

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Understanding Female Chinese Students' Low Engagement with Physical Activity –

Communicational, Environmental and Situational Barriers

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Executive Summary

The identification, understanding, and rectification of the communicational, environmental, and situational barriers that prevents Chinese female students from participating in physical activity (P.A.) at the University of British Columbia (UBC) is a research study conducted by a group of UBC students. It has been identified by UBC census data that Chinese female students (Chinese, Hong Kong, Macau, Taiwanese) are a demographic with one of the lowest P.A. rates (Kim, 2018). This is a significant demographic of UBC's student body, as they comprise 41% of the 54% of UBC's female population (Fact Sheet Winter 2018, 2018). Past research has identified that P.A. has the effect of preventing chronic diseases, and improving physical and mental health (Warburton, Nicol, & Bredin, 2006). Participants were recruited through Qualtrics surveys, followed by one-on-one interviews and focus groups. The research method was qualitative in nature.

Three notable findings from this demographic were determined from this study:

- 1) Academic achievement is prioritized above P.A.
- 2) There is a lack of awareness of P.A. programs and events at UBC
- 3) One's lived experiences affects the depth of their physical literacy

The findings from the study provide insight for key changes that can be implemented to improve UBC Chinese female participation in P.A. These recommendations include: utilizing different platforms of social media, developing a new mobile app that incentivizes P.A. participation, offering academic incentives for participation in P.A., incorporating a mandatory course into first year curriculum, and establishing women-only gym spaces.

Introduction

According to data compiled by the UBC Planning and Institutional Research Office (PAIR), they found that 54% of the university student body comprised of females, whereby 41% of students associate themselves as having Asian ancestry (Fact Sheet Winter 2018, 2018). Consequently, we have chosen to study a Chinese student base from UBC. Previous research has suggested that this given demographic is prone to engage in less P.A. relative to other demographics (Haase, Steptoe, Salli, & Wardle, 2004). Specifically, previous UBC SEEDS projects have suggested that there are lower participation rates for recreational programming among female students.

However, there is a knowledge gap in regards to understanding the cultural and religious values that Asian female students at UBC may encounter that may impede them from partaking in recreational programming at UBC. Consequently, from this study, we hope to address this knowledge gap by examining and understanding the potential facilitators and barriers that Asian female students at UBC may encounter with respect to three variables: environmental, communicational, and situational, as well as the perceived barriers that may impede this given demographic from partaking in recreational programming at UBC. Through the use of qualitative research by way of surveys, semi-structured interviews, and focus groups, we anticipate to attain a rich, open, and reflective discussion among prospective participants that will ultimately aid UBC policy makers to optimally implement strategies that will support and encourage the engagement of this given demographic. Therefore, in order to increase the P.A. participation of this demographic, it is critical to identify and understand their perceived barriers to P.A.

The research study was conducted in association with the support of our project partner UBC SEEDS. UBC SEEDS is committed to transforming the UBC campus and its communities into a more sustainable environment, and to also benefit its overall wellbeing (UBC SEEDS, 2018). Our project partners within the organization were Sally Lin, Charlene Phung, and Lyz Gilgunn. They provided guidance and

support with the structuring of our study, through providing valuable information on effectively conducting focus groups, recruitment of participants through distributing a campus wide email to potential subjects and revising our focus group questions to be effective, informative and respectful.

Background Information / Literature Review

From UBC's census data, Chinese female students are a demographic with one of the lowest levels of P.A. participation and adherence (Kim, 2018). Keung (2015) reported that 19% of Chinese youth experience life stressors that stemmed from social exclusion, lack of coping skills, poor relationships with their peers due to language barriers, and stress from the pursuit of academic excellence. In addition, Forbes-Mewett and Helen (2016) found that international students, who are one fifth of Asian descent, experienced adverse mental health states that stemmed from social and cultural barriers. These barriers, language being the largest barrier, create a disconnect from their community, peers, and difficulty in their academic environment. This can be attributed to the fact that Chinese students may face challenges such as acclimatizing to a new culture by entering UBC where they need to learn and adjust to the social and educational norms (Chen & Lewis, 2011; Young, 2017). This adjustment to new environments may cause Chinese students to experience complications with mental health issues. Moreover, Chinese female students are also shown to experience lower self-esteem compared to their male counterparts (Pak, Dion, & Dion, 1991). Therefore, understanding the lived experiences of Chinese female students is vital in the pursuit of increasing their P.A. participation, and thereby improving their health outcomes and well-being.

P.A. is vital in the prevention of chronic diseases. (Warburton, Nicol, & Bredin, 2006). P.A. has been found to reduce blood pressure to healthy levels, thereby reducing the onset of cardiovascular disease (Warburton, Nicol, & Bredin, 2006). P.A. has also been found to have a positive relationship with bone mineral density, as it facilitates the loading the the skeleton (Warburton, Nicol, & Bredin, 2006). This prevents the onset of osteoporosis and osteoarthritis of the individuals that partake in P.A. as they progress

through the lifespan. Furthermore, P.A. has shown to increase self-esteem in participants who regularly partake in cardiovascular P.A. (McArdle, Katch, & Katch, 2015). In addition, exercise is shown to alleviate symptoms of psychological distress to the same extent that pharmacotherapy can (McArdle et al., 2015). Therefore, because of the proven benefits of P.A. in alleviating the negative symptoms that may have been experienced by the Chinese female demographic at UBC, it is important to identify the barriers that prevent access to P.A., specifically, the situational, environmental and communication barriers. In addition, understanding the barriers to P.A. in this study can help inform UBC with updated mental health and physical health policies for those who are Chinese female students.

Situational barriers are those that are directly related to the individual; for example, the lack of time to participate in P.A. due to academic demands (Daskapan, Tuzun, & Eker, 2006). Environmental barriers include but are not limited to long commutes, inaccessibility of facilities or lack of physical literacy (Daskapan et al., 2006). Communication barriers are those that limit individuals from being aware of P.A. opportunities such as language barriers or lack of information received about P.A. opportunities (Daskapan et al., 2006).

Yan and Cardinal (2013) determined that the greatest barrier that Chinese females face is the lack of time due to academic commitments. This may be due to academics being deeply rooted in Chinese culture as parents place a great degree of importance on academic achievement (Chao, 1996). Many Chinese parents believe that without academic success, there is no future career available for their children, whereas physiological health is something that can improve in the future and is not an immediate concern (Chao, 1996). Therefore, for many Chinese females, it is not by choice that they do not participate in P.A., but a familial obligation that prevents them from doing so.

Another barrier to P.A. as identified by Yan and Cardinal (2013) is the unawareness of available P.A. programs, or the lack of understanding of how to get involved with the programs. For example, if

information about the P.A. program is not in a language that is understandable to the individual, there is less chance of their participation in that program (Yan & Cardinal, 2013). In addition, the availability and circulation of the information plays a critical role. Using relevant social media platforms that are popular among the Chinese female demographic, such as WeChat may influence the extent that information regarding P.A. will circulate to those individuals (Boyd, 2017).

The project is important to SEEDS because their mandate is to benefit the well-being of the UBC student population (UBC SEEDS, 2018). The findings and recommendations determined from this project will serve to potentially reduce barriers to P.A., create more inclusive and safe spaces, promote interculturalism at UBC and improve the mental and physical well-being of Chinese female identifying students at UBC.

Methodology

This study was conducted in accordance with UBC SEEDS to determine the situational, environmental and communication barriers for P.A. for students who self identify as Chinese (including Hong Kong, and Macao) or Taiwanese. UBC SEEDS Sustainability Program Project Coordinator, Sally Lin facilitated the initial kick-off meeting for our group. She was our main contact throughout the project and provided us with the necessary objectives, strategies and guidelines for the project. Our group communicated with our community partner, Lyz Gilgunn, from the UBC P.A. office and Charlene Phung, from the UBC Equity and Inclusion Office actively through emails and in person meetings. Through communication with Lyz and Sally, our group developed an understanding of the SEEDs project's purpose and the necessary steps in order to carry through this project. The main steps required from this project included the following in chronological order: participant recruitment, designment of our focus group, conduction of our focus group, analyzation of data and presentation of findings.

1. Participant recruitment

Participant recruitment included creating a catchy email blurb (Appendix G) and a UBC Qualtrics survey that screened for participant eligibility and availability. Sally Lin helped circulate this information to students to participate in our focus group. In addition, convenience sampling was employed the day the focus group took place in order to gather more participants. There was 10 participants total for this study. All participants fit the eligibility criteria.

2. Design of focus group

Focus group questions were prepared in advanced, using a qualitative method as it allows for the inquiry of the lived experiences, feelings, opinions, and knowledge of the participants (McEwen, 2017). Focus group questions were developed based on background information and literature reviews on potential situational, environmental and communicational barriers faced by this specific demographic. Feedback for our questions were provided by Liv Yoon and Charlene Phung. It was critical to gain feedback from both Liv and Charlene as their expertise in this field allowed us to develop questions that were effective, culturally appropriate and respectful. Lastly, the date for the focus group was based on the availability of the subjects.

3. Conduction of focus group

Semi-structured interviews were used for inquiry of the major topics of our study (situational, communicational, environmental), while also allowing for greater focus on more specific areas of interest (McEwen, 2017). If one did not feel comfortable answering the question in a group setting, forms with our focus group questions were provided for these individuals. Focus groups help facilitate open communication as one can express ideas and share feelings that do not typically come out in a quantified survey (Thomas, Nelson, & Silverman, 2015). There is a greater autonomy in answers as discussion are free flowing, and members can use comments from others to stimulate recall (Thomas et al., 2015). Consent forms were provided, and the participants' anonymity were kept.

4. Analyzation of Data

Participant responses to the focus group questions were recorded on an audio device and transcribed. Trends within the participants' responses were determined and analyzed. Based on the findings determined, recommendations were made for potential mitigation of barriers to P.A.

5. Presentation of Data

On November, 22nd, 2018. Our group presented our findings from our study to the class of KIN 465 as well as our community partners, Lyz Gilgunn, Charlene Phung and Sally Lin.

Project Outcomes / Findings / Discussions

Through the analysis of our focus group of 10 participants, 3 notable findings for the situation and communication barriers of Chinese female UBC students were identified. 1) P.A. is not viewed as a priority. 2) Not enough awareness on P.A. opportunities at UBC. 3) Physical literacy depends on an individual's lived environment.

