

University of Vermont
ScholarWorks @ UVM

Public Health Projects, 2008-present

Public Health Projects, University of Vermont
College of Medicine

1-24-2012

Exploring Barriers to Exercise among Adolescents at the Burlington Boys and Girls Club

Peter Cooch

Nazia Kabani

Vincent Kan

Gabriel Morey

Therese Ray

See next page for additional authors

Follow this and additional works at: http://scholarworks.uvm.edu/comphp_gallery

 Part of the [Community Health and Preventive Medicine Commons](#), and the [Health Services Research Commons](#)

Recommended Citation

Cooch, Peter; Kabani, Nazia; Kan, Vincent; Morey, Gabriel; Ray, Therese; Staples, Sara; Stackhouse, Jack; and Farnham, Pam, "Exploring Barriers to Exercise among Adolescents at the Burlington Boys and Girls Club" (2012). *Public Health Projects, 2008-present*. Book 67.

http://scholarworks.uvm.edu/comphp_gallery/67

This Article is brought to you for free and open access by the Public Health Projects, University of Vermont College of Medicine at ScholarWorks @ UVM. It has been accepted for inclusion in Public Health Projects, 2008-present by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.

Authors

Peter Cooch, Nazia Kabani, Vincent Kan, Gabriel Morey, Therese Ray, Sara Staples, Jack Stackhouse, and Pam Farnham

Exploring Barriers to Exercise among Adolescents at the Burlington Boys and Girls Club

Cooch P.B.¹, Kabani N.A.¹, Kan V.L.¹, Morey G.E.¹, Ray T.M.¹, Staples S.L.¹, Stackhouse J.², Farnham P.H.³
¹University of Vermont College of Medicine; ²Boys and Girls Club of Burlington; ³Fletcher Allen Health Care

Introduction

The Boys and Girls Club of Burlington (BGCB) is a non-profit that holds after-school activities for adolescents, including music, art, technology, and sports. The BGCB has struggled to encourage physical activity (PA) among many participants. We designed our study to identify deterrents to PA, as well as possible ways to improve participation.



Participants universally favored swimming

Methods We administered an optional, 10-question survey in a “check the box” format to 44 adolescents. Following the survey, participants were separated by gender for loosely-structured focus groups.

1. Survey topics included:

- Participants’ preferred activities at the BGCB
- Barriers to PA
- Opinions of possible additional activities

2. Focus group topics included:

- PA that kids participate in outside of the BCGB
- Favored field trips and incentives

Determined statistics were calculated using SAS 9.3. The Wilcoxon rank-sum test was used to evaluate statistical significance.

Age	21 Boys	23 Girls
9-11	13 (61.9%)	18 (78.3%)
12-14	8 (38.1%)	5 (21.7%)

