

Outdoor Play & Extracurricular Activity Among Latino Children



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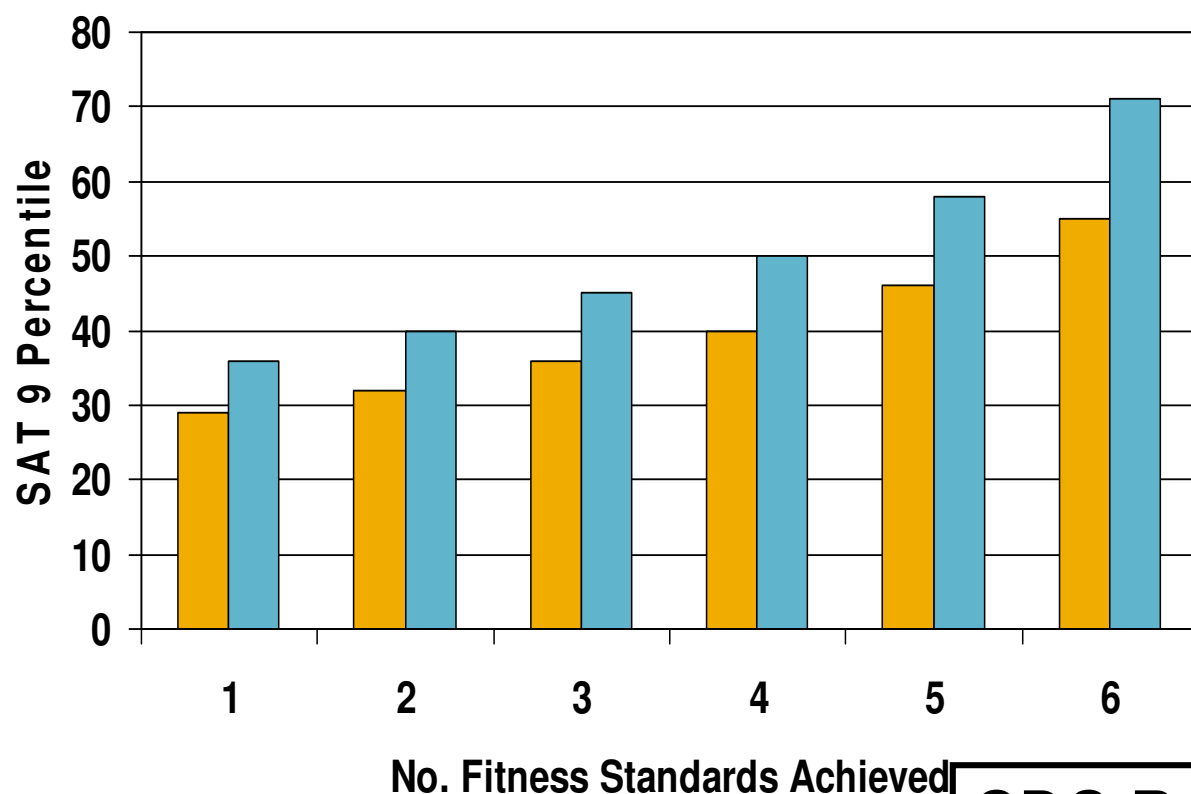
“Daily physical activity is that magic pill”: Benefits for Children

- ◎ Chronic disease prevention
 - Hypertension, type 2 diabetes, obesity, CVD.
 - Improves overall health
- ◎ Cardiovascular system
- ◎ Musculoskeletal system
- ◎ Mental health, psychological and emotional well-being
 - Reduces stress & symptoms of depression and anxiety
 - Improves self-esteem

(IOM, 2005)



