University of British Columbia

Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Opportunities for Community Wellbeing in Times of Emergency Response at UBC

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University of British Columbia

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UBC sustainability

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Table of Contents

1. Executive Summary	3
2. Introduction	4
3. Methods	7
3.1 Research questions	7
3.2 Research methods	7
4. Findings	11
4.1 Successful emergency response strategies around the globe	11
4.2 Opportunities and limitations for inclusion of marginalized or vulnerable	
communities in wellbeing projects	16
4.3 Identifying gaps in current initiatives at UBC and applications for the future	22
5. Discussion	28
6. Recommendations	32
7. Conclusion	31
References	34
Appendix A – Interview guides	37
Appendix B – Consent forms	43
Appendix C – Survey questions	45
Appendix D – Thematic analysis example	52
Appendix E – Visual overview of UBC's response to COVID-19	54
Appendix F – Group summary	55

1. Executive Summary

The COVID-19 pandemic triggered a wave of mass shutdowns across the globe in early 2020, and UBC's Vancouver campus was no exception. As classes moved online and social distancing regulations were implemented, concerns were raised about community wellbeing within the student population. This project aimed to investigate existing gaps in UBC's current response to the pandemic, as well as provide recommendations to improve future emergency response strategies.

This project involved the conduction of in-depth interviews with both current students and stakeholders within the UBC community, as well as an online student survey and a literature review. The main research question investigated was 'What are the best practices in community wellbeing that can be proposed for future emergency preparation and response strategies at UBC, based on the evaluation of the current COVID-19 response?'

The most promising initiatives adopted in other universities and communities were identified as being the creation of student volunteer emergency response teams and the adoption of culturally sensitive pandemic planning methods. Both strategies demonstrate great potential to be implemented at UBC. The most vulnerable student groups during the COVID-19 pandemic were identified, with international students recognized as being particularly vulnerable, as well as students with dependents, immunocompromised students and students of lower socio-economic status. Finally, gaps in UBC's current resources were identified and examined, with lack of communication and advertisement emerging as a large factor.

Based on these findings, several recommendations were made, including the implementation of a student volunteer emergency response team at UBC, the creation of a new and accessible online mental health resource and the establishment of a centralized location where students could access information regarding all resources available to them.

2. Introduction & Background

2.1 Introduction to the COVID-19 pandemic

In late 2019, an emerging novel coronavirus disease (COVID-19) was identified in China and subsequently spread across the globe, declared a pandemic by the World Health Organization (WHO) on March 11, 2020 (Infection and Prevention Control Canada, 2020). COVID-19 is the most recent example of how various factors have contributed to enhanced transmission of emerging infectious diseases (EIDs), including changing patterns in human behaviour and the environment (Wilson, 1995). Population growth along with increased international travel and movement of people are two factors which have greatly contributed to the spread of EIDs, which is particularly evident in the case of COVID-19. Additionally, climate change and rising global temperatures pose a threat to the spread of disease, as the potential exists for vectors to survive in new areas, as well as for microbes to adapt to higher temperatures (Casadevall, 2020). As these factors are expected to continue to contribute to the increasing rates of EIDs in the future, it is crucial to identify effective ways to respond to these types of crises and mitigate harmful effects on the human population.

2.2 COVID-19 at UBC

On March 17th, 2020, the Government of British Columbia declared a state of emergency as a result of the COVID-19 pandemic (Government of British Columbia, 2020). Simultaneously, the coronavirus pandemic caused an unprecedented near-total shutdown of programs and services at the University of British Columbia (UBC). Classes were administered remotely online, campus restaurants and retail outlets were closed, and research activities were curtailed. Events and gatherings were cancelled or postponed, and study abroad programs suspended. This posed many challenges to the wider UBC community – with new social distancing regulations in place, operations had to be completely altered in order to respond to the emergent situation. This required essential campus units such as UBC Emergency Management to work quickly and take immediate action to ensure the safety of students, faculty, staff and the greater community. Resources and supports were rapidly adapted to fit within new guidelines, often moved to online formats. This transition to online communities and learning,

however, has raised critical questions surrounding the accessibility of technology and safe learning spaces for marginalized or low-income students.

Students at UBC and across Canada have been identified as facing a variety of challenges due to the COVID-19 pandemic, including negative effects on social, health and economic aspects of life. In a survey conducted by Statistics Canada in April 2020, 58% of student respondents were very or extremely worried about losing their jobs in the future (Statistics Canada, 2020). International students in particular have been identified as a vulnerable group, as they are often ineligible for supports provided by the Canadian government. As previously stated, access to technology including high-speed wireless internet has also proven to pose a challenge to some students with limited resources.

2.3 COVID-19 and community wellbeing challenges

Across the globe, the pandemic led to apprehension about maintenance of community wellbeing and care. New public health regulations, including social or physical distancing and self-isolation, drew concerns regarding mental health due to reduced social interaction. (Anxiety Canada, 2020). The concepts of community wellbeing and engagement, often involving activities with large groups of people coming together, have been forced to undergo a rapid revamping as this was deemed impossible. The term community itself lacks a concrete definition, and is interpreted differently depending on context. In a study conducted on community engagement during the West African Ebola epidemic, Wilkinson, Parker, Martineau and Leach (2017) identified community as a dynamic, complex concept which is often restricted solely to geographic areas by institutions, which can be problematic for various reasons. A static definition of community overlooks diversity and the changing nature of communities themselves, and incorrectly assumes their predictability and boundaries (Wilkinson, Parker, Martineau & Leach, 2017). In this research, the term 'community' has been interpreted as consisting of groups of people not constricted to geographic boundaries, and is capable of change or undergoing transformation.

2.4 Aim of research

This project aimed to investigate UBC's response to the COVID-19 pandemic in terms of its effects on community wellbeing, and subsequently propose recommendations for improvement of emergency preparedness in terms of future crises. This study specifically aimed to analyze various aspects of UBC's response including any potential gaps in resources, and examine the effects of the response on marginalized or vulnerable student groups. Additionally, effective emergency response strategies regarding community wellbeing around the globe were identified and analyzed as to what extent they could be applied to the UBC setting.

3. Methods

In this section, the main research question and sub-questions will be defined, as well as the methods used to investigate each question. The process behind each data collection method will be detailed and specific elements discussed.

3.1 Research questions

In order to address the aim of this project, the following research question was proposed: What are the best practices in community wellbeing that can be proposed for future emergency preparation and response strategies at UBC, based on the evaluation of the current COVID-19 response?

This question was broken down into the following sub-questions:

- 1. What community wellbeing programs/interventions in times of emergency response exist in other cities around the world? How can these be adapted and applied to the UBC setting?
- 2. What are the opportunities and limitations for ensuring the inclusion and participation of marginalized or vulnerable communities in the creation and implementation of community wellbeing projects?
- 3. What current initiatives are present at UBC in the context of the COVID-19 pandemic for maintaining a sense of community? What gaps exist in these resources, and how can this information be applied to future emergency response strategies?

3.2 Research methods

Research methods in this study included a literature review, an online survey and in-depth interviews with both students and key stakeholders in the UBC community. Research sub-questions were answered using data generated through these methods, as illustrated in *Table 1* below. In the following table, 'primary' methods are the main methods used to generate data for a particular sub-question, while 'secondary' methods are methods which also supported data collection for that question, but were not the main mode of collection.

Methods used to generate data					
	Literature	Student	Student	Stakeholder	
	review	survey	interviews	interviews	
Research Q1	Primary				
Research Q2		Secondary	Primary	Primary	
Research Q3	Secondary	Secondary		Primary	

Table 1. Methods used to answer research sub-questions.

3.2.1 Literature review

The literature review consisted of both scientific articles and 'grey literature,' including news and media sources. The literature review was the primary source of data for research sub-question 1, and a secondary source of data for research sub-question 3. Insight from the literature review was utilized to help form interview questions for both student and stakeholder interviews. The literature search was conducted using the snowball method, beginning with specific search terms and compiling relevant articles from there on out. For sub-question 1, search terms consisted of "community" AND "wellbeing" OR "engagement" AND "emergency," often accompanied by "university" OR "school." For sub-question 3, grey literature such as news articles and media releases were analyzed, using the search terms "UBC" AND "COVID" AND "community" OR "wellbeing." Grey literature was the focus of this sub-question as the COVID-19 crisis is, at the time of writing, too recent to have published academic peer-reviewed papers on the topic. Search terms were used in Google, Google Scholar and the UBC Library database in order to compile diverse literature.

3.2.2 Interviews

Interviews were conducted with both the student population and key stakeholders in the UBC community regarding wellbeing and emergency response. 9 student participants were interviewed, and 9 stakeholders from various UBC departments were interviewed. Interview guides can be found in *Appendix A*. Student participants were recruited through the initial online survey, in which they had the opportunity to sign up for an interview slot at the end of the survey. Stakeholders were recruited via email invitations. Stakeholders

interviewed included representatives of UBC Wellbeing, UBC Food Services, Student Housing and Community Services (SHCS), UBC Social Ecological Economic Development Studies sustainability program (SEEDS), AMS Foodbank, Go Global and UBC Emergency Management. Student interviews lasted approximately 20 minutes in duration while stakeholder interviews lasted approximately 30 minutes in duration. Due to safety concerns and social distancing regulations in place at the time of research, face-to-face interviews were not possible, and instead were conducted via remote methods including telephone and Zoom. Both student and stakeholder interviewes signed written consent forms prior to the start of the interview. At the beginning of each interview, the details of the consent forms can be found in *Appendix B*. Student interviews were utilized primarily to collect data for research sub-question 2, while stakeholder interviews were primarily used for sub-questions 2 and 3.

Student interviews were transcribed verbatim, while the main points were written out for stakeholder interviews rather than transcribing word-for-word, as these interviews were significantly longer. In order to ensure the privacy of all interviewees, student responses were disclosed without any identifying information, and are referred to in chronological order from student interviewee 1 up until student interviewee 9. Stakeholders are referred to as a representative of their organization or branch of UBC, in order to ensure confidentiality. An overview of the interviewee titles and in-text citations can be found in *Table 2* below.

