University of British Columbia

Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Experiences, Challenges, and Assets of First-Generation College Students

Informing a More Equitable Learning Environment at UBC

Prepared by: Yuqing Cheng

Prepared for: UBC Alma Mater Society, Sociological Ecological Economic Development Studies (SEEDS) Sustainability Program

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UBC sustainability

EXECUTIVE SUMMARY

First-generation college students (FGCS) have many disadvantages compared to continuing-generation college students in post-secondary education (PSE) due to a lack of resources and guidance. However, this student group is largely overlooked by PSE institutions and government entities in Canada. The financial, social, and mental barriers faced by FGCS remain under-represented. To date, Ontario is the only province that has designated an equity-based bursary targeting first-generation students (Government of Ontario, n.d.). The Province of British Columbia has one of the highest numbers of PSE institutions in Canada, but little research has studied the experiences of FGCS in the province.

In collaboration with the UBC SEEDS Sustainability Program and the UBC Alma Mater Society (AMS), this pilot phenomenological study was carried out at the Vancouver campus of the University of British Columbia. The purpose is to understand first-generation students' perceptions, experiences, and challenges at UBC, to support the AMS Equity Action Plan, and to provide suggestions for the school and government to better support this underserved student group. The study used mixed data collection methods, including an online survey (N=112), six semi-structured interviews, and a focus group. Both undergraduate and graduate students were targeted. By using both quantitative and qualitative data analysis methods, the study produced important findings. Firstly, first-generation status comes with disadvantages but also brought participants motivation to learn and unique perspectives to contribute to the classroom. Some other common sentiments shared by the participants include pride, appreciation, family responsibility, and a sense of independence. Secondly, financial burdens, mental stresses, and a lack of guidance were the major challenges faced by the participants when applying to and studying at UBC. Many participants showed strong feelings of isolation and fear of falling behind.

Based on the results, three recommendations are proposed to the university and government: 1) provide equity-based financial aid to first-generation students to assist with their transition and retention in PSE, 2) organize free or affordable social events for first-generation students to help them build connections and alleviate their sense of isolation, and 3) designate a First-Generation Student Officer or ideally a First-Generation Student Advising Office as a resource hub to offer accessible assistance to FGCS. The study also highlights the importance of outreach in helping the academic and social integration of FGCS in university. This study fills the gap of little literature on first-generation college students in BC and informs institution leaders and policymakers of strategies for creating more accessible PSE experiences for equity-seeking students.

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LIST OF ABBREVIATIONS

AMS: Alma Mater Society
BC: British Columbia
FGCS: First-generation College Student
FGSU: First Generation Student Union
PSE: Post-secondary Education
UBC: University of British Columbia

1. INTRODUCTION

1.1 PROJECT CONTEXT

First-generation college students (FGCS), whose parents have no post-secondary education history (Evans et al., 2020), have been identified by many scholars as a major underserved population in post-secondary education (PSE) (Evans et al., 2020; Kirby, 2009; Palameta & Voyer, 2010; Smith & Gottheil, 2009). Compared to continuing-generation students, who have at least one parent with post-secondary education, FGCS are not only less likely to attend university but also less likely to remain in their programs. A study shows that adults who have two parents with a bachelor's degree have an 82% likelihood of getting a bachelor's degree, while adults whose parents have no college experience only have a 20% likelihood (Pew Research Center, 2021). Meanwhile, first-generation students are more than twice as likely to drop out of university within three years (33%) than non-first-generation students (14%) (Education Advisory Board, 2019). In addition, first-generation students have lower rates of attending graduate school (Engle, 2007).

In Canada and other countries, first-generation college students also tend to have multiple equity-seeking identities such as being racially minoritized, immigrants, low-income, or Indigenous (Engle, 2007; Ives & Castillo-Montoya, 2020; Jehangir, 2010; Statistics Canada, 2011). The existing literature has revealed many challenges faced by FGCS, including financial insecurity, a lack of academic preparation, little knowledge about the college systems, aspirational burdens from families if the family has invested a lot in one's education, limited class and school engagement, and a sense of alienation (Engle, 2007; R. Evans et al., 2020; Terenzini et al., 1996). Some scholars also suggest that FGCS are less likely to have faculty interactions or assist professors with research work based on a student experience survey distributed in the University of California (Kim & Sax, 2009). In addition, family attitude could be a source of stress if the student's parents are not supportive of PSE (Gofen, 2009). Despite the challenges, FGCS have been found to have high academic resiliency (Reyes, 2012). There is also increasing recognition that first-college students have unique assets. Their lived experiences and cultural wealth have the potential to not only assist with their own academic learning but also contribute to knowledge production in research, leading to a diverse and inclusive learning environment in PSE institutions (Ives & Castillo-Montoya, 2020; Jehangir, 2010).

