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Assessing the Benefits of College Climbing Programs: Applying the Perceived Health Outcomes of Recreation Scale

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Abstract

Although rock climbing was seen as a outdoor sport for few who chose to live life outside high on the mountain side, more recent years the sport of climbing has become more main stream. It is now in the Olympics, many YMCAs, middle schools, and colleges. College climbing programs have become increasingly popular. Yet, we have very little evidence of the benefits of rock climbing of “indoor settings” especially on college campuses.. The current study seeks to examine the health benefits among college rock climbers. In the spring of 2017, 52 college student rock climbers completed the Perceived Heath Outcomes of Recreation Scale (PHORS) using the online survey software Qualtrics.

Literature

- Rock climbing is a sport that requires a participant to lift the body against gravity to climb on a rock face using the irregularities of the rock. On a highly rated climb, the rock face is “virtually perpendicular and the irregularities are very small” (Li, Margetts, & Fowler, 2001; Slanger & Rudestam, 1997, p. 359).
- Rock climbing involves both sensation seeking and risk taking as the key elements to one’s motivation for participation (Palmer, 2002),
- Other research includes the possibility of characteristics that are unique to rock climbers, which set the rock climbing community apart from the other extreme sports (Kiewa, 2001; Slanger & Rudestam, 1997).
- Climbing is now in the Olympics, many YMCAs, middle schools, and colleges. College climbing programs have become increasingly popular. Yet, we have very little evidence of the benefits of rock climbing of “indoor settings” especially on college campuses.
- Research demonstrating objective, measurable benefits is needed to justify funding, advocate for and guide the development of new facilities, improve best practices for management and programming, and increase participation (Allen & Cooper, 2003; Freidt, Hill, Gómez, Goldenberg, & Hill, 2010; Goldenberg, Klenosky, O’Leary, & Temple, 2000; Moore & Driver, 2005).
- Empirical evidence of benefits is also instrumental to position and promote recreation and parks to address current public issues, especially those related to health and quality of life.

- The Benefits Movement implores recreation professionals not to assume that recreation is inherently rewarding, but instead to identify and measure the beneficial consequences (Allen & Cooper, 2003). The purpose of this pilot study was to understand the benefits of rock climbers across college campuses in the United States.

Research Questions

1. Using the PHORS as a measure, what are the benefits of indoor rock climbing?
2. Do the indoor rock climbing benefits vary among gender, age, and sexual orientation?
3. What are the levels of involvement with professional organizations among indoor rock climbers?



Methods

- The current pilot study examined the health benefits and among college rock climbers. In the spring of 2017, 52 college students from various campuses completed the 13-item Perceived Health Outcomes of Recreation Scale. The Perceived Health Outcomes of Recreation Scale (PHORS) is theoretically grounded, having gone through rigorous testing sites (invariance analyses), populations, and time (Gómez, Hill, Zhu, & Freidt, 2016). The scale uses Driver’s premise of the original three categories of benefits.
- A benefit of leisure, as defined by Driver (2008), is an outcome that causes (a) a change resulting in a more desirable condition than the preexisting state, (b) the continuance of a desired condition in order to prevent an undesired condition from occurring, or (c) the realization of a satisfying experience with regards to recreation. The PHORS has been used in previous research on two National Scenic Trails (Hill et al, 2010) and mountain biking areas across the country. The PHORS was administered via Qualtrics using iPads at the climbing walls.

Results

Demographics:

Climbers that participated are from Ball State University, Cornell, SUNY Cortland, East Carolina University, University of Tennessee at Chattanooga, and Old Dominion University.

