

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

**An Analysis of Recreation Communication Effectiveness Among English Second
Language Students in Their First Year at UBC**

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FINAL REPORT

AN ANALYSIS OF :
RECREATION COMMUNICATION
EFFECTIVENESS AMONG ENGLISH
SECOND LANGUAGE STUDENTS IN
THEIR FIRST YEAR AT UBC

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Executive Summary

The target population of this project are ESL International students in their first year at the UBC. Research indicates that international students have lower rates of physical activity than domestic students (Suminski et al., 2002), thus making them an ideal population for this study. Our research design is a mixed methods study, collecting qualitative and quantitative data. This study includes both open-ended and closed-ended questions during the interview process. Participants were asked 10 semi-structured questions.

Once the interviews concluded, a thematic analysis was done on the data collected. Researchers replayed the recordings and went over the notes to find keywords describing their experiences. Our main goal with these analyses was to identify whether there were similarities, differences or trends/themes in the answers provided.

Findings

Involvement

Most of the participants reported a limited amount of involvement in organized UBC Recreation activities and programs. Informal, unstructured, and individual recreational activities were preferred by many of the participants.

Language Barriers

Contrary to what we anticipated, none of the participants experienced notable language barriers during the interviews or pertaining to understanding advertisements.

Knowledge of UBC Recreation Programs

Limited knowledge of UBC Recreation programs was seen across all participants. Only 6 out of 9 participants knew where the Student Recreation Centre was. Although 5 out of 9 participants mentioned social media as an effective avenue for information on UBC Recreation programs, other forms of communication strategies such as Clubs Day booths, Vantage College emails, Campus wide emails, in-class speakers and peers were also reported.

We found three themes that have emerged following speculation of the participants' responses to our interview questions: (1) emphasis on competition, (2) loss of networks, and (3) quality and consistency of advertisements.

Discussion

There was a lot of variation in the number and type of communication techniques mentioned by the participants. Participants who were more aware of UBC Recreation programs and events also reported more communication techniques that resonated with them, which suggests that using multiple modes of communication may be beneficial. A student who is currently connected to a greater number of UBC platforms has a greater likelihood of being more aware of UBC Recreation events and programs, and may be more inclined to participate. However, merely knowing that there are UBC Recreation programs and events happening on campus may not guarantee participation. Overall, our results suggest that within our chosen population, variations in recreation interests, participation rates, perceived barriers, and lifestyles exist. Communication techniques and platforms that resonate with some students may be completely disregarded by others. Therefore, in order to promote UBC Recreation events and programs effectively, diversity in communication techniques must be attained.

Recommendations

1. Our first recommendation is that UBC Recreation could build on existing social networks by implementing interactive marketing techniques in UBC residence buildings.
2. Staying consistent with advertising throughout the year could strengthen student engagement with recreation.
3. UBC Recreation representatives could set up booths at residence common areas once a month.
4. UBC Recreation could emphasize their smaller events using a more inclusive tone more frequently throughout the school year.



INTRODUCTION

The topic of encouraging participation in health-promoting recreational programs on university campuses has been prevalent among Western countries (Mokoena & Dhurup, 2017). Universities globally are continuously improving and increasing communication in regard to recreation programs offered within universities. Although there have been drastic improvements, effective communication to specifically first-year English Second Language (ESL) international students seems to still exist as an apparent issue (Yan & Cardinal, 2013). Suminski, Petosa, Utter, and Zhang (2002) found that college students in America who immigrated from Asia and Africa self-reported more hours of physical inactivity compared to domestic college students. This could be explained by factors such as unfamiliarity with the recreational activities offered, conflict with cultural values, or lack of knowledge around physical activity in one's country of origin (Yan & Cardinal, 2013; Payne, Harvey, & Dharmage, 2011). The primary goal of this project is to answer this research question: How can UBC Recreation improve on their advertising when targeting first year international ESL students for recreation programs? From the findings, we will then be able to determine effective communication strategies to afford this demographic the beneficial health and wellness effects of participating in recreational activities at UBC.

The use of social media is a common method of promoting recreation programs and events on university campuses (Chaddha, Jackson, Richardson, & Franklin, 2017). According

