

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

**Recreational Programming for Commuting Students**

**Niamh McKinnon, Claudia Mackenzie, Holly Mahlerwein,**

**Brett Noseworthy, Sam Peterson**

**University of British Columbia**

**KIN 464**

**Themes: Community, Wellbeing**

**April 3, 2018**

*Disclaimer: "UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project/report and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a project/report".*

## Executive Summary

The purpose of this research study 'Recreational Programming for Commuting Students' is to determine if time spent commuting to campus is a large influencer regarding student's decisions to participate in recreational activities on UBC's Vancouver campus, or if it is due to communication techniques used. The commuter students being addressed range from a total of zero minutes up to 3 hours each day. The length of these commutes is inclusive of both directions, to and from campus. This population of commuter students was chosen to see if there are large differences in a student's perception of their ability to manage time, and if that becomes a determinant for students to participate in recreational activities. This research will examine the similarities or difference between these commuting students to see any other varying forms of constraints that students may face. Examples of relevant considerations include time management, social skills, skills to be successful in the activity, money constraints, and sense of inclusion/belonging (MacRae, 2011). Studies show that the average time to commute one way has gone up to about 26 minutes, with many people commuting for much longer, and therefore taking away time where individuals could be active (The Astonishing..., 2016). This research study will send out surveys through email to participants in an attempt to overcome time constraints that had been commented on by participants. These surveys will inquire about students issues within current communication methods among campus, and result in a discussion to determine a possible plan of action to improve these strategies. In researching the issues surrounding communication techniques of recreational programming, a subsequent goal of this study would be to increase recreational participation among commuter students.

## Introduction & Literature

This study will recruit students in the UBC population who have varying commute times in order to get to campus, and conduct surveys in order to determine the nature of several components of on-campus recreation, including communication. Research shows that some constraints the average student faces that prevent them from recreational participation are due to lack of money and time (MacRae, 2011). The surveys to be conducted will also assess the issues within current communication methods and determine a plan of action to improve these strategies. Studies have shown that providing sales promotions such as discounts through social media platforms aids in promotion of recreational activities, and with commuters having more time to access social media this may provide a positive correlation (Using Social Media..., n.d.). This specific population of commuter students was chosen due to the unique circumstances and factors of consideration surrounding their participation in recreational activities on campus; such as their sense of inclusion/belonging. MacRae (2011) finds that some of the special considerations of students include academic priorities, lack of social skills, and current physical fitness levels. There are several factors that are unique to the student population when deciding whether or not it is feasible to go out to an event on campus. This study will examine the influence of these student-specific and commuter-specific factors, and determine some recommendations as to how to make on campus events more appealing to commuting students.

Social media provides an easy means of communication with large populations. It has been used for example, to advertise and promote physical activity, form support groups, and hold interventions (Martínez-Bello, Martínez-Rojas, & Molina-García, 2017). Many of these means of communication have been found to deter individuals from participating in physical activities, due to stereotyping, unrelatable experiences, and differences in goals and body images (Martínez-Bello et al., 2017). This study investigates the frequency with which the commuting population encounters events

through online social media portals as well as the impression that those advertisements exude.

## Methods

The demographic we have selected to survey are students enrolled at UBC who range in commuting lengths to and from school. We chose to interview this population because they have several unique factors surrounding their decisions to partake in recreational programming on campus. Some of the primary deciding factors among these students include conflicting obligations, reduced amounts of spare time, additional effort or money required to participate, and first impressions of the event being made upon communication techniques.

Data was collected through short surveys sent through email. The intended information to be collected includes questions regarding the interviewee's exposure to communications/advertisements for recreational programming, what some of the deciding factors in attending events are, what their preferred methods of communication are, as well as the reasons why. As a function of efficiency in this study, online resources such as Facebook and text messages were used to communicate effectively with participants and arrange survey administration.

