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Student Research Report

The Mental Health of First Generation and International Asian Female Students at

University of British Columbia

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Executive Summary:

The mental health of first generation Asian female students at University of British Columbia (UBC) is a research project conducted by a group of UBC students, with a purpose to explore a problem that UBC Recreation (UBC REC) has been facing. Statistically, first generation Asian females at UBC have the lowest participation rate in UBC REC facilities, activities, and physical activity. It is stated that staying physically active has a strong correlation with reduced mental stress (Hamer, Stamatakis, and Steptoe, 2009). Therefore, this research project conducted semi-structured interviews with participants that fit this demographic to explore the precursors behind this existing problem and how the lack of participation affects the mental health and wellbeing of the participants. Furthermore, the project also seeked possible interventions that may help mitigate the issue of participation. The use of semi-structured interviews allows for open questions that encourage discussion, and the informal approach provides a comfortable and safe environment for participants to express their concerns. In the end, the results gathered three overarching findings: 1) The perception of mental/physical health compared to academics, 2) Varying perceptions of the mental health initiatives of UBC, and 3) The effect of school related workload and other determinants to mental/physical health.

For the first finding, most of the participants expressed their priority for academics over their mental and physical health. With the differing emphasis upon academics and recreation between Western and Asian culture, the participants stated that academics was their purpose to attend university, not for recreation. The second finding found that most participants were unaware or have only experienced mental health services via second hand accounts, leading to an inconclusive consensus on the state of mental health programs offered by UBC. The misinformation about the mental health services offered by UBC may further hinder the mental health of this demographic and students, as individuals may not seek help they need. The third finding noted the heavy workloads students manage, further limiting the time available for individuals to partake in physical and mentally relaxing activities, whilst increasing day to day stress. This environment further strengthens the academic first mentality, as many participants noted that school related work took the majority of their time and energy.

Based on these findings we believe UBC REC can look to improve the mental health of first generation Asian female students and other students, in a number of ways. UBC can further incentivise students by providing more opportunities and pathways to participate in exercise. This can be done through implementing more 'free weeks' for rec facility usage, as well as increasing outreach to students on social media platforms. Additionally, allowing access to recreational facilities like gymnasiums and dance studios during off hours can provide safe and ample space for students who live on campus to stay interactive. Finally, UBC REC can consider subsidizing costs for gym and class memberships. If subsidies are unattainable, a reward system can be implemented based on frequency of participation with UBC REC facilities and activities.

Introduction & Literature Review:

First-generation immigrants make up nearly 22% of all Canadians and are defined as individuals who were born in another country other than Canada and have subsequently immigrated to Canada (Canadian-born children of immigrants, 2016). In Canada, almost 48.1% of the foreign-born population originate from Asia, (Statistics Canada, 2017), with Asian populations making up the majority of international students in Canada (China: 38%, India: 14%, South Korea: 6%...) (CBIE, 2018) (Appendix A). Since a large number of Asian individuals are first-generation and/or are students, they represent a large and specific demographic. Due to their binary status, this demographic is challenged by both first-generational and student-based obstacles, providing unique challenges to their mental health and wellbeing.

First-generation student populations battle specific challenges to their mental health, alongside the difficult transition to a new society (Forbes-Mewett & Helen 2016; Keung, 2018). Good mental health is defined as an individual's ability to cope with normal stressors, realize their own ability, and contribute to their community (WHO, 2007). As reported by Nicholas Keung (2018), 19% of Asian youth (majority first-generation) in the Toronto area would rather be dead due to their current responsibilities and life stressors, with 12% of Asian youth seriously considered suicide. These adverse mental effects 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 (Keung, 2018). Additionally, a report by Forbes-Mewett and Helen (2016) found that adverse mental health states stemming from social and cultural barriers were reported by international students, one fifth of which were Asian. These barriers cause a disconnect from community, peers, and academic environment, noting language as a key determinant. Participants stated that their English capabilities dictated every other aspect of their life, predetermining their ability to feel integrated and part of the community, causing social exclusion, and consequently limiting their access to mental health resources. Forbes-Mewett and Helen (2016) also noted that opposing social norms further obstructed Asian students, citing cultural differences between mainland Chinese and the foreign nations educational norms. The questioning and increased engagement in the relationships between students and instructor, conflicts with the disciplined and firm education seen in mainland China (Forbes-Mewett & Helen, 2016). These clashing ideologies result in decreased participation and interaction with their peers and academic environment, further isolating students (Forbes-Mewett & Helen, 2016). International students also face the difficulties of a self-sufficient lifestyle, with responsibilities such as economic management, food security, and living conditions contributing to an already stressed and isolated individual. Therefore, the combination of novel conditions, language barriers, and lifestyle adjustment only further strain international and first-generation students, negatively affecting their mental health.

An article conducted by O'Mahony and Donnelly (2009) determined that immigrant women, encounter a myriad of issues with regards to mental health and access to mental health services. The factors that create this inequity include: cultural/social stigma, a lack of familiarity with western biomedicine and different spiritual beliefs/practices (O'Mahony & Donnelly, 2009). These factors work against women and the pursuit of mental health standards that are equitable to their male counterparts. Pak, Dion, and Dion (1991) explored the relationship between discrimination faced by male and female Chinese students. Pak et al. (1991) found that women were more susceptible to discrimination and, by extension, experienced lower self-esteem. Additionally, a scoping review carried out by Guruge and Butt (2015) built on these findings, concluding that female youth experience more mental health issues than male youth.

Therefore, the challenges faced by female first-generation Asian students regarding their mental health, are a unique circumstance of socially driven stressors, that isolate individuals in an unfamiliar society, advocating affirmative action.