Stakeholder 1: representative of UBC	(Stakeholder interviewee 1, personal
Wellbeing	communication, June 30 2020)
Stakeholder 2: representative of UBC	(Stakeholder interviewee 2, personal
Food Services and SHCS	communication, June 30 2020)
Stakeholder 3: representative of UBC	(Stakeholder interviewee 3, personal
SCHS	communication, June 30 2020)
Stakeholder 4: representative of Go	(Stakeholder interviewee 4, personal
Global	communication, July 2 2020)
Stakeholder 5: representative of UBC	(Stakeholder interviewee 5, personal
Food Services	communication, July 6 2020)

Stakeholder 6: representative of UBC	(Stakeholder interviewee 6, personal
Wellbeing	communication, July 6 2020)
Stakeholder 7: representative of AMS	(Stakeholder interviewee 7, personal
Foodbank	communication, July 8 2020)
Stakeholder 8: representative of SEEDS	(Stakeholder interviewee 8, personal
	communication, July 9 2020)
Stakeholder 9: representative of UBC	(Stakeholder interviewee 9, personal
Emergency Management	communication, July 16 2020)

Table 2. In-text referencing of stakeholder interviewees

3.2.3 Online student survey

A student survey was conducted using Qualtrics, the UBC Survey Tool. The survey served as a secondary data source for sub-questions 2 and 3, and attempted to gauge students' knowledge of resources, opinions and personal experiences during the pandemic. Survey questions can be found in *Appendix C*. Participants were recruited using various online methods, such as through social media posts and newsletters including the UBC Farm newsletter and the Faculty of Land and Food Systems newsletter (the Newslettuce). Data was analyzed by creating a code book and performing basic statistical analysis in Microsoft Excel.

A thematic analysis was conducted of student interviews, identifying common themes and topics in participants responses by highlighting and coding the transcripts. An example of this thematic analysis can be found in *Appendix D*.

4. Findings

4.1 Successful emergency response strategies implemented in other universities and communities

In this section, successful emergency response strategies from other universities and communities will be discussed. These initiatives will first be identified, then secondly their successes and limitations examined. Finally, the potential for these programs to be implemented at UBC will be analyzed, with respect to the COVID-19 pandemic.

Perhaps one of the most effective strategies for improving UBC's emergency response approach is to examine successful strategies employed and enacted at various other universities and institutions around the globe. Universities across the world utilize diverse strategies regarding emergency response, which has been particularly evident when examining responses to the COVID-19 pandemic. A literature review was conducted and several initiatives were identified which showed potential to be adapted to the UBC setting. These initiatives were then examined in detail and elaborated upon to determine to what extent they can be applied to UBC, using student and stakeholder interview responses to gauge interest and feasibility of implementation. The two most promising initiatives identified were the creation of community emergency response teams, and the adoption of culturally sensitive pandemic planning methods.

4.1.1 Volunteer emergency response teams

Overview

One of the initiatives adopted by several universities that shows potential for implementation at UBC is the formation of volunteer emergency response teams. Several universities in the United States including Virginia Tech and Northwestern University have created community emergency response teams (CERTs) made up of students, faculty and staff members (Rowley, 2014; Virginia Tech Emergency Response, n.d.). Generally, these teams are formed by volunteers to support existing emergency response frameworks in the event of a major emergency. Members undergo training regarding various aspects of emergency preparedness and response, facilitate educational awareness sessions, and assist emergency response units when necessary. Teams are

trained in techniques in order to prepared for a wide variety of emergencies, including disaster preparedness, fire suppression, search and rescue, disaster psychology and terrorism awareness. Some CERTs, such as the program implemented at Northwestern University, exist specifically with the goal to support community welfare during periods of crisis and contribute to community recovery after a major event (Rowley, 2014).

Successes and limitations of volunteer emergency response teams

Both Northwestern University and Virginia Tech's CERT programs are examples of successful implementation at the university level. Positive aspects of this program include the ability to engage students and involve them directly in emergency preparedness and response, as well as educate the general university population on emergency preparedness strategies. One limitation is that existing examples of CERT programs often place limits on the number of students that can join, which may present a barrier to student engagement and exclude some students who wish to join. Another potential limitation is that often CERTs have primarily been focused on campus outreach. This presents an issue with emergencies such as COVID-19, where the university may be required to shut down for a period of time, or physical gathering may not be possible. Regardless of these limitations, however, this model has the potential to be effective at UBC, particularly with regards to community wellbeing during the COVID-19 pandemic and any similar future events.

Feasibility of implementation at UBC

In order to determine the feasibility of implementation of a CERT program at UBC, student interest needed to be gauged. To determine the level of interest of potential student participants if a CERT program were to be adopted at UBC, 9 student interview participants were asked about their likeliness to volunteer for a CERT program. 8 interviewees (88.89%) indicated that they believed implementing a CERT program at UBC would be a good idea, and responded positively to the concept. 8 participants (88.89%) replied that they would be willing and likely to participate in a volunteer emergency response team such as the CERT program if implemented at UBC. One student interviewee commented that they appreciated the fact it would be run by UBC, so

they would not have to worry about who was running it or if it was an ethically sound program, and it would be easy to access. "Knowing where it's based out of ... [it's] something I would be for sure interested in," (Student interviewee 7, personal communication, July 9 2020). Additionally, students were asked if they could identify any aspects that may increase their likeliness to join a CERT program, such as financial compensation. One participant replied, 'If it was a work learn position that would be a really good opportunity for students. I would definitely apply for it," (Student interviewee 8, personal communication, July 8 2020). Another participant expressed that incentives including academic credits or availability of paid positions would increase general interest in the program (Student interviewee 7, personal communication, July 9 2020). Several student interviewees, however, indicated that they would be enthusiastic to join the program in a volunteer capacity regardless of incentives, demonstrating a high level of interest in the initiative.

In terms of the reality of implementing such a program at UBC, it is likely that a CERTstyle initiative would fall under the jurisdiction of UBC Safety & Risk Services, specifically the Emergency Management Department. A representative of UBC Emergency Management was interviewed in order to gain insight into the feasibility of carrying out this program at UBC. In its current capacity, UBC Emergency Management does not run any CERT-like programs, instead focusing on individual or specialized training sessions. When asked about the feasibility of implementing a CERT-style program at UBC, the UBC Emergency Management representative responded that they were aware of this style of program and had considered implementing something similar at UBC (Stakeholder interviewee 9, personal communication, July 16 2020). They acknowledged the high level of student interest in such a program, but identified one issue as being lack of staff or personnel to implement and carry out initiatives like a CERT program. The representative commented, "Volunteer programs are awesome but you need people to manage the volunteer program. That's just our challenge right now... we're such a small team... it's on our radar and it's something that we feel really needs to happen," Stakeholder interviewee 9, personal communication, July 16 2020). Currently, the UBC Emergency Management department is comprised of three permanent staff members and one Co-op

student (Stakeholder interviewee 9, personal communication, July 16 2020). The UBC Emergency Management representative shared that in an ideal situation, a Co-op student could manage an emergency preparedness volunteer program such as the CERT initiative suggested. They also shared that they had already been approached by multiple faculty and staff members showing interest in helping the UBC community during times of emergency. The representative identified an additional concern of the level of student time commitment and engagement, recognizing that the level of student turnover would be an issue. Fearing students would be too busy in their first and fourth years, the representative speculated that second and third-year students would be the primary group to engage in the program. "I don't think it's a simple program to do well. It's something that needs to be well thought out and well supported," the representative concluded.

4.1.2 Culturally sensitive pandemic planning

Overview

Another promising strategy identified during the literature review was culturally sensitive pandemic planning, or the inclusion of marginalized communities into the process of creating a pandemic response plan. A study conducted by Charania & Tsuji (2012) in remote, isolated First Nations communities in northern Ontario demonstrated the importance of community engagement when developing emergency response plans, using the example of the 2009 H1N1 influenza pandemic. The study found that engaging community members led to improved, culturally appropriate and community-specific pandemic plans which would likely lead to improved future response. It acknowledged that pandemic plans should be dynamic by nature, and therefore frequently updated to better address the needs of the specific communities (Charania & Tsuji, 2012). It identified tactics such as holding regular meetings with community members, conducting individual interviews or focus groups, and actively seeking feedback as methods used to carry out the creation of a culturally sensitive pandemic plan. This concept of creating and continuously updating pandemic plans in a culturally sensitive fashion, combined with engaging marginalized communities in the process, has the potential to be extremely effective if applied to the UBC setting.

Success and limitations

The above study found the technique of planning for pandemics in a culturally sensitive way to be highly effective in remote First Nations communities in northern Ontario. This proved to be a successful strategy for creating effective pandemic plans in general, particularly when examining the inclusion of marginalized people groups. Another positive aspect of this approach was the continuous updating of the plan – this allowed for the formation of a dynamic response plan that was able to adapt to variations within the community, and best support their changing needs. The community engagement aspect led community members to feel ownership over the plan, along with a sense of responsibility. One limitation of the concept of culturally sensitive pandemic planning is that it is highly specific and specialized. It worked effectively in certain areas such as specific communities in northern Ontario, however there has not been an example of this method being implemented in a much larger, highly diverse place such as UBC's Vancouver campus.

Feasibility of implementation at UBC

In order to examine the extent to which culturally sensitive pandemic planning could be implemented at UBC, the current state of pandemic response at UBC must be examined. UBC's current pandemic response plan was created in 2009 at the time of the H1N1 pandemic and its last completed update occurred in 2012 (Risk Management Services, 2009). This presents a problem in itself, as much of the information presented in the plan is evidently outdated and does not entirely resemble UBC's actual response to the current pandemic. It also appears to severely underestimate the effects of a pandemic on university operations, as demonstrated by the 'preparations' section, stating the university should "plan for 30% to 50% staff absences for periods of 2-3 weeks at the height of the pandemic," (Risk Management Services, 2009). As is now evident with the events of the COVID-19 pandemic, this was a definite underestimation. The pandemic plan also does not mention any plans for several major buildings on campus today, as they were built after 2012, including Orchard Commons and the Nest. It is clear that UBC's most recent pandemic plan was insufficient in terms of responding to the COVID-19 pandemic, and

could benefit from adopting a model similar to that studied in Charania & Tsuji's 2012 report. As will be discussed later in this paper, UBC's response has generally not been viewed by the student population as inclusive of marginalized or vulnerable student groups, which is another area in which it could benefit from culturally sensitive pandemic planning. In this sense, there is a great opportunity for UBC to improve by adopting this strategy of planning for pandemic response. Due to the fact that UBC has a much larger, more diverse population than the original communities surveyed in Charania & Tsuji's 2012 study, the concept would have to be adapted to serve the same purpose in this new population. The majority of the engagement techniques utilized in the original study, including focus groups, interviews and actively seeking feedback, could easily be implemented at UBC. It is likely that this responsibility would fall under UBC Safety & Risk Services, as this branch is currently largely responsible for UBC's pandemic response. Overall, there is great potential for the improvement of UBC's emergency response strategies by adopting a culturally sensitive planning approach, which would help ensure community engagement and the inclusion of marginalized people groups.

4.2 Opportunities and limitations for inclusion of marginalized or vulnerable communities in wellbeing projects at UBC

In this section, the inclusion of marginalized or vulnerable communities in community wellbeing initiatives at UBC will be investigated. First, an overview of the situation will be presented, followed by current student perspectives on inclusivity at UBC. Afterwards, the most vulnerable student groups at UBC during the COVID-19 pandemic will be identified and examined. Lastly, both opportunities and limitations for inclusion of marginalized or vulnerable communities in wellbeing initiatives at UBC will be discussed.