Situational Barriers to Physical Activity - Physical Activity is not a priority

Academic demands and scheduling conflicts were perceived as the greatest situational barrier among the participants of our focus group. 60% of our focus group (Appendix H) described how academic work came before P.A. and 50% of the focus group identified scheduling conflicts as a barrier to P.A. (Appendix H). A participant stated "I prioritize studies first," while another participant supported her point by stating, "I do not currently have any P.A. in my schedule due to immense amounts of assignments and exams." It can be inferred that from these statistics and personal quotes, P.A. is prioritized after academic needs. In addition, another participant shared that "I would love to go to the REC center, yet, I cannot balance homework, exercise and personal activities as of now." Therefore, it is evident that participants are not making the time for engagement in physical activities as they are allocating hours of their day toward other activities they deem as more important. Yan and Cardinal (2013) confirmed this through their studies

and stating that Chinese females perceive their lack of time to be a consequence from academic commitments. In addition, later findings from Daskapan et al. (2016) supports our findings that students direct their energy elsewhere, leaving them with no time or energy to engage in physical activities. It is critical to understand the reasons behind why students value academics over P.A. Daskapan et al. (2016) concluded that a possible reason that academics are more strongly emphasized in this particular demographic is through students hoping to fulfill the wishes of their parents by prioritizing academic success. This is supported through Chao's (1996) study which determined that academics is rooted in Chinese culture as parents place great emphasis on academic success. In addition, finding a work-life balance in early universities years may be difficult. McGill University (2017) published an article called the "work-life balance" and stated that many undergraduate students experience anxiety about the future and stress developed from comparison to their peers. This suggests that the prioritization of academic success at UBC could be fueled from an institution emphasis on academic importance. It is necessary to employ an intercultural lens in order to effectively determine means to mitigate these barriers and co-create activities that work for individuals from different backgrounds (Kopelow & Fenton, 2018).

Communication Barriers to Physical Activity - Lack of Awareness

Lack of awareness was determined to be the major communication barrier to physical activities. 50% of participants in our focus group stated that they were not aware of activities available at UBC (Appendix H). This was due to information regarding P.A. programs being limited to specific social media platforms that may not be used by majority of the Chinese female population at UBC. For example, interviewers in our focus group asked, "Are you aware of UBC programs and have you ever heard of UBC Free Week?" A participant replied stating, "I don't have a lot of knowledge of it. If I was subscribed to UBC's Facebook page, maybe I would have more knowledge. I don't have Facebook, so I can't subscribe to it. But for most people who have Facebook, it shouldn't be a barrier." Therefore, it seems that students

acknowledge that there are current advertisements about physical activities but their lack of awareness is because they do not use certain social media platforms that are popular among majority of the student body at UBC. In addition, our focus group findings determined that the #1 method of learning about physical activities is through friends (Appendix H). This suggests that social connections can impact the extent to how much an individual knows about P.A. opportunities. If Chinese female students are unaware of P.A. opportunities, then their peers may also be unaware. Therefore, it is important to determine how information is exchanged among this demographic of students. If one friend has access to information about physical activities at UBC, it is likely that there will be a chain reaction effect where news regarding this topic will be spread. By utilizing different modes of social media platforms, we can achieve interculturalism as it enables individuals of different ethnicities to come together and be aware of the activities and functions that UBC REC has to offer. This allows all students at UBC to have an equitable access in information about P.A. opportunities and programs. By using this intercultural perspective, UBC REC is able to reach the Chinese female demographic that may not regularly be informed or aware of the possibilities (Renfrew-Collingwood INTERactive, 2013).

Environmental Barriers - Lived Environment Influences Depth of Physical Literacy

Our focus group findings determined each participant's subjective motivations for partaking in physical activities and whether or not they understood the health benefits of P.A. Improving mental health, maintaining healthy lifestyles, taking a break from academics and socializing with friends was determined as the main reasons for participation in P.A. (Appendix H). This information was critical in addressing if physical literacy was present in this specific demographic. 60% of our focus group stated that improving mental health was their main incentive to participate in physical activities (Appendix H). Therefore, it can be inferred that the majority of students in our focus group understand the health benefits of P.A. However, a student in our focus group stated that "P.A. is not emphasized back home the same way that it is here." This

suggests that the environment that an individual was raised, spends time in and feels at home can impact their knowledge of the importance of incorporating P.A. into daily routines. Therefore, an individual's upbringing could manifest as a barrier to participation in P.A. at UBC. This suggests that the results obtained from our focus group cannot be generalized to the rest of the UBC student population who identify as Chinese female students as some of these students will be local to Vancouver while others with the same identity can come from several other areas of the world. It is critical to point out that as of November 1, 2018, UBC has 6239 Chinese international students which is the largest group of international students out of all countries respectively ("Demographics Overview", 2018). Because the target audience of our focus group was any female student who identifies as being from China, Hong Kong, Macao, or Taiwan, it is difficult to distinguish how many years an individual has lived in North America, whether they are International students and where they were raised. This may mask a large barrier to P.A., which is being an international student that had most of their lived experiences outside of North America. This emphasizes the significance of why it is important to not only ask "where are you from," but also, "where are you a local" (Selasi, 2014). For future projects, it may be beneficial to set more specific guidelines for the focus group demographic. If it is determined that physical literacy differs depending on where an individual was born and raised, more specific resources for Chinese, female international students may need to be developed and implemented at UBC, such as language specific P.A. guides or a mandatory class to improve physical literacy.

Because our sample size consisted of only ten students, it is not representative of all Chinese identifying female UBC students and the results cannot be generalized to all individuals with this identity. In order to increase population validity of the study, the sample size should be increased. The qualitative nature of this study also serves as a limitation as it is not possible to generalize subjective lived experiences of ten

students to an entire demographic. Further research can employ both quantitative and qualitative means to determine barriers to physical activities.

Recommendations

Based on the findings of our study, UBC REC and the greater UBC community can improve the participation levels of P.A. for female Chinese students on campus through a number of changes. Our first recommendation is increasing awareness of UBC REC programs through social media platforms such as WeChat. This is important because 50% of our focus group participants received information about recreational activities through friends (Appendix H). Research suggests that providing on-campus recreational information to students through multiple modes of social media platforms are necessary in order to disseminate and promote recreational programming (Bayne & Cianfrone, 2013). Consequently, WeChat is one social media platform that UBC REC can explore. WeChat is considered the most popular social networking app in China, with over 1 billion active users ("Global", 2018). WeChat provides similar resources that enables individuals from all walks of life to learn, share information, and interact with each other (Boyd, 2017). With respect to our given study demographic, 41% of the international students at UBC are Chinese undergraduate students (Fact Sheet Winter 2018, 2018). Interestingly, WeChat seems to be the fifth most popular choice (38%) among the Chinese population in Metro Vancouver ("Canada", 2017). It is worth noting that the UBC Sauder School of Business has a WeChat channel where students can stay up to date on what is occurring within the school ("Join the Conversation", 2018). As one participant stated "[I] know in Sauder we have a UBC Sauder 2019 group that is like a lot of international students in my year is in that group. There is a lot of social groups [in WeChat] that you can advertise stuff in." UBC REC should consider utilizing multiple modes of social media platforms, such as WeChat to be more efficacious in providing recreational programming on campus to this given demographic. Previous research suggests that

providing health information on WeChat led to attainment of high levels of satisfaction among participants (Li, Han, Guo, & Sun, 2016).

Our second recommendation is for UBC REC to establish a mobile app that provides activity-based rewards system for individuals utilizing recreational facilities at UBC (eg. Birdcoop, ARC, etc.). This is important as 40% of the focus group participants suggested that a conflict in their schedules was a barrier, suggesting that P.A. is not prioritized in their schedule (Appendix H). By offering an incentive, it can increase this priority in a given individual's daily life. Research suggests that providing some sort of incentive in relation to one's level of P.A. may induce positive effects of P.A. (Barte & Wendel-Vos, 2017; Patel et al., 2018; Pope & Harvey, 2015). Specifically, Pope and Harvey (2015) found that college first-year students who are provided with an incentive are more likely to use recreational facilities situated on campus. Furthermore, local gym facilities in the Greater Vancouver region such as Steve Nash Fitness World provide its members with various benefits by way of utilizing their mobile app (Appendix A) (Blondé, 2018). For example, whenever a participant checks into the sports club to begin an exercise session, they receive points that can be used to claim rewards towards clothing, merchandise, promotion to higher tiers of membership, as well as attaining complementary personal training sessions or nutrition consultations (Blondé, 2018). UBC REC can provide a "FitRewards" program where an individual can collect points when they participate in P.A. or recreation classes. UBC REC can collaborate with local organizations to provide incentives by supplying active students with credit that can go towards sports related merchandise, fees for given recreational programs, or on-campus food services. For example, one utilizing the Birdcoop gym over 5 times within a given timeframe can lead to a free reusable water bottle, etc. This provides participants the opportunity to not only target their goals to improve their overall health, but to also increase social interactions with other individuals.

Another feasible approach that UBC can employ is implementing an academic incentive for students who partake in P.A. on campus. A participant from our focus group stated, “it’s more like you can exercise later but if you don’t study for an upcoming exam, than there is no way to make for that.” Therefore, it seems that students are prioritizing activities in their life based on academic urgency or deadlines. This suggests that academics are extremely valuable to these students. If students were given the opportunity to earn academic credit for P.A., it may increase their participation as they have an academic incentive to work toward. Our next recommendation is to offer an academic incentive into all UBC classes. For example, each course can offer 1-3% bonus marks for proof of engagement in physical activities 5 or more times / semester. Adding an academic incentive to encourage participation in recommended activities is evident through UBC’s department of Psychology. UBC Psychology offers HSP (human subject pool) credit which is the opportunity for students to gain first-hand experience with how research is conducted as well as contribute to ongoing departmental research (“Human”, 2018). Therefore, if a similar incentive was offered for P.A., it may increase the rates of participation because the reward is something deemed valuable by the demographic examined. If the educational institution recognizes the benefit and impact of P.A., it is fundamental to employ strategies from the institutional level. It is unfair to expect students to engage in P.A. without acknowledging or rewarding their efforts. Promoting systemic change in the value of P.A. in a highly driven academic environment can create long lasting impactful changes. Additionally, DeVahl, King, and Williamson (2005) found that providing an academic incentive increased participants’ adherence to a voluntary exercise program.

Another recommendation would be to provide UBC students with more awareness of the importance of P.A. through providing elective courses or mandatory courses for all first year students to take. It is shown that first year students enrolled in an university are shown to gain weight as a result of a number of factors such as academic pressures, inadequate levels of PA, stress, unhealthy eating, etc.

(Vadeboncoeur, Townsend, & Foster, 2015). For instance, at the UBC Okanagan (UBCO) campus, they offer a new elective course HEAL 100, that provides a comprehensive overview of concepts and theories pertaining to health and wellbeing specifically to students' holistic health (Skolski, 2017). Consequently, this enables students enrolled in this course to learn strategies in terms of facilitating their own wellbeing and academic success in order to develop health competencies. Interestingly, UBCO has a course similar to this as a mandatory requirement for any student who is enrolled in the bachelor of human kinetics program ("Degree Requirements", 2018). This may influence UBC students to be aware of the potential benefits of exercise through completion of this course, which may entice one in accessing recreational facilities on campus.