Rationale:

Due to the aforementioned findings, it is clear that first generation female Asian students are a population that is susceptible to mental health issues. This rationalizes a need for affirmative action by the authors of public policy to combat these issues. The population we intend to study are first generation female Asian students from the University of British Columbia (UBC). It is critical to assess the barriers that first generation female Asians encounter because of the number of undergraduate students that are originally from Asia who study at UBC. For instance, as of November 1, 2017, in regard to one's country of citizenship at the UBC Vancouver campus, it is shown that about 6,299 undergraduate international students come from countries such as China, India, South Korea, Indonesia, and Singapore respectively ("Demographics Overview | Planning and Institutional Research", 2018). We have also chosen to study a Chinese student base from UBC to ensure a convenient and accessible population for the data collection portion of this project, as 38% of the international students at UBC are Chinese undergraduate students (Fact Sheet Vancouver Campus, Winter 2016, 2017).

This project will focus on students due to the fact that research has found this to be a group that is susceptible to lower levels of physical activity (i.e. less likely to engage in existing programs) as compared to the majority of the population (Haase, Steptoe, Salli, & Wardle, 2004). Hamer, Stamatakis, and Steptoe (2009) found that physical activity had a strong relationship with reduced psychological stress. Benefits to mental health were observed even with minimal amounts of exercise, with benefits seen in only 20 minutes of physical activity per week (Hamer, Stamatakis, & Steptoe, 2009). Additionally, Ono et al. (2011) found that increased amounts of social interaction and engagement were associated with improved mental health. Ono et al. (2011) also noted that social interaction leads to the development of social support networks; a crucial determinant on the mental health of first generation Asian female students. Therefore, participating in minimal amounts of physical activity and increased social interaction and engagement could provide a relief to the mental health of first generation Asian females.

Some unique barriers to physical activity that students face include: a lack of time, not liking physical activity, a lack of practicality, and apathy etc. (Gomez-Lopez, Gallegos & Extremera, 2010). All of the barriers that students face work to explain why this group, is less likely to engage in physical activity than other groups. Gomez-Lopez et al. (2010) has shown

that women experience lower motivation levels when it comes to engaging in physical activity (among students) than men, expanding on the need for interventions in the first-generation Asian female student demographic to engage in more physical activity. First generation female Asian students represent a significant minority of students at UBC, with rather unique and difficult challenges to their mental health. Therefore, engagement in physical and socially stimulating activities is imperative to promote for this demographic. UBC policy makers should make efforts to support and encourage the engagement of this demographic.

Methods:

The study population comprises of first generation Asian female undergraduate students who are studying at the University of British Columbia Vancouver campus. This study population provides an easily accessible sample of students that experience the same aforementioned barriers to engagement in existing programs. In order to attain the sample of this population we will reach out to first generation female Asian students via affiliated student clubs for this demographic. A research member has increased access to this population, due to his activity and association with affiliated clubs. Therefore, networking through this research member serves as the main subject recruitment method.

Semi-structured interviews will be used to gain a critical understanding of how mental health may be a barrier to or be improved by recreational participation on campus amongst first generation Asian female students. The utilization of a semi-structured interview is appropriate for this type of study because it allows for greater autonomy in responses, which may encourage participants to express their true feelings (Thomas et al., 2015). Furthermore, the formatting of the interview questions will be open-ended questions that are related to concepts on how the effects of mental health may play a role in affecting recreational participation within the participants. Open-ended questions are helpful for this study because they allow the participants to freely express and elaborate on their personal experiences (Thomas et al., 2015). Thematic analysis will be used for this study, to analyze and interpret the unique patterns and themes that come about from the input of the participants. Questions for the interview are listed in Appendix B. All the interviews are conducted by the team member affiliated with the student clubs due to his personal relationship with the subjects. This provides a friendly, comfortable and familiar environment for the subjects, in hopes to achieve highly detailed and honest responses.

In this study, participants that fit the sample criteria were contacted through email by way of coordinating with various student clubs. A sign-up sheet was provided for prospective participants who were able to partake in the study. Alternatively, through convenience sampling, the research member who has association with the affiliated student clubs provided a way to personally contact this demographic on campus. This allowed participants with to have flexibility to contact the researcher directly if they are interested in being involved with the study, giving them an option to voluntarily participate.

Before implementing the interview process, all of the participants must have read and signed off on the information and informed consent sheet provided seen in Appendix B. This

ensures that the participants are fully aware of their role in the study and any implications that may occur. Moreover, the data collected will be assessed to analyze patterns and themes that span across participants. This will allow to constructively attain a clear understanding on how the specific determinants of mental health within this given population may differ individuals from partaking in recreational activities on campus.

The data was collected from audio recordings of the semi-structured interview with the participants. This was done through a smartphone brought by the interviewer, with an application that does audio recording. To ensure consistency throughout all the participants, all the audio recordings started with an explanation of the waiver form and the right to not participate when the participant is not comfortable in answering questions. Additionally, all the audio recordings ended with a list of resources that can be useful for the participants, in terms of mental and physical health and wellbeing.

To think in the benefit of the participants, the interview was conducted in a neutral and safe environment. Because all interviews were conducted on the UBC campus, two main buildings were chosen: the UBC Life Building and the Henry Angus Building. Both of these buildings are accessible by anyone and also provided a lot of enclosed, private rooms that are safe and well supervised. These accessible buildings allowed for greater neutrality and safety for both the interviewer and the participants. Although the interviews were planned to be held at these venues, it is important to note that the buildings do not discriminate against any population or demographic, as many students use these facilities on a daily basis.

All interviews were conducted during the afternoon or at night, when the participant has finished the tasks for the day. It was decided that interviews should be at this time of day to prevent the participant to have a time limit before they attend to their schedules. At the end of the day, all tasks are finished and there was no time constraint, which allowed participants to take their time and clearly express their thoughts.

Findings:

Out of the six interviews conducted, there were three notable trends seen in our data analysis. 1) The perception of mental/physical health, compared to academics, 2) Varying perceptions of the mental health initiatives of UBC, and 3) The effect of school related workload and other determinants to mental/physical health.