N=52

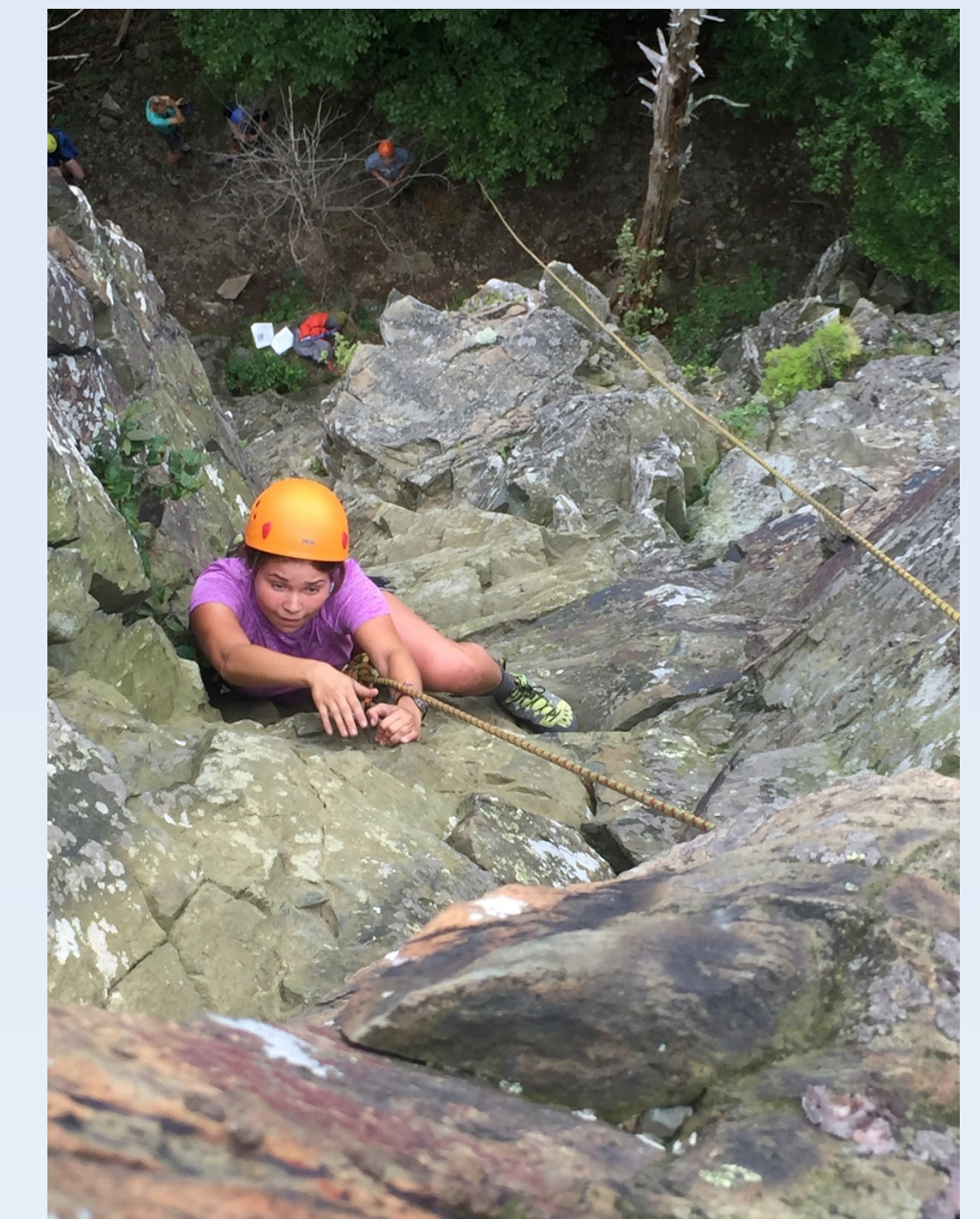
- Gender: 46% Female; Mean Age: 18; Race: 92% White; 66% Heterosexual; Marital Status: 96% Single; 82% employed;
- 73% voted in the last election; 55% climb indoors; and climbed on averaged 16 times/month
- 57% of climbers have attended some college and 19% have college degrees
- 28% indicated that they have a total household income of less than \$10,000 and 29% said they have a household income of over \$100,000.

Level of involvement with Professional Organizations:

- 75% of climbers use LNT principles, but only 22% are LNT Members
- 4% are Access Fund Members
- 14% are AMGA/PCIA members

PHORS

- Cronbach’s Alpha for the three dimensions = .89
- Factor structured supported Gómez, Hill, Zhu, & Freidt, 2016
- ANOVA reveled no significant difference between benefits (PREV, IMPROV and PSYC) attained and:
 - Sexual Orientation (LGBTQ-19/Straight-33)
 - Gender



Discussion

- Leave No Trace (LNT) principles are very important in maintaining the areas that climbers frequent. If more climbers were LNT members, then there could be a chance of those members educating other climbers.
- Majority of climbers that participated are from Ball State University (BSU) and Old Dominion University (ODU). BSU and ODU could help universities that have lower climber attendance, create or update their climbing program. This could include, first assent programs, climbing events or free climbing lessons for students. By offering these programs and events, the percentage of climbers with a college degree could increase.
- Access fund members help support parks and public lands. Marketing parks and protected areas that are endangered of being abused or rezoned for commercial use to climbers, can refocus the climbing communities attention on how they can help. With the climbing communities support, access fund memberships could rise along with environmental awareness.
- Research shows total household income greater than \$10,000 and under \$100,000, has the lowest amount of climbing participants. Starting local community climbing clubs through the local gyms, fitness programs, churches, or schools could help fill this void.