Table 1: participant breakdown by age and gender



Figure 1: Favorite Choice Time Activities

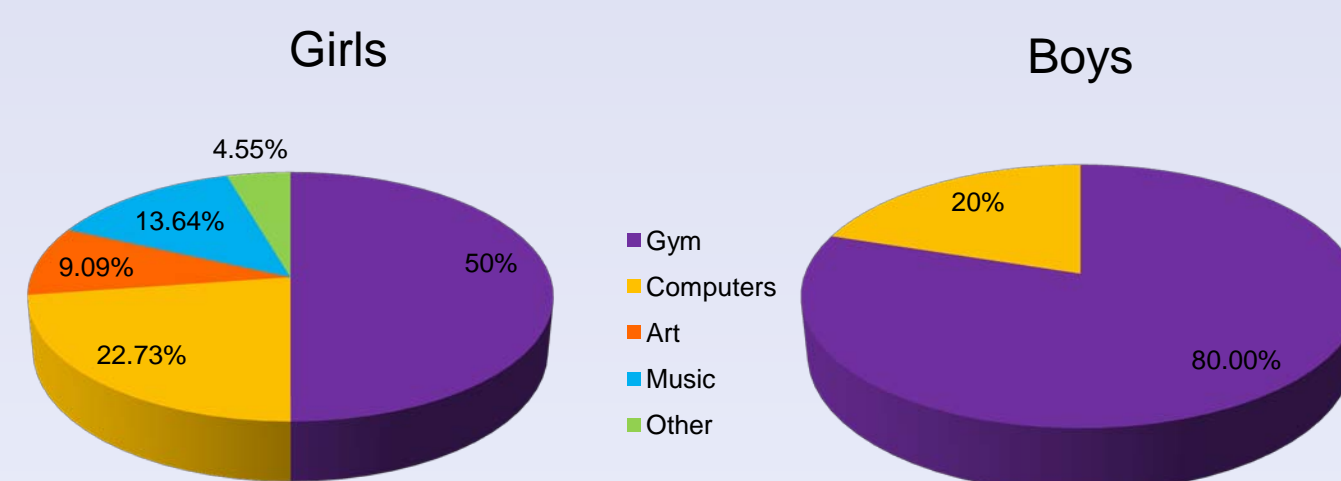
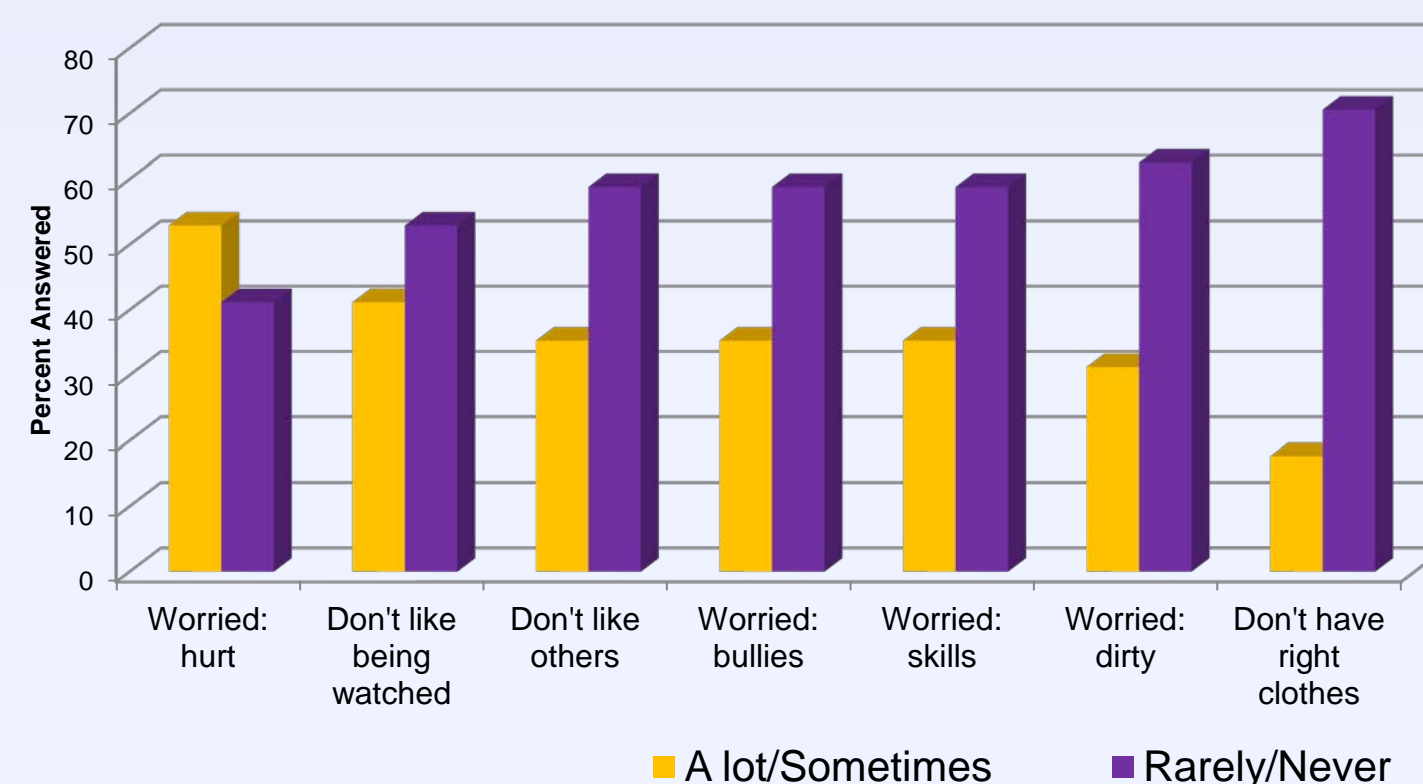


Figure 2: Reasons Kids did not Favor Gym



Results

- Gym was the favorite activity among both boys and girls of all ages (64% of respondents) (Figure 2)
- 21% favored the Computer Room
- Non-gym-favoring youth (NGFY) were most worried about getting hurt (56.3%) and being watched (43.8%) (Figure 3)
 - Younger group was more "worried about getting hurt" than older group (p=0.0095)
- Of current activities, NGFY like swimming (100%), nature walks, and capture the flag (Figure 3)
- Of potential activities, NGFY were most interested in rock climbing, ice skating, and skiing (Figure 4)
- NGFY preferred small groups over large groups by 3:1. Gym-favoring youth had no such preference
- 88% of NGFY preferred PA with both boys and girls