Perceptions of mental/physical health in relation to academics

There was a noted ideological gap between participants and western culture, regarding the prioritization of mental health in relation to academic success. Nearly all the participants noted that academic success was their biggest priority, stating that other domains such as mental and physical health are a secondary concern. Participant #506 noted that:

"Health is really important. But as experience has shown me I probably value school over health." (Participant #506, Appendix D)

Citing that her parents raised her to value academic success over well-being. She went on to note that because of this norm, she attends every class despite illness or other alignments; later comparing the western ideals of sickness and rest, to her ingrained cultural norms regarding school. Other participants including #234 cited the influence of their peers on their perception of academics in relation to mental/physical health as "A lot of people care about studies more", implying a community mentality favouring the importance of academics rather than physical/mental health.

Another participant, participant #341 noted that her educational goals (a master's program) was the reasoning for her limited activity, stating that "[playing sports] ... doesn't really get you good grades", noting that the time spent participating in sports is better spent studying. Participants #341, #234 and #506, all prioritize educational success over physical activity, limiting the opportunity for activities which are positive for their mental health. Despite the appearing disregard for mental and physical health, the majority of participants still noted that mental health was an important domain, with participant #328 stating that:

"It is probably the most important thing..., because without health or my well-being I will not be able to.../ have the motivation to achieve my goals, it is kind of like the foundation for whatever I am doing" (Participant #328, Appendix D).

Only one participant (#722) noted that physical/mental health was a significant priority to them, as it became a growing priority in their life. This participant went on to describe a transition in her priorities due to her educational experience:

"Back then [in high school] it was academics first. Now it's mental health and physical health first because it's my last year [of university] I guess" (Participant #722, Appendix D).

The increasing priority of mental health may be a reflection of her school related workload and the influence it has on the amount of time each participant has for physical/mental health. Interestingly, despite the clear prioritization of academics, the majority of students seemed aware of the diminished value they place on their physical and mental health, specifically participant #328. Despite this awareness, the participants are actively choosing to prioritize school over their wellbeing.

Further determinants to mental/physical health

Associated with the noted conversion of priority from academic success to mental health, was the effects of school related stress and work. Participant #402 said, that the heavy workload and responsibilities related to her school work and her specific faculty, act as a significant barrier to her mental/physical health. She notes that large projects such as "exams and group projects" take the majority of her time, and notes that these obligations "take priority compared to health." The effects of demanding school work was further discussed by other participants, with participant #341 stating that school related workloads inhibited her ability to partake in physical activity, again noting her workload and the associated lack of free time as the cause. These factors even overcame her desire to engage in physical activity and beneficial activities, despite her identification as an active person:

"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 #341, Appendix D)

Alongside the influence of school workload, some participants noted their commute as another barrier to their on-campus activity. Participant #341 stated, that she would prefer to participate in sports off campus, noting that her commute is not worth the time spent, to perform on campus activities. #341 "would [only] travel back to campus.... for studying, [and] classes" noting that the commute is not worth her participation in physical activity on campus. #341 went on to stress that being on campus was for the sole purpose of school, further separating her school life from the rest of her life. Another participant (#722) stated that her decrease participation in physical activity on the UBC campus was due similarly to a matter of convenience. #722 stated that her commute also influenced her decision to partake in physical activity on campus, noting other determinants such as "figuring out parking, getting into the gym, coming out all sweaty, and then going directly home" as further barriers.

Perception of Mental Health Programs at UBC

There were an array of viewpoints on the state of mental health programs at UBC. Interviewees beliefs ranged from a lack of adequate/quality programs, to excellent awareness and action done by UBC, or indifference. Therefore, an inconsistent opinion on the state of mental health programs at UBC arose, although some participants had very strong opinions (particularly #722). #234 noted:

"Going online, and reading UBC confessions, I would say no [they don't do a good job] ... There is not much [mental health programs at UBC] can do about it I guess, by saying "you will be fine," or "you don't have to worry about it". They are not actually helping." (Participant #234, Appendix D)

Participant #234 stated that mental health programs at UBC don't work because they, as she goes on to say, give comfort rather than support. All of her comments are based on second hand assertions from people that she knows (and are therefore open to conjecture), but she stressed that the counselors/mental health professionals "don't actually care." On the contrary, another participant believed that it is an individual responsibility to seek and reciprocate the current mental health action and awareness that UBC is providing for students, stating that:

"I think they definitely have been reaching out a lot, but I think it's more a matter of those participants or those people who are getting interacted with have to respond." (Participant #506, Appendix D)

Participant 341 (Appendix) agreed with the sentiments conveyed by Participant #506, stating that UBC has adequate sources to support mental health and wellbeing of students on campus, by way of using email communication to deliver helpful information in regard to health and wellbeing.

On the other hand, a comment made by Participant #722 (Appendix) contradicts Participant #506's sentiments, stating: "I feel like when people are in trouble or challenges, that's when they are not able to seek help and I feel like UBC's way of just giving you a link and some phone numbers is not efficient enough. It's not enough. It's like protocol, like every school has to have that. Doing the bare minimum to provide that for the students." Overall, Participant #722 had perhaps the most opinionated thoughts on how UBC is currently attempting to combat issues regarding mental health, stating that: "I've never been to UBC counselling [but] I've heard negative feedback from them... I wouldn't really be motivated to go after hearing that kind of stuff."

The participant expanded upon the some of the perceived issues regarding UBC's mental health protocol, stating that: "Mental health wise I know they have the sexual assault clinic [and] counselling but some of the locations are so visible too. You have the sexual assault [clinic] built... where everyone can see when you're walking in. I think it's rude, actually, because people who are walking in don't want that kind of exposure... So that's the thing I think is really lacking... I feel like it would be better... [to have an organization] that actively reaches out to students. Maybe do more surveys in class to see how the classes mental health is going in general." (Participant #722, Appendix D)

It is evident based on the testimony of these participants that there is an array of viewpoints on the currents state and effectiveness (or lack there in) of mental health programs offered at UBC. Thus, a clear conclusion on the effectiveness of these programs cannot be made.