4.2.1 Overview

Often in times of emergency situations or crises, marginalized and vulnerable populations are hit the hardest by emergencies and yet are repeatedly left out of response planning. Emergencies in the public health sector in particular are capable of affecting these populations disproportionately, largely attributed to socio-economic disparities (Charania & Tsuji, 2012). The aim of the second sub-question of this project was to determine the

opportunities and limitations for the inclusion of marginalized or vulnerable people groups in UBC's wellbeing resources. In order to accomplish this, it first had to be identified which student groups were most vulnerable to the effects of the COVID-19 pandemic, and which students were consistently left out of UBC's response. Through student surveys and interviews, it was determined that international students as a whole were disproportionately affected by the pandemic as a result of largely being left out of both responses from UBC and the Canadian government. Next, it was determined which factors were considered opportunities or limitations towards the participation of vulnerable groups in wellbeing initiatives and programs. Students' perspectives on the current state of the inclusion of marginalized groups at UBC was also evaluated in order to gain a more holistic view of the situation.

4.2.2 Perspectives on the state of UBC's inclusivity

In order to identify which student groups were most vulnerable to the effects of the COVID-19 pandemic, students' opinions and personal experiences during the pandemic were examined through an online survey, along with further in-depth interviews. The purpose of these interactions with students was not only to identify which students were most vulnerable, but also to garner students' perspectives on UBC's current efforts and level of engagement with marginalized or vulnerable groups. Survey participants were asked to indicate their level of agreement or disagreement with the statement, 'UBC has included marginalized or vulnerable student communities in its response to COVID-19.' 5.4% of respondents (n=93) strongly disagreed with this statement, while 29.0% disagreed. 44.1% of students neither agreed nor disagreed. When asked to expand on their reasoning behind their selected choices, students produced a variety of responses. "[It] kind of seems like UBC is providing no support for these students. I don't really know the details, but I do know that I haven't heard of any support programs for marginalized students, and that's a problem," one respondent identified. Another stated, "In light of current situations with people fighting for their basic human rights, I truly believe now, that UBC has not done enough to help marginalized communities in their COVID-19 response plans. Although there are bursaries and such for financial aid, I believe this was not advertised enough and thus many suffering communities are not getting the help they so

deserve." Being unaware of resources for marginalized or vulnerable students, or lack of advertising of such resources, proved to be a common theme throughout the student survey and interviews. "It has been hard to see if they've done anything specifically for marginalized/vulnerable student communities," one student stated. Another remarked, "As for including marginalized or vulnerable populations... it could just be that I'm not looking at the right stuff, but I have not seen anything that seems specific to helping those communities." Overall, both the student survey and interviews demonstrated that the overall sentiment exists in the student body that UBC has been unsuccessful in including its marginalized or vulnerable populations in its response to COVID-19.

4.2.3 Identification of vulnerable groups

International students

As mentioned previously, the major group identified as facing disproportionate challenges during the pandemic was found to be international students. The resounding consensus from both the student survey and interviews was that international students have consistently been left out of UBC's response, and yet bear some of the biggest impacts. One international student interviewee stated, "I feel like it's been especially hard for international students... not having enough financial resources and also it always feels like we're on the receiving end of news and not part of the discussions. Because a lot of the impact does fall on international students." (Student interviewee 2, personal communication, July 7 2020). International students have also been left out of the Canadian government's response, as they were deemed ineligible to receive Canada Emergency Student Benefit (CESB) payments (Asuncion, 2020). One international student interviewee discussed their challenges with navigating the government's resources: "I hadn't met the financial requirements to apply for CERB. I thought that the best way for me was to apply for the CESB, unfortunately it's only for Canadian students," (Student interviewee 5, personal communication, July 8 2020). Another international student interviewee commented, "It's been really hard as an international student to get funding both from the States and Canada and I would say, overall, financially, it's been very difficult and definitely feels really tenuous financially." (Student interviewee 2, personal communication, July 7 2020). Multiple survey respondents identified similar challenges, and acknowledged UBC's lack of financial resources for international students during this time. "[There are] not enough financial resources and assistance for us international students who have to pay much higher tuition," one survey respondent commented, while another stated, "I think they could have offered better financial aid for students and also give more information with regards to course structure beforehand for students overseas." At the time of writing, after data collection had occurred, UBC did announce new 'self-isolation accommodation packages' for students returning to Vancouver from abroad (University of British Columbia, 2020). This package includes accommodation on campus and food for 14 days, free of cost, relieving some of the financial burden on international students returning to Vancouver.

Students with dependents

Alongside international students, however, several other vulnerable groups were identified who have experienced distinct challenges due to the pandemic, and have been largely left out of UBC's response. One group identified repeatedly as being particularly vulnerable was students with dependents. One survey respondent observed the lack of support and resources for students with families. "There are no special help or programs for... full time students with family," the student remarked. It is worth noting that even the recent resources UBC has created such as the self-isolation accommodation packages, largely leave out students with families as well. The no-cost accommodation is strictly limited to one person, and the sole option for family suites states "additional fees may apply," (University of British Columbia, 2020). Students who identified as both international and as having dependents experienced particular difficulties, as illustrated by one survey respondent: "I am full time student and mother of toddler, I wasn't working prior but I was planning to work in summer. Due to lack of childcare, and PR status and lack of working prior to COVID made me ineligible for all the benefits."

Immunocompromised students

Another vulnerable group during this emergency period was identified as immunocompromised students. As social distancing regulations came into place in Vancouver, concerns rose about immunocompromised persons and accessibility of necessities such as groceries. One interview participant pondered the challenges of accessing food while living on campus. "I can imagine if you're immunocompromised or an at-risk person, then leaving your room to go access food would definitely impact your food security," (Student interviewee 7, personal communication, July 9 2020). A survey respondent shared, "A pre-existing lung condition means I have to be super careful. I have to think about when and where to go outside to stay away from people and crowds that often gather regardless of the social distancing rules."

Students of lower socio-economic status

Finally, students of lower socio-economic status were identified as a particularly vulnerable group during the COVID-19 pandemic for several reasons. One of the largest difficulties experienced by low-income students was lack of access to technology and the means to transition into remote online education. A representative from UBC SEEDS discussed this problem in greater detail. "Not everybody has access to equipment... not everybody has access to spaces that they feel they have enough of a sound barrier or even a plug in the wall to be able to do that work," the representative remarked (Stakeholder interviewee 8, personal communication, July 9 2020). The representative shared that they were aware of one faculty which sent out an email at the beginning of the pandemic stating if students required a computer, they could lend one to them. However, the representative also noted that this was not widely communicated to students, and rather was based upon relying on students to instead come forward to instructors and communicate their technology needs (Stakeholder interviewee 8, personal communication, July 9 2020). A survey participant detailed this challenge further: "The abrupt transition into online school and need to move back home assumes that the majority of students have the means to do so. [It] assumes that students have access to computers, strong Wi-Fi, and a healthy work environment. Assuming these types of resources as being accessible to everyone on such short notice forces students to come forward about various issues within their living situations they may not have otherwise been comfortable doing." This statement echoes the concern of the UBC SEEDS representative about students' abilities in coming forward for assistance during this time.

4.2.4 Opportunities and limitations for participation in wellbeing projects

Based on the various student responses, comments and suggestions, there are several key opportunities and limitations that can be identified regarding the inclusion of vulnerable people groups in wellbeing initiatives at UBC. During an interview, the representative of UBC SEEDS discussed the opportunity to learn from the current situation and bring that newfound knowledge into future initiatives. "I think that there's a lot of opportunity to learn from this and create some procedures, but I think they've got to be grounded in the community in which it affects," the representative stated (Stakeholder interviewee 8, personal communication, July 9 2020). This provides a unique insight into emergency response strategies moving forward – it is clear that an opportunity does exist to learn important lessons from the COVID-19 pandemic, and apply these lessons to inevitable future emergencies. In terms of inclusion of vulnerable student groups, it is becoming apparent which strategies employed by UBC do or do not work, based on the comments of these vulnerable students themselves, as detailed in the above sections.

One limitation of the current response has been communication strategies and advertisement, as UBC has created or adapted several different wellbeing resources in response to the pandemic, however many students have not heard of them or been made aware. The UBC SEEDS representative echoed this sentiment and commented that even though many resources are available to the university, "[they are] kind of hidden... [often] from lack of money to do a good job on a website," (Stakeholder interviewee 8, personal communication, July 9 2020). Another limitation identified was the unintentional exclusion of certain vulnerable groups from initiatives, such as through the self-isolation accommodation packages, which only provide complimentary accommodation for single students with no dependents. This goes along with lack of engagement of students in general in terms of emergency preparedness and planning, as identified personally by a representative of UBC Emergency Management: "The amount of interaction we've had with students has been... not enough," the representative admitted (Stakeholder interviewee 9, personal communication, July 16 2020). Overall, the largest opportunity that exists is the ability to learn from past and current events and apply the lessons

learned to future crises. One potential example of this could look like acknowledging the general student attitude that vulnerable students have been excluded, and adopting a culturally sensitive planning method (as mentioned in section 4.1.2) for future emergency events.

4.3 Identifying gaps in current initiatives at UBC and applications for the future

In this section, the gaps in current wellbeing resources at UBC during the COVID-19 pandemic will be identified, and potential applications for the future will be discussed. First, an overview of UBC's current response in terms of wellbeing will be examined, followed by specific analysis of any gaps in physical health, mental health and general wellbeing resources. Overall gaps in community wellbeing during the pandemic will then be discussed, as well as applications of these results to the future.

4.3.1 Overview

In order to create an overview of UBC's current response to COVID-19 with respect to community wellbeing initiatives, information was compiled from both UBC students and stakeholders. It was identified that several new resources were created since the beginning of the COVID-19 pandemic, while multiple other resources were altered in order to continue to serve students during the pandemic. In many cases, this has meant that initiatives and programs have been moved to an online format. In order to propose effective recommendations, gaps were identified in the existing resources by listening to student experiences. As future emergency events similar to the COVID-19 pandemic are considered inevitable, it is necessary to learn from this experience and adapt current resources for the future. This section aims to evaluate the current community wellbeing resources available at UBC during the COVID-19 pandemic and consider potential alterations or improvements for future emergency response situations. A visual overview of UBC's wellbeing resources during COVID-19 can be found in *Appendix E*.