Children who are physically active do better in school



Fitness & Academic Achievement

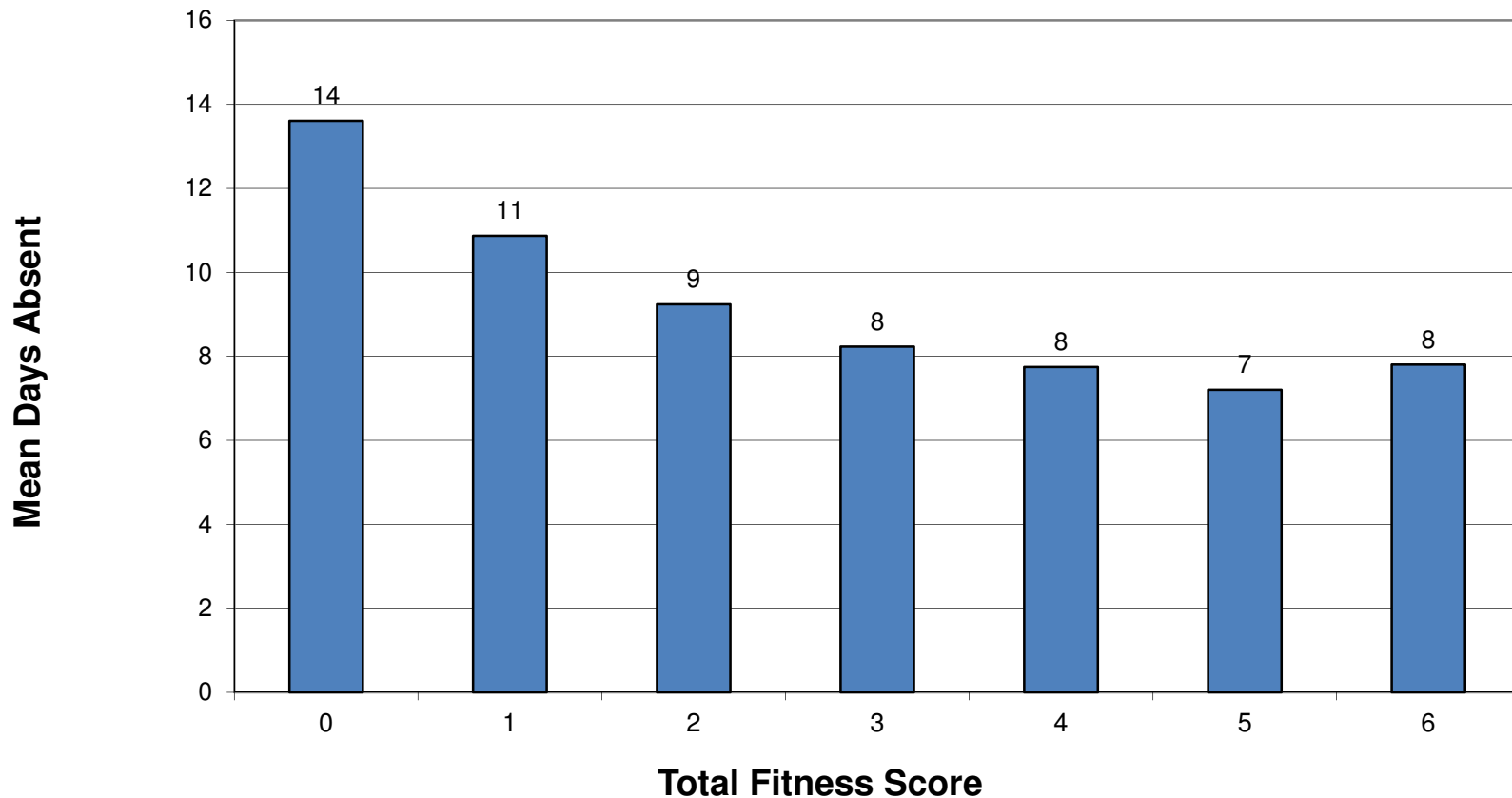
- California ('02)
- Texas ('09)
- New York ('09)
- Louisiana ('10)

CA Dept. of Education, 2002
Grade 5, SAT Scores (Grissom, 2005)

CDC Report 2010:
“Substantial evidence that
PA can improve academic
achievement”

Fit students miss less school...

-Grades 3–12, 2007-08 Austin ISD-



Data source: AISD District records - All students grades 3 through 12 who had attendance and fitness data in 2007–2008 (n = 45,787)

Sedentary Behavior: *Too Much Sitting!*

-Review by Owen et al., 2010-

- [AusDiab Accelerometer Study](#): Increased breaks in sitting beneficially associated with waist circumference, BMI, and other physiologic measures, independent of sedentary time & MVPA. (Healy et al., 2008).

- [Canada Fitness Survey](#): Canadians who reported most of day sitting had poorer long-term mortality outcomes. Associations held even among those who were physically active (Katzmarzyk 2009).

- [Follow up AusDiab Study](#): Each 1-h increment in TV time associated with increased risk of all cause and CVD mortality rates, respectively (Independent of PA) (Dunstan et al., 2010).

- [U.S. \(n=7744 men\)](#): >10hrs sitting/week in cars & >23 hrs/week watching TV and in cars = 82% and 64% increased risk of dying from CVD (Warren et al., 2010)



U.S. & Texas Children

Childhood Obesity

- ~17% of U.S. children 2-18 years are obese (Ogden et al, 2012).
- In Texas, 47% of Hispanic children are obese vs. 26% non-Hispanic blacks and 23% non-Hispanic white children (Arons, 2011).