Discussions:

This study examined the various determinants to the amount of physical activity, and consequently the overall mental health of first generation Asian female students in the UBC community. Despite the action currently being done by UBC to promote well-being, our interviews suggested three key factors in the decreased physical activity levels of this demographic on the UBC campus. We found a clear prioritization of academic success, over other important domains such as physical and mental well-being. The majority of participants stated that this attitude was present in their lives in some capacity, with some participants stating a cultural gap between western and eastern educational values, similarly described by Forbes-Mewett & Helen (2016). Other participants noted that their peers stressed this mentality as well, suggesting a hyper academic environment which facilitates an unbalanced school focused lifestyle, diminishing the mental and physical health of our participants. Interestingly, most participants actively chose to ignore their physical and mental health, as environmental and socialized norms overwhelm any prioritization of health. Associated with this perception are the large workloads that this demographic manages, notably from their school/coursework which further limit their ability to partake in physical activity and improve their mental health. With greater workload comes less time available to partake in recreational, social, physical or mentally relaxing activities limiting the opportunity to improve ones well being. The relationship between high workloads from school, limited time, and an emphasized prioritization of academic success therefore exacerbates limited participation in physical activity and perchance their mental health.

Furthermore, a lack of knowledge and true understanding of the mental health initiatives offered via UBC significantly affect the mental health of first generation Asian female students in the UBC community. A clear conclusion on the effectiveness of the mental health programs at UBC could not be made given the varying opinions on said programs. This lack of consensus can likely be partly attributed to the fact that the majority of the participants had not experienced/partaken in any of the mental health services at UBC and were answering the questions based on second-hand accounts. Without a clear, firsthand account of what UBC is offering to those that require their mental health services, it is hard to fully ascertain exactly what UBC is offering. One participant (Participant #328, Appendix D) also conveyed that she was not too sure about the available resources that UBC has to offer in terms of mental health and wellbeing. Given this fact, it would be hard for this participant to answer questions about the mental health initiatives at UBC. Based on the interviews of each participant, it is evident that there are an array of viewpoints on the currents state and effectiveness of mental health programs offered at UBC and therefore a true understanding or lack of knowledge of the mental health initiatives at UBC may be present. This clear lack of consensus, knowledge, and understanding of the mental health initiatives offered via UBC, along with the relationship between high workloads from school, limited time, and an emphasized prioritization of academic success may combine to act as a determinant of the overall mental health of Asian female students in the UBC community.

There were a number of challenges and limitations that were inherent in this study, mainly pertaining to the formatting of the interviews. Firstly, despite the evidence that semistructured interviews have played a part in improving the accurate recollection of information on the part of the interviewees, it is still plausible that interviewees suffered unwittingly from memory decay and thus distort the results obtained in the interview process of this study. Secondly, it is probable that the interviewees can also embellish or in some other way manipulate their answers due to self-interest, or external pressure/influence, which would affect the findings of this study. Furthermore, scholars and experts who employ qualitative methods such as semistructured interviews usually have expertise and prior experiences within these research contexts. It is worth mentioning that this was the research teams first experience as interviewers, which may have played a role in the outcomes of the findings of this study. Perhaps with repeated exposure and experience within these research contexts, we would be more adept in employing these research techniques.

Another limitation from this study was the scheduling of interviews, due to the time constraints of the participants and interview team. This factor may also have a played a part in the number of participants that we were able to interview. Another limitation of this study was that we were unable to gather participants from different ethnic demographics. For our study, we were able to attain six participants who have Chinese cultural and ethnic heritage. Although we contacted different student bodies on campus, we were not able to interview individuals from different cultural and ethnic backgrounds, thereby making our findings problematic because we cannot make inferences to other first generation Asian female students with respect to their

cultural and ethnic backgrounds. Consequently, this research may not be a true representation of other first generation Asian female students at UBC. Future research needs to be conducted to accurately depict the perspectives of other first generation Asian female students at UBC to appreciate and understand other possible barriers that these individuals may face to their participation in recreational programming at UBC.

While all of these limitations are a reality of this study, we were able to constructively build a meaningful conclusion with a small number of participants of this scope. For instance, due to all of our participants being first generation Asian females from Chinese ancestry, we have an in-depth understanding of the dynamics, motives, and influences of these individuals in terms of the factors that might impede them from partaking in recreational programming at UBC. Therefore, we have formulated a number of recommendations that may decrease the barriers that this demographic faces, ultimately increasing the recreational participation within campus for this specific group.

Recommendations:

Based on the findings of our study, we believe UBC REC and the greater UBC community can improve the mental health of first generation female Asian students, and the greater student population through a number of changes. First, UBC REC should look to increase the opportunity of exercise on campus, alongside further incentivisation of these activities. This can be done with more 'free weeks' for recreational facilities, allowing for increased exposure to new activities and increases in social interaction for students. However, it is important to manage the sudden increases in fees, as a number of participants noted this shift from free to moderately high fees deterred them from further participation.

Additionally, UBC REC should look to subsidize cost of facilities and programs, such as the on-campus gym memberships to compete with the convenience factor many off campus students battle. If decreases in fees are unattainable, then UBC REC should look towards an activity-based rewards system, which supplies active students with credits towards sports related merchandise, program fees, or on-campus food. This would perhaps encourage more students to take part in recreational programming due to this incentive-based system that is established.

UBC REC can also focus on social media outreach to tackle the common problems that students express as the precursors of not staying physically active. For example, UBC REC can emphasize on posting short videos or graphics on social media platforms, like Snapchat, Instagram, and Facebook. Short video clips or graphics keeps information clear and concise, in consideration of the short attention span that people present online. Additionally, outreach on social media platforms allows access to a significantly larger population, as the virtual space can be accessed anywhere, at any time, by anyone. The video content should confront common problems that arise, such as the lack of time to participate in physical activity, or the lack of space. Therefore, a suggestion would be to film a video clip that consists of a bodyweight workout program, not exceeding 30 minutes, and can be done anywhere with a flat surface. To allow the video to be more relevant to students, this workout program should be done in a dormitory space.