4.3.2 Physical health resources

Various resources, programs and initiatives exist at UBC regarding physical activity and health. As a result of social distancing regulations, however, the majority of these

resources either closed down entirely or were modified and re-introduced in an online format. Facilities such as the Student Recreation Centre and the Aquatic Centre were closed immediately as the pandemic triggered widespread shutdowns across campus in March 2020 (UBC Recreation, n.d.). In July 2020, many of these services and facilities were able to reopen with physical distancing regulations in place. At the time of writing, these resources remain open with significant reductions in operations, including reductions in capacity, mandatory online sign-ups and shifting activity locations to outdoors. Almost immediately after the initial shutdowns, UBC Recreation introduced an alternative to in-person physical activity - online fitness classes and workouts via Instagram and Zoom. "Movement breaks," short and low-barrier sessions held live through Instagram were adopted twice a week, free of cost. Additionally, virtual fitness classes were held via Zoom with various forms of workouts. This was demonstrated to be an effective way to engage with the student population from afar and maintain physical health. During student interviews, participants were asked to identify community wellbeing resources at UBC in place during the pandemic. Out of 9 student participants, 2 identified the existence of online fitness classes as a current wellbeing resource. This included the classes run by UBC recreation, as well as online activities run by residence advisors, such as yoga sessions via Instagram. When asked about their overall feelings towards UBC's pandemic response, online fitness activities were identified as a positive support by one participant.

In the online student survey, participants were asked an open-ended question on how they feel UBC can best support their physical health and wellbeing. This question produced multiple answers which assist in pointing out potential gaps in UBC's current physical health resources. One student identified the importance of no-equipment workouts, and proposed that UBC Recreation post guides for such workouts online. No-equipment workouts can reduce the barriers students may face to being physically active, as exercise equipment can be extremely expensive and may not be accessible to lower income students. One participant mentioned another gap they had noticed regarding physical health resources at UBC – the lack of a "unified resource with all the physical activity initiatives UBC has moved online on a single website." Currently, students wishing

to find out information about physical health resources must visit a variety of websites in order to gain a comprehensive overview of all that UBC has to offer, including websites belonging to UBC Recreation and UBC Wellbeing. The Student Services website (students.ubc.ca) does provide an overview of physical health and activity resources at UBC, however it is not entirely comprehensive or detailed, and users must still sift through information on various other websites in order to gain a complete overview of all available resources.

4.3.3 Mental health resources

During a time period where massive emphasis is placed on social isolation, mental health supports and resources are a crucial part of any institution's response. UBC offers a variety of mental health services, many of which had to be modified or revamped entirely in order to follow social distancing guidelines during the COVID-19 pandemic. Often, this meant that programs were only offered via remote formats including through Canvas, Zoom, and by telephone.

UBC Counselling services, previously offering primarily in-person appointments, altered operations to provide counselling sessions via phone and video calling (University of British Columbia, 2020). The Wellness Centre shut down physically and instead can be accessed through a Canvas course in which students are able to self-enrol. The course contains a variety of modules concerning topics including stress and self-care, and provides resources and personal anecdotes from student wellness peers about issues such as graduating without closure, moving back home and making studying adjustments. When asked about their knowledge of community wellbeing resources, along with the resources above, student interviewees also identified Empower Me as an existing initiative. Due to the fact that Empower Me is a service only offered via phone, no social distancing adjustments were required when the pandemic hit Vancouver.

One major gap identified by students regarding mental wellbeing resources during COVID-19 was the lack of advertisement or communication. When asked if they could identify any wellbeing resources at UBC related to COVID-19, one student interviewee

replied, "I don't think so. I haven't received any emails or notifications of UBC reaching out to me," (Student interviewee 8, personal communication, July 8 2020). The student further commented that they felt mental health resources were something that should be advertised properly to students, rather than students being forced to seek them out independently. "It's the kind of thing you would expect would be someone reaching out to you, rather than you having to search for it," (Student interviewee 8, personal communication, July 8 2020). In the online student survey, 21.5% of students surveyed (n=121) identified as having experienced difficulties taking care of their mental health since the beginning of the pandemic due to lack of accessibility of UBC's resources. One student identified that even remote mental health resources may prove to be difficult to access, as online does not guarantee 'accessible.' Regarding specific resources, one survey participant remarked that they appreciated how quickly UBC Wellbeing was able to transfer their programs to online platforms, however, "the services are not necessarily on par" with previous in-person offerings. When asked to comment about their experiences accessing mental health resources at UBC, a common theme in student responses was issues with high wait times, poor appointment availability and lack of longterm programs.

4.3.4 Other community wellbeing resources

Go Global

Go Global is a branch of UBC that offers a variety of international experiences, including academic exchange, research abroad opportunities and global seminars. When the COVID-19 pandemic began to trigger mass shutdowns around the world, Go Global was under a particular amount of pressure, with students located across the globe. Concerns emerged surrounding students being isolated in foreign countries, especially regarding social wellbeing and mental health. Currently, all international programs have been suspended until at least the end of 2020 (University of British Columbia, 2020). A representative from Go Global was interviewed and provided further insight into lessons learned during the pandemic, as they became aware of gaps in their own response. The representative discussed the importance of communication with students during periods of emergency response, and actively seeking feedback in order to improve. They detailed

how Go Global aims to conduct feedback sessions with program participants in order to not only gauge how students are doing but also to "learn about what the experience felt like, if there is anything [Go Global] can do to further reflect on and improve," (Stakeholder interviewee 4, personal communication, July 2 2020). These feedback sessions include a self-reflective online survey and face-to-face sessions where participants can connect and share their experiences with other students. The representative's comments demonstrate a positive response from Go Global in terms of community wellbeing, in terms of willingness to take the initiative to identify gaps in their resources and response and meet students' needs to the best of their ability. The representative shared a question that Go Global hoped to answer through receiving student feedback during the COVID-19 pandemic: "How are our actions being perceived and how can we improve our ability to engage and support students?" (Stakeholder interviewee 4, personal communication, July 2 2020). This method of seeking feedback through student engagement sessions has the potential to be successfully applied to other branches of UBC involved in the pandemic response, such as UBC Emergency Management.

Work Learn Program

The Work Learn program at UBC consists of hundreds of student employment positions on campus which exist to develop students' professional skills. Throughout the course of this project, student respondents identified several gaps within the Work Learn program. Many of these positions for the summer 2020 terms were cancelled outright due to the pandemic and social distancing regulations. Loss of student employment can have many potential negative consequences on student wellbeing, including financial losses and impacts on mental health. A study by Laycock & Caldwell investigated emergency response strategies in Canadian rural areas after extreme weather events and found that employed persons experienced a greater sense of community (Laycock & Caldwell, 2017). Therefore, it is likely that this extends to student populations as well, and that students may be experiencing a lack of community as a result of removal of student employment opportunities such as Work Learn positions. In the online student survey, when asked about how UBC could better support students with financial resources, one respondent commented that it was "very disappointing to have work learn positions not continue to pay students when the pandemic began." Even with the few Work Learn positions that were available over the summer, problems persisted for some students. "Work Learn has been a hassle for me. I got a position for the summer and was able to work remotely without a problem. However, because I am residing outside of Canada right now due to the pandemic, I am technically not allowed to work," another survey respondent stated. Overall, students appeared to identify the Work Learn program as an important part of their university experience, but identified these issues with the program that have arisen during the COVID-19 pandemic.

4.3.5 Overall gaps

Although each initiative or program previously identified had its own specific gaps and issues, some problem areas were widespread across many aspects of UBC's response. One major issue with regards to community wellbeing resources during the pandemic at UBC was that students generally do not feel connected to the UBC community. In the online survey, students were asked to indicate their level of agreement or disagreement with the following statement: 'I have felt connected to the UBC community' both prior and since the COVID-19 pandemic. Regarding prior to the start of the pandemic, 51.3% of respondents (n=119) agreed with the statement, while 10.9% strongly agreed that they felt connected to the UBC community. However, when given the same prompt but asked to respond based on their experiences during the pandemic, these numbers dropped to 22.7% and 1.7%, respectively. One major gap identified across many of UBC's resources was the lack of advertising and communication about the resources themselves. The UBC SEEDS representative interviewed stated concerns over the lack of a centralized resource such as a website where students could find all wellbeing resources in one singular place, rather than having to search through multiple sites (Stakeholder interviewee 8, personal communication, July 9 2020). As discussed in previous sections above, many student interviewees and survey respondents stated they were unaware of many of UBC's resources or felt they could have been better advertised. The lack of communication about wellbeing resources appeared to be a general theme throughout the course of the project.

5. Discussion

In this section, connections will be drawn between the various results discovered in the three research sub-questions. Potential solutions to some of the gaps identified will be proposed, with a discussion of the logistics of what those may look like. This includes the evaluation of potential ways to implement CERT programs, improve mental health resources, and strengthen advertisement and communication of wellbeing resources in general. Finally, reflections on the methodology and limitations of this research will be examined.

5.1 Drawing connections and proposing solutions

5.1.1 Implementation of a CERT program at UBC

It is evident that the student support and interest exists to justify implementing a student volunteer or CERT style program on UBC's Vancouver campus. However, several considerations must be acknowledged, such as the potential concerns identified by the UBC Emergency Management representative, who would likely be in charge of such a program if it were to be implemented. As discussed previously, one point raised by the representative was the number of administrative staff required to support and implement a student volunteer program, combined with the low number of current personnel in the department. One potential solution to this issue is to create Work Learn or Co-op positions for students who would be involved in overseeing and implementing this program. This draws a connection to one of the gaps identified by students in wellbeing resources, as the lack of Work Learn positions during the pandemic was raised as a concern by some respondents. The creation of new Work Learn positions in the UBC Emergency Management Department would not only alleviate some of the concerns of lack of staff, but also provide opportunities for student wellbeing by providing new jobs and potentially increasing a sense of community.

Another concern identified by the UBC Emergency Management representative was potentially high student turnover, and level of student dedication to the program. One way to alleviate this concern is to create a program framework similar to the Sustainability Ambassadors Program at UBC, where students apply to join an interdisciplinary cohort of other students for a period of one academic year (UBC Sustainability, n.d.). This would allow for the involvement of a smaller, highly dedicated group of students. This model has the potential to be effective for an emergency response student volunteer program such as a CERT program, as the two programs share many similarities. Both cover a diverse range of topics and involve student engagement and educational sessions for the wider student population. One downside of this model is that it places a limit on the number of students that can be involved, as the Sustainability Ambassador program was limited to approximately 25 student members in the 2019/20 academic year (UBC Sustainability, n.d.). This could be modified, however, depending on student interest for an emergency response version of the program in order to create the most effective CERT program at UBC.