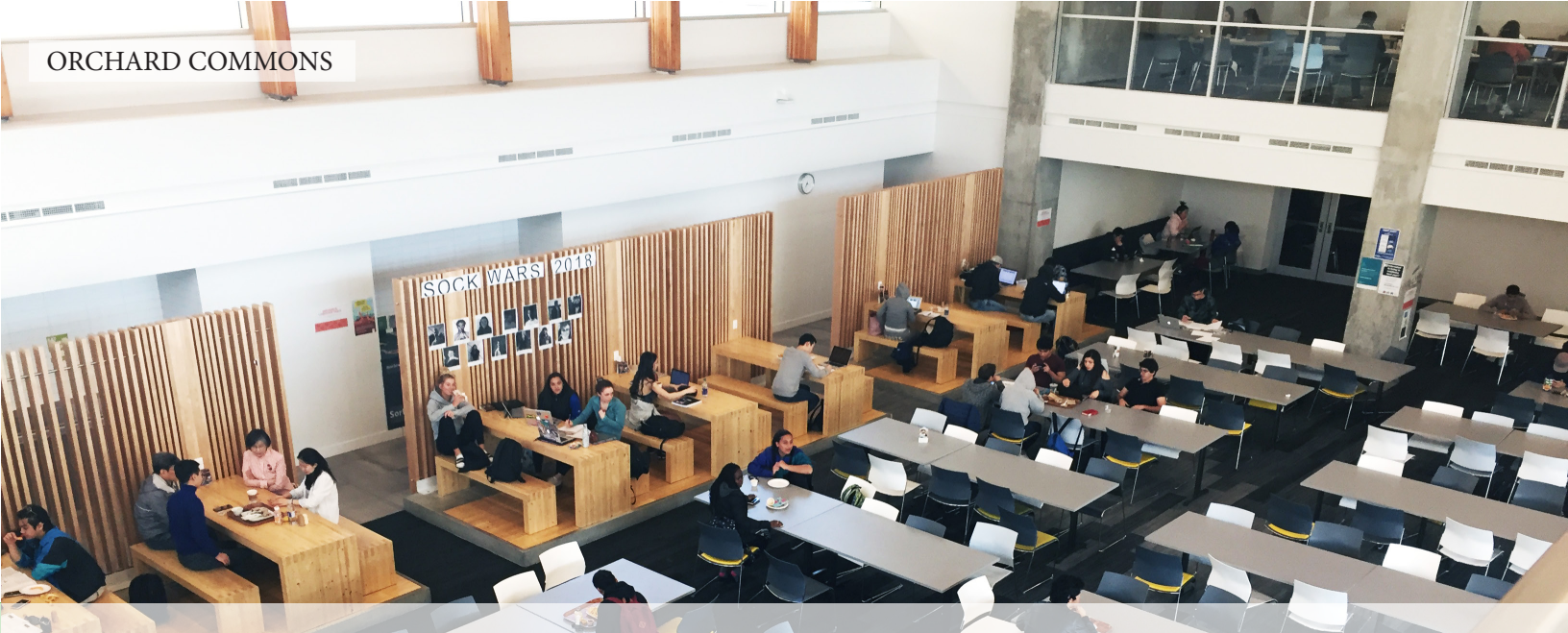
to Chaddha et al. (2017), Facebook, Twitter, Instagram, and Pinterest are platforms where users can communicate their participation in physical activity to encourage the participation of their peers. UBC Recreation is noticed upon various social media platforms, including Facebook and Instagram (UBC Rec, 2018) and recognizes the importance of social media among students. However, Neiger et al. (2012) outline that the effect of using social media to communicate should be evaluated using reach, exposure and engagement indicators. Reaching the people who are in contact with social media and its contents is of concern because students from locations where social media use is scarce, such as South Asia, Africa, and the Middle East, may be excluded (Neiger et al., 2012; We Are Social, 2017).

There are a variety of strategies that can be used, such as sending out emails, handing out flyers, posters, and advertisements on the school website are also popular strategies for promoting participation in recreation programs (Milroy, Wyrick, Bibeau, Strack, & Davis, 2012). We recognize a possible barrier for international students at UBC would be the lack of language diversity in these promotion materials. Methods of promotion are strengthened when they're used in collaboration with other sectors on campus that the targeted demographic has more exposure to (Milroy et al., 2012). At UBC, a key sector that would be beneficial to work with is the Vantage One Program, which facilitates the transition from high school to university for international students ("Program Overview", 2018).

When looking at UBC's website, there

is an UBC International Study Guide where one can "find everything you need to know about life as an international student at UBC's Vancouver campus (International Student Guide, 2018)." This section explains important areas of student life, such as job opportunities, health insurance, financial planning and mental health. However, this section fails to discuss ways to get involved with physical activity. UBC Wellness advocates that physical activity contributes to better mental health, yet there is no link provided to the opportunities on campus (See image 1). Being a first year ESL international student attending university can be incredibly stressful, UBC recreation recognizes and advocates the importance in group recreational activities to promote mental wellness and social connectivity (Health Body, Health Mind, 2018). In 2016, UBC's Vancouver campus had 13,182 international students enrolled in undergraduate and graduate programs from 152 countries. Furthermore, 32% of UBC's graduate student population and 23% of undergraduate students were international students (Redish & Mathieson, 2017). From 2012 to 2016, enrollment of international students at UBC increased by 4,744 students and this number continues to grow.

Although campuses currently use various strategies to promote recreation, we continue to see a lack of participation in first-year ESL international students. Further research on effective communication strategies must be done to afford this demographic the beneficial health and wellness effects of participating in recreational activities at UBC.



METHODS AND RATIONALE

The target population of this project are **ESL International students in their first year at the UBC**.

Research indicates that international students have lower rates of physical activity than domestic students (Suminski et al., 2002), thus making them an ideal population for this study. Additionally, UBC's international student population is expected to grow. Finding additional ways to reach out to international students to promote physical activity and recreational opportunities may help increase participation in events and initiatives at UBC.

Due to the difficulty identifying the specific target population in combination with a limited amount of time to recruit, random sampling will not be used. A sample of **9 first year ESL international students at UBC** was drawn from the population of first year ESL international students. The sample was collected from students in Vantage College, as well as through referrals from researchers' acquaintances. When recruiting participants, we tried our best to collect a sample representing a variety of ethnicities and cultural backgrounds in hopes of generating a sample that is representative of UBC's diverse student population, thus increasing external validity. Research has demonstrated that male and female college and university students have different exercise and dietary habits (Gruber, 2008), therefore, we also tried to collect a sample that was 50% male and 50% female in hopes of generating a sample that is representative of UBC's student population, and in turn, increasing external validity.

We investigated the effectiveness of UBC Recreation outreach methods to first year UBC ESL international students by asking them about their involvement in UBC Recreation events and how they heard about them.

