



Background

- Older Latinos are:
 - Projected to increase to 17.5 million by 2050
 - Are at greater risk than non-Latino whites for chronic health conditions including diabetes and metabolic disorders
- One strategy to mitigate these risks is participation in moderate/vigorous physical activity (PA)
 - However, Latinos are less likely to participate in leisure PA than non-Latino whites (37% vs. 50%)
- It is essential to examine the correlates of PA in order to inform intervention development
- Current correlate studies do not include:
 - Older Latinos
 - Objective measures of PA
 - Environment

Purpose

To identify the background (demographics, acculturation, environment, current health, and light PA) and intrapersonal (self-efficacy) correlates of moderate/vigorous physical activity (MVPA) in older community-dwelling Latinos.

Methods

Design:

- Secondary analysis of a descriptive, cross-sectional study of older Latinos ($N = 174$)

Subjects

Eligibility criteria:

- ≥ 50 years
- Self-reported Latino
- No ambulation disability
- No history or evidence of dementia
- Chicago metropolitan address

Recruitment:

- 11 sites in communities with moderate-to-large Latino populations

Setting:

Data were collected at home, community site, or research office



Acknowledgements:

The presenter is supported by the Jonas Nurse Leader Scholar 2014-2016, Jonas Center for Nursing Excellence & American Association of Colleges of Nursing. The original research was supported by Rush University Pilot Funds

Methods

Background Characteristics Measures

Demographics:

- Age, gender, marital status, education, perceived income (BRFSS)

Current health

- Perceived health
- Hypertension: SBP ≥140 or DBP ≥90, or taking blood pressure medications
- Chronic condition history
- CES-D: depressive symptoms

Environment

- Perceived neighborhood problems
- Using geo-coded addresses:
 - Concentrated disadvantage (American Community Survey)
 - Rates of index crime (8 major crimes; Chicago Police Dept., Illinois State Police)
 - Proximity to parks (linear distance using ArcGIS)

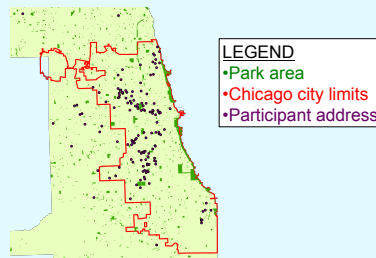
Acculturation:

- ARSMA-II: American and Latino orientation

Self-efficacy:

- McAuley's 17-item Self-Efficacy Scale for Overcoming Barriers to PA

Parks in Relation to Participants' Addresses



PA Measures

Self-report lifestyle PA:

- CHAMPS: Frequency and duration of 41 activities
- Total daily minutes of light PA
 - Total weekly minutes of moderate/vigorous PA
 - Total weekly minutes of leisure MVPA

Accelerometer:

- Actigraph GT1M
- Total daily minutes of light PA
 - Total daily minutes of MVPA
 - Intensity cut-offs (Miller et al., 2010):
 - Light: 100-1951 counts/min (< 3 METs)
 - Moderate: 1952-5724 (3.0-6.0 METs)
 - Vigorous: >5724 (>6.0 METs)



Data Analysis

- 3 linear regression analyses:
- Total weekly minutes of MVPA (self-report) regressed on background characteristics
 - Total weekly minutes of total leisure MVPA regressed on background characteristics
 - Total daily minutes of MVPA regressed on background characteristics (accelerometer)

Results

Demographics ($N = 157$)*

Age (years; <i>M, SD</i>)	66.0 (9.1)
Women (%)	72.0
Married (%)	42.0
Education (%)	
< HS graduate	82.8
HS graduate	17.2
Perceived income (%)	
Low	68.8
Medium	26.1
High	.6

*Calculated based on missing data

Regression of self-report MVPA on background characteristics

Variable	β
Light physical activity (self-report)	.23*
Self-efficacy	2.91*

Regression of accelerometer MVPA on background characteristics

Variable	β
Age	-.62*
Gender	-14.82**
Depressive symptoms	-13.43*
Light PA (accel)	.10***
Self-efficacy	.35***

* $p < .05$, ** $p < .01$, *** $p < .001$

Physical Activity

Self-report (min/week)	(<i>M, SD</i>)
Light PA	601.4 (570.0)
MVPA	268.8 (218.8)
Leisure MVPA	234.2 (242.9)
Accelerometer	(<i>M, SD</i>)
Light PA (min/day)	257.3 (76.5)
MVPA (min/day)	31.2 (30.3)

Regression of self-report leisure MVPA on background characteristics

Variable	β
Distance to parks	-.05*
Self-reported health	-59.08*
Light physical activity (self-report)	.20***
Self-efficacy	2.13**



Discussion

- Consistent with previous research:
 - Being older, male, and more depressive symptoms were significantly related to MVPA per accelerometer
 - Better self-rated health was related to more leisure MVPA per self-report
 - Greater light PA and higher self-efficacy are consistent predictors of greater MVPA
- Future intervention development should consider:
 - Individual differences in physical activity intensity (both light and MVPA)
 - The impact of neighborhood environment on leisure MVPA, such as distance to parks

Limitations:

- Cross-sectional design
- Sample limited to Latinos
- Volunteer sample