Another recommendation that UBC REC should consider is the accessibility and use of recreational facilities such as gymnasiums and studios that are situated in student residences. One of the participants who lives in student residence mentioned that "the RAs are trying to come up with opportunities to bond with the residents" and states that they "keep asking why can't they do better, but at the same time there is so much residents want to do that they don't know that", the participant suggested that if facilities such as those situated in student residences are accessible not only during class time hours, but as well as non-class time hours, it would encourage more individuals to utilize these facilities, thus increasing their recreational participation on campus.

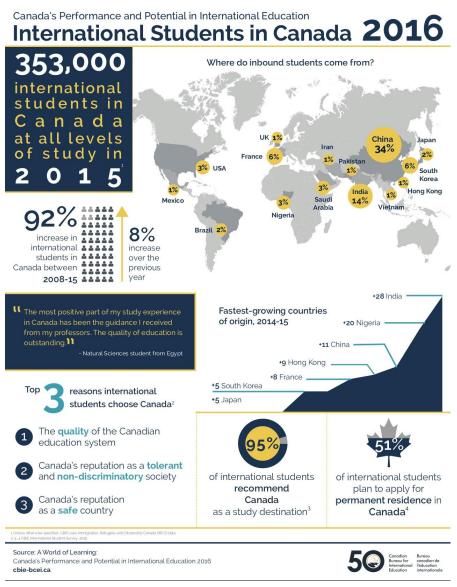
However, safety and liability issues may arise such as injury, damage and misuse of equipment and property due to a lack of supervision. A strategy to tackle this issue could be through the RAs in residences. For instance, the RAs could provide opportunities to use these facilities by incorporating group involved activities. Another strategy could be allowing students to use facilities during off time hours through their student cards, whereby any damage to property or equipment, or injury is the resident responsibility. Lastly, having a trained individual to monitor and supervise the facility to ensure safe use of equipment could be another safeguard to consider. Consequently, from implementing these measures, UBC would provide more opportunities for individuals who live on campus to partake in recreational activities.

References

- *Demographics Overview* | *Planning and Institutional Research*. (2018). *Pair.ubc.ca*. Retrieved 12 February 2018, from http://pair.ubc.ca/student-demographics/demographics/
- Drasch, K., & Matthes, B. (2011). Improving retrospective life course data by combining modularized self-reports and event history calendars: experiences from a large scale survey. *Quality & Quantity*, 47(2), 817-838. doi:10.1007/s11135-011-9568-0
- *Facts and Figures CBIE.* (2018). *CBIE.* Retrieved 9 February 2018, from http://cbie.ca/media/facts-and-figures/
- *Fact Sheet Vancouver Campus, Winter 2016.* (2017). Retrieved from http://pair2016.sites.olt.ubc.ca/files/2016/04/UBCV-factsheet.pdf
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal* of *International Students*, 6(3), 661.
- *Generation status: Canadian-born children of immigrants*. (2016). *Www12.statcan.gc.ca*. Retrieved 9 February 2018, from <u>http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011003_2-eng.cfm</u>'
- Gómez-López, M., Gallegos, A. G., & Extremera, A. B. (2010). Perceived barriers by university students in the practice of physical activities. *Journal of sports science & medicine*, *9*(3), 374.
- Guruge, S., & Butt, H. (2015). A scoping review of mental health issues and concerns among immigrant and refugee youth in Canada: Looking back, moving forward. *Can J Public Health*, *106*(2), 72-78.
- Haase, A., Steptoe, A., Sallis, J. F., & Wardle, J. (2004). Leisure-time physical activity in university students from 23 countries: associations with health beliefs, risk awareness, and national economic development. *Preventive medicine*, 39(1), 182-190.
- Hamer, M., Stamatakis, E., & Steptoe, A. (2009). Dose-response relationship between physical activity and mental health: The scottish health survey. *British Journal of Sports Medicine*, 43(14), 1111-1114.
- Keung, N. (2018). *Study raises alarm over mental health of Asian immigrant youth* | *Toronto Star. thestar.com.* Retrieved 9 February 2018, from <u>https://www.thestar.com/news/immigration/2015/06/10/study-raises-alarm-over-mental-health-of-asian-immigrant-youth.html</u>
- O'Mahony, J. M., & Donnelly, T. T. (2007). The influence of culture on immigrant women's mental health care experiences from the perspectives of health care providers. *Issues in mental health nursing*, 28(5), 453-471.

- Ono, E., Nozawa, T., Ogata, T., Motohashi, M., Higo, N., Kobayashi, T., . . . Miyake, Y. (2011). Relationship between social interaction and mental health. Paper presented at the 246-249. 10.1109/SII.2011.6147454
- Pak, A. W. P., Dion, K. L., & Dion, K. K. (1991). Social-psychological correlates of experienced discrimination: Test of the double jeopardy hypothesis. *International Journal of Intercultural Relations*, 15(2), 243-253.
- The Daily Immigration and ethnocultural diversity: Key results from the 2016 Census. (2017). Statcan.gc.ca. Retrieved 9 February 2018, from http://www.statcan.gc.ca/dailyquotidien/171025/dq171025b-eng.htm
- Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2015). *Research methods in physical activity* (Seventh ed.). Windsor, ON: Human Kinetics.
- Utility of adaptive designs in publicly funded clinical trials (2013), University of Sheffield, Retrieved from: https://www.sheffield.ac.uk/polopoly_fs/1.360069!/file/Consent_form_for_Adaptive_Desi gns_AppendixC.docx.
- WHO | Mental health: a state of well-being. (2018). Who.int. Retrieved 10 February 2018, from http://www.who.int/features/factfiles/mental_health/en/

Appendix A

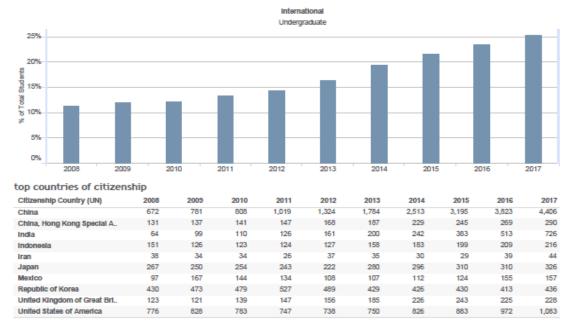


(CBIE, 2018).