5.1.2 Potential improvements to mental health resources

Although many student interviewees and survey respondents identified gaps in UBC's mental health resources, some also suggested potential improvements or changes that could be made. Long wait times and inaccessibility of mental health resources were some of the key issues that students identified with UBC's existing resources, and therefore any new initiative created would have to overcome these challenges in order to best support the student population. Several student survey respondents raised the idea of a new resource, one which would exist as an online platform where students can support other students, perhaps involving anonymous peer communications and support. If a platform were created where students could share their experiences with mental health struggles anonymously online, this could present an opportunity to alleviate some of the strain on other mental health resources at UBC such as UBC Counselling and Empower Me. Additionally, it could be set up in such a way so that it is accessible to all by having instant access (i.e. no wait times), free of cost, and no limit on use, therefore possible to use long-term. This would avoid some of the main challenges students identified as experiencing with UBC's current mental health resources. It would also aim to increase social wellbeing of students by connecting them in a safe, socially distant way. This resource could also be useful for future emergency situations where it may not be possible to access physical resources on campus.

5.1.3 Strengthening advertisement and communication strategies

A common theme throughout both student and stakeholder interviews, along with the student survey was the need for stronger advertisement and communication regarding wellbeing resources. This was a topic that arose repeatedly with regards to financial resources, physical and mental health resources, and general resources for wellbeing. When students were asked during interviews to list any community wellbeing resources they had heard of, some were unable to produce any response at all. This demonstrates that a clear disconnect exists between the branches of UBC and staff members who create and oversee these resources, and the students in need of said resources. Many students also commented that they were unsure of where to seek information about resources, and some suggested a centralized location would be beneficial to the student population. However, when asked about any challenges they were facing at their respective branches of UBC during the pandemic, few very stakeholders identified communication with students or advertisement as challenges they were experiencing. This illustrates that it is unlikely that many of these branches of UBC are even aware that this disconnect between them and the student population exists. Therefore, it would be beneficial for many of these branches such as UBC Wellbeing to place an emphasis going forward on student engagement and actively seeking student feedback. Additionally, another opportunity for improved communication and advertisement lies in creating a centralized resource, where the various branches of UBC involved in community wellbeing would be required to collaborate in order to contribute to a centralized website where students could gain a holistic view of all resources available to them.

5.2 Reflections on methodology and limitations of research

5.2.1 Social distancing challenges

Upon reflecting on the methodology and limitations of this study, several key points have come to light. Perhaps the most obvious limitation regarding the methodology has been the social distancing regulations in place at the time of the project. Due to the current COVID-19 pandemic, face-to-face interviews were no longer possible for public health reasons, and therefore all communication and interviews with both students and

stakeholders were conducted virtually. Social distancing regulations forced the methodology to be flexible, moving away from a traditional qualitative study as in-person focus groups or interviews along with in-person recruitment was not an option. Instead, methods such as online recruitment through social media or email newsletters were adopted, and interviews had to be conducted via Zoom or telephone.

5.2.2 Non-representative samples

One limitation of this research is that the results produced may have a slight bias as the student survey sample was not representative of all faculties. Land and Food Systems students made up 45.4% of the sample, which is not representative of UBC's actual student population. Additionally, 6 out of the 9 interview participants (66.7%) were students in the Faculty of Land Food Systems, which may have led to biased results. During the interviews, students were asked questions which included identifying any resources they had heard of on campus with respect to either community wellbeing or food security. Due to the fact that Land and Food Systems is a faculty that is highly focused on food security issues, it is reasonable to assume that these students may have been able to identify a higher number of resources than the general student population. Several important student groups were underrepresented in both the interview process and online survey, which weakened overall guality of results and may have led to missing information. For example, when identifying marginalized or vulnerable groups during the pandemic, 0% of the student survey participants self-identified as Black. This meant that survey results are missing data from an important demographic of students on campus, and means this report may have overlooked some crucial challenges or issues.

5.2.3 Lack of literature on COVID-19

Another limitation encountered during this project was that since the COVID-19 pandemic is an extremely recent and current topic, peer-reviewed literature on its effects on community wellbeing is non-existent. It is also difficult to examine data on similar events and extrapolate it to present day, as there are many variations between different emergency situations. There is no similar event in present day to compare the current pandemic to, which presents difficulties with examining strategies from previous crises.

6. Recommendations

Based on the findings of this report, several recommendations can be made to UBC in order to improve their response to future emergency situations. These recommendations are listed below, and are not solely limited to the current COVID-19 pandemic but can be applied to future emergencies as a whole.

- Create several new Work Learn or Co-op student employment positions in the UBC Emergency Management Department in order to alleviate burden on staff and allow for creation of new programs or initiatives.
- Implement a CERT-style emergency response student volunteer program, adopting a model similar to the Sustainability Ambassadors program (8-month cohort). Use newly created Work Learn or Co-op positions to assist in the implementation and running of this program.
- Create a new mental health resource in which students can access a free online platform where they can anonymously communicate with other students and share mental health struggles and tips, with no wait time or limit on participants. Advertise this resource widely and effectively!
- Encourage collaboration between various branches of UBC in order to create a centralized location (website) where students can access information regarding all wellbeing resources at UBC including but not limited to physical health, mental health, social wellbeing, financial aid and food security resources, all in one singular place.
- Actively seek feedback from vulnerable student populations, applying the culturally sensitive pandemic plan model to emergency response planning as a whole.
- Mandate that campus emergency response plans (particularly the pandemic response plan) are updated continuously, setting a target timeline i.e. every year or every two years.

7. Conclusion

Throughout the process of this project, it has been made evident that multiple gaps exist in UBC's current response to the COVID-19 pandemic. Several improvements have been identified that should be implemented to improve future emergency responses. A great opportunity exists to learn from the current situation and apply these findings to future crises, in order to better support the student population. These include creating new initiatives such as emergency response student volunteer teams, or more inclusive and accessible mental health resources. These initiatives can help address major gaps identified in UBC's current response such as lack of inclusivity of vulnerable groups and insufficient communication. If the recommendations discussed above are implemented by UBC, it is likely that there will be an increase in the inclusion of vulnerable students and also increase student engagement in emergency preparedness strategies in general. In order to accomplish this, however, UBC needs to be willing to put in the resources required in order to make these changes and commit to improving their emergency response in a timely and conscious manner.

References

- Anxiety Canada. (2020, March 27). COVID-19: Balancing Public Health and Mental Health. Retrieved July 05, 2020, from https://www.anxietycanada.com/articles/covid19-balancing-public-health-andmental-health/
- Asuncion, M. (2020, May 14). International students deal with gaps left by CERB, CESB. Retrieved August 12, 2020, from https://www.ubyssey.ca/news/international-student-gaps-funding/
- Casadevall, A. (2020). Climate change brings the specter of new infectious diseases. *Journal of Clinical Investigation,130*(2), 553-555. doi:10.1172/jci135003
- Charania, N. A., & Tsuji, L. J. (2012). A community-based participatory approach and engagement process creates culturally appropriate and community informed pandemic plans after the 2009 H1N1 influenza pandemic: Remote and isolated First Nations communities of sub-arctic Ontario, Canada. BMC Public Health, 12(1). doi:10.1186/1471-2458-12-268
- Government of British Columbia. (2020, March 18). Province declares state of emergency to support COVID-19 response. Retrieved July 05, 2020, from https://news.gov.bc.ca/releases/2020PSSG0017-000511
- Infection Prevention and Control Canada. (2020). Coronavirus (COVID-19). Retrieved July 22, 2020, from https://ipac-canada.org/coronavirus-resources.php
- Laycock, K. E., & Caldwell, W. (2017). Exploring Community Cohesion in Rural Canada Post-Extreme Weather: Planning Ahead for Unknown Stresses. Social Indicators Research, 139(1), 77-97. doi:10.1007/s11205-017-1706-1
- Rowley, S. (2014, May 20). Northwestern Trains First Class of Emergency Volunteers. Retrieved June 09, 2020, from

https://news.northwestern.edu/stories/2014/05/northwestern-trains-first-class-ofemergency-volunteers

- Statistics Canada. (2020, May 13). Impacts of the COVID-19 pandemic on postsecondary students. Retrieved July 10, 2020, from https://www150.statcan.gc.ca/n1/daily-quotidien/200512/dq200512a-eng.htm
- Risk Management Services, UBC. (2009). Pandemic Influenza Response Plan (Publication).

Rowley, S. (2014, May 20). Northwestern Trains First Class of Emergency Volunteers. Retrieved June 09, 2020, from https://news.northwestern.edu/stories/2014/05/northwestern-trains-first-class-ofemergency-volunteers

- UBC Recreation. (n.d.). COVID Update. Retrieved August 08, 2020, from https://recreation.ubc.ca/covid-updates/
- UBC Sustainability. (n.d.). Sustainability Ambassadors Program. Retrieved August 18, 2020, from https://sustain.ubc.ca/get-involved/sustainability-ambassadors-program
- University of British Columbia. (2020). Counselling Services. Retrieved August 7, 2020, from https://students.ubc.ca/health/counselling-services
- University of British Columbia. (2020). International experiences. Retrieved August 15, 2020, from https://students.ubc.ca/career/international-experiences
- University of British Columbia. (2020). Self-isolation accommodation packages for UBC students, faculty and staff. Retrieved August 21, 2020, from https://vancouver.housing.ubc.ca/other-housing/self-isolation/
- Wilkinson, A., Parker, M., Martineau, F., & Leach, M. (2017). Engaging 'communities': Anthropological insights from the West African Ebola epidemic. *Philosophical*
Transactions of the Royal Society B: Biological Sciences, 372(1721). doi:10.1098/rstb.2016.0305

Wilson, M. E. (1995). Travel and the Emergence of Infectious Diseases. *Emerging Infectious Diseases*, *1*(2), 39-46. https://dx.doi.org/10.3201/eid0102.950201.

Appendix A – Interview guides

Interview guide for students

JUSTICE-CENTRED EMERGENCY PREPAREDNESS INTERVIEW GUIDE

Rachel Ma, Bronwyn Neufeld, Vicky Kim

Students

Welcome/Introduction Script

Thank you for being part of the interview process of our research project, Justice-Centred Emergency Preparedness. We greatly value your time and thoughts as a member of the UBC student community. The interview will be approximately 20–30 minutes long, and we will begin by briefing you on the purpose of our research and information about the interview process.

Research purpose

The main purpose of this project is to evaluate and provide suggestions on UBC's emergency preparedness and adaptation strategy to inform future student engagement efforts by UBC Climate Hub and UBC Emergency Management. Reflecting from the impact of COVID-19, this research aims to gain a deeper understanding of the gaps in current resources and initiatives at UBC and identify areas of improvement in the diverse student population.

Clients and collaborators

The project is done in collaboration with UBC SEEDS. Our research findings will inform our clients at the UBC Emergency Management team and UBC Climate Hub.

