Perceived Constraints to Leisure Time Physical Activity among Latinos

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Latinos and Physical Activity

• While the rising trend in obesity cuts across all social classes, the prevalence of obesity and the severity of the consequences from obesity-related diseases are greater in the Latino population

• Attributed to Latinos disproportionately living in communities that encourage unhealthy food choices and discourage physical activity

(Woodward-Lopez & Flores, 2006)
Constraints to Physical Activity

- Identifying constraints to PA among Latinos is an important research need.

What are constraints?
- Constraints are factors that are perceived or experienced by individuals to limit the formation of leisure preferences and/or inhibit participation and enjoyment in leisure.
Past PA Research with Latinos

- Time
- Accessibility
- Lack of Knowledge
- Safety/Fear of Crime

(Cronan, Shinew, & Stodolska, 2008; Marquez, McAuley, & Overman, 2004; Schneider, Stanis, & Chavez, 2008; Stodolska et al., 2007)
Research Purpose

- While we have identified constraints (or barriers) specific to Latinos, few have compared relative perceived importance.

- Study Objectives
  1. Examine and compare perceived constraints to PA among Latinos.
  2. Compare constraints based on self-reported leisure time physical activity (LTPA), age, gender, and income categories.
Methodology

• Partnered with El Pueblo
  ▫ Non-profit advocacy Latino organization
  ▫ Promotores (community health leaders) distributed questionnaire to constituents

• N = 457; 91% Return Rate

• Constraint measure adopted from previous research in multiple PA settings (e.g., Alexandris & Stodolska, 2004)
  ▫ 20 items
  ▫ 7 variables
Measured Constraints

**Intrapersonal**
- Psychological – not confident; not fit
- Safety – do not feel safe; fear of crime

**Interpersonal**
- Partners – no one to go with; friends don’t like

**Structural**
- Time – too busy at home, with work or friends
- Knowledge – Don’t know where, no one to teach
- Accessibility – no transportation, no parks or facilities near home
- Facilities – poor quality; too crowded

Internal reliability ($\alpha = .61 - .86$)
Results

Leisure PA Segments (Stanford Brief PA Survey - Taylor-Piliae et al., 2006)
- Inactive (N = 163, 50%)
- Light-Inactive (N = 54, 16%)
- Moderate (N = 80, 22%)
- Hard (N = 29, 8%)
- Very Hard (N = 13, 4%)

Gender
- 58% female

Age
- Range = 18-83, M= 34.9, SD = 11.4
- Categories: 18-35 (57%); 36-55 (36%); 56 – 83 (5%); missing (2%)

Income (yearly household income)
- Less than $20,000 (35%)
- $20,000-39,999 (35%)
- $40,000–59,999 (13%)
- $60,000 or more (8%)
- Did not respond (9%)

Generation
- 78% were born outside of the US
- 14% 1st generation Americans (born in the US)

Country of Origin
- 52% were born in Mexico
Results

81% indicated that they would like to be more active

Constraints (Overall Means)
1. Partners = 2.84
2. Knowledge = 2.83
3. Accessibility = 2.82
4. Time = 2.77
5. Facilities = 2.66
6. Psychological = 2.53
7. Safety = 0.92

Scale = 1 (strongly disagree) to 5 (strongly agree)
Higher the # → the higher the constraint.
Segmentation MANOVA Results

- LTPA
  - Overall significant difference [Wilks’ $\Lambda = .83$, $F(28, 11184.04) = 2.289$, $p < .001$, $\eta = .05$].
    - Post hoc significant for:
      - Knowledge of PA ($p < .001$, $\eta = .08$)
      - Access ($p = .001$, $\eta = .06$)
      - Partners ($p = .001$, $\eta = .06$)
      - Psychological constraints ($p = .001$, $\eta = .05$)
      - Time ($p = .001$, $\eta = .05$)
    - Post hoc not significant for:
      - Facility ($p = .28$, $\eta = .02$)
      - Safety ($p = .16$, $\eta = .02$)
Constraint Comparison for Leisure PA

The graph illustrates the comparison of constraints for leisure physical activity (PA) across different levels of activity intensity: Inactive, Light-inactive, Moderate, Hard, and Very Hard. The constraints are represented by various lines:

- Knowledge
- Access
- Partners
- Time
- Psychological

The y-axis represents the constraint levels ranging from 1.8 to 3.2, while the x-axis represents the activity intensities from Inactive to Very Hard.
MANOVA Results

• Age
  ▫ No significant differences [Wilks’ $\Lambda = .96$, $F(14, 650) = 1.04$, $p = .41$, $\eta = .02$] and

• Gender
  ▫ No significant differences [Wilks’ $\Lambda = .95$, $F(7, 325) = 2.43$, $p = .02$, $\eta = .05$].
MANOVA Results

INCOME:

• Overall significant differences
  ▫ [Wilks’ $\Lambda = .82$, $F(21, 879) = 2.9$, $p < .001$, $\eta = .06$].
    • Post hoc significant for:
      • Facilities ($p < .001$, $\eta = .06$)
      • Psychological constraints ($p = .001$, $\eta = .05$)
      • Safety ($p = .001$, $\eta = .05$)
      • Accessibility ($p = .003$, $\eta = .04$)
    • Post hoc not significant for all other variables.
Constraint Comparison for Income

![Graph showing constraint comparison for different income brackets](image)
Key Findings & Implications

• Salience of Constraints
  ▫ Overall means - Non-Latino samples using identical measures have been lower.
  ▫ Time – biggest perceived constraint in most other studies (quantitative and qualitative)...not with our sample.
  ▫ Lack of knowledge about places and programming and lack of opportunities due to transportation, money, or location may hinder PA
  ▫ Partners – Promotores interviews
Key Findings & Implications

• Segmentation
  ▫ **Less Active -> More Constraints**
    • Inactive highest in all categories; Active lowest
  ▫ **Income**
    • Lowest Income
      • Safety (not a big factor in this study except with this segment)
      • Internal factors (lower PA competence)
  ▫ **Gender**
    • No differences at least for Leisure Time PA, not found to be the case for overall PA (Marquez & McAuley, 2006)
  ▫ **Age**
    • No differences
Key Findings & Implications

- Policy measures specific to Latinos
  - Marketing materials that emphasize locations and programming
  - Introductory programming dedicated to those less active
  - Programming supporting participation with partners, and transportation to PA opportunities.
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Questions

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