S	a place of mind					THE UNIVERSITY OF BRITISH COLUMBIA Fact Sheet Vancouver Campus, Winter 2016*							Prepared by: Planning and Institutional Research (PAIR)							
						* Data a	s of November 1st, unless note	d otherwi	se											
Citizenship of inte	ernatio	nal stu	dents b	y world	l regior		Citizenship of internat	tional s	tudent	ts by w	orld re	egion		Applicants, admits,	registr	ants*				
	2011	2012	2013	2014	2015	2016	East Asia						45%			Academic Year				
East Asia	2,812	3,205	3,724	4,570	5,298	5,917	North America		11%					2011	2012	201	3 2	014	2015	201
Europe	1,069	1,135	1,225	1,352	1,468	1,536	Europe		12%					Completed 25,391	23.353	24.984	4 25.5	503 2	7.491	29,40
North America	1,392	1,352	1,355	1,413	1,438	1,515	South Asia		10%					Admitted 12,580	12,954	13,176			4,932	15,78
South Asia	774	859	918	997	1,149	1,297	South-East Asia	7%												
South-East Asia	564	631	707	781	848	925	South America	4%						Registered 6,711	7,075	6,788			7,476	7,60
Africa	213	240	288	449	518	529	Africa	4%						Admit Rate 49.5%	55.5%	52.7%	54.	3%	54.3%	53.79
South America	250	295	333	444	478	484	West Asia	3%						Yield Rate 53.3%	54.6%	51.5%	51.	8%	50.1%	48.2%
West Asia	243	240	285	302	355	388	Central America	2%												
Central America	256	238	231	234	246	285	Australia and New Zealand	2%						* New to institution undergradua	ate first-ch	oice progr	ams only.			
Australia and New Ze	156	159	167	234	199	209	Central Asia 0	1%						Starting in 2014, the definition of	of "Comple	ted Applic	ations" wa	as update	d based o	on the
Central Asia	30	50	62	56	66	53	Caribbean 0	1%						definitions used by Enrolment S restated to allow for accurate co	ervices. C	Consequer	itly, the to	tals from p	prior years	s are
Caribbean	31	28	29	36	46	39	Others 0	1%						restated to allow for accurate co	mpanson	5.				
Others	4	6	47	35	8	5								Retention to Year 2*						
Grand Total	7.794	8.438	9.371	10.903	12.117	13,182	Employment*							Retained to Year 2	2011		012	20		201
								2010	2011	2012	2013	2014	2015	Yes	92%		93%	92		939
Citizenship of inte	ernatio	nal stu	dents b	y coun	try		Faculty Full Professor	934	964	999	1,020	1,031	1,047	Tes	9276	1	9376	92	76	83%
Undergraduate							Associate Professor	656	660	648	661	653	621	* First-time, first-year, full-time u	indergradi	uate stude	nts (CSR	DE standa	ard)	
			2	016			Assistant Professor	471	442	442	408	384	382	Tracume, mac-year, romanie undergraduate audenta (concol: atandaro)						
			Students	% of Tot	al Students	along T	Deans & Principals	15	15	16	15	14	13 Degrees conferred by convocation			on yea	n year			
China			3.823			38%	Assoc./Assist. Deans	59	58	69	59	61	68	Program Type	2011	2012	2013	2014	2015	201
United States of America			970			10%	Clinical Inst. / Prof.	199	203	234	209	193	302	• •			6.085			6.50
Republic of Korea			413			4%					209			Baccalaureate Degree	5,871	5,858		6,368	6,454	
Japan			310			3%	Instructor I	71	77	84	66	89	80	Diploma & Certificate	636	592	601	573	589	56
India			513			5%	Instructor II	10	3					Doctoral Degree	487	533	512	534	572	55
China, Hong Kong United Kingdom			269			3% 2%	Senior Instructor	91	94	95	96	102	116	Masters Degree	2,104	2.344	2.339	2.277	2.423	2.30
Malaysia			177			2%	Professor of Teaching			4	10	15	17							
Indonesia			209			2%	Lecturer	122	149	165	176	207	234	Post-Baccalaureate Degree	1,164	1,092	1,021	1,036	1,079	1,04
Mexico			155			2%	Sessional Lecturer	553	480	478	480	444	433	Grand Total	10,262	10,419	10,558	10,788	11,117	10,97
Others			2,995			30%	Librarians	86	94	90	83	77	83							
Grand Total			10,059			100%	Total Faculty	3.267	3.239	3.324	3.305	3.270	3.396	GRADUATE OUTCOMES						
Graduate							Related Acad. Staff *	1,280	1.310	1.314	1.354	1.430	1.468	GRADUATE OUTCOMES					graduat	
oradato							Staff Management&Prof.	2,981	3,202	3.412	3.505	3.640	3.665				graduat	e	Post-Bac	
				016			Clerical& Secretarial	1,740	1.724	1.630	1.637	1.616	1.582			De	grees		(Educ)	_
			Students	% of Tot	al Students		Trades/Service&Tech.	3,091	3,094	3 115	3,158	3.145	3,003	Satisfied / very satisfied				90%	8	3%
China United States of America			753 540			24% 17%	Other Staff			0,110	3,158		1.000	Conductor and and the				91%	9	5%
United States of America India			272			17%		1,078	1,085	1,097		1,111		Graduates employed*						
Iran			186			6%	Total Staff	8,890	9,105	9,254	9,456	9,512	9,250	Graduates employed full	time			83%	9	3%
Mexico			82			3%	Student Employees**	7,005	7,402	7,796	7,866	8,031	7,393				6		\$42.9	
United Kingdom			82 79			3% 3%	Total Paid Employees	20,442	21,056	21,688	21,981	22,243	21,507	Average annual income*				9,063		300
Germany Saudi Arabia			79			3%	Unpaid Employees	5,725	6,497	7,042	7,687	8,715	9,444	*of those in the labour force		pursuing	further	educatio	n	
Brazil			67			2%	* Related academic includes post-	focs, visitin	a, emeritu	us, adjunct	RAs, ho	norary/		**for those employed full-tin	me					
Republic of Korea			51			2%	affiliate, program directors and aca					-								
Others			917			30%	** Student employees includes Gra	duate Ass	istants, et	IC.										
Grand Total			3,107			100%														