By receiving feedback from students provided in the interviews, we have generated a list of most effective, or preferred outreach methods in hopes of increasing participation through improving outreach methods. We began with identifying the extent to which first year ESL international students at UBC are engaged in recreation programs on campus. Determining this has allowed us to elaborate on the reasons why this population does or does not partake in recreation as well as providing us with a starting point to determine whether communication is a large factor for participation rates in this population.

Secondly, we analyzed the **effectiveness of communication techniques** already presently being used at UBC, in terms of overcoming language barriers, and then determined how these techniques can be improved. UBC consists of a diverse population of students both domestic and international and strives to foster an inclusive and accepting environment in which students with varying levels of English language skills can thrive. As part of UBC's commitment to foster inclusivity and acceptance, it is crucial that UBC creates and utilizes strategies that cater to and help inform ESL international students in a way that is accessible.

Thirdly, we analyzed this group in hopes of gaining insight into how ESL international students feel about the **communication and promotion of recreation programming**. We have investigated their knowledge of UBC Recreation to measure how effectively UBC Recreation spreads awareness of their programs and facilities on social media and on campus. With this knowledge, we have highlighted the most effective and preferred strategies and have suggested new innovative strategies to promote programs for this population.

PROCEDURE

INTERVIEW QUESTIONS

Our research design is a **mixed methods study**, collecting qualitative and quantitative data. The data was collected concurrently and then was analyzed at the end. This project included both **open-ended** and **closed-ended questions** during the interview process. Participants were asked 10 **semi-structured questions**. Upon answering the questions, we were able to veer from the scripted questions to further probe for explanations, clarification and elaborations.

Our goal was to provide the participants with the interview questions in English and their primary language two-day prior to conducting the face-to-face interviews. However, due to the limited amount of time to recruit and interview participants, we had to use **convenience sampling** (a form of non-random sampling). Only one participant was provided with the interview questions in both English and their primary language prior to the interview. While providing the interview questions in advance may be introducing bias by allowing participants to better tailor their responses to what they think we want to hear, we accounted for this by informing the participants prior to the start of the interview as well as after the interview that all data will be anonymized. Instructions at the top of the handout clearly indicated that answers must be provided in person, and spoken in English.

At the beginning of the study, participants were provided a consent form detailing the purpose of the study, the risks, and their rights (see Consent Form in Appendices). Participants were informed that they would not be able to participate until they signed the consent form. Once signed and revised with the participant in person, the interviews took place. All interviews were conducted face to face and were recorded, with the exception of one interview conducted over Skype using video calling. This interview was still recorded. **Face to face** interviews were prioritized as it allowed us to gather in-depth data and observe our participants' facial expressions, body language and assist if there is a language barrier. Interviews allowed us to interact with our participants, clarifying any questions they may have and probe for further explanations. While all interviews were recorded, we also took brief notes during the interviews.

The use of several closed-ended questions allowed our participants to respond more easily and in a timely manner, thus minimizing the impact of the language barrier. The open-ended interview began by asking basic questions about the individuals. This gave us background information and context for future data analyses. By allowing open ended questions, we were able to retrieve in-depth answers where

Please describe a bit about yourself. (Example: I am ___ years old. I am a full time student working part time as a ____).

What do you like to do for recreation?

How many hours per week do you engage in recreational activities? (It is okay to estimate if you are not quite sure). How many of these hours of recreation are at UBC?

If you do not participate in recreational activities at UBC, what are your reasons why? (For example, awkward times for events, didn't know about the events, not in your language, expensive etc).

Do you know where the recreation center is (SRC)? (Y/N)

If you are in Vantage College or a cultural club, do you feel that your program encourages you to participate in recreation at UBC?

Have you heard of any UBC Recreation activities this year? If yes:

Have you participated in any of these activities? Y/N

How did you hear about these events? Did you hear about these activities through social media or on-campus?

Are there any events that you were interested in but didn't know how to get more information?

On a scale from No Information to All Information, how much of the information on UBC Rec advertisements do you understand? (No information, some information about what the activity is, where and when it's held, most information, all information)

How could UBC rec improve on their advertising for recreation programs?

Wrap up: Thank you for participating in our study. Do you have any additional comments or questions that you would like to make in regards to recreation and participation in this study?

participants could further elaborate on feelings and attitudes towards the questions. This also allowed us more information to access and analyze. The closed-ended questions were answered on paper while the open-ended questions were answered verbally.

Once the interviews concluded, a thematic analysis was done on the data collected. Researchers replayed the recordings and went over the notes to find keywords describing their experiences. Patterns of positive and negative experiences with UBC recreation were examined through key words and phrases. Positive experiences with UBC recreations can be sorted into themes of inclusion, reward, easy communication, and easy accessibility. Negative experiences with UBC recreation can be sorted into themes of **frustration, discrimination, exclusion, anger, sadness or embarrassment**. These categories are not finalized and may be altered based off the data presented. A thematic analysis will also be done on the avenues for recreation communication. Themes that researchers will be looking out for are **social media, human interaction, self interest and bulletin advertising**. Again, this list will vary based off the data.

Population statistics were looked at when analyzing the data. We compared physical activity rates to those found in the previous studies mentioned and the Canadian Physical Activity Guidelines (Canadian Society for Exercise Physiology). An important consideration we took into account

was the types of communication to motivated versus non-motivated ESL international students. While some forms of communication may work for one group, it may be not be as effective as the other. To help assess the effectiveness, data about the participant's recreation knowledge will be compared with their physical activity levels. [MT3]

When analyzing the data collected for the research question: **"How can UBC recreation improve their recreation program advertising In ESL ?"** we looked into the recommended strategies to examine the effectiveness. Based off the body of literature, we will then formulate a recommendation for UBC recreation.