While there is a wealth of studies on first-generation students in countries such as the United States and the United Kingdom (Azmitia et al., 2018; LeBouef & Dworkin, 2021; Spiegler & Bednarek, 2013), there is so far limited research on first-generation students in Canada (Lehmann, 2021; Santos, 2018; Smithies, 2015). Toronto Metropolitan University suggests that 35% of university students in Canada are FGCS, but the university does not cite valid sources (Toronto Metropolitan University, n.d.). No conclusive data about the number or the composition of first-generation students in Canada could be found (Bach, 2017). The disadvantages of first-generation students in university result from not only the students' lack of resources but also the education environment and structure provided by schools and governments (Ives & Castillo-Montoya, 2020; McCallen & Johnson, 2020). It is important to examine whether FGCS have been given enough support to help with their transition and retention in university. It seemed that this student group had not received much attention from PSE institutions and policymakers in Canada. To the author's knowledge, Ontario is the only province in Canada that currently has a need-based bursary established for first-generation students (Government of Ontario, n.d.). While there are some not-for-profit organizations that aim to empower first-generation students worldwide by providing financial resources and educational programs (Close The Gap Foundation, n.d.; Rise First, n.d.), none has been found to directly support students in Canada. In particular, even though the Province of British Columbia

(BC) is one of the provinces that have the highest numbers of post-secondary institutions (Universities Canada, 2022), little study has examined the experiences of FGCS in BC. It is significant to understand the experiences of its first-generation students and whether the schools and the province have provided them with sufficient opportunities to grow and thrive.

1.2 PROJECT OBJECTIVES

This pilot study aims to understand the perceptions, experiences, and challenges of first-generation college students, including undergraduate and graduate students, at the University of British Columbia (UBC). The study hopes to provide suggestions for the school and government to better support this student group. Specifically, this project aims to answer the following research questions:

1. How do first-generation college students at UBC perceive the role of first-generation status in academic learning?

2. What challenges do first-generation college students have related to applying to and studying at UBC?3. What kinds of assistance would be helpful for them to overcome the barriers they face in post-secondary education?

2. METHODOLOGY AND METHODS

2.1 RESEARCH METHODS

Taking a phenomenological lens (Patton, 2002), the study used a mix of qualitative and quantitative methods, including a campus-wide survey, interviews, a focus group, and observation. The data collection methods were approved by the UBC Behavioural Research Ethics Board before conducting the research. The researcher also obtained the "Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022) Certificate" before the research.

2.1.1 SECONDARY DATA COLLECTION RESEARCH METHODS

The secondary data collection method used was observation. The researcher observed the social media platforms and the website of the First Generation Student Union, a student-led club on campus that aims to help and empower first-generation and low-income students. By examining their past events, the researcher aimed to capture the issues concerned by FGCS on campus. This observational component could compliment the self-reporting methods at it would not be influenced by researcher-subject interactions (Cotton et al., 2010).

2.1.2 PRIMARY DATA COLLECTION RESEARCH METHODS

Survey

The survey was used to gather information about first-generation students' identities and perceptions, learning and working experiences, perceived barriers, and needed assistance. Surveying was chosen as part of the

methodology because it can collect data from a large, diverse sample in a relatively fast and cheap manner (Wright, 2005). Conducting the survey online also has the advantage of including students who cannot be reached in person due to travel restrictions caused by the Covid 19 pandemic. The survey was conducted using Qualtrics between November 7 and November 28. The introduction page provided information about the research and mentioned that consent was implied by completing and submitting the survey. Survey respondents could voluntarily join a prize draw of two \$25 Visa gift cards if interested. It was distributed through the AMS social media platforms, student clubs, the Graduate Student Society's newsletter, and Undergraduate Student Societies' newsletters. In total, 135 responses were collected, and 112 were valid responses (respondents who answered "No" to the question "Are you a first-generation college student according to the study's definition?" were excluded from the analysis).