Our last recommendation is to increase safe spaces for recreation at UBC; specifically, women's only exercise programs. This is because 2 participants in our focus group declared personal comfort levels as a barrier to P.A. One participant shared, "a specific side for female-identifying individuals at the gym for more comfortability," while another participant stated, "I believe that as a young Asian female student, I sometimes feel uncomfortable and rather inferior to those who are so used to the facilities." UBC is recommended to establish women's only gym sessions. For example, it can be at one of UBC's two gym facilities at a certain time / week, such as Monday and Wednesdays from 7am-9am. This can encourage individuals who are unfamiliar with the gym environment to work out in a safe environment that provides equitable access and opportunity regardless of ability. The establishment of these programs does not intend to exclude individuals who do not identify as a female. Since UBC has two gym facilities, there will always be a facility that is available for individuals regardless of their identity. In addition, with the implementation of women's only spaces, an additional component will be added to the gym registration form. Through this form, an individual can indicate if they are a woman and wish to participate in women's only gym sessions. Currently, the University of Toronto incorporates Women-only programs at their recreation facilities. The

Strength and Conditioning centre is a space that is only open to women, including staff (University of Toronto, 2018). The University of Toronto offers women-only hours at their facilities to ensure equitable participation in P.A. and is one of the several strategies implemented by the Faculty to optimize participation, reduce barriers to be active and foster inclusivity across culture, religion and ability level (University of Toronto, 2018). In addition to women-only gym access, the university also offers several drop-in programs such as basketball, stick 'n puck, swimming, volleyball, olympic weightlifting, weight room training and field sports (University of Toronto, 2018). Therefore, UBC should consider providing certain hours for women-only access to not only increase the participation of Chinese female students at UBC, but all females.

Conclusion

The objective of the study was to identify, understand, and rectify barriers to P.A. that Chinese female students perceived. It is important to improve this demographic's P.A. participation as they make up a significant percentage of UBC's student population. Through our findings, we were able to determine that the greatest barrier to Chinese female student's P.A. participation was their academic demands. As Chinese families take high precedence on academia, it is difficult for Chinese students to be able to manage their time to include P.A. (Chao, 1996). The lack of time, the cost of facilities, the lack of adequate spaces in the recreation centers, and the students' personal comfort levels also serve as barriers to Chinese female P.A. participation. The recommendations that we have highlighted in this report achieve interculturalism as each of these recommendations may increase engagement and connections between individuals from all walks of life. These recommendations are designed to fulfill the needs of the study demographic to improve their physical literacy, thereby improving their participation in P.A.

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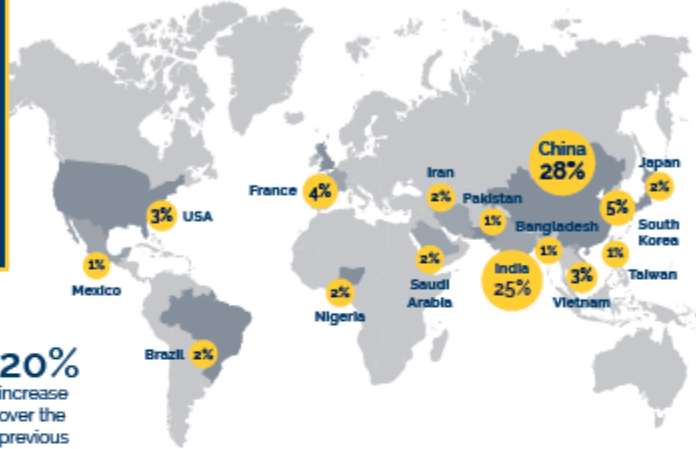
Appendix A: Figures

Canada's Performance and Potential in International Education

International Students in Canada 2018

494,525
international students in Canada at all levels of study in 2017

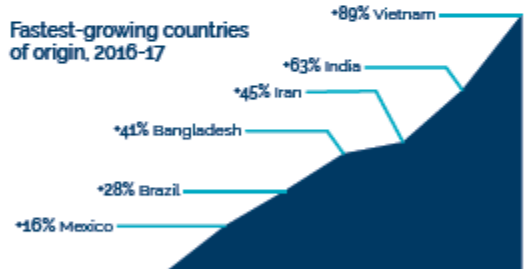
Where do inbound students come from?



119% increase in international students in Canada between 2010-2017
20% increase over the previous year

"The most positive part of my study experience in Canada has been the guidance I received from my professors. The quality of education is outstanding."
 - Natural Sciences student from Egypt.

Fastest-growing countries of origin, 2016-17



Top 3 reasons international students choose Canada²

- 1 The **quality** of the Canadian education system
- 2 Canada's reputation as a **tolerant** and **non-discriminatory** society
- 3 Canada's reputation as a **safe** country

95%

of international students recommend Canada as a study destination³

51%

of international students plan to apply for permanent residence in Canada⁴

1. 2016-2017 International Student Survey; 2. 2016-2017 International Student Survey; 3. 2016-2017 International Student Survey; 4. 2016-2017 International Student Survey

Source: A World of Learning: Canada's Performance and Potential in International Education 2018
 cble-boel.ca

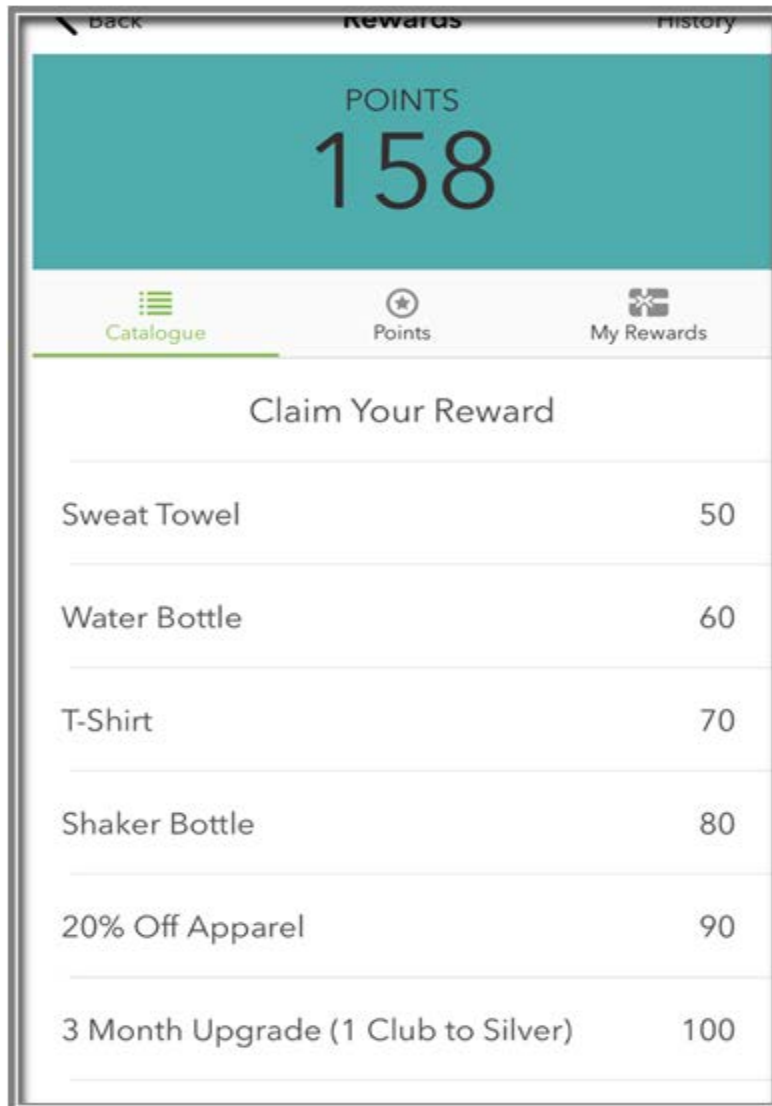


(CBIE, 2018).

UBC Fact Sheet of the Demographics Overview


Fact Sheet Winter 2018 The University of British Columbia, Vancouver Campus Data as of November 1st, unless noted otherwise							Prepared by: Planning and Institutional Research (PAIR)																																																																																																																																																																																																																											
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(Fact Sheet Winter 2018, 2018).



(Blondé, 2018).


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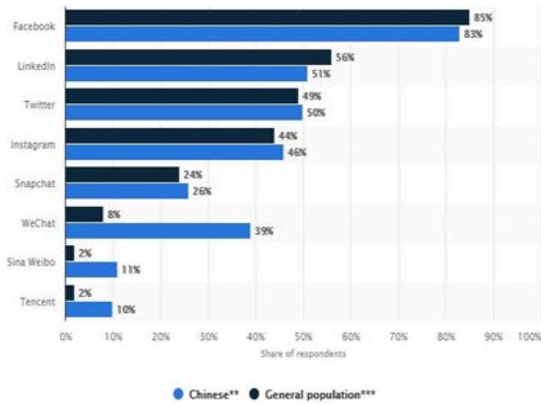
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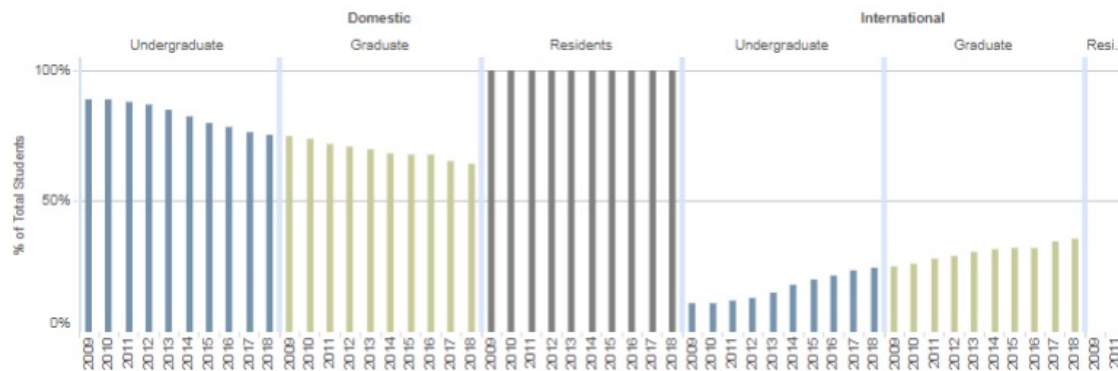
(“Join the Conversation”, 2018).

Share of the Chinese and general population of Metro Vancouver using selected social media sites in Canada as of June 2017



("Canada", 2017).