Once all recordings of the interviews with all of the participants were transcribed by hand by all team members, analysis of the data collected was analyzed as a group. Thematic analyses were conducted. Our main goal with these analyses was to identify whether there were similarities, differences or trends/themes in the answers provided.

Questions requiring a simple **"yes" or "no"** will be visually represented through the use of a pie chart. Specifically, we will examine the effectiveness of the recommended strategies against existing literature, and then formulate an informed recommendation for UBC Recreation. Frequency of suggestions and recommendations will be displayed in frequency tables.

When

Interviews began at the end of February once the interview questions were approved by teaching assistants and Dr. Andrea Bundon. Some students at Vantage college had to return home in the first week of March which made our window to conduct interviews time-sensitive. In order to maximize external validity, we wanted to replicate the same environment for each participant by conducting all interviews face to face. Interviews were conducted in quiet, and private spaces at UBC to ensure privacy and confidentiality. Two group members were present for all interviews except for two interviews (one of which was conducted over Skype because the participant fell ill, and the other in person, but due to conflicting schedules, only one interviewer was able to attend). Interviews were scheduled a week in advance. Each interview was approximately 10 minutes long and at the end of each interview, participants were debriefed and were given the opportunity to ask questions about the project.

Trustworthiness

We enforced trustworthiness by recording our interviews, which allowed us to accurately report our participant's responses and to further analyze the data presented. Additionally, by providing a detailed description of the methods, we allow future researchers to replicate our project and speculate the generalizability of our findings.



ORCHARD COMMONS BUILDING

RESULTS

In the following section, we report the results pertaining to the effectiveness of existing communication strategies employed by UBC Recreation to first year ESL International students at UBC by discussing (1) involvement, (2) language barriers, (3) knowledge of UBC Recreation programs.

Involvement

Most of the participants that were interviewed reported a limited amount of involvement in organized UBC Recreation activities and programs. Informal, unstructured, and individual recreational activities were preferred by many of the participants. However, some participants spent a substantial amount of time on campus doing these individual activities in UBC Recreation facilities. For example, one participant stated that he “[swims] **about 8 hours a week all at UBC**” (Participant 8) in a proud, and affirmative tone. Other participants participated in their preferred recreational activities on other UBC infrastructures, such as a participant who reported that he “**like[s] to walk around campus to relax**” (Participant 3). One of the participants stated that he is involved with a structured UBC Recreation program, namely the Intramural Soccer league, but he reports that he hasn’t been consistently competing due to his busy schedule. The mean reported number of hours per week doing recreation on UBC campus, whether structured or unstructured, was **3.6 hours per week**.

Language Barriers

Contrary to what we anticipated, none of the participants experienced notable language barriers during the interviews or pertaining to understanding advertisements. When asked how much they understood UBC Recreation advertisements on a scale of 1-10 from No information to All information, all participants provided an answer of 5 or above, with a mean of 8.3. One participant reported, “**I can pretty much get all the information if I try... everything can be found easily with some effort**” (Participant 1). When the interviewer prompted the participants to elaborate on the information that can be extracted, all of the participants agreed that they can understand general information such as location, date, and the physical activity involved.

Knowledge of UBC Recreation Programs

Limited knowledge of UBC Recreation programs was seen across all participants. When Participant 1, Participant 3, Participant 7 and Participant 8 were interviewed, advertisements for UBC Recreation’s Storm the Wall were ubiquitous in the environment, yet only 2 out of the 4 participants acknowledged it when asked what UBC Recreation programs they knew of. Furthermore, only 6 out of the 9 participants knew where the Student Recreation Centre is.

One participant showed slightly more knowledge of UBC Recreation programs when she listed “**Free week, the triathlon,...a lot of classes, dance classes, yoga classes**” (Participant 1). She was informed of these programs through friends and online platforms such as Facebook. Additionally, she spoke more about the advantage of being part of a social community that is interested in recreation, and is therefore able stay informed:

“I think it kind of depends on like, who your friends are, like some friends are not into these dances and stuff. I had a friend, we went to most of them together. I found most of the schedule on the UBC website.”

- Participant 1

Another participant noted that she has knowledge of some programs offered by UBC Recreation, but feels that they are not convenient for her as a commuter student:

“I haven’t heard of event, but I have heard that you can join like, basketball, and teams here if you want, and there are classes you can join...but that’s more appropriate for someone who lives by UBC or lives on campus.”

-Participant 2

She further explains that she was informed about the UBC Aquatics Centre through a friend who lives on campus, suggesting that students who live on campus may be better acquainted with the facilities and programs offered at UBC.

Although 5 out of 9 of the participants mentioned social media as an effective avenue for information on UBC Recreation programs, other forms of communication strategies such as Clubs Day booths, Vantage College emails, Campus wide emails, in-class speakers and peers were also reported.

In the following section, we report the results pertaining to three themes that have emerged following speculation of the participants' responses to our interview questions: (1) emphasis on competition, (2) loss of networks, and (3) quality and consistency of advertisements.