Semi-structured Interviews

The interviews were conducted to understand a) the participants' educational experiences, b) how they perceive their identities as first-generation students, c) what they find challenging in post-secondary education, and d) what suggestions they would like to propose to the school and government. The interview guide was designed in a semi-structured manner with open-ended questions. Interview participants were recruited through a) the researcher's personal networks, and b) the survey. Survey respondents who were interested in participating in an interview or focus group were asked to voluntarily input their email addresses at the end of the survey. A total of 6 interviews were completed, lasting 30 minutes on average. According to the participants' preferences, three interviews were conducted online over Zoom and three were conducted in person in a private study room on campus. Informed consent was obtained both verbally and in a written document before each interview. The interviews were audio-recorded and transcribed for analysis. Pseudonymous were used in the report.

Focus Group

A focus group was held to capture additional meaningful information from participant interactions (Acocella, 2012). Focus group methods have been found especially useful in educational research because they can reveal social dynamics, interactions, and discourses of the targeted issue (Shoaf & Shoaf, 2006). In the focus group, the participants were asked to give feedback about the survey and interview results as well as their perceptions of being FGCS. It was conducted in a group study room on campus. The focus group guide listed relevant topics summarized from the survey and interview results. The discussion lasted 1 hour and 15 minutes. Informed consent was obtained from the participants by signing a written document before the discussion. The discussion was audio-recorded and transcribed for analysis. Pseudonymous were used in the report.

2.2 POSITIONALITY AND ETHICS

The researcher is not a first-generation college student, but being a female, racially minoritized non-native English speaker, she shares multiple equity-seeking identities with likely participants. However, the researcher understood that maybe not all participants would be comfortable sharing their identities and stories. The participants were notified that they could refuse to answer questions that they did not want to answer. Asking the participants to reflect on their difficulties has the possibility of creating minor stresses for them. The participants were notified of the risk before participating in the study and the right to withdraw from the study at any time. Information about school counseling resources were provided as needed. Principles of informed consent, anonymity, and confidentiality were followed.

3. RESULTS



Figure 1 summarizes the findings of the study.

Figure 1. Concept map of the "Experiences, Challenges, and Assets of First-Generation College Students" study.

3.1 CHARACTERISTICS OF THE PARTICIPANTS

Out of the 112 survey respondents, 76.79% were undergraduate students and 23.21% were graduate students. Over 80% of the respondents were female and over 50% were visible minorities. LGBTQ+ students, students with disabilities, and Indigenous students account for 20.54%, 16.07%, and 7.14% of the sample respectively. Around 7% of the respondents preferred not to answer which equity-seeking groups they self-identify with. Out of the nine interview participants, five were undergraduate students, and four were graduate students. Eight of the interviewees were female, six of them were racialized minorities, one was Indigenous, one was an international student, and one had disabilities. The categories were not discrete.

3.2 PERCEPTIONS

I think [being a FGCS] can be a motivating factor but also a stressful one. As a first-generation student, it fuels my motivation to learn and make change in my community and family, but it also adds pressure to succeed and be this perfect model student who is always doing well.

- A survey respondent

When asked about the impact of being an FGCS on their academic learning, almost 40% of the respondents suggested that being an FGCS benefited them, and 26.79% of them were unsure. Through the analysis of the survey, interviews, and focus group data, five major themes of perception emerged: pride, responsibility, appreciation, independence, and contribution to the classroom. These identified sentiments brought the participants both motivation and pressure to succeed in university as well as in future careers (Figure 2).





3.2.1 PRIDE

Some participants indicated that first-generation status was a source of pride. One respondent wrote that being the first college student in the family provided her with "a sense of family honor." This sentiment was also raised in the focus group discussion.

Thi, a 22-year-old undergraduate student studying engineering, came from a refugee family. Her parents fled to Canada hoping for a better life. She indicated that her motivation largely comes from the pride she and her family had for her.

I have a lot of pride in being the first in my immediate family to go to university. And I know my parents are really proud of me too. So it's like a sweet and sour kind of situation. Even though they can't pronounce the major I'm in, and I don't have the language abilities to translate what I'm learning. But just knowing that their child is in university, that was definitely a really big motivator for me, like throughout my whole life, to work really hard.

Describing the situation as "sweet and sour" suggested that Thi's joy and pride are intertwined with the pressure to continue the hard work and to avoid letting her parents down. Depending on their family histories, the sense of pride was not shared by all participants. Erin, whose parents were not supportive of her education, did not express similar feelings as Thi. As an abandoned kid, she grew up in a foster care facility, and her parents did not sponsor her education.

