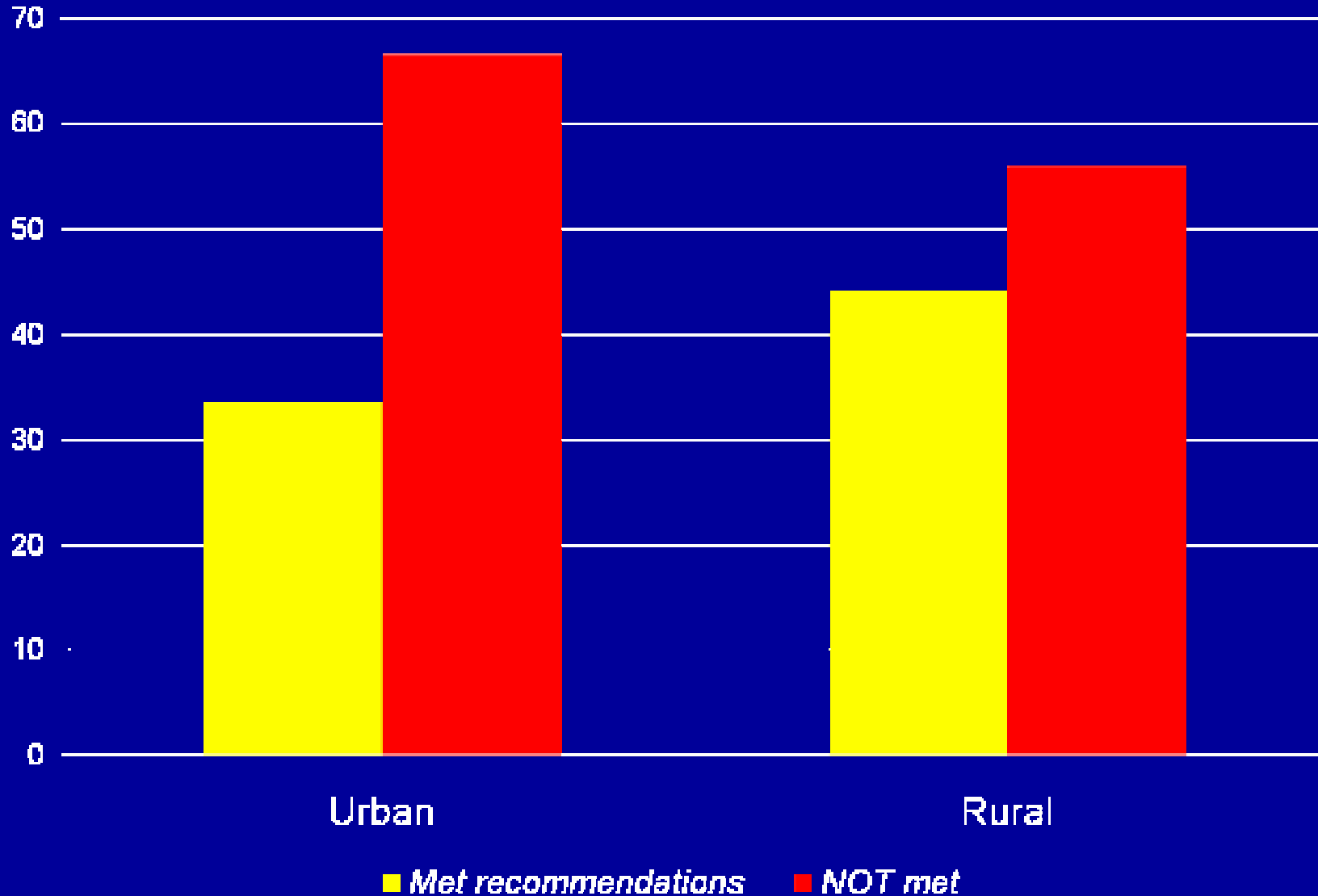
Neighborhood Characteristics
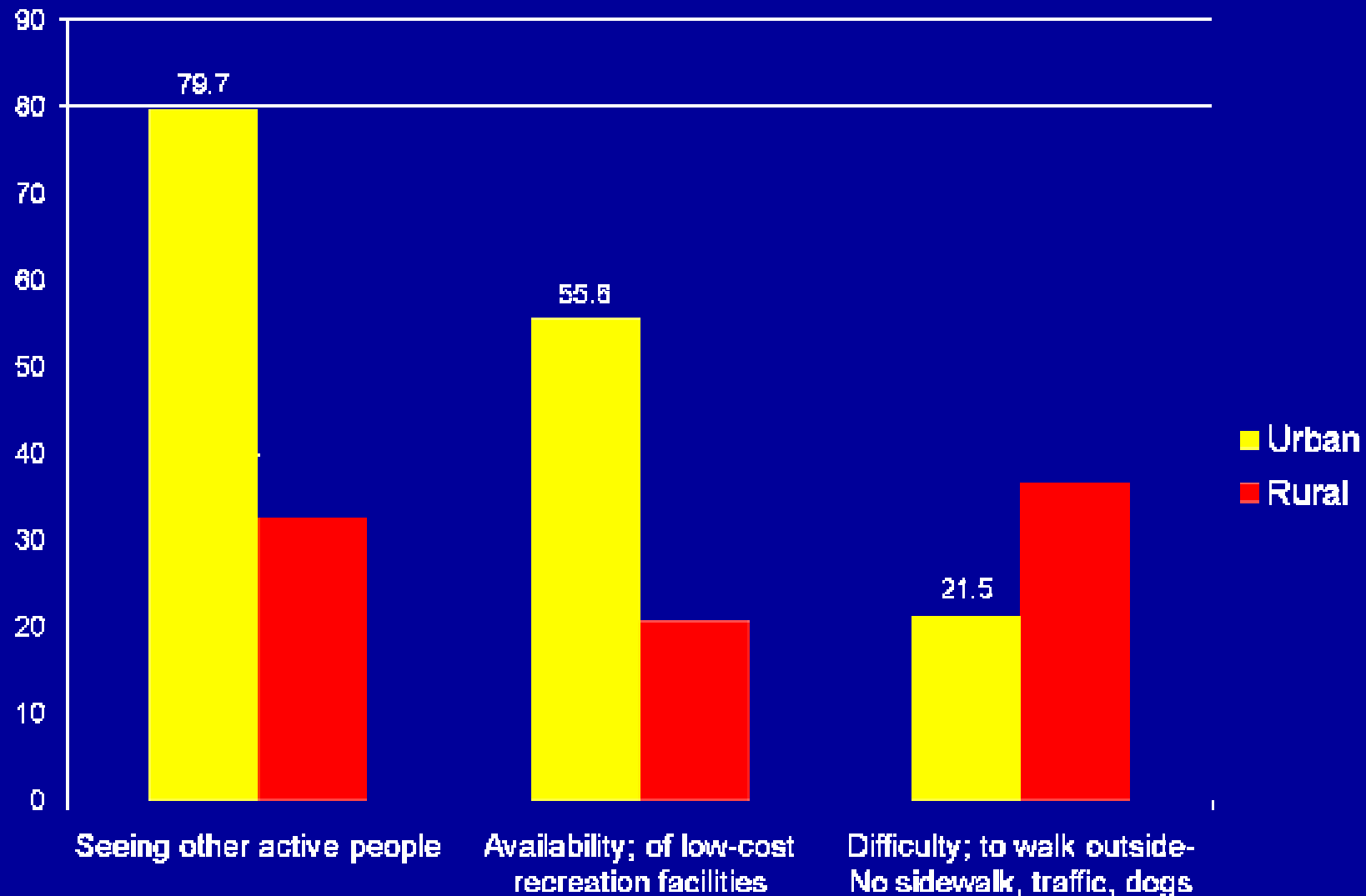
Multivariate Correlates to Meeting PA Recommendations

