

**Does Convenience Impact Student Participation in UBC Recreation and Events?**

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RECREATION AND EVENTS?

Does Convenience Impact Student Participation in UBC Recreation and Events?

The Raddest Madness

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# DOES CONVENINCE IMPACT STUDENT PARTICIPATION IN UBC RECREATION AND EVENTS?

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## **EXECUTIVE SUMMARY:**

We studied whether or not living on campus had an effect on student participation in the University of British Columbia (UBC) recreation centre and events. Specifically, we assessed students' participation in UBC recreational programming and facilities, as well as their participation in UBC Recreation signature events. We issued a survey, both online and in person, and gathered data from 80 participants. The results confirmed our hypothesis; students who live on campus are more likely to make use of the regular UBC recreation programs and facilities, but living on campus has no effect on involvement in UBC signature events.

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## **RESEARCH QUESTION:**

Does living on campus affect student use of the UBC recreation centre and participation in UBC recreation events?

## **HYPOTHESIS:**

We hypothesize that students who live on campus are more likely to make use of UBC recreation facilities and participate in the programs offered by the recreation centre than those who do not live on campus. However, we believe that whether a student lives on or off campus will not affect their participation in UBC signature events.

## **METHODS:**

### *PARTICIPANTS:*

There were a total of 80 participants, 40 of which responded to the online questionnaire and another 40 of which were answered in person. The age range of participants were 18 - 47, with the median age being 20. All were students at the University of British Columbia.

29 participants were male, 47 were female, and 4 participants declined to answer regarding gender.

### *CONDITIONS:*

We chose to separate three major conditions: whether or not the participant lived on campus, whether or not the participant used the recreation centre facilities and its programs, and whether or not the participant was involved in the recreation signature events.

Our independent variable is whether or not the participant lives on campus and our dependent variables were their participation in the recreation centre and in the recreation events.

### *MEASURES:*

We chose to administer a short self-report survey to UBC students. Knowing that students are often busy and sometimes hesitate to answer long questionnaires, we limited ours to a brief 15 questions, which took approximately 3 minutes to fill out. The majority of the questions in the survey were multiple choice or simple yes-no questions, but it also had a qualitative section that asked respondents if they had any suggestions to improve UBC Recreation (UBC Rec).

The questions that we designed for our survey aimed at assessing people's involvement with UBC Recreation, including their programs, facilities and signature events. We also assessed peoples' perception of the impact that living on campus would have on their use of the UBC recreation centre, using a 1-7 scale, as well as their self-reported activity level, either falling below, around, or above 150 minutes of physical activity per week, as recommended by the Canadian Society for Exercise Physiology.

### *PROCEDURE:*

Each member of the group posted the survey on their Facebook and invited their UBC friends to fill the questionnaire. Group members also each collected a number of surveys in person, with a large number of answers being collected at the Storm the Wall 2015 event.

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Prior to filling out the questionnaire, participants were asked to read over a consent form, which informed them of the purpose of our study, of their voluntary participation, as well as their anonymity. In addition, the consent form contained all of our group members' contact information, should participants have any questions regarding the study.

### **RESULTS:**

We calculated the Pearson's correlation for the various factors, and found there to be a small, significant, correlation between living on campus and participating in regular recreation events ( $r=0.238$ ,  $p<0.05$ ). This suggests that there is a role in proximity to the recreation center in student's choices to visit. This falls in line with the study *Distance Between Homes and Exercise Facilities Related to Frequency of Exercise Among San Diego Residents* which reports a negative correlation between distance to the gym, and peoples' use of it (Sallis et al., 1990).

However, we found no other correlation between the other factors measured. The physical proximity to the signature events, and daily exercise levels had no correlation to participation in the signature events. Likewise, participation in regular recreation events did not correlate with signature event participation. The data also showed that the respondents were inaccurate in estimating the effect that convenience had on their use of the UBC recreation centre and programs.

### **DISCUSSION:**

We were interested in student use of the UBC recreation centre, including its facilities like the Birdcoop gym and the Aquatic Centre and the programs offered, such as spin classes or yoga classes. We also wanted to look at student involvement in UBC recreation events, such as Day of the Longboat or Storm the Wall. We chose to treat UBC's signature events as separate from regular UBC recreation programs and facilities because the signature events occur once per year, making them a unique opportunity for community involvement, and are promoted widely each year. The UBC recreation centre, conversely, offers a more regular schedule and programming. Furthermore, because the signature are annual events, we believed that event participation would not be an accurate reflection of their attitudes towards exercise and exercise habits.

Our hypothesis was generated from the thought that convenience, especially physical proximity would be one of the main cognitive impairments to routine physical exercise. We chose to define convenience as living on campus because of the physical proximity to the UBC recreation facilities and events. We read studies (Sallis, et al. 1990) that also inquired about geographic factors as a barrier to fitness, although they focused on density while we explored proximity. Those living on campus would have easier access to the UBC recreation centre and its programs simply due to their location, thus making it more convenient for them to utilize the centre and its programs. For this reason the attendance of students to recreation classes would be closely connected to the student population living on campus. The data supported our two part hypothesis. The first part being that close proximity to the UBC recreation centre would promote

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participation in use of the recreation center's regular programs. Like the participants in Sallis et al. study, students understandably simplified the relationship between distance and convenience which explains why participant responses suggested nearness to the Birdcoop would positively impact attendance (1990, p. 184).