3.2.2 RESPONSIBILITY

Some survey respondents indicated that being an FGCS came with a responsibility to support their families in the future and be a role model:

Respondent A: [I was] motivated to pursue higher education to provide better lives for my parents and also my own family in the future, as well as to live up to what my parents have done for me to be here.

Respondent B: Being the first out of my family to attend post-secondary education, I find it important to do well and set a positive example for my siblings

Some interview participants indicated similar feelings. Jasmine, a 19-year-old undergraduate student studying Global Health, moved from Jordan to Canada with her mother. Her mother always wanted her to have a good education. For Jasmine, being an FGCS feels like she is leading her family to go up the education spectrum.

It's the motivation that you're kind of leading your family into getting more education, and you're being one of the first of your family to learn all this stuff...so it's kind of one of the motivations, but it's also a lot of pressure because you're also, again, the only one in your family who's going through this. Nobody else before has gone through this, and nobody else knows the journey.

Similarly, Thi, whose parents were also refugees, shared:

The idea is that my parents came all the way to Canada and they're hoping for a better life and that better life is through their children. And all of a sudden, now that's something that I've embodied as my

responsibility. So I think that's a lot of the stress I get and also because of the cultural expectations that I have to take care of my parents. Not that I have to, but like, I should.

One interviewee was financially independent, and a sense of responsibility was not mentioned during the conversation.

3.2.3 APPRECIATION

Another feeling mentioned by more than half of the interviewees was the appreciation of having the opportunity to study at UBC. Harneet, an 18-year-old freshman from the Faculty of Science, grew up in a nearby city and was glad she got the opportunity to attend UBC.

I appreciate being here because that's not something that a lot of people that I know are doing. So maybe I have a bigger appreciation for it than other people who [think] this is just like a normal thing that their families have been doing.

Anne, a 20-year-old undergraduate studying political science, showed similar appreciation for being able to study at UBC despite the difficulties she face, such as opposition from her father.

I would have never grown into the person I am now without coming [to UBC] and it's nice to be around people who are more like-minded...I only think of a handful of my friend's parents who ever went to university. So most people I know never went. So it's nice to have different perspectives. And like, there are definitely a lot of interesting people [here at UBC]. I would just say I have a hard time making friends, but like I am happy to be here. I think it's also nice because I like the idea of going back to my community and I can give something back to them.

Several survey respondents also indicated that they are deeply grateful for studying at university, and the appreciation motivated them to work harder.

3.2.4 INDEPENDENCE

Another sentiment shared by almost all interviewees is the tendency to rely on themselves when they face difficulties. Jasmine described her journey of applying to UBC and navigating the campus on her own. When asked whether she tried to search for help from the school, she said she rarely did because she had developed a habit to figure things out on her own.

I've always needed to fight things on my own. I've developed this habit where I always have to try things on my own first without seeking help from others. It's like I'm like Noah's me and you know, you've always done things yourself, you can figure it out yourself, so you've never had to actually go out and, you know, search for help. Anne shared a similar sentiment and mentioned that sometimes looking for help is emotionally draining.

I have a hard time asking for help... I find it hard because obviously, you have to go out of your way sometimes to find these things. So I'd say that's the hardest thing. Like if you are already struggling and you don't know where to look, sometimes the effort it takes to find [help] can be really draining.

Stu, a 23-year-old master's student studying geography, commented that

Sometimes looking for help [in university] is like navigating a maze, trying to find out where you can go, who you can talk to.

Another form of independence experienced by three interviewees is the freedom to pursue their own interests. Miss Wan, a 27-year-old master's student studying Environment and Sustainability, shared:

My parents gave me a lot of freedom to choose whatever path I want to go. And they didn't really impose whatever they want me to study or impose whatever directions they want me to follow. So I kind of decided independently myself by doing some research or just following my friends. When I choose the type of course that I want to take or the type of study that I want to do, it's completely based on my interests. My parents didn't really discourage me or encourage me.

Mina, a 19-year-old undergraduate student studying International Relations, also mentioned that

I think there are some beautiful things to it in the sense of like I do kind of get to forge my own path in a way like I don't have anything that necessarily my parents did weighing on me.

However, for some participants, the freedom was constrained by family expectations or the need to take care of their families. Thi described her dilemma of choosing between studying something she likes and studying something that is more financially "secure."

