



Barriers and facilitators for physical activity in rural and urban middle school youth

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Presenter Disclosures

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- The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:
 - "No relationships to disclose"



Rationale

- The prevalence of overweight and obesity in youth is emerging as a major global health concern
- Recent literature has suggested that rural residence might increase the risk of overweight and obesity in youth
- Low levels of physical activity (PA) have been observed in rural youth compared to their urban counterparts



Rationale

- Many previous studies have been driven by a socio-ecologic framework which identifies factors at the intra-personal, inter-personal and community levels
- Recent studies have concluded that rural youth encounter unique barriers and facilitators for PA
- More research is needed to identify modifiable determinants of physical activity particularly in rural youth



Purpose

- The present investigation employed a qualitative approach using focus group discussions to achieve four goals, which were to:
 1. examine PA barriers reported by middle school youth and their parents
 2. examine PA facilitators reported by middle school youth and their parents
 3. explore rural/urban differences in reported PA barriers/facilitators; and
 4. examine suggestions for increasing PA of youth in the future.



Participants

- Forty-one parents/guardians
 - 20 rural, 21 urban, 10% male
 - mean age = 41.0yrs
 - 19.6% Hispanic/Latino
- Fifty children
 - 22 rural, 28 urban, 44% male
 - mean age = 12.6yrs,
 - 21.6% Hispanic/Latino

Procedure



- Participants were recruited through letters sent home with students in one rural and two urban middle schools
- Participants attended evening meetings where they completed a survey and participated in a focus group
- Thirteen focus groups were conducted in total
 - Seven rural
 - One held in Spanish
 - Six urban

Analyses



- Focus group recordings were transcribed verbatim.
- NVivo (Version 8) was used to organize and manage focus group transcripts.
- A master codebook was developed by two independent coders which consisted mainly of deductive codes, generated from research questions and the moderator guide.
- All 13 focus group transcripts were then coded independently using the codebook to assign codes to appropriate segments of text in each transcript.
- After independent coding, coders met to discuss coding decisions and resolve discrepancies.

Results: Parent Reported Barriers



- Most rural parents reported that recreation centers and other centers for PA were located in urban areas, at least a 20 minute drive from their homes
- Urban parents also mentioned that resources such as a local recreation club and newer parks were being built outside the city, in the 'suburbs', a long drive from their downtown residences
- Participants in one urban group noted that there were venues for ice-skating and skate boarding in the area, but these were not activities that "ethnic kids" would enjoy
- Safety was indicated as a concern for urban parents



Results: Youth Reported Barriers

- Adolescents were cognizant of their parents' safety fears and cited this concern as a common constraint to their activity participation
- Both urban and rural youth reported their parents' supervision and vigilance to neighborhood threats reduced their opportunities to be outside and to be active
- Youth in public activity spaces and recreation programs "felt watched" which reduced their desire to visit these sites/programs and be physically active
- Students and parents both reported zoning policies that districted students to attend a school not within walking or biking distance to school



Results: Facilitators

- Parents perceived that children were in an important time in their lives for establishing peer relationships and noted that peers were the ones with the greatest influence over children
- Youth, like parents, frequently reported participating in active (e.g., basketball, walking around town) pursuits with peers
- Similar to their parents, youth mentioned facilities, such as fields, basketball courts, and community centers as facilitating PA



Results: Rural/Urban Differences

- Different safety concerns were salient to urban as compared to rural parents
 - Urban parents expressed fear of the social environment of PA areas, which might include drug dealers and gangs
 - Conversely, rural parents were less concerned about crime
- Urban youth did describe gangs and drugs as legitimate dangers while rural youth identified vandalism, hunters, and isolated stretches of land as environmental dangers
- Urban parents reported that there were facilities in their areas where youth could be active compared to rural parents
- Rural parents, compared to urban parents, reported greater importance of parental PA role-modeling as a facilitator

Suggestions for Future PA Venues



Group	Suggestions for future PA venues
Urban Parent Groups (n = 3)	<ul style="list-style-type: none"> • Skating rink, YMCA, Boys and Girls Club • Use of abandoned buildings for PA venues • Boys and Girls Club, YMCA, Parks • Something for all ages • No or low cost venues
Rural Parent Groups (n = 4)	<ul style="list-style-type: none"> • YMCA, Family Life Center, Boys and Girls Club, Bowling and skating rink "all under one roof" • Use of abandoned buildings for PA venues • Public pool at low cost • Public transportation system
Urban Youth Groups (n = 3)	<ul style="list-style-type: none"> • Indoor facilities/ Sports and Recreation Centers, Teen Center • No or low cost venues • Places to socialize • Public transportation system • Basketball courts open at all hours • Public pool at low cost • PE in school every day • Something for all ages • Less police interference with outdoor activities
Rural Youth Groups (n = 3)	<ul style="list-style-type: none"> • YMCA, Boys and Girls Club, indoor gym, skating rink • Place to socialize • Public pool at low cost

Discussion



- The results suggest that the socio-ecologic model is a relevant framework for understanding rural and urban youth physical activity
- The findings from this study suggest that interpersonal (safety, social/ peer interactions, supervision) and policy factors (school) had the greatest impression on youth
- Further, we recommend an additional focus on geographic setting in physical activity research since rural and urban samples are likely perceive and relate to PA environments differently

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