Percent international



top countries of citizenship

Citizenship Country UN	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	1,329	1,434	1,725	2,212	2,789	3,606	4,278	4,928	5,638	6,239
China, Hong Kong Special A..	168	175	185	203	236	285	303	331	353	362
India	253	286	302	364	453	547	710	876	1,203	1,591
Indonesia	142	147	145	149	175	206	226	239	253	278
Iran	293	322	379	404	357	309	285	277	309	331
Japan	315	316	309	292	351	351	369	365	391	384
Mexico	258	239	223	207	198	207	221	255	289	276
Republic of Korea	566	590	640	598	525	506	514	503	539	528
United Kingdom of Great Bri..	186	210	222	248	271	324	346	344	368	316
United States of America	1,389	1,397	1,441	1,398	1,399	1,463	1,512	1,594	1,756	1,741

("Demographics Overview | Planning and Institutional Research", 2018).

Appendix B: Focus Group Transcript

FG = Focus Group Participants

FG - Is the first two questions about UBC activity or in general?

Interviewer: It is about UBC.

Interviewer: Maybe while you guys are writing, you guys can write and listen at the same time while I give a brief overview of why we are conducting the study and what statistics have been found that drew attention to this cause in particular. In 2018 the academic experience survey that was conducted by the UBC alma mater society which is the AMS, they found that 54% of the university student body was comprised of female students and which 54% of themselves associated with Asian ancestry. So, consequently we have chosen to study a Chinese student base from UBC as 38% of the international students at UBC are Chinese undergraduate students. So, previous research has suggest that this particular demographic is susceptible to lower levels of physical activity which means they are less likely to partake or engage in exciting recreational programs as compared to the majority of the population and specifically, UBC SEEDS projects has suggested that their lower participation rates for recreational programming at UBC among female students. However, there is a knowledge gap in regards to understanding the cultural and religious values that Asian female students at UBC may encounter that may impede them from partaking in recreational programming or any other leisure forms at UBC. So, in this study we hope to address this knowledge gap by examining and understanding the potential facilitators and barriers that Asian females students at UBC may encounter with respect to 3 variables , environmental, communicational, and situational as well as their personal perceived barriers that may impede them from partaking in recreational programming at UBC. So that is just a little

blurb and background on why this project is important and of significance and why your voice really matters in this cause.

Interviewer: So, I'm just going to ask some follow up questions to what you are filing out already. So, do you guys prioritize your academics over your physical activity?

FG- Yeah, yeah probably.

Interviewer: So why is that? Is that due to family expectation or some other factor?

FG- It's cause our studies is heavily relied on what we want to be when we graduate and our profession so that is the priority for me other than exercise cause I can always just do that later on.

FG- Yeah. I agree.

Interviewer: Yes, that's a good point. How about you?

FG- It's more like you can always exercise later but if you don't study for the upcoming exam for example, then there is no way to make up for that.

Interviewer: So, does your academic course load or your extracurricular activities leave you with little to no time to exercise ?

FG- Definitely.

Interviewer: So basically you don't enough time to participate because academics is important.

So, are there any like barriers that you perceive other than academics that prevent you from actually participating? For example, I commute or I know people who commute from Port Moody and it would be a pain to use UBC facilities because they would get home really late. So, any barriers like that?

FG- I think workload is a barrier so that relates to academics , so I used to , I live in Richmond and I used to try to incorporate exercise by running from Richmond to the UBC campus, but that

overtime I stopped doing that because it became too much, and on top of trying to work, do 5 courses, volunteer, it is too much, so eventually the stress is too much.

* All the other participants were amused of the response from this participant

Interviewer: So, it is like a time constraint?

FG- Yeah time constraint and also I was taxing myself, there was too much going on yeah.

Interviewer: That's pretty insane though running from Richmond. How long did it take you?

FG- It took a couple hours.

FG - Oh, wow.

Interviewer: So, would you say the facilities at UBC are affordable like Birdcoop or REC, that's not really an issue or is it?

FG - No, not really.

Interviewer: Okay.

Interviewer: Would you say if you go the gym at 2 pm, would you say its overcrowded?

FG- Yeah that's an issue.

Interviewer: So it's an issue. Is it like too many people in the facility or just not accessing the appropriate equipment you want to work out with?

FG- Yeah that too, because I would go during my breaks between classes and sometimes during those time periods it would be too full because I know like around lunch time and early mornings and around 5 pm is the busiest because people get off class. But, I also have class in-between where the gym would be empty so I would never have the chance to go.

Interviewer: So, what do you think would be a beneficial aspect that UBC REC could deliver to make it more accessible for students according to their schedules?

FG- I want to say more equipment and more space, but I know that means an increase in tuition for us and yeah I don't want to pay for that.

Interviewer: Makes sense.

Interviewer: Thank you. Next, I am going to ask you about potential communication barriers, so are you guys currently aware of the current available recreational activity here at UBC? So, let's say if you lived on campus versus if you don't live on campus, do you see posters of what's free, what's available, or do professors ever talk about things or how do you even know when activities are available?

FG- Well, I like the UBC page on Facebook so sometimes they appear on my feed and like people post like intramurals or REC center activities or something like that so that's how I get information of what's happening on campus pretty much, but I don't know much about the prices and whether or not if they are free or not so yeah.

Interviewer: So is there anyone that is not part of the UBC Facebook pages? Do you feel like you are aware of what programs UBC has to offer and have you ever heard of UBC Free Week or do you even know what that is ?

FG- Yeah I heard of it but I'm not, umm I don't have a lot of knowledge of it so, like I hear it in passing.

Interviewer: So, when you are walking around campus there is really nothing that jumps out at you like I can do this today - Do you have to actively seek to find information?

FG- Yeah, but I think if I was subscribed to UBC's Facebook page maybe I would have more knowledge, yeah.

Interviewer: Is there a reason for it to make it easier for you to subscribe to that page ?

FG- I don't have Facebook so I can't subscribe to it. But I think for most people who have Facebook, it shouldn't be a barrier.

Interviewer: Do you think there is any other social media platform that may be more accessible to everyone - For instance, Instagram ?

FG- Yeah I think Instagram I believe is becoming as popular as Facebook. It could potentially be a good way to help spread the word.

Interviewer: Have you ever received emails about physical activity like UBC free week, Move UBC, or intramural activities via email before ?

FG- Sometimes.

Interviewer: Does anyone use Snapchat or Instagram on campus?

FG- Yes.

Interviewer: Do you ever see advertisements from UBC particularly from recreational activities?

FG- No

Interviewer: Do you think that would be a good way of delivering info, would that help you on what's going on at campus?

FG- I think emails is pretty good because we all have to check our emails from professors regarding coursework so if we see emails from UBC, we are more inclined to access that knowledge I guess.

Interviewer: Furthermore, what usually encourages you guys to participate in physical activities - like social circles - if all your friends are participating, or if your family are participating, or advertisements, or if its free or if there is no cost barriers? For example, if your friends participated would you feel more inclined to participate?

FG- Yeah I think so.

Interviewer: Do you all agree if one of your friends was doing a physical activity you would be more likely to join them?

FG- It's the opposite for me because I work with a lot of marginalized communities like in particular first nations communities I can see how lifestyle issues can affect health, so for me, seeing that first hand motivates me to exercise more. But, that is just for me.

FG- For the friends thing it depends what it is like if we are going hiking it is more fun in a group, but if I want to work out on a treadmill, I don't want to socialize or look cute for my friends, yeah.

Interviewer: Lastly, do you think there is anything that UBC REC can change for your participation in physical activity on campus? Your opinions is very valuable for us because if we get a consensus for something that we can change, the administration will look at it and examine it and possibly implement it in the next policy cycle.

Interviewer: Do you think if there was a incentive for working out on campus or exercising, would that be a favourable choice for everyone? Any sort of suggestions?

Interviewer: Like part of your tuition you pay a given amount for UBC REC - even though you pay that fee you still can't access the Birdcoop, you still need to pay an additional fee. What if that was all totally covered, would that be a good choice?

FG- Yes, that would.

FG- However, we need a bigger gym space and more equipment and free weeks to try out more things.

Interviewer: Do you think if there is more time for free activities or programs, would that be beneficial? Because during the beginning of each semester, everyone is trying to transition to figure out which class to take, that is probably more of a priority. Let's say there is more free

week programs till the middle of October, you will have more of an exposure of what they are providing, and if you like the program you would continue with it. You think that would be a good way of promoting physical activity on campus?

FG- I think free week was offered after I bought my membership.

Interviewer: How do you feel about that?

FG- I was a little disappointed.

FG- Also, I think it's impossible to fit and go to everything in one week.

Interviewer: Do you all agree to spread it out and offer free weeks throughout the semester?

All Participants - Yeah.

Interviewer: Okay.

FG- Does UBC offer free lockers all day?

Interviewer: Yeah if you have a gym membership you can borrow a locker while you go to the gym or you can buy a locker for a term and it's yours.

Interviewer: One idea I was thinking about like in some gyms there's a women only area and for me I always went there, like what you said it's not a social activity my hair is gross, but I go at it and that made me feel more comfortable - would you think that could affect your willingness to go to the gym and increase comfort levels?

FG- I would say so. I used to have a membership at this gym and they had that. I felt more comfortable because it was open to women but you were allowed to workout outside of that space, which is a nice choice, because I noticed that the women that I was working out with , some of them seem to be less comfortable working out in a bigger, open space. So, I think it is nice for people who are not comfortable to work within this women's only area. Also, I know lots of people compare bodies at the gym, so yeah, it is nice to have a women's only area.

Interviewer: Thank you everyone for your time and input.

FG - Thank you.

Appendix C: Transcription of Semi-structured Personal Interviews

Participant # 102

Interviewer: So, do you currently schedule physical activity in your schedule?

Participant: Yes. So, I would usually go to the gym for at least one time per week if I have time and yeah... I usually go to the student union [ARC gym] because there is less people there, yeah.

Interviewer: So, you are using gym facilities at school?

Participant: Yes (nodding).

Interviewer: Okay, that's good.

Participant: Sometimes I play badminton with my friends and we usually go to the other gym,

Interviewer: The SRC (Student Recreation Centre building)?

Participant: Yeah.

Interviewer: So why only once a week though? (Scheduling Physical Activity)

Participant: It is just my schedule is a bit packed because I also have to work and yeah, so I usually do it over the weekend or on Friday

Interviewer: Oh, you are working at the ice cream place, right?

Participant: Yeah.

Interviewer: So, would you prioritize your studies over physical activity in that sense? Do you care more about your health or would you rather be better in academics?

Participant: I would say if it's like going to the gym, then I would prioritize with my studies instead of going to the gym, but I would also, I am not like go to the gym everyday or something,

but if I have time, I would just walk around the campus to make sure I am exercising and I try to reach 5000 steps every day, yeah.

Interviewer: Once a week is pretty good actually, it's not that bad.

Participant: It's not enough, but like doing my work time it seems like exercise, I have to stand for 6 hours.