I also wanna do what I'm passionate about, but how do you do what you're passionate about and financially support your family? That's the struggle.

Because the participants' parents did not attend university themselves and were doing low-paying jobs, financial stability was their priority and what they hoped for in their kids. This adds another layer of pressure on the participants.

3.2.5 CONTRIBUTION TO THE CLASSROOM

More than 10% of the survey respondents and most interviewees believed that they have unique perspectives to offer in class discussions. Anne, coming from a rural community in BC, mentioned that in her finance and policy classes, she was usually the only one who would offer a rural community perspective.

When I was in class discussions, I am often the only person from a small town. And it's like often when we talk about politics, like in my policy classes, those perspectives are omitted a lot. And people forget rural people exist and they do matter, you know? Sometimes their views are very different, but I find that people often forget that [rural communities] have needs too. So, I would say I'm often the only person to ever raise the issues about rural communities.

A survey respondent also wrote:

Bringing an international student perspective, especially from migrating from a middle-income country and having worked in clinical care in such a setting, allows me to bring my stories to a much more privileged healthcare space.

Their seemingly disadvantaged living experiences allowed them to connect with the course content and to have relevant personal stories to share in classes.

3.3 CHALLENGES

In addition to the pressure to succeed, there were three major challenges faced by the participants when they were applying to and studying at UBC: financial burdens, mental and emotional struggles, and a lack of knowledge and guidance (Figure 3).



Figure 3. Participants' perceived challenges.

3.3.1 FINANCIAL BURDENS

Financial burdens were the most common difficulty faced by the research participants. Around threequarters of the survey respondents indicated that they experienced difficulties paying their tuition (75%) and living expenses (74.11%). Around 37% of them struggled with paying the university application fee. Over 60% of the respondents were taking loans, and 58.04% of them used personal savings to support their studies. Around 80% of the respondents were working at the time of completing the survey, and over one-fifth of them were working more than 20 hours per week.

All nine interview participants had financial concerns. All of them had to work part-time or take loans. Jasmine commented that

I absolutely needed a job. So whether it was that job or another, I would have absolutely needed a job no matter what. As much as I can, I try to use the money that I get from my job. So it goes for certain bills. So that's kind of what I'm trying to do. Truth be told, I wish I could have another job as well, just to kind of help me with financial stability

Miss One worked 10 to 20 hours per week and rarely had time to participate in social events organized by her program. She struggled the most with the increasing rent in Vancouver. She shared that she had to give up the residence offer from the school and find a cheaper place to live.

I ended up choosing off-campus accommodation which is super tiny and does not have a very good living environment, but at a rather cheaper price. It's about \$650 per month. It's very near to the campus, but the living conditions are not so great.

She also expressed frustration about the limited financial assistance available for international students.

What if something goes wrong with my parents and I suddenly don't have any [financial] support? But because I'm an international student, I cannot ask for bursaries, and I cannot ask for loans.

Stu emphasized that being financially stable was critical to his success in completing his undergraduate program and pursuing his master's study.

I was so grateful to have my scholarship, because if I didn't, I mean I probably would have been too stressed out and dropped out because that's difficult...I mean, again, I was fortunate and successful because I was financially stable.

Several interviewees mentioned that they must get good grades to maintain their scholarships. Thi shared

I remember having an incident where someone's like it's not a competition, but it's like...it's not when your parents are working in the industry and they have those connections, and you're not on student loans.

Erin, a 47-year-old master's student studying Library and Information Studies, mentioned that she could not afford the social events organized by her classmates, which made it hard for her to get to know them. The financial concerns were also the reason why she chose her program:

[Studying something secure] is exactly why I'm in the Master of Library Studies program. It's to find something secure, like a profession that I would be qualified to get a job immediately after [graduation]. Because I'm also a mature student, that makes things a little bit more difficult financially.

Overall, tuition, living expenses, and the cost of social events were the sources of financial burdens for the research participants. They mainly relied on loans, personal savings, and family support to cover expenses. On the First-Generation Student Union's social media platforms, several posters were about budgeting and affordable food options. While it is acknowledged that financial burdens are a common challenge faced by university students, the literature and the results suggest that first-generation students tend to be more stressed about financial stability.