<u>Consent</u>

Prior to this interview, you were sent a consent form. We just want to take this time to acknowledge that you have read, understood and agree to continue with our interview.

Please be assured that all your personal information will remain confidential, and your answers will not be disclosed with any identifiers such as your name. Your answers will only be used for the purpose of our research.

Before we proceed to the interview, do we have your permission to record this session? Please note that the recording will not be released in any form, but will serve as a helpful reference in our coding and analysis process.

<u>Interview</u>

Please feel free to share as much or little as you wish. If you don't feel comfortable sharing at any point of the interview, please let us know and we can move on to the next question. You are not obligated to provide an answer if you do not wish to, and you are free to end this interview at any time.

Do you have any questions before we start?

Demographic

The following demographic questions, please let us know if you prefer not to answer. You are not obligated to if you don't feel comfortable sharing!

- 1. What are your preferred pronouns?
- 2. What faculty or department are you in? What year of your program are in?
 - a. Undergraduate or graduate:
 - b. Faculty:
 - c. Program:
 - d. Year:
- 3. Are you a:
 - a. Domestic student
 - b. International student
 - c. Exchange student (at UBC)
 - d. Exchange student (outgoing)

Living Situation

- 4. Could you describe what your living situation is like prior to COVID-19 and currently? (ex. living at home (BC, Canada, or international), on-campus (residence/other)
 - a. What is your current living situation?
 - b. Where are you currently living?
 - c. What was your living situation prior to COVID-19?
 - d. Where were you living before COVID-19?
 - e. Are you living with anyone? (i.e roommates, family, children, alone)
- 5. Will you be returning to campus in the fall? Will you be continuing your studies in the fall? Why or why not?
 - a. Student housing? Is it year-round housing or Winter Session residency?

Finance

- 6. If applicable, could you tell us more about your work situation prior to COVID-19 and currently?
 - a. Working part-time?
 - b. Working full-time?
 - c. Self-employed?
 - d. Working more than one job?
 - e. Working remotely?
 - f. Are you an essential frontline worker and/or work for an essential service (e.g. health, transportation, food/agriculture, critical infrastructure, law enforcement, financial institutions, IT)?
 - g. Temporarily laid off?
 - h. Unemployed/unable to work?
- 7. If you're comfortable sharing, how has COVID 19 impacted you financially?
 - a. Are you accessing these funds:
 - i. CERB? CESB? CSSG?

	ii. UBC emergency funds?							
	iii. Bursaries? Honorariums?							
	iv. Awards/scholarships?							
	v. Loans?							
	vi. \$\$\$ from family?							
8.	Have you heard of any of UBC's emergency financial resources? What are your thoughts about them?							
	a. Is it accessible and inclusive? Well-advertised?							
	i. If not, what do you think can be improved?							
	Food Security							
9.	What is your perspective on the state of food security on campus before and after the pandemic?							
10.	 Household or individual food insecurity is defined as "the inadequate or insecure access to food due to financial constraints" (PROOF). Can you share your overall experience with food (in)security, if any, as a UBC student? a. If you don't have a personal experience to share, could you tell us about an experience from a friend or someone you know? 							
11.	During COVID-19, how has your experience with food (in)security changed or impacted aspects of your student life such as in academics, mental health and social wellbeing?a. If no food insecurity, overall financial constraints impact these aspectsb. If no financial constraints, how has COVID-19 in generally impacted these aspects							
12.	About 40% of students across universities in Canada experience food insecurity of varying severity. As such, UBC targets food insecurity through a variety of resources and initiatives, such as the AMS Food Bank which provides temporary relief. What resources at UBC have you heard of, used or are currently using?							
13.	What was your experience in accessing these resources during a time of emergency, such as during the recent COVID-19 pandemic? How do you feel about reaching the level of support you need?a. What groups do you think can be better supported?							
Community Care & Wellbeing								
14.	Are you aware of any community wellbeing initiatives UBC or any campus group has implemented since the start of the COVID-19 pandemic?							
15.	Some other universities around the world have implemented 'volunteer emergency response teams,' made of students, staff and community members where these teams support the existing university emergency response framework by undergoing disaster and emergency response training, and participating in community education, awareness and outreach.							

- a. If something like this were to be implemented at UBC, how likely would you be to sign up for something like this?
 - i. If not at all, why not? Is there something that would make you more likely to join (i.e. financial compensation?)
- 16. How do you feel about UBC's response regarding COVID-19?
- 17. Can you share an example of how it has affected you personally? Do you have any thoughts or ideas to share on how you feel UBC could improve future emergency response initiatives?
 - a. Where are you currently receiving your emergency/COVID related updates from UBC?
 - b. Which method of communication do you prefer from UBC? (email, social media, etc)

Ending Remarks

That concludes our interview, thank you for sharing your time and thoughts with us

Is there anything else that you would like to share with us? We can also answer any additional questions you may have at this time.

Housekeeping questions:

- How did you hear about our project?
- Would you like to receive a copy of the final report?
- Explain prize draw

Interview guide for stakeholders

Clients/Organizations

Welcome/Introduction

Thank you for being part of the interview process of our research project, Justice-Centered Emergency Preparedness. We greatly value your time and thoughts as a member of the UBC community. The interview will be approximately 30 minutes long, and we will begin by briefing you on the purpose of our research and information about the interview process.

Research purpose

The main purpose of this project is to evaluate and provide suggestions on UBC's emergency preparedness and adaptation strategy to inform future student engagement efforts by UBC Climate Hub and UBC Emergency Management.

Clients and collaborators

The project is done in collaboration with UBC SEEDS. Our research findings will inform our clients at the UBC Emergency Management team and UBC Climate Hub.

Consent

Prior to this interview, you were provided a consent form. We just want to take this time to acknowledge that you have read, understood and agree to continue with our interview. Please note that this session will be recorded, as outlined in the consent form, but it will only be used for notetaking. Do you have any questions or concerns about this?

- In the report, if quoted or referred to, you will be referred to as a representative of (your organization/branch of UBC)

Interview

For each of the questions, please feel free to share as much or little as you wish. If you feel the question is not relevant to you or your role personally, please let us know and we can move ahead to the next one!

Do you have any questions before we start?

General

1. In light of the current circumstances under COVID-19, what are your current key priorities in your role?

Food Security

- 1. Based on your own understanding of food security, do you believe the UBC community is food secure? Why or why not?
- 2. Could you share with us a relevant project or initiative of yours?
- 3. How has accessibility and inclusivity been considered in food security initiatives at your

organization?

- a. Are they conceptualized and implemented with vulnerable and marginalized student groups in mind?
- 4. What food security initiatives or resources at your organization have been established to support students during an emergency?
 - a. If possible, could you provide an example relevant to COVID-19?

Community Care & Wellbeing

- 1. How has your organization/group been involved in community wellbeing initiatives prior to COVID-19? What were some of your primary concerns or areas of focus?
 - a. Can you share an example of a recent initiative you or your group have worked on?
- 2. What steps have you as a group or organization taken to ensure the inclusion of marginalized or vulnerable students in your programs or initiatives?
 - a. Are these initiatives/steps inclusive to students who will not be on campus this coming fall semester?
 - b. Do you have support for those who are frontline workers or working in essential services (e.g. health, transportation, food/agriculture, critical infrastructure, law enforcement, financial institutions, IT)?
- 3. Have you identified any areas you feel require more work or support for the future, should a similar event happen again? How can UBC best support you with this? (practical steps would be useful if you feel you can provide them!)

Perhaps share some difficulties you as a group/organization have experienced while trying to implement initiatives?

Student Engagement

1. What platforms or methods do you use to engage with students? (e.g. social media platforms, blogs) Do you have any sort of system in place where you seek feedback from students?

Can we follow up via email if we have any other questions? Would you like a copy of the SEEDS report sent directly to you when finished?

Appendix B – Consent forms

Consent Form

Research Team Bronwyn Neufeld Rachel Ma Vicky Kim

Collaborator & Clients UBC SEEDS Sustainability Program UBC Emergency Management UBC Climate Hub **Faculty Supervisors** Dr. Gail Hammond Dr. Les Lavkulich

Project Name: Justice-Centred Emergency Preparedness

Introduction: The main purpose of this project is to evaluate and provide suggestions on UBC's emergency preparedness and adaptation strategy to inform future student engagement efforts by UBC Climate Hub and UBC Emergency Management. Reflecting from the impact of COVID-19, this research aims to gain a deeper understanding of the shortcomings of current policies and resources at UBC and identify areas of vulnerabilities in the diverse student population.

Interview Procedures: The in-depth interview will take approximately 20 minutes to complete. After a briefing of our research purpose and goals, we will begin by asking basic demographic questions about your student status, identity, location, and living conditions. We will then ask questions encompassing our research themes including (1) food security, (2) financial status and (3) community care and wellbeing. You will also be given the opportunity to share specific feedback or any additional comments at the end of the survey.

Confidentiality: The interview will be conducted via Zoom, a company hosted in the United States. Zoom may store data in servers outside Canada. To learn more about Zoom and their privacy policy, visit <u>https://zoom.us/privacy</u>. We will be recording the interview session for the purpose of transcription, unless otherwise requested. Your responses during the interview will remain anonymous and any personal information, such as your name and email, will not be disclosed.

Contact Information: If you have any questions or would like further information about this project, please contact Bronwyn Neufeld (bronwyn.neufeld@alumni.ubc.ca), Rachel Ma (rachel.ma@alumni.ubc.ca), or Vicky Kim (vicky.kim@alumni.ubc.ca).

Consent: Your participation in this survey is entirely voluntary and you may refuse to answer or withdraw from the interview at any point.

Name

Signature

Date

Consent Form

Research Team Bronwyn Neufeld Rachel Ma Vicky Kim **Collaborator & Clients** UBC SEEDS Sustainability Program UBC Emergency Management UBC Climate Hub **Faculty Supervisors** Dr. Gail Hammond Dr. Les Lavkulich

Project Name: Justice-Centred Emergency Preparedness

Introduction: The main purpose of this project is to evaluate and provide suggestions on UBC's emergency preparedness and adaptation strategy to inform future student engagement efforts by UBC Climate Hub and UBC Emergency Management. Reflecting from the impact of COVID-19, this research aims to gain a deeper understanding of the shortcomings of current policies and resources at UBC and identify areas of vulnerabilities in the diverse student population.

Interview Procedures: The in-depth interview will take approximately 30 minutes to complete. We will be asking questions about the work within your organization encompassing our research themes of (1) food security, (2) financial status and (3) community care and wellbeing. You will also be given the opportunity to share specific feedback or any additional comments at the end of the survey.

Confidentiality: The interview will be conducted via Zoom, a company hosted in the United States. Zoom may store data in servers outside Canada. To learn more about Zoom and their privacy policy, visit <u>https://zoom.us/privacy</u>. We will be recording the interview session for the purpose of transcription, unless otherwise requested. Findings from your responses will be reported without disclosing your specific role, i.e., "Representative from (organization name)."