Interviewer: Oh, that could be seen as exercise

Participant: Yeah that's why I only go the gym once a week

Interviewer: So, it's basically due to your work, and school commitments, those are the two things that are barriers to your physical activity?

Participant: Yeah

Interviewer: Okay.

Interviewer: So are costs associated with anything? Is everything affordable to you when you are doing physical activity?

Participant: I would say yes. At school, the gym is really cheap for three months or the whole semester, so yeah, and when you want to rent the equipment, most of them are free, so I would say yes, it is really affordable, The cost would not be a concern for me.

Interviewer: Also, do you commute to school or do you live on campus?

Participant: I live on campus.

Interviewer: So you live on campus?

Participant: Yeah.

Interviewer: Okay. That's good.

Interviewer: So, I guess you don't have to waste a lot of time going back and forth from one place to another

Participant: Yeah, that's why I go to the gym at school because I live on campus.

Interviewer: So, are you aware of any of the recreational activities on campus? Do you see flyers around, or Facebook posts, or even your professors talking about it?

Participant: I see posts on Facebook. They are usually like events, especially when the school semester starts, there is usually a week that every facility is free or you can take some classes for free and try it. That's the big Facebook post that I always get. And usually when you go to the gym, there are posters of the new equipment or some events, but I never attended them.

Interviewer: Okay. Why did you not attend them?

Participant: It's just that sometimes the time schedule doesn't fit or most of the events are related to yoga or similar to that, and I am just not interested in that, so I didn't go.

Interviewer: Yeah, yoga isn't always the best activity because it depends on the instructor, because some of them may teach you the wrong things

Participant: Yeah and I am not really good at stretching. I just go to the gym and run for usually an hour and a half (90 minutes).

Interviewer: Okay. So, you don't hear anything from professors that share recreational activities on campus?

Participant: No, not really. I don't think so.

Interviewer: What about social media, do you get any information on recreational activities on campus from there?

Participant: Like Facebook as I mentioned, usually sometimes you can see people post pictures when they go to the Storm the Wall event or sometimes you will see posts when people go to the gym, yeah.

Interviewer: Speaking of Storm the Wall, would you ever consider doing that?

Participant: Oh yeah, I was considering doing it, but we could not find enough team members to do the whole activity. It sounds really interesting especially like when you climb the wall. I feel like it's like a bucket list for university, but for the whole activity, you need to find enough members to do it, which I unfortunately don't have, and I really want to try it.

Interviewer: So, what influences you or encourages you to participate in physical activity?

Participant: I would say friends are sort of like an influence because when most of your friends go to the gym or they are considering eating healthy, then you start thinking about it. Also, after going to the gym, I realize that it is a really good way to release your stress when you are just like put your headphones and start running, it really calms you down. So, I think it is a really good way to release your stress. Also, like social media when you look at your Instagram, you notice that most of your friends are going to the gym, you feel like maybe I should go, and once you try, you will know how good it is, yeah.

Interviewer: Do you think that offering more free programs would cause more individuals to come and participate in recreational programming on campus?

Participant: I would say yes. So, what I notice is that the UBC pool (UBC Aquatic Centre) is free which a lot of my friends go, because it is free, and they do not want to pay for the gym membership, so I think it would be a good thing if the gym membership is cheaper even though it is already cheap, but if it is free, then definitely more individuals would come and exercise, yeah.

Interviewer: Alright. Is there anything you think that UBC can change in order to increase participation levels for Chinese female students at UBC? As it is suggested that this demographic has the lowest participation levels of all groups at UBC.

Participant: I would say maybe having more events or promotions because I think that people who exercise, they really just go to exercise. Or, as you asked that if professors mentioned about it, for my professors, they did not mention about recreation or anything related to it. Maybe if professors promote it might allow more people to know more recreation activities, because a lot of people do not know that the Old Student Union Building has a new gym, right? So, maybe sharing this information would let more people know about these recreation activities. Also, a lot of people would say that it is too crowded at the Birdcoop gym on campus so they just don't exercise, yeah. So, maybe having more facilities would also be a good thing, yeah.

Interviewer: Alright.

Interviewer: Do you think that there are any social media platforms that might influence one in knowing about UBC REC's programs besides Facebook or Instagram?

Participant: I think maybe posters around classrooms, because you really do not see this information in your classrooms. You only see it like in the Student Union Building where there are small bulletin boards, and you walk past the bulletin board and see the information. But, like when you go to the Buchanan building, you can't see it or when you go the Chemistry building, you won't really see something related to it. I would say maybe have more physical posters or somehow to advertise and promote this information (recreation information).

Interviewer: What do you think that UBC REC could do to influence more individuals to partake in their facilities?

Participant: First, I would say if they can increase more facilities because when you go during like 2 PM to 4 PM, it is usually very crowded. You have to choose either to go early morning or late afternoon, but sometimes for people who want to commute back home, that would be a concern because they have to wake up early to come to UBC or have to go home late. So, even

though I live on campus, I usually go to the gym during the weekend but the opening hours could be longer I would say because they usually close at 8 pm but at the same time UBC REC would need to consider the costs for employees. Second, if UBC REC states that the gym membership is free it would definitely attract more people, but at the same time, it is already crowded at the gym, so attracting more people UBC would need to have more space or more facilities or equipment for the students.

Interviewer: Exactly. That makes sense, yes.

Interviewer: Would you believe having an incentive to exercise on campus, for instance, the more you go to the gym or use the facilities that are offered such as badminton drop-in, or basketball drop-in, would that be an ideal way?

Participant: Yeah, that would definitely be a good thing because for badminton, the first time when we planned to go play badminton we did not notice that we have to make a reservation for it. If we can just drop-in to play badminton, that would definitely be better. Also, when you go ice-skating, you have to check the schedule to see what time you can go in. But like you can't just like oh I want to try ice-skating and then you just go, you have to make sure to go at a certain time, and there are a lot of times that your schedule does not really fit the time they are making it available for students to use, yeah.

Interviewer: Are these schedules easily accessible or do you have to be physically be there?

Participant: You can just find it through their website. I think it is really clear, yeah. When you type UBC gym or UBC ice-skating, or UBC badminton drop-in, you will definitely find the information that you need which is really useful, you do not need to go there and notice that. But, sometimes the schedule they open for students, it is just really bad.

Interviewer: Alright. I see.

Participant: Yeah.

Interviewer: Thank you for your time and responses.

Participant: Thank you and no worries.

Participant #204

Interviewer: Do you believe that if you go into a gym space, or a fitness or a zumba class, do you potentially think that some of the movements being taught in the class may seem foreign to some Chinese female students because they may have not been exposed to that in their culture?

Participant: - No, I just think that if you are a regular fitness person in China you would know, but not a lot of Chinese female students go to the gym.

Interviewer: Okay. Are you saying that they don't know how to work out? Or the importance of working out?

Participant: They know It's more like they don't have the habit of working out yeah.

Interviewer: So could that possibly be that in China they don't prioritize it back then?

Participant: Yeah even though that everything is there, they don't access it.

Interviewer: What do you think can decrease that or build a habit of starting to exercise or increasing their interest in exercising?

Participant: That's very hard, they do promote a lot of fitness and health and wellness at UBC, but I think is to take the message to them.

Interviewer: Okay. On that note we can move onto communication and awareness platforms. A lot of advertisements here at UBC from what we can see are from Facebook and UBC REC highlights free week events on Facebook. Sometimes they post it on Instagram. What platform do you think that the majority of Chinese female students at UBC use?

Participant: Definitely WeChat.

Interviewer: In your experience do you feel like a lot of Chinese females students or international students, do they have Facebook and do they know to follow UBC REC to get their knowledge about recreational activities on campus?

Participant: They have Facebook and Instagram but most don't follow UBC.

Interviewer: Have you seen an ad from those social media platforms with a geographical location?

Participant: No, I don't think so, but I follow them on Instagram and Facebook so I get everything anyways.

Interviewer: Do you think there is a possibility to use WeChat to disclose information about recreational activities?

Participant: Yeah, there should be an official account called UBC REC and they could like hire or ask volunteers to help spread the message in a lot of groups. Also, I know in Sauder we have a UBC Sauder 2019 group that is like a lot of international students in my year is in that group. There is a lot of social groups that you can advertise stuff in.

Interviewer: That's a really good point I bet UBC REC right now have media directors and they focus on making their Facebook and Instagram appealing so they could broaden that.

Participant: Yeah there could be an international position.

Interviewer: Maybe an international student who has those connections can work with UBC REC.

Participant: Yeah, we definitely have a lot of people like that.

Interviewer: If you are saying they already made a UBC Sauder group then they could make an official UBC REC WeChat group that would be cool then we could target this population.

Interviewer: What situational or environmental barriers inhibit you from participating in physical activity on campus? Some examples are like commuting, or the affordability of some of the spin classes I think cost about a hundred sixty or something.

Participant: Yeah the classes are quite expensive. The price is one thing and then language barriers for international students.

Interviewer: Language barriers. What do you mean by that? Could you explain?

Participant: Like they are not familiar with the language in general even if they go to UBC they may not speak the language proficiently.

Interviewer: Potentially at a fitness class an instructor may say lunge, squat, and so on, maybe they may not understand those instructions

Participant: Yeah those bootcamp classes maybe hard.

Interviewer: Definitely I experience this before like in a spin class, the instructor was saying faster, slower, or sit-up or sit-down and sometimes it may be hard for them to comprehend so that may deter them if they had a bad experience.

Interviewer: Do you think your academic schedule or academic priorities are greater than exercise?

Participant: Yeah, because I know I don't really workout during midterm season, but I definitely try if I have the time. Going to the gym is definitely a priority for me now but it wasn't for the past three years.

Interviewer: What shifted that mindset?

Participant: I think you do get a lot of influence but you have to accept it yourself. Like truly accept it yourself to be able to have a gym routine. A consistent gym routine. It's not something easy, it's quite hard, it takes time I think.

Interviewer: You mention perhaps a language barrier may be an issue for some students in those boot camp programs where there are a lot of commands like sit, stand, squat, all that, lets say there's like special classes that use more body language and less vocalization to show what they are trying to do in class.

Participant: I feel like they may be intimidated by other people and may want to join

Interviewer: Maybe if they had instructors who can speak Chinese?

Participant: I am pretty sure they would be a lot more comfortable and if there would be more international students. Also I feel like that they are at UBC after all also we should push them a little to integrate and connect with UBC or Canadian culture.

Interviewer: Lastly, you know UBC is very big on promoting health, and wellness - like most first year, second year, third year students know that physical activity can help aid their academic performance, why do you think people are still reluctant to schedule in physical activity into their day? Especially during midterm or final season. Do you think there is too much academic pressure?