UBC Fact Sheet of the Demographics Overview

(Fact Sheet Vancouver Campus, Winter 2016, 2017).



Percent international

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

Appendix B

Draft Interview Questions

- 1) How are you doing today? 你今天怎麼樣?
- 2) How important is health and well-being to you? 健康和幸福對你有多重要?
- 3) Are you actively part of any physical activity or exercise whether it would be on campus, home, or elsewhere? 你是否參加任何身體活動或鍛煉?每週幾多次?在那裡參加
 - a) if within campus, ask what current activities they partake in.
 - b) if outside of campus, ask if there is any reason on why they do not partake in that particular activity on campus.
- 4) Are there any perceived barriers or challenges that might impede in your participation in recreational programming on campus?

在UBC,你有沒有遇過任何困難或挑戰去參與校園□樂和身體活動?

- Eg. storm the wall, day of the longboat, fitness classes, spin classes, free week, UBC gyms
 - a) if yes, encourage the participant to speak on these perceived barriers.
 - b) Follow-up question to question 3 (if participant said "yes"): With respect to those perceived barriers, are there any suggestions or recommendations that you believe the university is able to do to accommodate and tackle these barriers to ultimately make recreation on campus a more inclusive setting for all individuals?
 - i) let the participant describe any recommendations that the university can do to improve recreational programming on campus.
 - 5) Have you had a negative experience when partaking in recreational programming on campus that discourage you from taking part in foreseeable events? If so, please elaborate.

在參與學校□樂和身體活動時,你是否有過不愉快的經歷,不鼓勵你參加可預見的 活動?

- From your experience do you believe that UBC has adequate resources that support mental health and wellbeing? Please elaborate.
 根據你的經驗,你認為UBC有足夠的資源來支持心理健康和幸福嗎?請詳細說明
- Has this interview improved or contributed to increased positive thoughts and feelings about your mental health, and your ability to discuss and express any difficulties you may have?

這次訪談是否改善或有助於增加對你的心理健康的正面想法和感受,以及你是否有 能力討論和表達你可能遇到的任何困難?

"Thank you for your time, and responses. We are providing you with a list of the upcoming events at UBC, which are a variety of physical activity and social gatherings here on campus. We will also be providing you with mental health resources on campus, through the *EMPOWER ME* resource, which is a 24/7 service that connects you with local counselling service, through in person, phone, video call and other means of communication. The phone #1 844 741-6389 (toll free). For 24/7 medical non emergencies, phone #8-1-1 connects you to registered nurses that can provide professional advice to address your concerns.

Email: English Version: "The mental health of first generation and international Asian females at UBC — A Research Project"

To whom it may concern,

You are invited to take part in a semi-structured interview with a group of students from KIN 464: Health promotion and Physical Activity. Specifically, the interview aims to gain valuable insight on the adverse effects on mental health and wellbeing of first-generation and international asian females, due to the lack of participation within the UBC community. If you have any questions or have interest in participating, please email Jeremy Lai at:

Note: Interviews will need to take place before March 16th and require no more than 10 minutes to complete. The goal of this project is to use the information gathered from the interviews to assist and provide UBC policy makers with ideas, issues and recommendations for student mental health within this demographic. The outcome of this report will ultimately contribute to the growth of mental health awareness and participation at UBC. Students in KIN464 have received approval by the research ethics board of UBC, and all interviews are completely voluntary.

All the best, Jeremy Lai

Chinese Version:

"UBC第一代和國際亞裔女性的心理健康 - 一項研究項目"

致相關人士,

你被邀請參加一個由KIN464組織的學生組成的半結構化訪談:健康促進和身體活動。具 體來□,由於缺乏UBC社區的參與,訪談旨在獲得有關第一代和國際亞洲女性心理健康 和福祉的不利影響的寶貴見解。如果您有任何問題或有興趣參與,請發送電子郵件至jere ,聯繫Jeremy Lai以安排快速面試。

注意:訪談需要在3月16日之前進行,完成時間不超過10分鐘。這個項目的目標是利用從 訪談中收集到的信息來幫助和向UBC決策者提供這個人群中的學生心理健康的想法,問 題和建議。本報告的結果將最終有助於增加UBC的心理健康意識和參與。

KIN464的學生已經得到UBC研究倫理委員會的批准,而且所有訪談都是完全自願的。

謝謝! Information sheet English version:

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council.

"The mental health of first generation and international Asian females at UBC - A Research Project"

You are invited to take part in a semi-structured interview with a group of students from KIN464: Health promotion and Physical Activity. Specifically, the interview aims to gain valuable insight on the adverse effects on mental health and wellbeing of first-generation and international asian females, due to the lack of participation within the UBC community.

Interviews will need to take place before March 16th and require no more than 10 minutes to complete. The goal of this project is to use the information gathered from the interviews to assist and provide UBC policy makers with ideas, issues and recommendations for student mental health within this demographic. The outcome of this report will ultimately contribute to the growth of mental health awareness and participation at UBC. Students in KIN464 have received approval by the research ethics board of UBC, and all interviews are completely voluntary.

If you have any questions or have interest in participating, please email Jeremy Lai at: or sign the sign-up sheet to schedule a quick interview and receive a consent form for participation.