Physical Activity (& Inactivity)

- <50% of children and adolescents meet recommendations of 60 minutes of daily PA (Troiano et al, '08)
- Inactivity (no PA in last 7 days): African-American (19.6%) and Hispanic (15.9%) compared to White (11.0%) high school students (Eaton et al., 2012).

Children's engagement in nature/outdoor activity and physical activity: a systematic review

Vanessa Martucci, MPH Thesis

- **Study Objective:** To assess the effect of children's engagement in outdoor activity on children's physical activity (PA).
- **Methods:** Systematic review
- **Findings:**
 - N=169 articles initially identified; n=11 eligible for inclusion in review.
 - Studies designs: cross-sectional (n=9), RCT (n=1), cohort (1).
 - Study participants: 3-15 years.
 - PA measured by accelerometers, pedometers, observ. or surveys.
 - A majority of the studies (9/11) found a positive association between time spent outdoors and physical activity in children and adolescents.
 - 5 found association specifically between time spent outdoors in greenspace and physical activity.
- **Conclusion:** Findings support the positive association between time spent outdoors and PA in children and adolescents.

Outdoor Play

- **Less play and outdoor activity since the 1970s:**
 - Children have lost 12 hours of free time a week
 - 25% decrease in play
 - 50% decrease in outdoor activities
- **Six percent** of children ages 9-13 played outside on a weekly basis (McCurdy et al., 2010).



Outdoor play and extracurricular activity

Nicole Suarez, MPH Thesis

Background

- CINCA Partnership for Child Wellness Initiative
- Dell Center for Healthy Living: Intramural Funding

Specific Aims

- To explore facilitating factors and barriers for outdoor play and extracurricular activities in majority Hispanic children in central Texas (parents).
- To examine the frequency, duration, and attitudes towards outdoor activity and extracurricular activities (children).

Methods

Focus Groups

- 4 focus groups
- n= 28 parents (24 female)
 - Primary Language Spanish (n=24; n=3 both)
 - 20-39 years: n=20
 - High school or less: n=23
- Location- El Buen Samaritano
- Analysis: Content analysis



Child Survey

- 2 East Austin elementary schools
- Self-administered questionnaire: 3rd & 4th grade students

Parent Focus Group Findings

School Support

- Parents identified various ways that their child's school is promoting activity:
 - PE, school open gym, ACES, Kids Café, Marathon Kids, CATCH, and playground markings, .
 - "Sí tienen eso de los números. Sí los sacan hacer ese tipo de ejercicio y aprendizaje." [Yes they have those numbers. Yes they take them out to do that type of exercise and learning.]
- Need for more afterschool programs and programs for preschool children.



Extracurricular Activities: *Barriers*

Cost Barriers

- “Estoy buscando una actividad que ellos (los niños) juegan un deporte, pero es muy caro.”

[I am looking for an activity where they (the children) can play a sport, but it is very expensive.]



Extracurricular Activities: *Barriers*

Age Barriers

- “Las edades de mis hijos a veces se me hace un poco complejo. Tengo una niña de 3 años y una de 11 años. Entonces a veces no las puedo meter al mismo lugar.”
- [My children’s ages sometimes makes it a bit complicated. I have a 3 year old and an 11 year old. Sometimes I cannot put them in the same place.]

Extracurricular Activities: *Barriers*

Language and Discrimination

- “Yo he visto que hay mucha discriminación en los equipos. Meten a niños que son amiguitos y que son de tal escuela y que se conocen. Y porque ellos si saben más y a los de nosotros los hacen a un lado.”
- [I have seen a lot of discrimination on the teams. They put in the kids that are friends, that are from certain schools, and that know each other. And they push our children to the side.]

Outdoor Activity: *Barriers*

Safety as Barrier to Outdoor Activity

“Es la falta de confianza con la gente. La seguridad es muy importante.” [It is the lack of trust with people. Safety is very important.]

- Not enough police surveillance, homeless people, insufficient lighting, crime, drugs, strangers.
- Lack of infrastructure (speed limit signs, speed bumps, sidewalks)



Outdoor Activity: *Barriers*

Technology

- “Antes no había tecnología como ahora. Ahora como los iPads les llaman las nanas”.
[Back then there wasn’t technology like there is today. Today the iPads are like the babysitters.]