Emphasis on competition

Participants were more aware of UBC Recreation events/programs that emphasized competition, such as Storm the Wall and Intramurals. One participant mentioned that she did not feel informed enough about recreational activities that promote enjoyment:

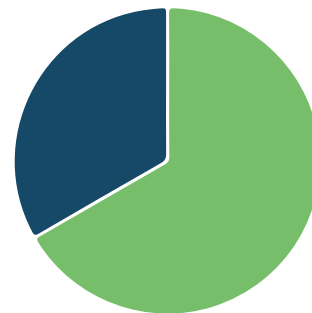
“It would be nice to like, go for something that’s for fun...I don’t really know what there is, to be honest, I know the main ones are basketball and swimming...I don’t hear much about it except for like, the athletes I meet”

- Participant 4

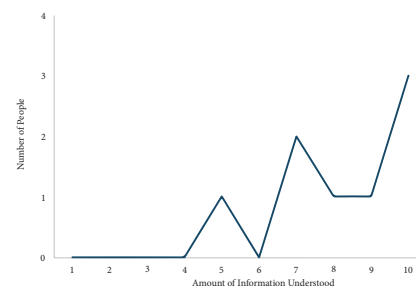
Related to competition, one participant reported that she felt as if all of the events were held **“in places where there are a lot of people and [she doesn’t] really like”** (Participant 9) the feeling of surveillance.

Do you know where the UBC Student Recreation Centre is?

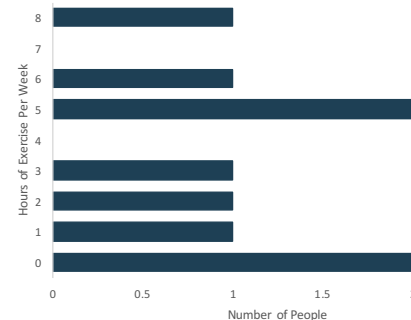
■ No ■ Yes



How much information can you understand on UBC Recreation advertisements?



How many hours of recreation do you do on campus?





Loss of networks

A barrier that some participants experienced was a loss or a lack of connections to the UBC campus, whether it be a limited amount of time spent on campus, lack of friends with similar recreational interests, or not being connected to UBC on social media. One participant explained that the reason why she does not participate in recreation on campus is that she **“lives downtown, which is far”** (Participant 2). Another participant explained that **“If I don’t see [the events] in emails, I don’t feel like I have ways to know about it”** (Participant 3). Furthermore, a student explained that she does not have a well-established social circle at UBC:

“It’s the first year for me to study abroad... I didn’t have any friends in my high school to be in the same university as me, so sometimes I may feel a little bit lonely”.

- Participant 6

Quality and Consistency of Advertisements

Multiple participants commented on the quality of advertisements promoting UBC Recreation events/programs. A few participants commented on the lack of clarity in the advertisements that may have caused confusion:

“There were some points that I’m not sure for the Storm the Wall, for example they said we had to register for the clinic but they didn’t say what’s the content of the clinic and no location was finalized for the clinic, that’s a bit confusing”.

- Participant 5

“For example the intramurals weren’t as advertised as well as the Storm the Wall, for example the deadline wasn’t really clear enough”.

- Participant 7

“I think there is a bit of confusion rising from Faculty Cup, I didn’t really know what activities in Faculty Cup, I don’t think it’s shown on the Facebook event description and that’s a bit confusing”.

- Participant 5

Another participant found that there was a lack of consistency in the frequency of advertisements across different types of UBC Recreation events:

“If there can be a post every day especially when it comes close to the deadlines for the [intramural] teams...just like exactly like the Storm the Wall campaign, if that’s applicable for everything”.

- Participant 7

The lack of consistency in frequency of advertisements throughout the semester was also noted by one of the participants, who explained that she was introduced to recreation opportunities at the start of the semester **“through Jumpstart”** (Participant 2), however she was not continually encouraged to participate in recreation as the semester progressed.

HOW DID PARTICIPANTS HEAR ABOUT UBC RECREATION EVENTS?



4 students heard through friends



3 students heard through General Social Media



2 students heard through Facebook



2 students heard through campus wide email and 1 heard through vantage emails



1 student heard during clubs day



1 student heard in class

DISCUSSION

Based on our results, we have found that ESL international students in their first year at UBC experience a number of barriers to recreation participation. Despite their interest to engage in recreation on campus, there exists a potential for improvement in effectively promoting UBC Recreation's events and programs to our population.

There was a lot of variation in the number and type of communication techniques mentioned by the participants. Participants who were more aware of UBC Recreation programs and events also reported more communication techniques that resonated with them, which suggests that using multiple modes of communication may be beneficial. Both on-campus ([posters](#), [UBC Recreation speakers](#), [residence advisors](#), etc.) and off-campus (social media, friends, etc.) techniques were mentioned. Therefore, a student who is currently connected to a greater number of UBC platforms has a greater likelihood of being more aware of UBC Recreation events and programs, and may be more inclined to participate.

However, merely knowing that there are UBC Recreation programs and events happening on campus may not guarantee participation. We noted that a few participants mentioned the competitive tone of some UBC Recreation

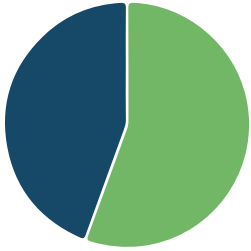
advertisements, which discouraged them to participate. We speculate that they may feel especially intimidated by the competitive environment because of the unfamiliar setting, where they are subject to judgement. Therefore, UBC Recreation may benefit from [reframing the goals and objectives of their events](#) on the advertisements to highlight the social opportunities to appeal to populations who are looking for a safer and more inclusive sense of community at UBC. Many students also mentioned that despite knowing about programs and events offered by UBC Recreation, they were unable to participate because of their busy schedules. One participant mentioned that she is required to take 7 courses, including 2 obligatory English-proficiency courses. Although this finding was outside the realm of our project, further studies should be done to address this barrier.