3.3.2 MENTAL AND EMOTIONAL STRUGGLES

The second most common challenge faced by the survey respondents was mental and emotional struggles (71.43%). Based on the qualitative analysis of the interviews and focus group discussion, two types of mental struggles were revealed: a sense of isolation and fear.

Sense of isolation

The sense of isolation felt by the interviewees came from both the university side and the family side. Harneet mentioned that even though she was from nearby, she felt the university environment was different from her previous social environment, and she felt it was hard to fit in. This sentiment was shared by Thi, who disclosed her longing for a community during the focus group discussion:

A community, actually, that's been something I feel like in my whole undergrad I've craved a lot for. I'm just really... because I also grew up in a neighborhood where almost everyone I was friends with was also first-generation [students], like everybody in my neighborhood was low-income immigrants. So we all had just a shared understanding, like, oh, I can't go out and do this because it costs too much money or like I don't drive, because that's a lot of money and I actually like taking the bus, things like that. But when I came to university, I didn't have the same community around me, it did feel very isolating.

Other focus group participants resonated strongly with her comments. They also felt that they were not "seen" by the school. Zana mentioned that she had never heard of people talking about first-generation students on campus.

Even at the university scale, like I've worked for the university too and you know I've never heard anything about [first-generation students]. Like even professors, like most of my profs have been through a line of

college graduates and so, I mostly just hear about people who have family members that have gone to university.

On the other hand, several participants felt a sense of isolation from their families. Mina described her application process as an isolating process because there was no one in her family she could turn to for help. The isolating feeling also results from the mismatched worldviews of the participants and their parents. Anne felt that it became hard to connect with her family because going to university gave her a very different worldview.

I would say me coming to university, having a wider perspective on the world and meeting people who aren't like me and who are different, and being able to accept that resulted in my disconnectedness [from my family]. When I go home, my opinions don't fit within their worldview of what they think things should be like. So that's hard when yeah, like they're very conservative, and I would just say, I'm very open and progressive now and I wasn't like before. Moving obviously helps change your perspectives.

Fear

Several interview participants mentioned that navigating PSE is a scary process. They have a constant fear of doing things wrong or missing out on things. While being active in campus activities and class discussions, Yasmine repeatedly mentioned her worries about "falling behind":

You will always have this feeling that you're always behind. I think I always mentioned this, but there's just this feeling that will never go away. It's like you're always forgetting something or that you're always unaware of something. So if there's like an opportunity or there's like a resource...it always feels like there's something that I don't know about. Everybody else looks like they have everything together. They all look like they know everything, like they're on top of everything.

For some interviewees, fear also comes from not getting good grades because they rely on scholarships to support their living. Erin, while having four kids to take care of, had to maintain a good academic performance:

My funding is directly related to how well I do and I cannot fail or I am not going to get funded and that means no livelihood, no income. So that also motivates me to not drop the ball.

Some participants also experienced the fear of failure. Mina, being the only person in her family going to college, felt that she cannot fail and must live up to her family's expectations.

I have a huge fear of failure. I think it's like my big thing. I think that because of being first-gen, there are certain expectations put on me...like I have been positioned to be like, a doctor, lawyer, engineer, or otherwise a disgraced child. Like, I'm the one that has to live up to an expectation. And so, I am afraid of falling behind and I am afraid of failing, constantly, and that's always kind of in my mind.

3.3.3 LACK OF KNOWLEDGE AND GUIDANCE

The third most common challenge faced by the survey respondents was a lack of knowledge about college systems (67.86%). This sentiment was shared by several interviewee participants. Based on the analysis, the things the participants struggled with the most were: university application, academic learning, and networking.

University application

Before attending the university, the application process was already hard for several interviewees. Jasmine, completely relying on her own online research to complete the application, was not prepared to do it.

It was just hard figuring out, you know, how to apply...the application process. I remember one of the first instances that made me kind of wake up and realize just how little I knew about university. I used to think majors were classes, so I told everybody I was going to do ten majors in university. I did not [know that was not possible] until I got a waking call. Well, they're like, Yasmine, you can't do ten majors. And I'm like, what are you talking about? We do that in high school all the time.

Harneet, similarly, found the process very stressful and thought that university applications would only focus on her academics.

It was very stressful for me because I didn't know what specifically the universities were looking for or like what they wanted me to write about. And also, I didn't realize that universities look so much at things outside of academics. Like no one had told me about that kind of stuff.