Subjects were recruited for this study through social media platforms as well the physical application of posters in various locations around UBC that are believed to be frequently populated by commuting students, such as bus loops. We believe social media recruitment allowed us to easily reach a larger population of students, by posting to many of the popular UBC Facebook pages. Social media makes it easier to communicate with students considering the frequency of the usage of smartphones by this demographic of the population. Online communication also allows individuals to feel more comfortable reaching out and contacting one of the study's conductors, if they are too shy to call or

meet in person. Interaction with a project coordinator was one click away, also allowing them access to the conductor's profiles thereby humanizing and legitimizing the information being inquired about. Both the methods of posters and social media allowed us to collect data from students in various programs throughout UBC.

The virtual recruitment methods included the posting of messages conveying the primary purpose of the project and describing the interview process on Facebook pages commonly populated by commuting UBC students, as well as the Facebook group created specifically by the research team named "Kin Campus Commute Research". Members of the research team put up posters at various areas around campus. Locations included areas such as those with close proximity to on-campus bus loops, several bus stops around campus, popular food and shopping locations near campus such as McDonald's and Save On Foods, as well as frequently visited buildings such as Woodward, The Nest, and Osborne. These posters provide information on how prospective participants can contact members of the group and get involved in the study as a participant.

Once participants were chosen (based on meeting the subject requirements of the study) they filled out the online research survey and consent form. Data was compiled in terms of similarities and differences among interviewee answers, in the form of comparative graphs and charts. Any outlying answers were also included in these figures and further analyzed through comparison to other answers in the discussion section of this paper.

### **Interview Questions**

1. How much time (approximately; in minutes) do you spend per day commuting to AND from school?
2. In what form does this commuting take place (bus, skytrain, Canada line, personal vehicle, biking, walking)?
3. Do you currently participate in any regularly scheduled recreational activity on campus?
  - a. If so, what is it?
  - b. How did you first hear about this activity (poster, word of mouth)
4. Do you currently participate in any regularly scheduled recreational activity off campus?

- a. If so, what is it?
  - b. How did you first hear about this activity?
5. What do you consider to be the biggest deciding factors in whether or not you participate in on-campus activities that are not classes? (check all that apply)
  - a. Time of event
  - b. Time commitment involved in event
  - c. Cost of event
  - d. Advertisement of activity (rate of perceived fun)
  - e. Extra commuting trips out to the school
  - f. Extra cost of commuting back to the school
  - g. Extra cost of eating more meals at school
  - h. Needing to bring more items on your commute
  - i. Conflicts with a work schedule
  - j. Not enough time for school work
6. Which do you think are the most common methods of communication of recreational activities on campus? (check all that apply)
  - a. Facebook
  - b. Instagram
  - c. Posters in regularly visited locations/location of event
  - d. Television/radio
  - e. Text message
  - f. Word of mouth (friends)
  - g. Professors
  - h. UBC website
7. What are some of the factors within these communications which are the most influential in your decision whether or not to attend? (check all that apply)
  - a. Cost of event
  - b. Colouring/initial visual appeal
  - c. Convenience of communication (easily accessible)
  - d. Time of event
  - E. Inclusion (ex. all experience levels welcome, disabilities, etc)
8. What is your age?
9. What activities would you say take up most of your time in a week?  
(examples: work, school, taking care of family)
10. Do you have interest in participating in recreational activities on campus?  
What is the reason for your answer?