Overall, our results suggest that within our chosen population, variations in recreation interests, participation rates, perceived barriers, and lifestyles exist. Communication and promotion techniques should take into account the [diverse barriers](#) experienced in order to effectively promote UBC Recreation programs and events.



3:6

Male : Female



Did participants think social media advertising was effective?

■ No ■ Yes



What was UBC Recreation's most listed event?

4/9 Participants listed Storm the Wall

WHAT DO PARTICIPANTS DO TO STAY ACTIVE?



PARTICIPANT'S PREFERRED METHOD OF RECREATION PROMOTION



Facebook



Resident Advisors



Posters



Email



Flyers

LIMITATIONS

Sample size may also be a limitation of this project. With the limited amount of time to recruit and conduct interviews to collect data, our team was able to recruit and interview 9 ESL first year international students. Small sample sizes threatens both internal and external validity. Due to small sample size, we are not able to effectively demonstrate a premise or theme and therefore all participants of the study have to undergo unnecessary work or we could potentially be wasting financial and time resources. A significant problem with research studies with small sample size is interpretation of results. Small studies may provide results in a timely manner, but often do not yield reliable or precise conclusions. Therefore, data from such studies should be used to design larger or confirmatory studies. If we were to have the opportunity to replicate this project, it would be best to have a longer period of time to recruit and interview participants to have a larger sample size which would have a greater likelihood of being a better representation of the population, thus increasing external validity, and would allow us to more confidently identify trends and draw conclusions from the sample, thus increasing internal validity.

The use of **non-random sampling** is also a limitation of this project. Random sampling techniques would be ideal in order to maximize internal and external validity, however due to the limited amount of time and resources for this project, we chose to use convenience sampling. If we were to replicate this project, it would be beneficial to have a greater amount of time to recruit, and utilize random sampling, rather than non-random sampling.

One-on-one interviews may have caused nervousness, anxiety or stress in the participant (Boyer, Carden, Johnson, & Boyd, 2017). The presence of a language barrier may have accentuated these feelings, which may have impacted the answers provided by the participants. For these reasons, our goal was to provide written interview questions in both English and their primary language. However, due to the limited amount of time to recruit and interview participants, we were only able to provide one participant with the interview questions in advance. By providing the interview questions in advance, we reduced the potential for psychological and emotional harm. It is possible that by providing the interview questions prior to the interview allowed the participant to generate answers that were according to what they thought we would want to hear rather than what was specific to them. In order to account for this potential bias, we informed the participant two days prior to the interview, as well as just before the start of the

interview that their data will be anonymized and therefore readers will not be able to link any results back to them. The benefits of providing the interview questions prior to the interview outweighs the potential bias.

Interviews may be tiring and draining which may have impacted the quality of the answers that the participants provided. Our interview therefore consisted of a combination of open and closed questions. We used scaled items which are a type of closed question that requires participants to indicate the strength of agreement or disagreement with a statement. We also used open-ended questions which allow people to respond freely. While the answers may contain useful information, they may be hard to analyze, thus requiring clarification.

Misunderstandings or confusion were also potential problems while interviewing the participants. To try and minimize these influences, we took the following precautions: use clear wording, keep the questions short and concise, and avoid technical language. To account for the potential need for clarification, our group discussed in person, potential probing questions and methods of clarification prior to the start of the interview process.

Another limitation of this project is **experimental mortality**. There were 3 students who were interested in being participants in our research study, however as we had not yet had our interview questions pre-approved, we were unable to interview them as they had left to return home to Japan. If we were to replicate this project, we would require a larger period of time to recruit students and perhaps our interview questions to be approved sooner. This would allow us to have a larger sample size which would allow us to maximize internal and external validity and trustworthiness.

Consistency in interview environment may also be a potential limitation of this study. Our goal was to conduct all interviews in a booked study room at Woodward Library, however due to the busy schedules of all of the participants as well as our group schedules as well as a limited amount of time to recruit and conduct interviews, we chose to conduct the interviews in person in quiet and private spaces around UBC to preserve privacy and confidentiality of the participants, with the exception of one participant who was ill but agreed to an interview from home over Skype. If we were to replicate this study, we would conduct all interviews in person in the same quiet study room to ensure consistency and minimize the chances of differences in environment impacting the responses of the participants.

RECOMMENDATIONS

Feedback and recommendations from the 9 participants provided in interviews may contribute to improving marketing and communication of UBC Recreations' classes, events and programs to first year, ESL international students at UBC.

UBC RECREATION



1.

Our first recommendation is that UBC Recreation could build on existing social networks by implementing interactive marketing techniques in UBC residence buildings. UBC Recreation could implement interactive marketing techniques by using short, fun and interactive floor activities to promote various recreation opportunities throughout the year. By using these techniques, students may be more inclined to get involved or continue participating in these activities with their friends, family or classmates.



2.

Some participants mentioned that advertising was most prominent at the start of the school year, and decreases as the school year progresses. We recommend that UBC Recreation stay consistent with advertising throughout the year to strengthen student engagement and involvement in classes, events and programs year-round. More frequent exposure to advertisement generates a larger response rate than infrequent exposure (Fox et al., 1997).