Participant: Obviously if people mess up on a midterm it is more damaging than skipping out on the gym for a week. The pressure is there yeah. And it is a hard activity to maintain as well you need the willpower.

Interviewer: You said you live on campus, do you see any environmental barriers for you accessing the REC facilities at UBC?

Participant: No, but I think that the UBC gyms are definitely less smaller and less useful than actual gyms yeah. Less equipment and stuff like that.

Interviewer: Do you use any other gym facilities that are close by?

Participant: No, but I used to go other gyms but like yeah this year I started going to gyms on campus and I realised they are quite small and lacks a lot of stuff.

Interviewer: Comparing to other gyms that you went to and were close by, were they working for you? Was it more accessible and less crowded?

Participant: Yes, it was, but it was more expensive, but I guess value for value there were pros and cons. Overall, I think the ARC gym is not bad for its price, but the Birdcoop is definitely outdated.

Interviewer: Overall what do you think if there was more space at the UBC gyms?

Participant: Yeah definitely having more space would be great, as well as more equipment, more classes, and more free weeks.

Interviewer: Thank you for your time and responses.

Participant: Thank you.

Participant #306

Interviewer: Do you currently schedule physical activity in your schedule?

Participant: Yes, it's not a concrete schedule though because it's influenced by exams, and the weather, because I commute to the gym, but it's roughly around 4 days a week. Personally, I don't sweat often and I love running at a speed of 5.7 with an incline of 3.5 for 25-30 minutes while catching up on my YouTube. I feel more productive and I live for the runner's high. I also paid for a 4 month gym membership so if I don't go, it feels like a wasted investment. Finally, I am a Nutritional Science student, and learning about how important health is always leads me into wanting to take care of my body physically as well. Also, I am rather short too, so if I wasn't as active, I feel like I'd look like a potato, and I already have a young, baby face.

Interviewer: Alright that's good.

Interviewer: Would you say you prioritize academics over physical activity?

Participant: Yes, I do, but before finals I'd like to say I try to be balanced.

Interviewer: Okay.

Interviewer: Do you believe your academic course load or extracurricular activities leave you with little time to exercise?

Participant: Yes.

Interviewer: I see.

Interviewer: Do you believe you have enough time to participate?

Participant: I think so. I have less hours for sleep, but I still participate.

Interviewer: Okay.

Interviewer: What situational or environment-related barriers inhibit you from participating in physical activity?

Participant: Well my classes from UBC take 3 hours on average and the commute there and back is roughly 2 hours, that coupled with days where I work on campus leave me no time or energy. On days where I have the energy, the gym will be closed by the time I get home or it leaves me with little time to get in a proper workout and that deters me since the days are shorter.

Interviewer: Alright. So you believe the commute back home and to school impacts the frequency and total amount of exercise you partake in?

Participant: Yes definitely.

Interviewer: Okay. Do you believe you can afford the costs of participating in physical activity programs at UBC such as intramurals and accessing the bird coop?

Participant: Yes, I believe so.

Interviewer: Okay. Also, do you feel included and safe in partaking in physical activity programs at UBC?

Participant: Yes, I do.

Interviewer: Alright that's good.

Interviewer: Are there any other barriers that might impede in your participation in physical activity?

Participant: No, not really. I just lack the personal confidence if my friends don't participate because I am small.

Interviewer: I see.

Interviewer: Are you aware of current recreational activities available at UBC?

Participant: Yes, the popular ones and the Facebook ones I am invited to from Kin friends and faculty events.

Interviewer: Alright. Are you also aware of UBC Free Week?

Participant: Yes, I am aware of it.

Interviewer: Alright. Have you seen advertisements of UBC Free Week or other physical activity programs at UBC?

Participant: Yes, I have seen advertisements for UBC Free Week and for the Storm the Wall event.

Interviewer: Alright that's good.

Interviewer: Do you ever receive notifications about activities on campus on your social media?

Participant: Yes, I do.

Interviewer: Okay. Also, does your lecture professors share information about physical activity programs available on campus?

Participant: Sometimes, but not often.

Interviewer: Okay.

Interviewer: Where do you currently get your information about physical activity programs available at UBC?

Participant: From my friends or social media.

Interviewer: Alright. From which social media platforms?

Participant: Mostly from Facebook.

Interviewer: Okay.

Interviewer: So, what encourages you to participate in physical activities?

Participant: Usually time convenience - like if it lines up with my timetable, since I have classes in the daytime, I don't like staying late at night for it because I am drained. Also friends as well - like the Storm the Wall event was somewhat hard to navigate but friends trying to persuade me helped with that.

Interviewer: Alright.

Interviewer: So if your friends all prioritized exercising, would you exercise more?

Participant: Definitely, but my friends prioritize social gatherings, eating, and other things.

Interviewer: Okay.

Interviewer: So you mentioned earlier, you get information on various physical activity programs at UBC through Facebook, are there are any other social media platform you use currently? If you saw advertisements on these platforms, would it increase your level of participation?

Participant: I use Instagram as well and if I did see these advertisements while I am on campus, I think it might increase my level of participation for physical activity programs on campus.

Interviewer: Alright.

Interviewer: Would be more willing to participate in physical activity programs such as intramurals, group fitness classes if they were free?

Participant: Yeah definitely.

Interviewer: Okay, that's good.

Interviewer: Do you think there is anything that UBC can change in order to increase your participation in physical activity?

Participant: Yeah I would say having more team events such as Storm the Wall might increase my level of participation.

Interviewer: Great. Well thank you for your time and responses.

Participant: Thank you.

Appendix D: Signed Consent Forms from Participants



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.

Subject signature Loa Chen Date: November 2, 2018

Please provide your contact details if you are interested in attending a presentation on the results of this study:

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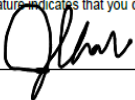
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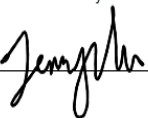
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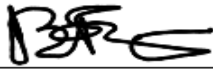
a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

School of Kinesiology

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.

Subject signature _____ 

Date: November 2, 2018

Please provide your contact details if you are interested in attending a presentation on the results of this study:

Address: _____

Phone #: _____

Alternative #: _____ Email: _____

Appendix E: Work Plan**Name of Project:**

SEEDS - Understanding Female Chinese Students' (low engagement with) Physical Activity - Environmental, Situational Barriers & Communications

Purpose(s) of Project (“why are we doing this?”):

To better understand the perceived communicational, environmental, and situational-specific barriers and facilitating factors for physical activity that students who self-identify as female and Chinese (including Hong Kong, Macao, or Taiwanese) encounter at UBC

Deliverables (“what are we going to create?”):

- An Executive Summary
- A Presentation presented in the classroom to fellow classmates, instructors, and project partners on November 22, 2018
- A Final Report that highlights recommendations that might help this given demographic to improve their participation levels of physical activity at UBC

Methods (“how are we going to do this?”):

- Collecting information through a qualitative approach (ex: focus groups, semi-structured interviews, surveys) with study participants
- Conducting a Literature Review
- Finding common themes in terms of barriers and facilitators within the study participants
- Providing Recommendations

Project Members	Skills/Interests	Role(s) in the project	Availability
Stephen Anandalingham		Assist in transcription of participant responses, methodology, general formatting, recommendations	Available when needed
Kambiz Dolatyar		Assist in literature review, recommendations, conducting focus group interviews, general formatting.	Available when needed

		transcription of participant responses	
Alisha Singh		Assist in literature review, background information, findings, general formatting	Available when needed
Iris Xie		Assist in conducting focus group interviews, recommendations, findings and discussion, conclusion, general formatting	Available when needed
Kalon Yip		Assist in introduction, background information, general formatting, conducting focus group interviews	Available when needed

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Project Component	Specific Task	What do you need in order to get this done?	Who is responsible?	When is this due?
First meeting with project partners	Email contact person to introduce our group and formulate meeting dates to progress with project.	Learn each project partner's availability	All group members	Late September
	Meet with the contact person and discuss project objectives and goals	Read the background information provided by our project partners to have an understanding of the project before the preliminary meeting	All group members	Late September
Class Requirements	Midterm Progress Report	- Complete midterm progress report and make any necessary amendments and submit it to Canvas	All group members	October 30

	Presentation	Complete the necessary requirements in order to have a succinct presentation that highlights they key outcomes from the project.	All group members	November 22
	Final Report	Complete the necessary requirements in order to have a comprehensive final report highlighting the project.	All group members	December 6
	Peer Evaluation	Reflecting on each group member's contribution to the project	All group members	December 6
Project Requirements	Recruitment of participants	Recruiting potential participants for our study.	All group members	November 3
	Conducting the Focus group	Conducting the focus group and semi-structured interviews with the study participants	All group members	November 3
	Transcription of participants' responses	Transcribing responses of participants to formulate common findings and trends	Stephen, Kam	November 8

<p>Introduction, Background Information, Literature Review, Methodology, Discussion / Findings, Recommendations, Conclusion</p>	<ul style="list-style-type: none"> - Purpose of the project and objectives stated - Relevant background information and previous literature pertaining to the project - Describe a clear step-by-step methodology for meeting the objectives and goals of the project - Describe 3 key outcomes / findings of the project and a clear relevance to project objectives and goals - Provide key recommendations to the project partner relevant to this project 	<p>All group members</p>	<p>November 30</p>	

Appendix F: Focus Group Survey Template**Understanding the Situational, Environmental and Communication Barriers to Physical Activity
for Chinese, female identifying students at UBC**

November 2nd, 2018

Thank you for participating in our focus group.
With your participation, you are helping to make physical activity more accessible and enjoyable for all
students at UBC.