## Findings

Figure 1: Commuting Time

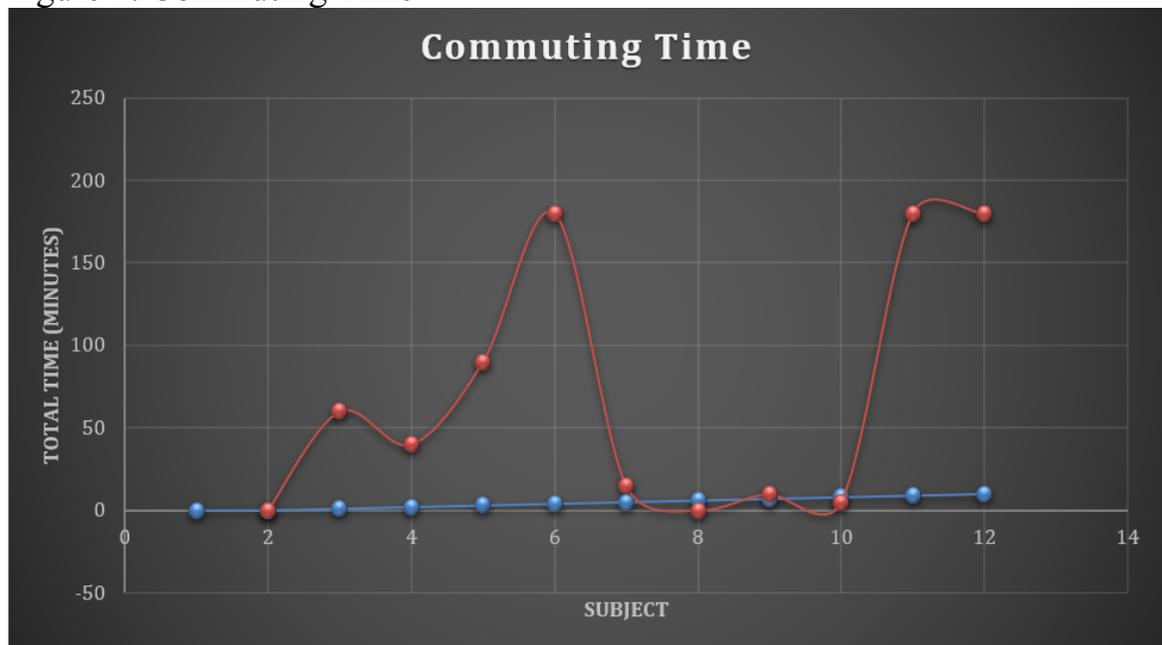


Figure 2: Mode of Transportation

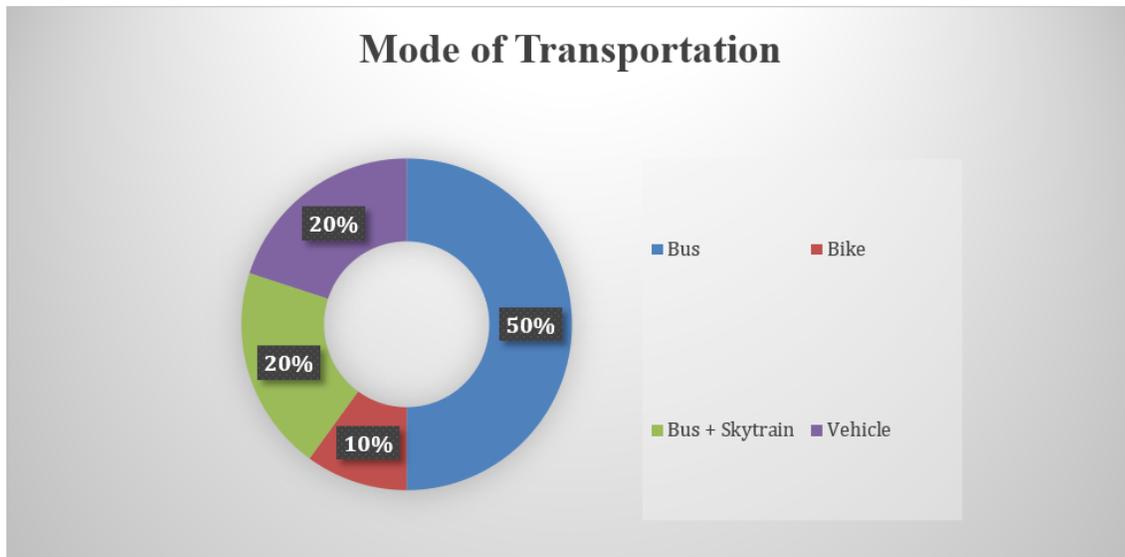