Consent Form

English version:

(Consent form, was based on a publicized consent form from University of Sheffield for the *Utility of adaptive designs in publicly funded clinical trials* (2013) study.)

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council.

THE UNIVERSITY OF BRITISH COLUMBIA

School of Kinesiology 210-6081 University Boulevard Vancouver, BC Canada V6T 121 Phone 604 822 9192 Fax 604 822 6842 www.kin.ubc.ca

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: XII (16) Chris Schreiber, Avery Mackenzie, Kambiz Dolatyar, Jeremey Lai

The purpose of the class project:

To gather knowledge and expertise from community members on topics related to physical activity, recreation, health promotion and/or active transportation.

Study Procedures:

With your permission, we are asking you to participate in a recorded interview spanning 10-15 minutes. Recordings allow for note taking and transcribing. 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

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

Potential benefits of class project:

There are no explicit benefits to you by taking part in this class project. However, participating will provide you with the opportunity to voice your opinion on your experiences with health promoting activities or initiatives in a broad sense and will provide the students with an opportunity to learn from your experiences.



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Confidentiality:

Maintaining the confidentiality of the participants involved is paramount, and no names will be used in the reports.

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:

Version 2 – February 2018

Chinese version:



THE UNIVERSITY OF BRITISH COLUMBIA

School of Kinesiology 210-6081 University Boulevard Vancouver, BC Canada V6T 121 Phone 604 822 9192 Fax 604 822 6842 www.kin.ubc.ca

KIN 464:健康促進和身體活動

基於班級的項目的參與者同意書

首席研究員: Andrea Bundon博士(教育學院人體運動學院助理教授)

學生組:XII(16) Chris Schreiber, Avery Mackenzie, Kambiz Dolatyar, Jeremey Lai

課程項目的目的: 從社區成員那裡收集有關身體活動,娛樂,健康促進和/或主動運輸的知識和專業知識。

研究程序: 經您的允許,我們要求您參加10-15分鐘的記錄訪談。錄音允許記錄和轉錄。收集到的信息,學生將認真審查不同的個人如何理解或 參與健康促進活動或舉措。

項目成果: 收集到的信息將成為課程項目書面報告的一部分。書面報告將與參與該項目的社區合作夥伴分享。 調查結果摘要也可能發佈在以下網站上。

UBC種子計劃圖書館: https://sustain.ubc.ca/courses-degrees/alternative-credit-options/seeds-sustainabilityprogram/seeds-sustainability-library

這些報告中沒有包含能夠確定參與者的個人信息/信息。

課堂項目的潛在好處: 參加這個課程項目對你沒有明確的好處。然而,參與將為您提供一個機會,就廣泛的健康促進活動 或舉措對您的體驗發表意見,並為學生提供一次從您的經歷中學習的機會。

保密:

保持參與者的機密性至關重要,報告中不會使用任何名字。

課程結束後,所有數據(即筆記,訪談記錄)和簽署的同意書將保存在英屬哥倫比亞大學Andrea Bundon博士研究實驗室(1924 West Mall)的鎖定檔案櫃中。所有數據和同意書將在課程結束1年後銷毀。

風險:



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參與這項研究的風險很小。沒有已知的與參與本研究相關的身體,經濟或社會風險。雖然有問題排 期,但參與者可以自由分享他們想要的內容,包括拒絕回答具體問題。您應該知道您的參與是完全 自願的,您可以自由退出面試,並且不會對您的退出產生負面影響。如果您退出研究,您分享的所 有信息將被銷毀。

有關該研究的信息,請聯繫: 如果您對這個課程項目有任何疑問,可以通過電話604-822-9168或電子郵件andrea.bundon@ubc.ca與Andrea Bundon聯繫。

研究倫理投訴: 如果您對作為研究參與者的權利和/或參與本研究的經歷有任何疑慮或抱怨,請撥打UBC不倫瑞克 研究辦公室的研究參與者投訴熟線,電話604-822-8598或發送電子郵件至RSIL@ ors.ubc.ca.或撥打免費電話1-877-822-8598。

同意:

你参加這項研究是完全自願的,你可以隨時拒絕参加或退出研究。您在下方的簽名表示您已收到本 同意書的副本供您自己記錄。你的簽名表明你同意參加這項研究。

參與者簽名_____

日期:_____

Version 2 – February 2018

Sign up sheet

English version:

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NOTE: Name and email required

Please leave your name, email, and phone number if you are interested in participating

Name	Email	Phone number				
		9				

Chinese version:

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council.

"UBC第一代和國際亞裔女性的心理健康 - 一項研究項目"

你被邀請參加一個由KIN464組織的學生組成的半結構化訪談:健康促進和身體活動。具體來說,由於缺乏 UBC社區的參與,訪談旨在獲得有關第一代和國際亞洲女性心理健康和福祉的不利影響的寶貴見解。如果 您有任何疑問或有興趣參與,請發送電子郵件至_______發送給Jeremy Lai。 注:需要姓名和電子郵件

Т

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如果您有興趣參加,請留下您的姓名,電子郵件和電話號碼

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名稱	電子郵件	電話號碼

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council.

Appendix F

Post-interview follow up email for all participants:

KIN4	464 Research Project Follow Up		• •
•		2:20 PM (0 minutes ago) ☆	* *
	Dear Participants,		
	Thank you very much for your time and effort in providing us valuable feedback for the research project. The conducted interview was very helpful allowed you to be conscious of your mental and physical health beyond academics. As stated at the end of the interview, here are a few resources that are available to attend to any mental and physical health concerns.	towards our project, and we hope the	at it also
	EMPOWER ME is a 24/7 service that connects you with local counselling services through in person, phone call and other means of communication	m. Toll free phone # <u>844-741-6389</u>	
	For 24/7 medical non-emergency concerns, toll free phone #8-1-1 connects you to registered nurses that can provide guidance and suggestions for	or further action.	
	 Best Regards,		