Part 1: Situational and Environmental Barriers

- 1. Do you currently schedule physical activity in your schedule? Why or why not?**

- 2. What situational or environment-related barriers inhibit you from participating in physical activity?**
 - a. Possible examples – cost, accessibility, comfort, conflict in schedule**

- 3. Think about your identity. Are there situational or environmental barriers that are related to your identify that impact your ability to participate in physical activity?**

Part 2: Communication Barriers

- 1. Are you aware of current recreational activities available at UBC?**

- 2. Where do you currently get your information about physical activity programs available at UBC?**

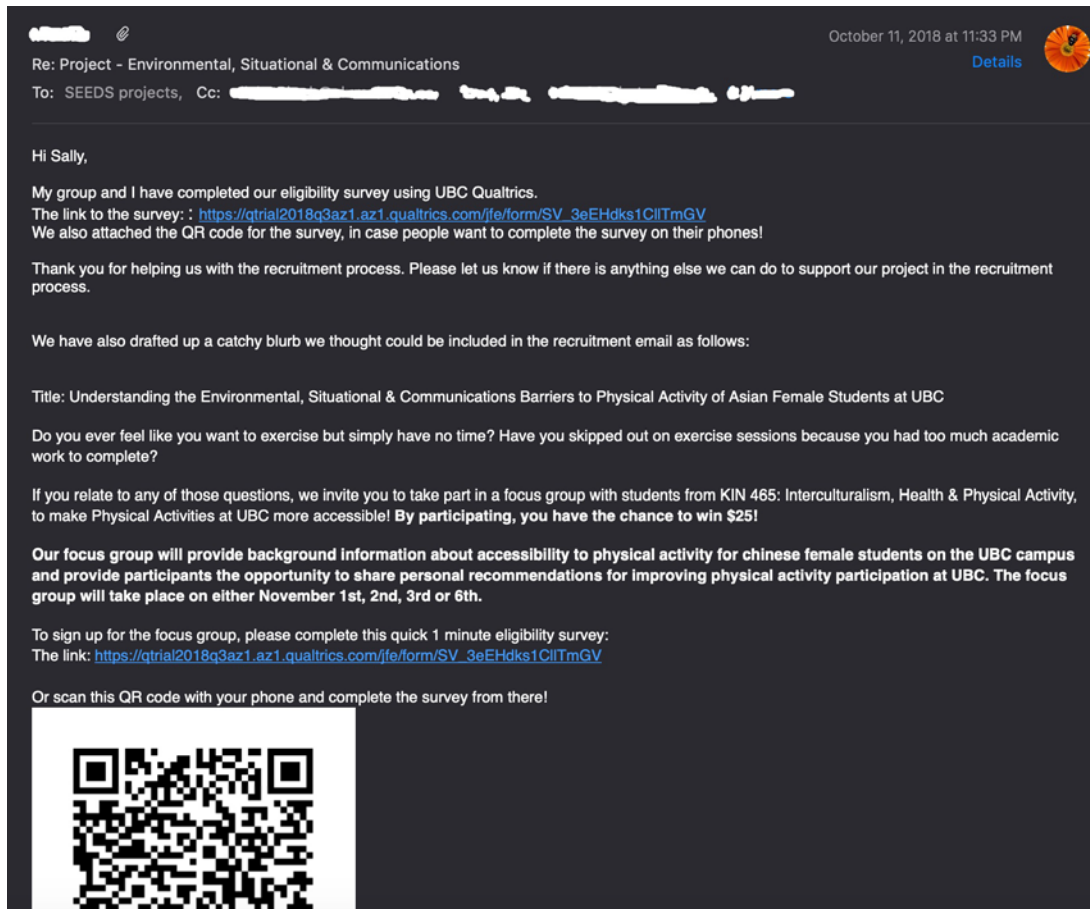
Part 3: Recommendations and open-ended questions

- 1. What encourages you to participate in physical activities?**

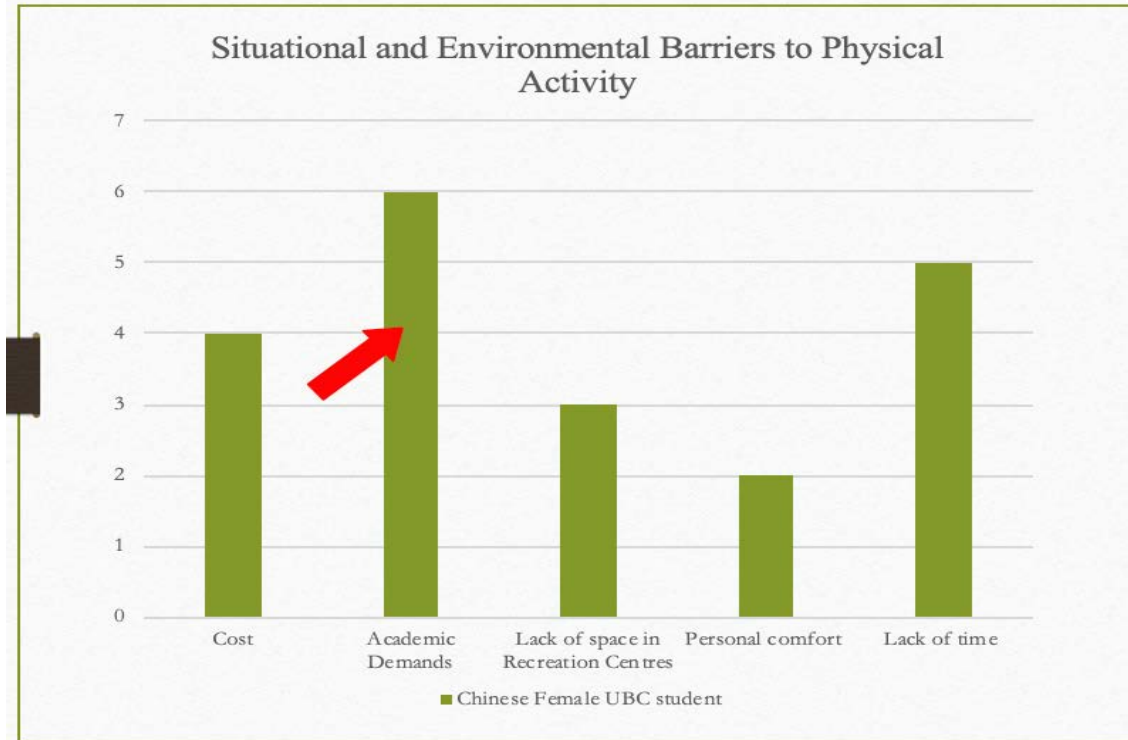
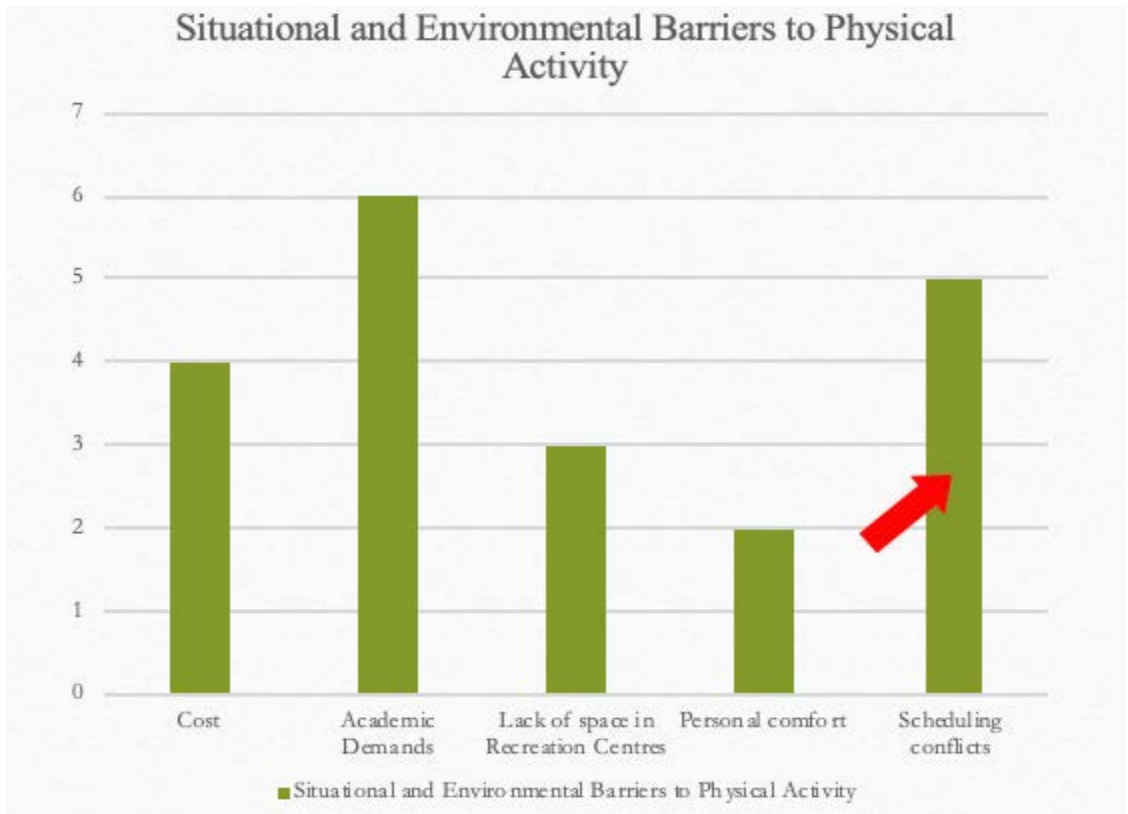
2. Is there anything you think UBC can change in order to increase your participation in physical activity?