Variable	Urban	Rural
Age	*Older Adults and Baby-Boomers*	*n.s.*
Gender	*n.s.*	*Males*
Marital Status	*Not Married*	*Not Married*
Income Level	*Low Income*	*Poverty and Low Income*
General Health	*Better Perceived General Health*	*Better Perceived General Health*
BMI	*Normal Weight*	*Normal Weight*
Physical Environment	*Worse Perceived Physical Environment*	*Better Perceived Physical Environment*

Results from multivariate binary logistic regression
n.s. – No significant differences estimated

Research Implications

- Understand age/geographic residence influences

- Consider different ways of assessing environment

Policy and Practice Implications

- Identify what can be done to encourage activity in each area
- Engage in Building Healthy Communities for Active Aging initiative
- Share lessons learned with Active for Life Learning Network

Multivariate Correlates to Meeting PA Recommendations

Variables	Meet PA recommendations YES vs NO							
	Brazos County (urban)				Rural Counties			
	OR	95% CI for OR		Sig.	OR	95% CI for OR		Sig.
		Lower	Upper			Lower	Upper	
Age (years)								
Older 61+	**2.87**	2.11	3.91	**0.000**	1.07	0.81	1.41	0.648
Baby boomer 42-60	**2.67**	2.09	3.41	**0.000**	0.98	0.76	1.26	0.855
Young 18-41 (Reference)	1.00				1.00			
Gender								
Female	1.01	0.83	1.23	0.918	**0.57**	0.45	0.71	**0.000**
Male (Reference)	1.00				1.00			
Marital Status								
Married	**0.54**	0.44	0.67	**0.000**	**0.58**	0.45	0.75	**0.000**
Not married (Reference)	1.00				1.00			
Income level								
Poverty (below FPL)	0.90	0.67	1.20	0.470	**1.43**	1.01	2.02	**0.042**
Low Income (101-200% FPL)	**1.88**	1.37	2.57	**0.000**	**1.46**	1.08	1.98	**0.015**
Above Low Income (Reference)	1.00				1.00			
General Health								
Fair / Poor	**0.23**	0.15	0.34	**0.000**	**0.42**	0.27	0.66	**0.000**
Good	**0.28**	0.21	0.38	**0.000**	**0.64**	0.43	0.93	**0.020**
Very Good	**0.41**	0.31	0.53	**0.000**	0.83	0.58	1.21	0.332
Excellent (Reference)	1.00				1.00			
BMI								
Obesity	**0.53**	0.41	0.69	**0.000**	**0.60**	0.45	0.80	**0.001**
Overweight	0.80	0.63	1.00	0.055	0.92	0.70	1.21	0.535
Normal Weight (Reference)	1.00				1.00			
Underweight	0.57	0.27	1.20	0.140	1.73	0.56	5.34	0.339
Physical Enviroment								
Better (Positive score > 6)	**0.73**	0.59	0.89	**0.002**	**1.41**	1.10	1.81	**0.007**
Worse (Reference)	1.00				1.00			

Perceived Environment Items

- There are sidewalks on most of the streets in my neighborhood
- I see many people being physically active in my neighborhood
- Many shops, stores, other places to buy things are within easy walking or biking distance from my home
- My neighborhood has several free or low cost recreation facilities
- There are many interesting things to look at while walking through my neighborhood
- If I were to fall or get hurt on my walk there would be someone in the neighborhood who could help me
- There are problems in my neighborhood which make it hard to walk and go outside (streets, traffic, loose dogs)
- I am concerned if I walked or biked outside in my neighborhood I might be the victim of a crime