Contact Information: If you have any questions or would like further information about this project, please contact Bronwyn Neufeld (bronwyn.neufeld@alumni.ubc.ca), Rachel Ma (rachel.ma@alumni.ubc.ca), or Vicky Kim (vicky.kim@alumni.ubc.ca).

Consent: Your participation in this survey is entirely voluntary and you may refuse to answer or withdraw from the interview at any point.

Name

Signature

Date

Appendix C – Online student survey

Note: only general demographic style questions and questions relevant to the community care aspects of this project are included in this appendix.

Demographic I

- 1. Are/were you a UBC...
 - Undergraduate Student
 - Graduate Student

If you have **recently graduated (May 2020)**, please continue based on your student status in 2019–2020.

If you are a **faculty member, staff, alumni who graduated prior to 2020, or visitor**: Thank you for your interest in our survey! However, we are only recruiting current or recently graduated students for the purpose of our project.

* If options Undergraduate Student or Graduate Student are selected, survey takers will be led to reading a consent form

- 2. Check all that applies/applied to you:
 - Domestic Student
 - International Student
 - Visiting Student
 - Co-op Student
 - Exchange Student (at UBC)
 - Exchange Student (outgoing)
- 3. Are/were you a part-time or full-time student?
 - Part-time
 - Full-time

Living Situation

March 17th, 2020 was the day that BC officially declared a public health emergency for COVID-19. This survey will ask you to evaluate your experiences prior to the COVID-19 pandemic in BC (before March 17th, 2020) as well as your experiences since/during the COVID-19 pandemic in BC (March 17th, 2020 onwards).

The following questions are about your living situation **prior to the COVID-19 pandemic** (before March 17th, 2020):

- 4. Where were you living **prior to the COVID-19 pandemic**?
 - On campus in residence/student housing
 - On campus but not in student housing
 - Off campus, Lower Mainland
 - Off campus, rest of Canada

- Off campus, international
- Other, please specify:
- Prefer not to say

5. Which of the following describes your living situation **prior to the COVID-19 pandemic**? Check all that applies.

- Living alone
- Living with your parents and/or your siblings
- Living with your partner
- Living with children
- Living with roommates
- Other, please specify:
- Prefer not to say

The following questions are about your **current** living situation (March 17th, 2020 onwards):

- 6. Where are you **currently** living?
 - On campus in residence/student housing
 - On campus but not in student housing
 - Off campus, Lower Mainland
 - Off campus, rest of Canada
 - Off campus, international
 - Other, please specify:
 - Prefer not to say
- 7. Which of the following describes your **current** living situation? Check all that applies.
 - Living alone
 - Living with your parents and/or your siblings
 - Living with your partner
 - Living with children
 - Living with roommates
 - Other, please specify:
 - Prefer not to say

Finance

8. Which of these following statements describes your situation **prior to the COVID-19 pandemic** (before March 17th, 2020)? Check all that applies.

- I worked part-time.
- I worked full-time.
- I was self-employed.
- I worked more than one job.
- Prefer not to say
- None of the above

9. Which of these following statements describes your situation **since the COVID-19 pandemic** (March 17th, 2020 onwards)? Check all that applies.

- I am working part-time.
- I am working full-time.
- I am self-employed.

- I am working more than one job.
- I am working remotely.
- I am an essential frontline worker and/or work for an essential service (e.g. health, transportation, food/agriculture, critical infrastructure, law enforcement, financial institutions, IT)
- I am temporarily laid off.
- I am unemployed/unable to work.
- Prefer not to say
- None of the above

10. **Since the COVID-19 pandemic** (March 17th, 2020 onwards), have you experienced change in income?

- Yes, partial loss in income
- Yes, entire loss in income
- No
- Prefer not to say
- 11. Which of the following applies to you? Check all that applies.
 - I am financially dependent.
 - I have financial dependent(s).
 - I have no financial dependent(s).
 - Prefer not to say

12. Which of these following financial resources have you accessed **prior to the COVID-19 pandemic** (before March 17th, 2020)? Check all that applies.

- Scholarships and/or Awards, please specify:
- Bursaries
- Student Loans (e.g. government, private, lines of credit)
- Employment Insurance (EI)
- Money from family/parents
- Other, please specify:
- Prefer not to say
- None of the above

13. Which of these following financial resources have you accessed **since the COVID-19 pandemic** (March 17th, 2020 onwards)? Check all that applies.

- Scholarships and/or Awards, please specify:
- Canada Emergency Response Benefit (CERB)
- Canada Emergency Student Benefit (CESB)
- Canada Student Service Grant (CSSG) I Want to Help Platform
- UBC Emergency Bursary
- UBC President's Emergency Student Fund
- UBC Indigenous Emergency Assistance Fund
- UBC Graduate Student Financial Aid (GSFA)
- Money from family/parents
- Other, please specify:
- Prefer not to say

• None of the above

14. Overall, do you believe that **UBC's financial resources** (that were created in response to the COVID-19 pandemic) meets the aspects of: (Matrix table)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Not applicable
Diversity of options						
Easy navigation/application						
Low-barrier						
Inclusive						
Widespread advertisement						

15. Do you have any comments on the mentioned resources or ratings? If none, please type N/A. (Open-ended question, optional)

16. In what other ways do you think UBC can better support student financial needs? If none, please type N/A. (Open-ended question, optional)

Community Care

36. Over your past year at UBC, **prior to the COVID-19 pandemic** (before March 17th, 2020), how do you identify with the statement: 'I have felt connected to the UBC community'?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

37. **Since the COVID-19 pandemic** (March 17th, 2020 onwards), how do you identify with the statement: 'I feel connected to the UBC community'?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

38. Please indicate your level of agreement/disagreement with the following statement: 'UBC has included marginalized or vulnerable student communities in its response to COVID-19'.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Don't know

39. Please expand on why you have agreed or disagreed with the above three statements. (Openended question, optional)

40. To what extent have you personally experienced difficulties in any of the following areas as a result of the COVID-19 pandemic? (Matrix table)

	No difficulties	Some difficulties	Major difficulties	Prefer not to say
Adapting to online education				
Unavailability of jobs/difficulty finding work				
Food insecurity				
Housing uncertainty				
Financial difficulties paying for tuition and/or housing				
Decreased interactions with community				
Other, please specify:				

41. **Since the COVID-19 pandemic** (March 17th, 2020 onwards), have you experienced trouble accessing anything in particular (i.e. specific foods, supplies, medicine)? Be as specific as you can. If none, please type N/A. (Open-ended question)

42. In what ways do you think UBC can better support community health and wellbeing? (Openended question, optional)

43. Are you currently enrolled in summer classes and/or have taken classes in Term 1 of the 2020 Summer Session?

- Yes
- No
- Prefer not to say

44. Will you be returning to school in September (2020 Winter Session)?

- Yes, full-time
- Yes, part-time
- No, I graduated
- No, I am taking a break
- Undecided
- Prefer not to say
- 45. Where will you be living during the 2020 Winter Session?
 - On campus in residence/student housing
 - On campus but not in student housing
 - Off campus, Vancouver or Lower Mainland
 - Off campus, rest of Canada
 - Off campus, international
 - Other, please specify:
 - Undecided
 - Prefer not to say

Demographic II

- 46. How do you describe your gender?
 - Non-binary
 - Male
 - Female
 - Other
 - Prefer not to say
- 47. How would you describe your ethnic or cultural background? Check all that applies.
 - Arab
 - Black
 - East Asian (e.g. Chinese, Japanese, Korean)
 - First Nations
 - Inuit
 - Latin American
 - Métis
 - South Asian (e.g. Indian, Pakistani, Sri Lankan)
 - Southeast Asian (e.g. Vietnamese, Cambodian, Malaysian, Filipinx)
 - West Asian (e.g. Iranian, Afghan)
 - White
 - Other, please specify:
 - Prefer not to say
- 48. Which of the following do you identify with? Check all that applies.
 - LGBTQ+
 - A person with a disability
 - Other, please specify:
 - None of the above

- 49. How many years have you been a UBC student?
 - 1
 - 2
 - 3
 - 4
 - 5+

50. What faculty are you in? Check all that applies.

- Applied Science, Faculty of
- Architecture and Landscape Architecture, School of
- Arts, Faculty of
- Audiology and Speech Sciences, School of
- Business, Sauder School of
- Community and Regional Planning, School of
- Dentistry, Faculty of
- Education, Faculty of
- Extended Learning
- Forestry, Faculty of
- Graduate and Postdoctoral Studies
- Journalism, School of
- Kinesiology, School of
- Land and Food Systems, Faculty of
- Law, Peter A. Allard School of
- Library, Archival and Information Studies, School of
- Medicine, Faculty of
- Music, School of
- Nursing, School of
- Pharmaceutical Sciences, Faculty of
- Population and Public Health, School of
- Public Policy and Global Affairs, School of
- Science, Faculty of
- Social Work, School of
- UBC Vantage College
- Vancouver School of Economics

Appendix D - Thematic analysis example

Q: Do you have any thoughts or ideas to share on how you feel UBC could improve future emergency response initiatives? Theme Legend: Communication (3) Creation of more mental health + wellness resources (2) Advertisement of resources (3) Better organization (2) Support for international students (1)

I think a big thing is just awareness. I know UBC has huge platforms on social media. President Ono is literally always on LinkedIn, always on Instagram, and ifeel they're not really using their platform in a way that's super constructive in this time. It's almost like trying to distract people from the issue rather than helping their students and their staff, whoever needs help. So I think they need to almost re-evaluate their priorities at this time. They've been using email for updates, but I don't think they're really detailed enough, or they don't really give ways to help. Like I don't even remember what any of their emails have said.

In terms of emergency response, especially right now, it's really hard being away from family, because I'm international I don't have any many family connects here or places that I can just go to if there's an emergency, so I have to really rely on building relationships with my cohort and friends. But I can see where mutual aid groups, that we kind of saw with COVID, being instituted at the university level, it would be really nice to be able to reach out to something like that. Like there's a wildfire at Pacific Spirit Park, I have nowhere to go, what can I do. Just having those points of contacts would be beneficial and at least add some more peace of mind for being so tenuous as an international student.

I'd definitely say to provide more wellness and mental health resources and to really market them to students because there are so many changes going on, and students are in a foreign situation. Also just providing more services to international students I think is pretty important. I've seen a lot of posts about that on Facebook and petitions and stuff to support international students, because they don't receive the government funding, so finding ways to support them i think is important.