In conclusion, the purpose of this study was to determine ways to improve promotion of UBC Recreation activities to our specific target population: ESL international students in their first year at the UBC. By conducting interviews, we were able to identify the effectiveness of UBC Recreation's existing promotional methods to this specific population. It became evident that there existed a need to improve communication to first year ESL international students of UBC Recreation classes, events and programs. We then generated novel promotional techniques for UBC Recreation to address the identified barriers to participation that our population experienced.



3.

Building off of our second recommendation, we suggest that UBC Recreation representatives set up booths at residence common areas once a month. By setting up a booth regularly, students will conveniently have the opportunity to regularly learn more about the variety of recreation options hosted by UBC Recreation. As previously mentioned, students will be more inclined to participate when they are continuously exposed to recreation programming (Fox et al., 1997).



4.

Another participant mentioned that UBC Recreation's advertising appears to cater to very experienced athletes and that it may therefore be uncomfortable for students who have not previously been exposed to the recreational activities offered by UBC Recreation. Emphasising that activities are open to individuals of all skill levels and will be held in welcoming, accepting and fun atmospheres, could increase student engagement (Licsandru & Cui, 2018). Another participant discussed that many activities are too large and crowded and many students were unaware of the smaller activities such as intramural programs and exercise classes UBC Recreation offers. A greater number of students could be more interested in participating if UBC Recreation advertised their smaller activities as frequently as their large-scale events, such as Storm the Wall.

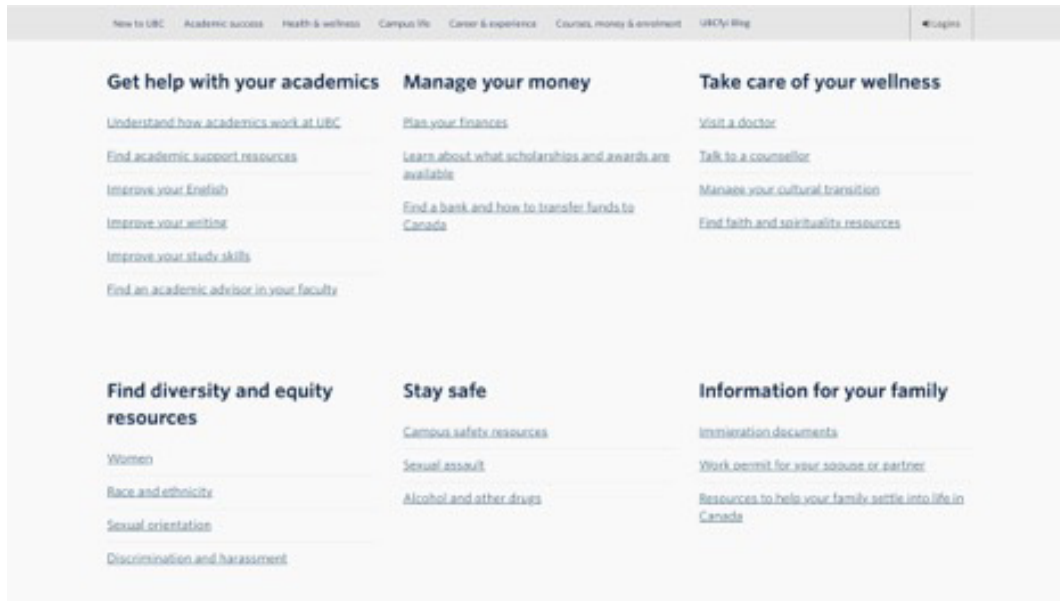
REFERENCES

- Boyer, L., Carden, L., Johnson, L., & Boyd, R. (2017). Establishing an interview anxiety baseline: Assessing applicants' readiness. *Business and Professional Communication Quarterly*, 80(3), 365-378. 10.1177/2329490616686567
- Canadian Society for Exercise Physiology. (n.d.). Canadian Physical Activity Guidelines. Retrieved from http://csep.ca/CMFiles/Guidelines/CSEP_PAGuidelines_0-65plus_en.pdf
- Chaddha, A., Jackson, E., Richardson, C., & Franklin, B. (2017). Technology to help promote physical activity. *American Journal of Cardiology*, 119(1), 149-152. 10.1016/j.amjcard.2016.09.025
- Courneya, Kerry S., Plotnikoff, Ronald C., Hotz, Stephen B., Nicholas J. (2000). Social support and the theory of planned behavior in the exercise domain. *American Journal of Health Behavior*, 24, pp. 300-308. doi:10.5993/AJHB.24.4.6
- Harvey, J., Payne, W., & Dharmage, S. (2011). Physical activity, health and wellbeing among migrants at risk of cardiovascular disease. *Journal of Science and Medicine in Sport*, 14, 74-75. 10.1016/j.jsams.2011.11.154
- Health Body, Health Mind. (2018, February 4). Retrieved February 12, 2018, from <http://www.recreation.ubc.ca/2018/02/04/healthy-body-healthy-mind/>
- International Student Guide. (2018). Retrieved from <https://students.ubc.ca/international-student-guide>
- Leventhal, Richard. (2005). The importance of marketing, *Strategic Direction*, Vol.21 Issue: 6, pp 3-4. doi:10.1108/02580540510594084
- Licsandru, T. C., & Cui, C. C. (2018). Subjective social inclusion: A conceptual critique for socially inclusive marketing. *Journal of Business Research*, 82, 330-339. doi:10.1016/j.jbusres.2017.08.036
- Milroy, J. J., Wyrick, D. L., Bibeau, D. L., Strack, R. W., & Davis, P. G. (2012). A university system-wide qualitative investigation into student physical activity promotion conducted on college campuses. *American Journal of Health Promotion*, 26(5), 305-312. 10.4278/ajhp.101110-QUAL-365
- Mokoena, B. A., & Dhurup, M. R. (2017). Evaluation of a campus service quality recreational scale. *Studia Universitatis Babes-Bolyai Oeconomica*, 62(3), 67-82. 10.1515/subboec-2017-0014
- Moody, J. (2001). Race, School Integration, and Friendship Segregation in America. *American Journal of Sociology*, 107(3), 679-716. doi:10.1086/338954