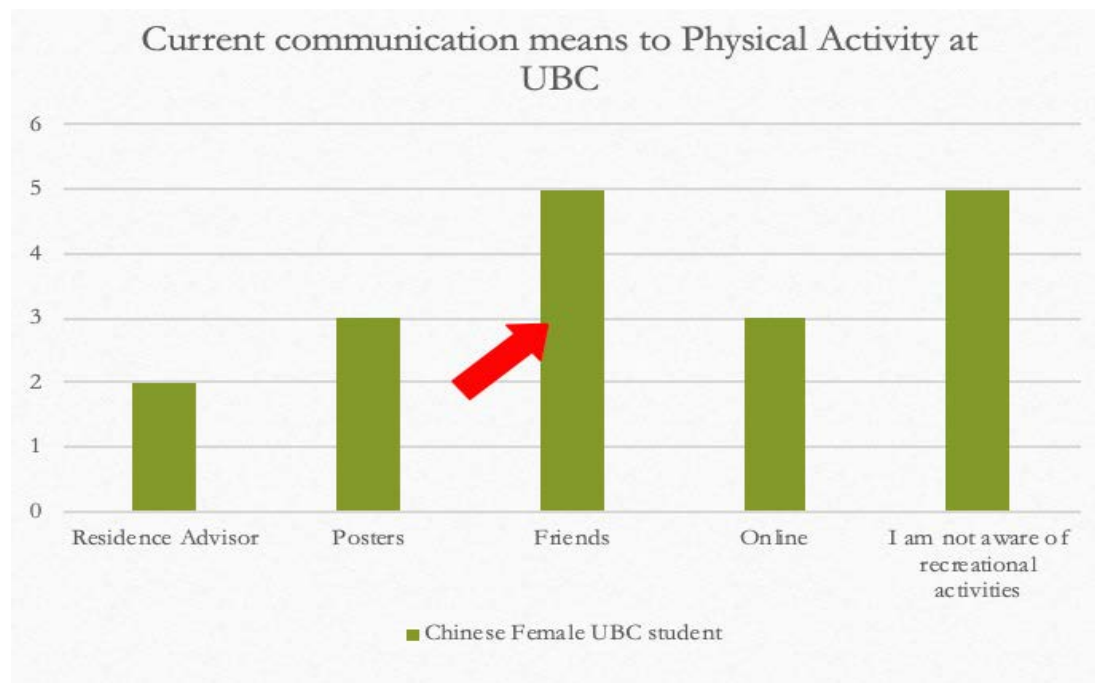
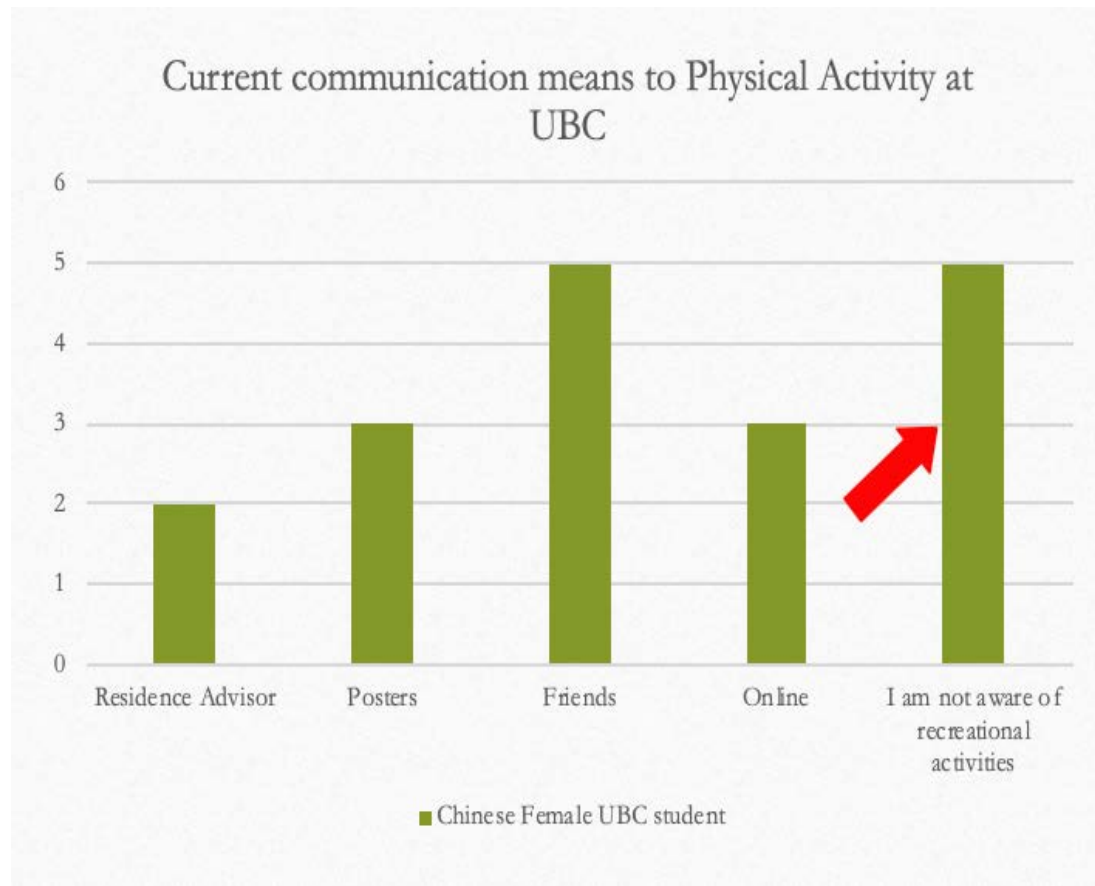
Thank you again for your participation
You will be entered in a draw to win a \$25 UBC Bookstore Gift card

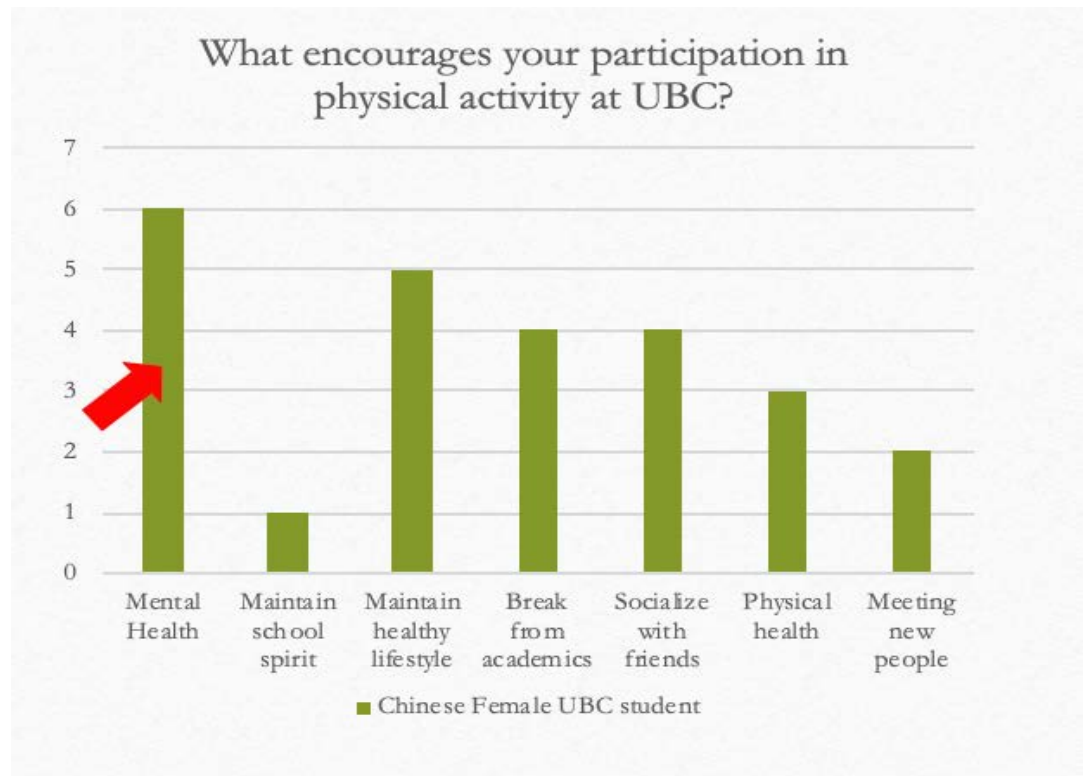
Appendix G: Email Recruitment




Appendix H: Figures of Survey Responses from Participants








Appendix I: Template of Poster used for Class Presentation



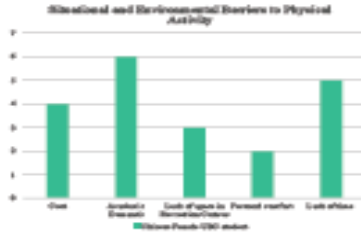
UBC Environmental and Situational-specific barriers of physical activities amongst female UBC Students identifying as Chinese (including Hong Kong and Macao) or Taiwanese

S. Anadalingam, K. Dolatyar, K. Yip, A. Singh, I. Xie.
 Professors: Bryna Kopelow, Jennifer Fenton, Lin Yoon Project Partner: Sci&S and UBC Recreation
 Group #4



Introduction

In accordance to the 2018 Academic Experience Survey Report that was conducted by the UBC Alma Mater Society (AMS), they found that 54% of the university student body comprised of females, whereby 54% of students associate themselves as having Asian ancestry. Consequently, we have chosen to study a Chinese student base from UBC as 30% of the international students at UBC are Chinese undergraduate students (Fact Sheet Vancouver Campus, Winter 2016, 2017). Previous research has suggested that this given demographic is susceptible to lower levels of physical activity (i.e. less likely to partake or engage in existing recreational programs) as compared to the majority of population (Hesse, Steptoe, Sallis, & Wadell, 2004). Specifically, previous UBC SEEDS projects have suggested that there are lower participation rates for recreational programming at UBC among female students at UBC.



Finding 1:

The number one situational barrier to PA was academic demands.

- 60% of our focus group identified academic demands as a barrier to physical activity at UBC

Participant Quote: "I prioritize studies first and often will sacrifice or prioritize my time"

Participant Quote: "I do not currently have any physical activity in my schedule due to immense amounts of assignments and exams"

Recommendations

- Develop an incentive program for coming to the gym
 - By offering a "FitRewards" program where an individual can collect points when they work out.
- Increasing awareness of UBC REC programs through social media platforms such as WeChat
 - Providing on campus recreational information to students through multiple modes of social media platforms such as Facebook is necessary in order to disseminate and promote recreational programming (Bayne & Cianfrone, 2013).
- Increase awareness of the importance of physical activity
 - The offer of an incentive in all UBC classes
 - 1-3% bonus opportunity for proof of exercise 3 times / semester
- Increasing safe spaces – women's only gym times
 - Set times for women's only gym session

Additional recommendations are available via the final report.

Finding 2:

The second most common barrier that was identified was scheduling conflicts.

- 50% of our focus group identified scheduling conflicts as a barrier to physical activity at UBC.

Participant Quote: "I would love to go to the rec centre yet I cannot balance homework, exercise, and personal activities as of now."

Participant Quote: ""There is a lot of school work with the courses I am taking and it is hard to find time for physical activity."

Purpose

The survey and focus group aims to understand UBC environmental and situational-specific barriers of physical activity amongst female UBC Students self-identifying as Chinese (including Hong Kong and Macao) or Taiwanese.


Finding 3:

Participants identified friends as their source of knowledge about available recreational activities at UBC.

- 50% of our focus group participants identified friends as a mean of developing awareness toward recreational activities offered at UBC
- 50% of our focus group participants identified that they were not aware of recreational activities at UBC.

Participant Quote: "I don't really have time to exercise, even though I really want to exercise..... But now I just don't really have the time for it, even though I really want to do it, I just can't really find the time."

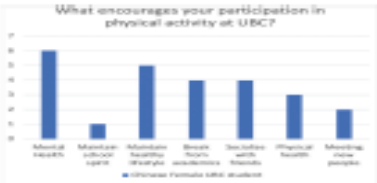
Participant Quote: "[I would]only[travel back to campus.... for studying, [and] classes"



Project Design

In this project we conducted a focus group consisting of 10 individuals who identified as Chinese female UBC students. Through the use of qualitative research by way of surveys, semi-structured interviews, and focus groups, we anticipate to attain a rich, open, and reflective discussion among prospective participants that will ultimately aid UBC policy makers to optimally implement strategies that will support and encourage the engagement of this given demographic.

Finding 4:



References

Fenton & Kopelow (2018). *Kin 485: Actively Engaging Girls and Women in Physical Activity and Sport* (Class 5 Powerpoint).

Fenton & Kopelow (2018). *Kin 485: Introduction to Interculturalism* (Class 1 Powerpoint).

Discussion:

In the end, the results gathered three findings:

- Situational and environmental barriers to physical activity.
- Communication barriers to awareness of physical activity.
- Subjective reasons for participation in physical activity.

As a team, we determined recommendations to navigate these barriers.