Our data correlation was small, and one plausible explanation for this is that those who do not live on campus could have an alternate place to exercise. In a different study by Sallis et al., titled *Assessing Perceived Physical Environmental Variables that may Influence Physical Activity* (1997), researchers found that mental perception of proximity played a role in participants, which supports our idea of proximity and participation in exercise centers. Sallis' study, however, was done on working adults as opposed to university students, which accounted for all but one of our participants.

The second part of our hypothesis predicted that there would be no correlation between living on campus and participating in signature events. The data supported our hypothesis, as there was no correlation between the two. We did further research, this time comparing people's daily exercise habits, and found there to be no correlation between the two. Essentially, there was no correlation between any factors and participation in the signature events. This means that the difference in UBC Rec's approach towards signature events and regular facility programs and events play a role in the difference in participation rates. In the study, 50 participants took part in signature events as opposed to 37 who used the regular UBC recreation programs and facilities.

For further research, we recommend drawing from a larger population sample. Our data was a result of convenience sampling so future studies should take care in sampling a more representative and varied population that is more reliably generalizable to the entire student body. Giles-Corti and Donovan's study *The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity* (2002) suggests that other factors such as social pressures and individual behaviors are more influential on fitness habits. A potential issue in our study was that a large number of in person surveys were collected at Storm the Wall 2015, which could have reflected a pre-existing interest in the signature event. Any further research should take this into consideration and expand the scope of the experiment to compensate.

Additionally, most of our participants did not live on campus - only 20 out of 80 lived on campus and do not reflect a good representation of students living on campus. A larger subject pool would also provide more qualitative feedback.

The survey we utilized could be amended for future studies to ask more comprehensive questions, such as physical distance from the UBC recreation centre, including those who live on campus, and regular exercise habits and attitudes.

Regarding student use information and statistics, we attempted to retrieve these numbers from UBC Rec but there proved to be some difficulties and we were unable to obtain that information. We believe, however, these numbers could be helpful to future studies in terms of raw data and numbers analysis.

### **RECOMMENDATIONS:**

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The qualitative section of our survey asked respondents about what they would suggest to improve programming. After coding the answers into three recurring categories, we found that 41.2% of students wanted more/updated equipment and bigger facilities, 16.2% requested more available scheduled programs and a higher level of promotion and advertisement for their programs, and 7.5% of the participants suggested free or cheaper programming. Furthermore, 10% offered miscellaneous suggestions, e.g. “wipe the floors everywhere please,” and 30% of respondents declined to answer or had no suggestions. A number of participants offered multiple suggestions, which accounts for the discrepancy in the total of the percentages.

The recreation centre, as a result, should make a larger effort in promoting their regular programs and facilities and not limit their campaigns to their signature events, which see a great deal of publicity. UBC Rec should also consider expanding their scheduling and availability, and possibly updating their facilities to meet some of the above suggestions.

These suggestions and results are important for the administration to consider. These changes could possibly help contribute to a healthier student body and promote physical well-being, while helping UBC Rec increase participation and grow as an organization.

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**APPENDIX A:**

Have you participated in a UBC recreation programs (such as drop in sports, storm the wall, etc) in the past? (ex. Day of the Longboat, Storm the Wall, Thrive Week)

Yes       No

If so, what types? Please list any events participated in and what year you did it.

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Have you participated in a UBC fitness program in the past? (ex. Yoga, Zumba, Spin classes)

Yes       No

If so, which program, and how often? Please list any programs participated, which year, and how often.

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How much time do you spend on physical activities in a week?

Less than 150 minutes       About 150 minutes       More than 150 minutes

Do you live on campus?

Yes       No

How do you get to school? Please list method (ex. Walk, Bike, Bus, Train) and travel time.

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Do you use UBC facilities (the Birdcoop, drop in classes, etc) as a means to get exercise?

Yes       No

If not, where do you go?

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What is your primary way to get exercise?

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How much of an impact do you think living on campus would make on your use of UBC Rec facilities? (“1” being Big Impact: I use the Birdcoop entirely because it's on campus, and “7” being: No Impact: the fact that the Birdcoop is on campus has nothing to do with why I go there).

1       2       3       4       5       6       7

If UBC could make one change to its fitness program, what would it be?

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How old are you?

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What year and faculty are you in?

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What is your gender?

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### **APPENDIX B:**

The analysis of convenience is likely incomplete as our survey only referenced the Birdcoop and the aquatic center but does not analyze fitness centers within individual buildings, private gym clubs nor the wide variety of other activities students indulge in for exercise, all of which may be far more convenient than the Birdcoop. Furthermore, we chose a rather specific definition of convenience, that of physical proximity, while other factors may play a role in the notion of convenience.

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