- Neiger, B. L., Thackeray, R., Van Wagenen, S. A., Hanson, C. L., West, J. H., Barnes, M. D., & Fagen, M. C. (2012). Use of social media in health promotion: Purposes, key performance indicators, and evaluation metrics. *Health Promotion Practice*, 13(2), 159-164. 10.1177/1524839911433467
- Payne, W., Harvey, J., & Dharmage, S. (2011). Factors affecting participation in physical activity among migrants at risk of cardiovascular disease. *Journal of Science and Medicine in Sport*, 14, e13-e14. 10.1016/j.jsams.2011.11.029
- Program Overview. (n.d.). In UBC Vantage College. Retrieved from <https://vantagecollege.ubc.ca/program-overview>
- Redish, A., & Mathieson, C. (2017). University of British Columbia 2016/17 Annual Report on Enrolment. Retrieved from https://senate.ubc.ca/sites/senate.ubc.ca/files/downloads/UBC%20Enrolment%20Report%202016-17_Final%20-%209%20Jan%202017.pdf
- Simpkins, S. D., Vest, A. E., Delgado, M. Y., & Price, C. D. (2012). Do School Friends Participate in Similar Extracurricular Activities?: Examining the Moderating Role of Race/Ethnicity and Age. *Journal of Leisure Research*, 44(3), 332-352. doi:10.1080/00222216.2012.11950268
- Suminski, R. R., Petosa, R., Utter, A. C., & Zhang, J. J. (2002). Physical activity among ethnically diverse college students. *Journal of American College Health*, 51(2), 75-80. 10.1080/07448480209596333
- UBC Rec. (n.d.). In Facebook. Retrieved from <https://www.facebook.com/ubcrec/>
- We Are Social (2017). Digital in 2017: Global Overview. Retrieved from <https://wearesocial.com/special-reports/digital-in-2017-global-overview>
- Yan, Z., & Cardinal, B. J. (2013). Promoting physical activity among international students in higher education: A peer-education approach. *Journal of Physical Education, Recreation & Dance*, 84(1), 35-40. 10.1080/07303084.2013.746151

IMAGES

Image 1:UBC Wellness



CONSENT FORM



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KIN 464: Health Promotion and Physical Activity

Participant Consent Form for Class-based Projects

Principal Investigator:

Dr. Andrea Bundon (Assistant Professor, School of Kinesiology, Faculty of Education)

Student Group: 21

Leona Chan, Sydney Lopes, Stephanie Quon, Shivani Sen

The purpose of the class project:

The goal of this project is to determine novel ways to effectively promote UBC Recreation activities to ESL international students in their first year at University of British Columbia (BUC). We can utilize this knowledge to implement strategies on UBC campus to encourage their participation, so that they can receive the aforementioned health benefits.

Study Procedures:

With your permission, we are asking you to participate in an interview. We will record the interviews and take notes of your responses. With the information gathered, students will critically examine how different individuals understand or engage in health promoting activities or initiatives.

Project outcomes:

The information gathered will be part of a written report for the class project. The written report will be shared with the community partners involved with the project. Summaries of findings may also posted on the following website.

UBC SEEDS Program Library:

<https://sustain.ubc.ca/courses-degrees/alternative-credit-options/seeds-sustainability-program/seeds-sustainability-library>

CityStudio Projects:

<http://www.citystudiovancouver.com/projects/>

No personal information/information that could identify participants will be included in these reports.



Potential benefits of class project:

You may not directly benefit from participating in this research study. This study is designed to determine novel ways to effectively promote UBC Recreation activities to ESL international students in their first year at the University of British Columbia. The results from this study may be used to help UBC Recreation promote events in the future.

Confidentiality:

In order to ensure confidentiality, participant's contact information and direct identifying information will be kept apart from the data in the questionnaires. The data will also be assigned codes, where the key to the codes will be kept in a secure place away from the data.

At the completion of the course, all data (i.e. notes, interview transcripts) and signed consent forms will be kept in a locked filing cabinet in Dr. Andrea Bundon's research lab (1924 West Mall) at the University of British Columbia. All data and consent forms will be destroyed 1 year after completion of the course.

Risks:

The risks associated with participating in this research are minimal. There are no known physical, economic, or social risks associated with participation in this study. Although there is a schedule of questions, participants are free to share what they would like, including refusing to answer specific questions. You should know that your participation is completely voluntary and you are free to *withdraw from the interview* and there will not be negative impacts related to your withdrawal. If you withdraw from the study, all of the information you have shared up until that point will be destroyed.

Contact for information about the study:

If you have any questions about this class project, you can contact Andrea Bundon by phone at 604-822-9168 or by email at andrea.bundon@ubc.ca

Research ethics complaints:

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or e-mail RSIL@ors.ubc.ca. or call toll free 1-877-822-8598.

Consent:

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. Your signature below indicates that you have received a copy of this consent form for your own records. Your signature indicates that you consent to participate in this study.



Participant signature _____

Date: _____