Figure 3: Most Common Activity Deterrents

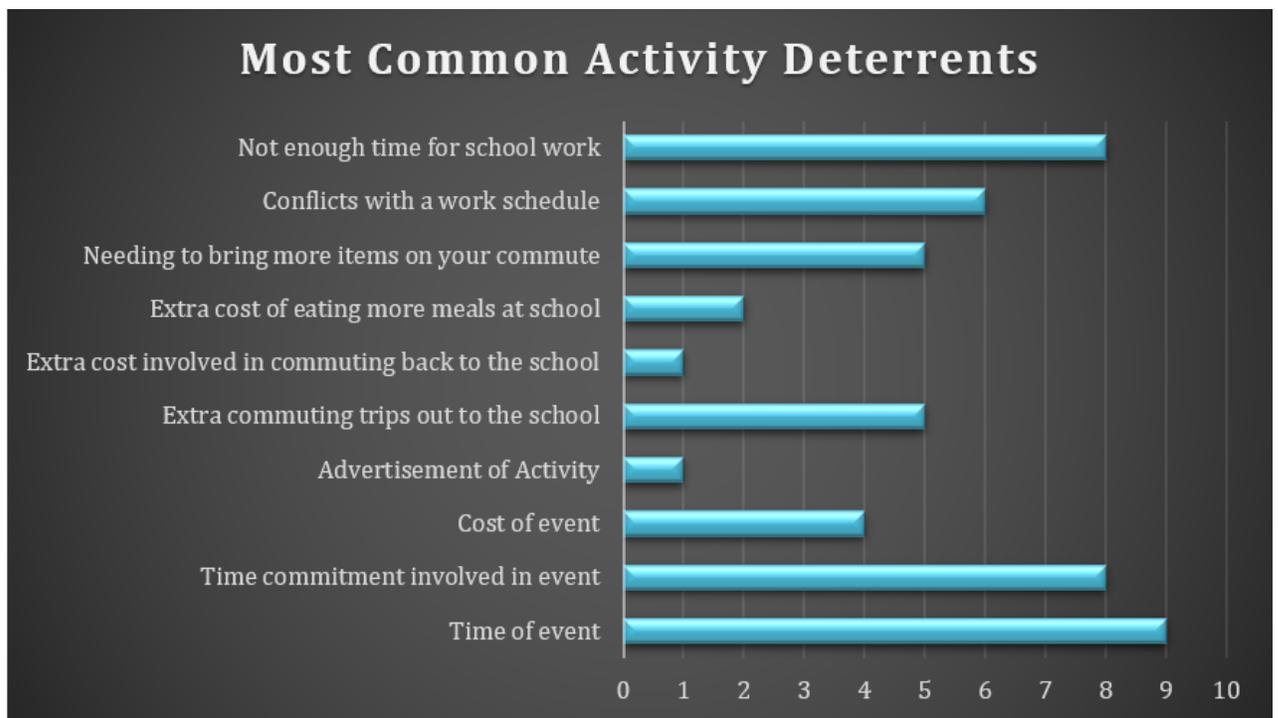
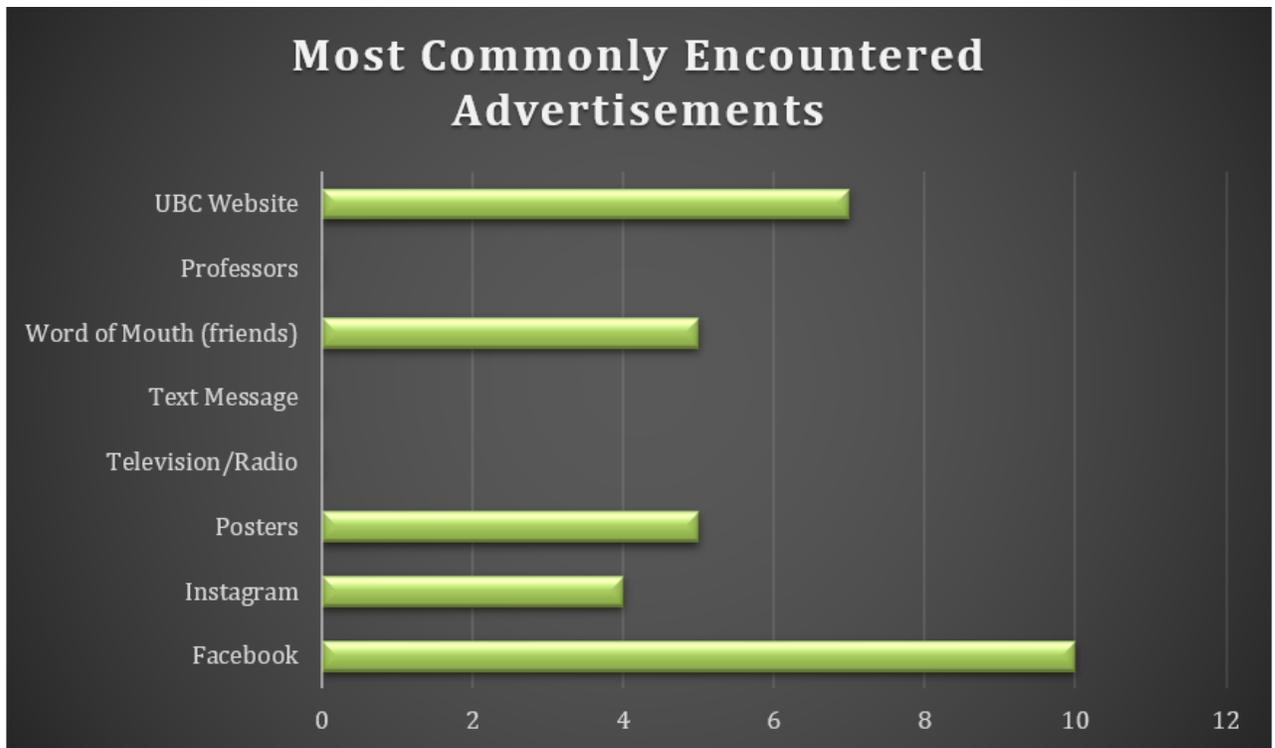