There are a lot of resources here and there. There's a lot of clubs that are offering in places as well. But they are so spread out all over the place and the resources are only exposed to a small group of people who like won't likely share it with their friends. Having a website dedicated to compiling resources together and making sure that if there's such a resource that it is easily accessible and well-communicated to students.

It's definitely easy for me to say you should waive fees I understand that maybe they can't do that, but I do think some communication would've been better, like maybe telling them that they still had to pay the full fee on time and then maybe actually emailing us instead of forcing the penalty really fast. Maybe organization?

I think just being really open, and transparent with students is important. Obviously they're not gonna come up with a solution overnight, nor should you, but (missing), but I think more openness

like "hey, we're talking about what our options are, we're looking into maybe closing the university but we're not there yet," and kind of taking students along with that, so there's not through rumors and Reddit threads and it's not (missing).

I guess one thing is the profs also need to transition into that period where they need to post videos and whatnot on time, it takes a little while to adjust to that so I guess now they would be more prepared if there's another emergency situation that comes up. I felt like the profs might get informed, it's almost like at the same time as the students, I don't know. I don't really know how UBC can do better. From UBC training the profs on for example how to use collaborate ultra, to the profs actually figuring out how to use it and then being able to use it to host classes it's just that there was a little bit lagging. In one of my courses, the prof didn't really start using that until a while later. But that doesn't really affect much. I mean there are alternative ways to host lectures.

N/A

Well, there's still time for them to improve on their response right now, given that COVID-19 is still happening. Just making sure that they can build a more coherent team, higher up positions, if I'm not mistaken there was this article that talked about some higher up at UBC having to step down because of a racist remark or something? I can't remember the details but I do know there was something like that happened. Part of their response I'd say would be to actively reshuffle the higher ups, maybe a bit of a difficult task, but at least making sure that the foundation is organized in a structured manner, would definitely help them with responses to pandemics such as COVID-19 in the future.

Appendix E – Visual overview of UBC's wellbeing initiatives during the COVID-19 pandemic



Justice-Centred Emergency Preparedness: Group Summary

Bronwyn Neufeld, Rachel Ma, Vicky Kim

Introduction

In the early months of 2020, a novel coronavirus epidemic quickly spread across the globe and was soon declared a pandemic. The COVID-19 pandemic sparked a wave of shutdowns worldwide, with UBC's Vancouver campus following suit. Social distancing regulations were rapidly put into place, leading to the shift to online classes, closure of campus facilities and cancellation of events. Various branches of UBC were forced to act quickly to implement changes and alter existing services. As the pandemic resulted in immense disruptions to everyday life, concerns began to be raised about student wellbeing, specifically regarding the aspects of food security, financial resources and community care. This project aimed to investigate UBC's pandemic response and identify areas of improvement for responses to future emergency situations.

In order to examine UBC's response to the COVID-19 pandemic, an undergraduate research team was formed in collaboration with UBC SEEDS Sustainability Program, UBC Emergency Management and the UBC Climate Hub. The goal of this project was to provide student perspectives and input to inform future emergency planning processes and student engagement efforts. Three separate reports with different research sub-questions were produced, with one report focusing on food security and two reports focusing on various aspects of finance, community care, and wellbeing within the student population.

Methodology

A mixed-methods study was conducted, with both quantitative and qualitative analysis being performed. The primary methods utilized to collect data were an online student survey and in-depth student interviews, while secondary methods included interviews with key stakeholders and a literature review. The main all-encompassing research question was: What are the best practices that can be proposed for future emergency preparation and response strategies at UBC, including, but not limited to climate emergencies? Each of the three reports contained their own individual research sub-questions pertaining to specific aspects of emergency preparedness. Quantitative data from the student survey was analyzed using descriptive statistics on Microsoft Excel, while qualitative data from student interviews as well as open-ended survey questions was analyzed by thematic analysis.

Results

Demographics

150 acceptable responses were analyzed from the 181 survey entries, with there being a steady participant dropout rate in response between each of the four sections of the survey: finance, food security, health and wellness, and community care. The majority of the survey participants identified as female, and most stated that they were full-time domestic undergraduate students. Over one-half of the participants identified as East Asian, and almost one-half indicated that they were from the Faculty of Land and Food Systems. Over one-half lived off-campus in the Lower Mainland before the pandemic, and over two-thirds are currently living off-campus in the Lower Mainland during the pandemic.

A total of nine students, comprising eight undergraduate students and one graduate student, were interviewed. The majority of respondents identified as female, and most stated that they were full-time undergraduate students. Most interviewed students lived off campus in the Lower Mainland before the pandemic, and none of the interviewed students had lived outside of the Lower Mainland during the past academic year.

Finance

In general, the findings showed that many students were working part-time before the pandemic, but their employment status and situations were affected by the pandemic. Most students identified that they were financially dependent, and there was a split between students who faced changes in their income and who did not as a result of the pandemic. While money from family or parents was identified as the most accessed financial resource for the majority of the study population before and during the pandemic, other financial resources that several students reported to have also accessed during the pandemic are the Canada Emergency Student Benefit (CESB), and the Canada Employment Response Benefit (CERB). Among the study population, barriers associated with accessing UBC financial resources

56

were identified to be lack of widespread advertisement, diversity of options, and inclusivity for at-risk student groups such as international and graduate students.

Food security

Overall, the results of this project indicated that there was no significant difference in the prevalence of food insecurity before and during the pandemic within the study population. It was discovered that there was a statistically significant relationship between housing and food security status during the pandemic. This may indicate that students who live off campus might have higher access to food and financial resources due to living with family or a partner. No other demographic factor was found to have a statistically significant relationship with food security. Students were asked how UBC could better support them in terms of food security, and common themes that appeared included affordability, access, education and student involvement.

Community care and wellbeing

Successful emergency response strategies in other universities and communities around the world were identified and analyzed to what extent they could be implemented at UBC, with student volunteer emergency response teams and culturally sensitive pandemic planning emerging as two of the most promising initiatives. Several student populations were identified as being particularly vulnerable during the pandemic, with international students emerging as the main group. Other vulnerable groups identified include students with dependents, immunocompromised students and students of lower socio-economic status. Increased screen time, decreased interactions with community or support networks, reduced or loss of access to gyms and/or fitness classes, and reduced time spent outside were identified as key challenges in taking care of physical and mental health during the pandemic, according to the study population. Additionally, major gaps in UBC's response and available health and wellness resources were identified. Lack of communication, advertisement, and inclusivity of resources were recurring concepts that arose while examining this aspect.

Discussion

Finance

One particular group of students that showed increased financial restraints during COVID-19 were international students. Because government resources created in response to the pandemic, including the Canadian Emergency Response Benefit (CERB) and Canadian Emergency Student Benefit (CESB), were not eligible for international students, they may have been limited in maintaining their financial security. Being away from home may have also limited one's access to resources, such as financial support from family or shared family housing. Despite having to pay high costs of tuition and housing with expressed financial challenges during COVID-19, international students at UBC have not been supported directly by any resources targeted to their needs. This finding necessitates the University's attention to providing financial resources for international students in general, but especially during an emergency. In addition, a demand for stronger advertisement and communication regarding financial resources through creating a centralized place for all information was expressed by several students. *Food security*

International students were identified as one of the groups with heightened vulnerability to food insecurity before and during the pandemic, due to the aforementioned financial challenges. Additionally, there was a low number of students in the survey who displayed awareness for the discounts provided by the Chomp Meal Plan, despite the affordability of campus food being a common criticism among students. Aside from the Emergency Food Card Program, there are currently limited food security resources specific to the context of an emergency apart from the general financial aids offered by UBC. Students who remain living on campus may experience greater difficulties in finding affordable food, with student-run initiatives such as Sprouts and Agora being shut down due to COVID-19; however, the AMS Food Bank is one of the resources on campus that remained opened during COVID-19 to continue supporting students. Improved advertisement about available and open resources may be needed in order to reach a larger student population.

Community care and wellbeing

Despite numerous students expressing needs for health and wellness resources, a low number of students who displayed awareness for UBC's support systems and resources was observed. A need for stronger advertisement and communication about wellbeing resources through a centralized system was emphasized repeatedly by the study population. Moreover, long wait times and inaccessibility of mental health resources were some of the key issues that students identified with UBC's existing resources, and there was a demand to overcome these challenges in order to best support the student population. Several student survey respondents raised the idea of a new resource—one which would exist as an online platform where students can support other students, perhaps involving anonymous peer communications and support. This resource could also be useful for future emergency situations where it may not be possible to access physical resources on campus.

Limitations

A limitation of this study was that the study population was non-representative of the UBC student population, due to convenience sampling for survey and interview recruitment. Specifically, there was little or no representation in the study of groups that are identified in literature to be the most vulnerable to emergency crises, such as Black and Indigenous folx. Target consultation with disproportionately impacted students is necessary in emergency planning and response strategies to understand and provide for diverse student needs, as well as to coordinate effective communication strategies to advertise resources to diverse groups.

Other limitations include a general lack of literature on COVID-19 as well as there being a high dropout rate on the survey, which was likely associated with survey fatigue due to the length of the overall survey.

Recommendations

Several recommendations have been proposed as a result of this study, targeted towards UBC Emergency Management, the UBC Climate Hub or UBC as a whole.

UBC Emergency Management

- Coordinate centralized communication and provision of resources in emergency response.
- Target consultation with disproportionately impacted students in planning.
 - Apply the culturally sensitive pandemic plan model to emergency response planning as a whole.
- Include students in work e.g. Work Learn, volunteer positions, student ambassadors.
 - Create several new Work Learn or Co-op student employment positions in order to alleviate burden on staff and allow for creation of new programs or initiatives.
- Implement a Community Emergency Response Team (CERT) style emergency response student volunteer program.
 - Can adopt a model similar to the Sustainability Ambassadors program (8-month cohort).
 - Use newly created Work Learn or Co-op positions to assist in the implementation and running of this program.
- Set a mandate that campus emergency response plans (i.e. pandemic response plan) are updated continuously; setting a target timeline such as every year or every two years.

UBC Climate Hub

- Increase outreach to students in diverse disciplines
 - Emphasize outreach to students in underrepresented programs or faculties
- Facilitate discussion between students and campus stakeholders
 - Provide platform for discussion between students and stakeholders in both formal and informal settings

UBC as a whole

- Create a centralized location where students can find all relevant resources.
 - Encourage or facilitate collaboration between various branches of UBC in order to create a centralized location (website) where students can access information regarding all wellbeing resources at UBC including but not limited to physical health, mental health,

social wellbeing, financial aid and food security resources, all in one singular, easy-toaccess place.

- Implement a new mental health resource where students can support each other anonymously.
 - Design and implement a new mental health resource in which students can access a free online platform where they can anonymously communicate with other students and share mental health struggles and tips, with no wait time or limit on participants. Ensure this resource is advertised widely and effectively.