Figure 3: Current Activities Rated by NGFY

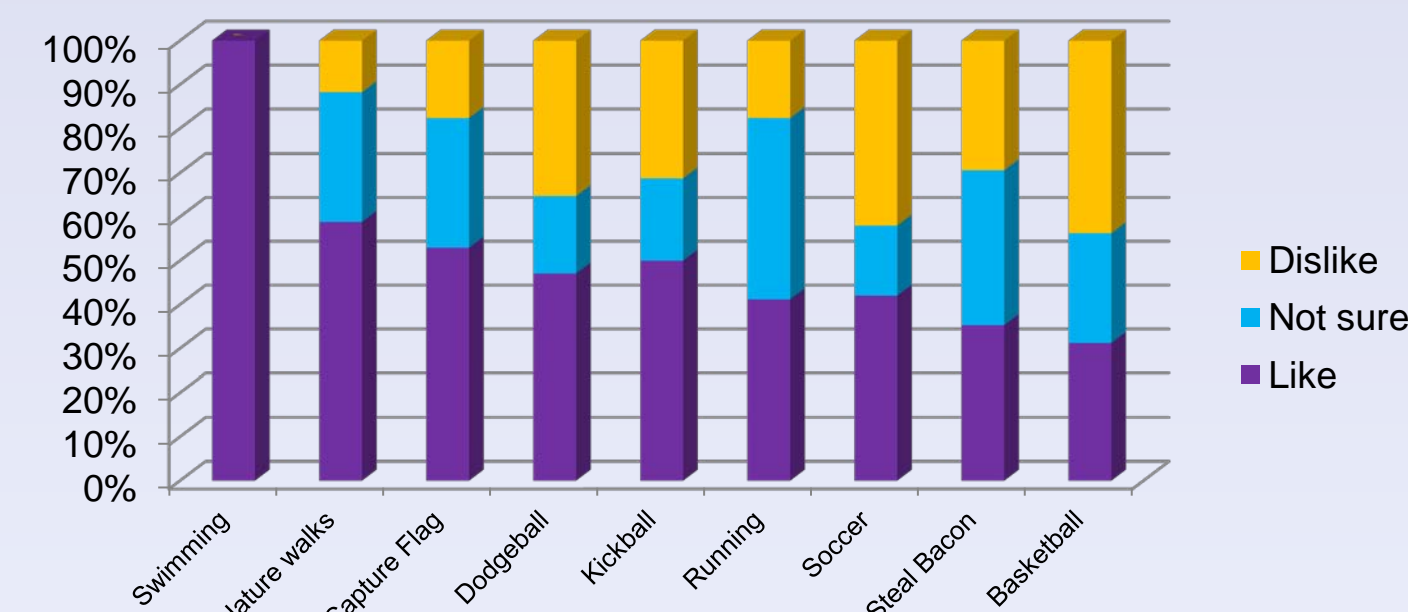
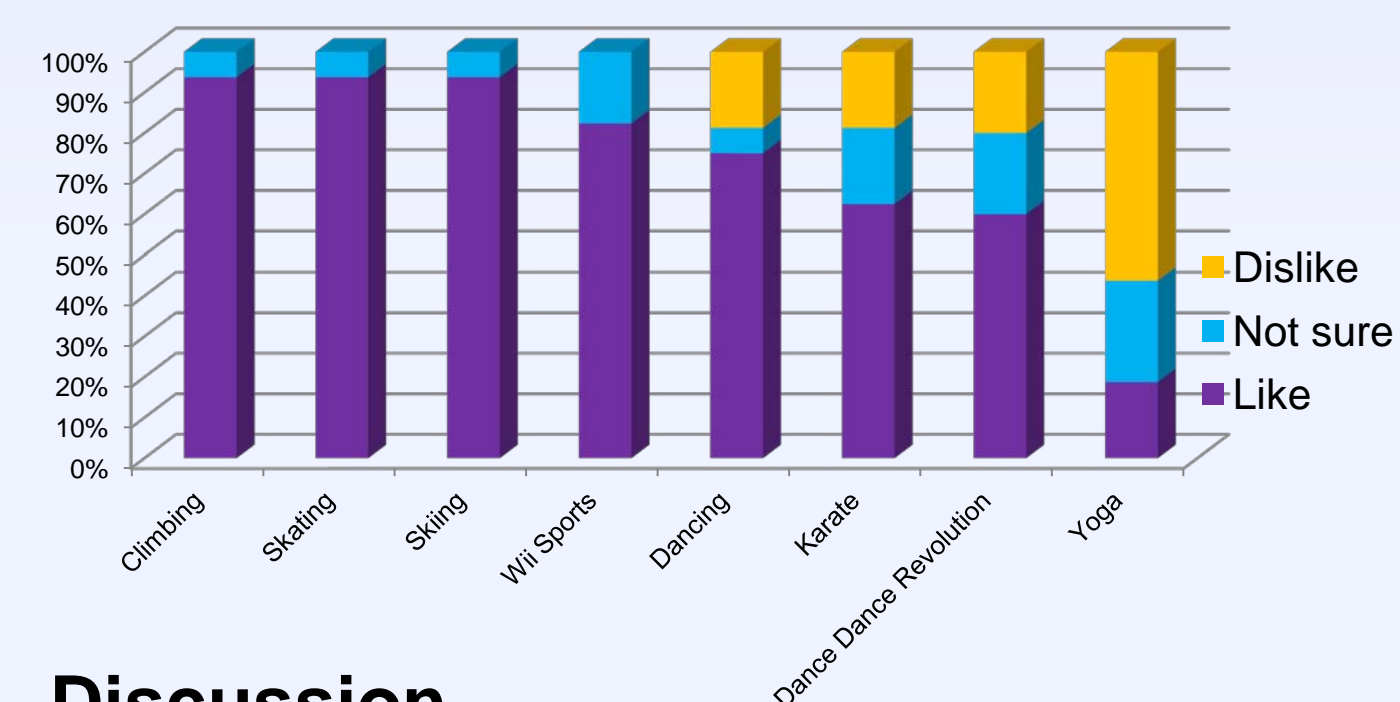