Figure 4: Most Commonly Encountered Advertisements



After receiving information from numerous participants, there were several common trends among the variables questioned in the survey. For example, the time spent commuting to and from school combined in which the most common times are approximately 180 minutes and 60 minutes respectively (as seen in figure 1 labelled “Commuting Time”). As seen in figure 2 (Mode of Transportation), the most common mode of transportation for their daily commute was the bus, with a secondary tie between a bus and skytrain combination and personal vehicles. There were also two outstanding factors, which were found to be the most common deterrents when deciding to go an activity on campus. These deterrents were the time of the event with 9 votes, and not enough time for homework with 8 votes (Figure 3: Most Common Activity Deterrents). Finally, it was found that Facebook group events and Facebook advertisements were the most commonly encountered advertisements for on-campus events (Figure 4: Most Commonly Encountered Advertisements).

## Discussion

After compiling participant's answers to the online surveys, we have found many responses to meet expectations of our original research hypothesis. Responses to the amount of time it takes for participants to commute to school, in regards to round trips ranged from 0 minutes to 180 minutes each day. These times were a result of not only the distance participants live in relation to UBC campus, but also the congestion and traffic involved between these locations during peak times of the day. Some participants lived a 10 minute commute away from campus, but stated that during heavy traffic hours that commute time would increase by an average of 20 minutes overall.

The participants also ranged in their mode of transportation to and from campus (as seen in figure 2). These methods include personal vehicles, bus, skytrain, and bike. The most common form of transportation used by participants to get to campus is the bus, with participants stating that this is their only method of transportation. Two other participants said they used a combination of skytrain and bus transit to get to campus. This can be associated with the lack of skytrain facilities that reach our campus location; some participants are unable to ride a skytrain straight to campus and are forced to take both skytrain and bus. Two of our participants stated that they drive to school, and only one of our participants said that they biked to school. This can be attributed to living closer to campus and accessibility to bike friendly streets and neighbourhoods. There is also a lower associated cost with biking to school considering they would not have to pay for a transit pass or gas/insurance costs associate with driving a personal vehicle. These results matched the expectations of the research predictions, mainly related to cost restraints of students with their general inability to work enough hours to afford other means of transportation (MacRae, 2011).

