

Is Dispositional Optimism Associated with Subjective Physical Health Across Demographics?

David Giard, California Northstate University



Introduction

- Quality of physical health is associated with not only longevity but also with increased societal and individual costs of healthcare.
- Dispositional Optimism has been shown to improve overall physical health, both subjectively and objectively.
- Despite this, differences in demographics have largely been ignored by research.
- Understanding the generalizability across demographics could lead to the development of interventions aiding in the cultivation of optimism resulting in increased quality of life, lower healthcare costs and longer lifespans.

Research Question

- Does Dispositional Optimism affect subjective physical health?
- Do the effects vary based on demographic differences?

Methods

Sample

- Data used for analysis will come from the fourth wave of the National Longitudinal Study of Adolescent Health (AddHealth). Add Health is a nationally representative sample of adolescents and their social environment and health factors. N=5114.

Measures

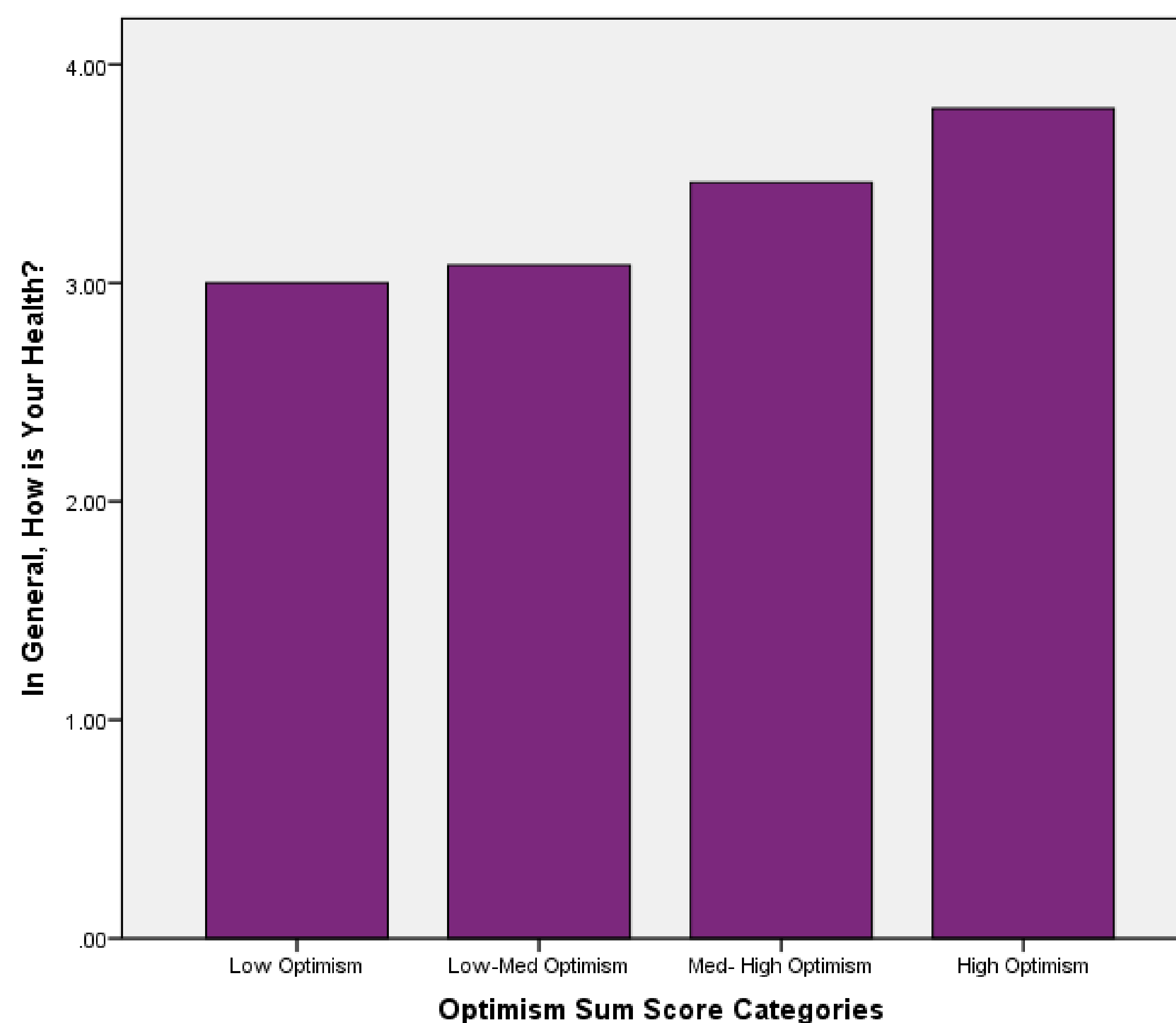
- The first variable is optimism. This is a secondary variable comprised of 4 questions taken from the LOT-R, such as "I'm always optimistic about my future".
- The response variable is subjective general health "In general, how is your health?"
- Demographic variables include biological sex, race and ethnicity, total household income and highest level of education.

Results

Optimism & Subjective Health

A linear regression showed that optimism sum score is associated with subjective general health at $p < .001$, with an R^2 of .082.

Results indicate that Optimism accounts for 8.2% of variance in general health.



Demographic Differences

A multiple regression was used to rule out confounds

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.232	.092		24.332	.000
	Optimism Sum Score	.070	.006	.183	12.672	.000
	Biological Sex	-.152	.026	-.083	-5.918	.000
	Total Household Income	.035	.005	.103	6.966	.000
	Highest Level of Education Achieved	.060	.006	.146	9.714	.000

a. Dependent Variable: How is your overall health

Significance = $< .001$ for all tested variables, indicating independent relationships with subjective health.

Results continued

Moderator

A Poisson Regression moderator analysis was used to test race/ethnicity as a moderator.

Race/Ethnicity consolidated	Likelihood Ratio Chi-Square	df	Sig.
Multiple Races	3.966	1	.046
Black or African American	16.562	1	.000
American Indian or Native American	.123	1	.725
Asian or Pacific Islander	5.033	1	.025
White	31.255	1	.000
Other	2.499	1	.114
Hispanic/Latino	6.877	1	.009

Dependent Variable: How is Your Overall Health
Model: (Intercept), Optimism Sum Score

This regression showed that race and ethnicity is in fact a moderator.

Discussion

- Dispositional Optimism is associated with subjective measures of health.
- Demographic differences including sex, age, household income, and highest level of education were found to be independent predictors of subjective health.
- Race/Ethnicity was a moderator of the effects on some races including American Indian and "Other" race

Future Directions

- It would be essential to generalize further by examining data involving more diverse age groups and more diverse demographics.
- Restricted age is a limitation which precluded looking at biological health outcomes.
- One possible expansion would be to compare data from previous waves of AddHealth to create a longitudinal study.