Figure 4: Proposed Activities Rated by NGFY



Discussion

Many of our findings supported related literature:

- Concern about being watched by others or lacking physical skills can be a barrier to PA.^{4, 6}
- While computers and technology serve as significant distracters from PA, many opportunities exist to harness it as an incentive as well.^{1, 2}
- Bullying can be a major barrier. Younger children preferred physical activity with same-aged peers, citing “meanness” and “ nastiness “ among older peers during focus groups.

Other findings were inconsistent with literature:

- The majority of children, including NGPY, preferred mixed gender activities, despite studies suggesting the presence of the opposite gender was a barrier.^{3, 6}

Our study was limited by the fact we offered the survey as an alternative to other free-time activities. Many students chose the computer room over the survey. These students may have also been less likely to participate in PA, skewing our sample representation.

Our Recommendations

- Limit PA identified as requiring a higher skill level, such as basketball. Alternatives include kickball and dodge ball
- Expand popular existing activities, such as nature walks and capture the flag
- As swimming was favored by 100% of NGFY, consider efforts to expand pool access year-round
- Incorporate new activities with an emphasis on smaller groups (e.g. climbing, skiing, or ice skating)



Basketball received mixed reviews from participants

- Increase safety measures during PA, perhaps by increasing staff supervision or non-contact sports
- Create incentives for PA by incorporating it into field trips, which have high popularity
- Continue to offer predominantly coed activities
- Continue to keep youth separated by age groups
- Next year offer a computer-based survey to better access the opinions of computer-favoring youth

Literature Cited

- Eaton, D. A., et al (2005). Youth risk behavior surveillance, United States. Morbidity & Mortality Weekly Report 2006, 55(SS-5), 1–108.
- Lenhart, A. (2008). Teens, video games, and civics. Washington, DC: Pew Internet & American Life Project.
- National Institute for Health and Clinical Excellence (NICE), United Kingdom, Health Collaborating Centre- Physical Activity (2007). Physical Activity and Children. Review 3: The Views of Children on the Barriers and Facilitators to Participation in Physical Activity.
- Pate RR, Mitchell JA, Byun W, Dowda M. (2011). Sedentary behavior in youth. Br J Sports Med. Sep;45(11):906-13.
- Pate RR, Ward DS, Saunders RP, Felton G (2005). Promotion of Physical Activity Among High School Girls A Randomized Controlled Trial, American J of Public Health, Vol 95, No 9.
- Trost, Stuart G et al. (1997). A Prospective Study of the Determinants of Physical Activity in Rural Fifth-Grade Children. PREVENTIVE MEDICINE, 26, 257–263