Three of the study's participants are currently partaking in regularly scheduled recreational activities on campus. These activities include basketball intramurals which was discovered through viewing a poster on campus, ice hockey intramurals found throughout the UBC website, and non-sport related activities. Another participant is involved in varsity level track and field, and discovered it through recruitment.

Off-campus recreational activities appear to be least popular among the study's participants. One of our study participants is involved with track and field off of campus, while another is involved in non-sport related activities.

There was a large range in the answers to our fifth survey question, which addressed the deciding factors that affects the participant's choice to partake in recreational activities on campus. All but one of our participants said that the time of the activity was a common factor as to if they would be able to, or even want to participate in the activity. This can be due to days students are on or off campus correlating to the time the activities are run. It can also be due to the timing of the activity interfering with one's class timetable. All but two of our participants found that time constraints and lack of time for school work regarding recreational participation was a large factor in their decisions to participate in on campus activities. Similar results were found in previous studies (Elkins, 2004). Conflicts with work schedules were the next largest factor that affected participation, being a constraint for six participants. Half of our participants found that needing to bring more belongings to school such as exercise clothes and food for excess time on campus, as well as needing to commute out to school more to participate in the activity, had an effect on their desire to participate. These responses associate physical activity for health purposes and sheer interest to it becoming another hassle or stress added to a student's everyday schedule. The cost of the event was considered less of a determinant than expected, becoming a factor for only four participants. This can be associated with resources of participants, as well as low costs of recreational activities. It can also be related to prioritizing time and schooling over

money, especially if students still live at home and have expenses covered by parents. The extra cost of needing to purchase more meals while on campus was only a concern for two participants. This can be a result of the time of the activity in regards to their course schedule, being that it does not extend their time at school. It may also be a result of students only bring food from home, and not needing to worry about extra money spending, or that they have no money concerns. Lastly, only one participant found that the extra cost of commuting back to school on days they did not have classes, and the advertising of the activity affected their overall decision to participate in the recreational activity. Cost can once again be a result of reduced money concerns compared to other student, as well as the relationship between the activity and their timetable. Advertising regarding recreational activities on campus did not seem to play a major role in the decision making of the participants of this study.

Participants stated that communication methods around advertisements of activities were most seen through online means. All study participants found Facebook to be the most common and influential means of communication and advertisements. The next most common method used to learn about recreational activities on campus was through the UBC website. This could be due to accidental findings or purposeful searching of participants, and was stated as a mean by seven participants. Word of mouth and posters were the next two most common forms of communication, each reaching half of the participants in this study. Lastly, Instagram was stated to be a common way of providing information, reaching four participants. These results may be due to the rise in popularity of social media, as well as the popularity of certain websites in relation to how long they have been around.

**“ I would like to continue to pursue an active lifestyle unhindered by my responsibilities.”-**

Anonymous

The results regarding factors that are influential to participant's decision to attend recreational activities are followed trends as we predicted. The main factor that concerned participants was the time that the event took place. This was a primary factor for all but two participants. The next main factor individuals took into account was the convenience of the communication, selected by six participants. This can relate back to recreational physical activity feeling like an added chore to people busy schedules. Half of the participants found the cost of the event to be a determining factor that influenced their decision to partake in activities. This is similar to other research findings on this topic (MacRae, 2011). Two of our participants found that inclusion of the activities, whether that be regarding those with disabilities, or lack of skill and experience in the sport was a factor to whether they feel they can participate. This was low compared to other studies results on this subject manner (MacRae, 2011). Only one participant found that the colouring and initial appeal of advertising had an effect on their desire to participate in the activity. The effects of various design elements of advertisements on the click through rates of online banner advertisements was examined by Lohita, Donthu, and Hershberger (2003), their research found similar results, in that the presence of emotion and animation in the advertisement increased the rates of consumer engagement.