Lack of Time/Opportunity

- **Parent Childhood Experiences:** “Entonces había mas oportunidad de jugar a la cuerda, a correr, con un palo y una piedra y era beisbol. Usábamos la imaginación para jugar.”

[We had more of an opportunity to play jump rope, to run, play with a stick and a rock and that was baseball. We used our imagination to play.]

Physical Activity: *Facilitating Factors*

Family Social Support

- Parents unanimously expressed that it was the parents' responsibility to motivate children to be active.
- "Bueno nosotros vamos a un gimnasio en donde hay actividad para todos. Lo hacemos en familia. Hay albercas, Zumba y los grandes hacen pesas."
[Well we go to a gym where there is activity for all. We do it as a family. There are pools, Zumba, and the older ones do weights.]

Findings: Student Survey

Study Sample

- n = 2 public elementary schools
- n=95 3rd & 4th grade students; Mean age: 9 years
- Ethnicity:
 - Hispanic (84.8%),
 - African American (5.4%)
 - White (4.4%)
 - "Other" (5.4%).
- Language Spoken at home
 - English and Spanish at home (47.9%);
 - 28.7% only spoke English at home with parents,
 - 23.4% said they only spoke Spanish at home.

Played outdoors for ≥ 30 minutes on each of the past 7 days (outside of school time)

Grade

- 44.8% 3rd grade students
- 21.2% 4th grade students

Sex: No difference

Ethnic Group

- 37.7% Hispanics
- 66.7% African Americans
- 33.3% White students

Language

- 40% of English only speakers
- 35% of Spanish only speakers
- 35.5% of Both English & Spanish speakers

Afterschool Activities: Where do you spend most of your after school time?

■ **Playing in the streets**

- 33.9% 3rd grade students
- 39.4% 4th grade students

■ **Extracurricular activity afterschool**

- 8.7% 3rd grade students
- 15 % 4th grade students

■ **Indoors with family watching TV**

- 22.6% 3rd grade students
- 30.4% 4th grade students

Outdoor & Indoor Activities:

Attitudes

How much do you like playing outdoors in nature? (“A lot”)

- Boys (79%) vs. Girls (90%)
- White (75%), AA (100%), Hispanic (87%).

Playing outdoors with friends is “very” important

- ~80% (no difference by grade or gender)
- White students (100%) more likely than AA (60%) or Hispanic (83.3%).

Video games are “not at all important”

- Girls (62%) vs. Boys (21%)
- African American (20%), Hispanic (46%) and White (50%).

Social Support

Outdoor Play

- I have a parent who encourages me to play:
 - Boys (32%) vs. Girls (42%)
 - Whites (50%) vs. AA (20%) and Hispanic (39%)
- I have a teacher who encourages me to play:
 - Boys (45%) vs. Girls (54%)
 - Ethnicity (40-50%) (no difference)
 - English only (59%) vs. Spanish only (45%)
 - 3rd (53%) vs. 4th (46%)

Extracurricular Activities

- I have a parent who encourages me to join:
 - Boys (32%) vs. Girls (45%)
 - Whites (25%) vs. AA (60%) and Hispanic (45%); English (50%) vs. Spanish (40%)
- I have a teacher who encourages me to join...
 - AA (60%) vs. White (50%) vs. Hispanic (37%)
 - English only (44%) vs. Spanish only (54%)

Summary

■ Outdoor Play

- Students expressed overall positive attitudes towards outdoor play; more positive attitudes towards video games among boys. Video games were a barrier noted by parents.
- ~1/3 play outdoors every day.
- Safety: Hispanic parents = safety concerns (Wilson et al., '04).
- <50% of parents/teachers encourage outdoor play/extracurricular activity.

■ Extracurricular Activities

- Parents expressed need for more low-cost afterschool/extrac. opportunities (plus considerations for Spanish-speakers; mixed age). Only 9-15% of children in afterschool programs.
- Cost: a major barrier to afterschool/nature activities.

Food for Thought/Opportunities...

■ School-Based

- Recess! Students engage >50% in MVPA (Springer et al., 2013).
- Every TEK: outdoor and indoor strategy for teaching?
- Enhancement of “outdoor teaching” environment (markings, nature trails, gardens, etc.) & need for teacher training...
- Wellness teams: expand mission to include outdoor activity.
 - Student nature clubs? Nature summits? Role for CINCA?

■ Extracurricular Activities

- Need for more afterschool programs/outreach efforts- especially for lower income children. (CTAN, 2011)
- Central Texas Afterschool Network: *policy, practice & training*

Thank you



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