When asked what activities take up the most of student's time, the results were not surprising. The main source of time constant is due to school, with work coming in second place before studying. These results may be interpreted differently depending on if participants considered school to be a broad category, including all studying and other schoolwork. Commuting was only considered a time constraint for two of our participants, before taking care of family and volunteering.

The age of participants in this study ranged from 19 to 22, with the majority being 21. As expected, the activities most frequently commented on taking up the most of student's time, were school, studying, work, and commuting. Most participants said they had interest in recreational activities, but due to activities not working with their schedule they were unable to participate. Most participants said they had interest in recreational activities because they are a fun method to be active and allow you to make new friends and socialize.

All research comes with certain limitations and weaknesses that coincide with the design of the research project. The primary issue arising out of the research conducted by our team would be poor control of the sample. The size of the sample presented two limitations to how we were able to use the information collected to make inferences. First off, with the size of the sample being small in comparison to the actual size of UBC's commuting population makes it very difficult to generalize the information collected back to the commuter population. The second weakness of the study design was the control over other miscellaneous variables such as age, gender, and year level of undergraduate degree. It brings forward the same limitations of the smaller sample size, in that without the control over the variables, the information has a large potential to be biased toward one group within the population. The potential variability in the subject's age, gender, and year level means that the data collected is not necessarily representative of the commuting student population as a whole. The information collected and the interventions designed, could end up only targeting a specific subsection of the population while negating others, and significantly hinder the impact the intervention has on the population. If this project were to be repeated these limitations could be better

addressed through the targeting of a specific population (e.g. female students, 18-22, Kinesiology Major). In doing so, the data collected would be more representative of the desired population. One could also conduct several studies over separate sample populations and compare the results in order to gather well rounded data. Another limitation discovered over the course of this project would be the consideration of the participant's socioeconomic status in the consideration of recreational participation. In the future, this factor should be further investigated beyond its ability to deter students as a function of ticket price. Additional monetary costs should be gathered such as average gas consumption over the semester, cost of transit passes, cost of loss of work hours, etc.

## Recommendations

After conducting our research, the data presented shows the main deterrents to activity all related to not having enough time to participate. Our research team came up with recommendations to combat these deterrents. The largest deterrent we discovered was the time of day/week that the activities are being offered. A possible solution that could be offered to ameliorate this would be to change or offer additional times for the events to make them more flexible and accessible. For example, offering short duration activities at multiple times and on multiple days of the week. This recommendation also has the potential to diminish the other time-based deterrents we came across such as the total time commitment involved in the activity and not having enough time for schoolwork. Other complaints that could possibly be addressed were students not wanting to bring their extra personal items for the activities on their commute to the university. Something that could be done to counteract this issue is that the University could implement increased amounts of low cost term lockers that are situated on campus to limit the amount of personal items that need be carried on daily commutes. Participants

noted that the increased cost, time and amount of commutes were deterrents. To counteract this, the event coordinators could offer motives for participation such as monetary prizes, academic credit or free transit passes, in an effort to try and encourage people to attend.

## References

- Elkins, D. J. (2004). *Levels of perceived constraint: A comparative analysis of negotiation strategies in campus recreational sports*
- Lothia, R., Donthu, N., & Hershberger, E. K. (2003). *The Impact Of Content And Design Elements On Banner Advertising Click-Through Rates. Journal of Advertising Research, 43(4), 410-418. doi:10.2501/jar-43-4-410-418*
- MacRae, M. A. (2011). *Barriers to participating in campus recreational sports programs by students at california state university, long beach* (Order No. 1507695). Available from ProQuest Dissertations & Theses Global. (954656203). Retrieved from <http://ezproxy.library.ubc.ca/login?url=https://search-proquest-com.ezproxy.library.ubc.ca/docview/954656203?accountid=14656>