Mina, who wanted to attend UBC since grade 11, also mostly figured out all the requirements by herself. She was studying at a public high school in a small town, and the school does not provide any advanced courses to prepare them for university. She mentioned that she had a hard time finding help from her high school because it lacked the resources to support them.

Academic learning

Academic learning was also a common thing the interviewees struggled with especially during their first two years of study. They were not aware that university courses would be very different from the ones in high school. Anne, who was never "warned" that university courses would be challenging, underestimated the effort and time needed for managing the courses.

One thing that's hard is learning how to study. Because in high school, you can get by without trying. And then when you come to university, you realize that you actually have to try and you don't have any of those habits instilled in you. So that was the biggest trouble I had, like learning how to study, learning actually how to retain information. That was hard for the first year and a half. Stu, who did fairly well in high school, also had a hard time navigating how to study in his first semester. Meanwhile, he was also unaware that he could go and ask for help from the university. Looking back, he wished that he knew and attended the study workshops provided by the school.

I think I experienced [mental stress] in my first semester where I was, you know, doing poorly on exams, and it seemed like everyone around me was doing just fine. And I couldn't figure out why. I don't have anybody to talk to, and you kind of just have to put your head down and study. And without the resources, it's hard to know if you're studying appropriately. For my first exam in college, I spent hours studying, and then I went in and I failed the exam. And I liked what I studied. I don't know why. I don't understand why. What am I doing wrong?

Not being prepared for the academic transition and the lack of awareness of the resources provided by the university contributed to the participants' difficulties in understanding how to effectively study.

Networking

Learning how to network was also a challenge brought up multiple times by the interviewees. They felt that because their parents had never worked in academia and related industries, it was particularly hard for them to adapt to the networking culture. Zana struggled to understand it and did not know how to appropriately approach people and build connections.

I think there's a really big emphasis on networking here, and I hate that culture. I don't know how to do it... but there's an automatic assumption that you do or you should be prioritizing those things. So it's kind of like a panic in that sense of how I should be making these connections. There should be certain courses for us offered and people should reach out to us, in my opinion, because even if they are offered, we don't know where to access them...I went to one networking event and everyone already knows what to do, like there's an expectation, and I feel like sometimes first-generation students aren't at that baseline yet because we don't come from that environment.

After Zana's comment, Thi quickly followed:

I really struggle with that networking culture too, especially because I'm in STEM, and the [networking] culture is [strong]. In the previous company I worked for, everyone got there by knowing somebody and I don't know how to...I don't know how business relations work. Like my parents have never been in a higher up position to like...you know, I don't have any of that [exposure]. And also I don't know how to do that. It also comes really unnatural for me.

A lack of awareness of the networking culture, and the insufficient knowledge and skills relevant to it made the participants feel intimidated by the need to network.

3.3.4 OTHER CHALLENGES

Some other challenges mentioned by the participants include negative family attitudes and the mental struggles associated with funding applications. For Miss Wan, even though her father was more or less supportive of her decision to pursue a master's degree, she faced constant opposition from her mother. Similarly, Anne shared that her education was not respected by the family on her father's side. For other interviewees, grant applications were "emotionally taxing." They had to disclose a lot of personal information and revisit their trauma.

3.4 ASSISTANCE

Based on the types of assistance the participants found most helpful for their academic learning and school life, three recommendations are proposed for UBC and governments: equity-based financial aid, free/affordable social events, and first-generation student advising (Figure 4).



Figure 4. Proposed recommendations for UBC and government.

3.4.1 EQUITY-BASED FINANCIAL AID

Almost 80% of the respondents and all interview participants indicated a need for financial support. In addition, the interviewees emphasized that the grant should be need-based instead of merit-based.

Stu, who experienced a hard time balancing work and study in his first year of undergraduate, commented that it is critical to support FGCS financially, especially for their first term or first year.

I think financial aid is the big one because, like I was saying, if you were struggling to come to school and you don't have the advice and the resources that other students do because their parents went to school, the last thing that you want to worry about is money. And so, I think it's crucial that the school offers funding to those students and makes it obvious... maybe in the application process listing whether or not you're a first-generation student, and if there are, automatically give them funding for their first year, unless they have some other source of funding. I can only imagine how many students drop out because of the lack of funding and the lack of financial aid that's provided to them

In the focus group, all three participants shared their pressure to maintain good grades to compete for merit-based scholarships. Zana, who had to take a year of part-time study to financially support her family, shared her disappointment in not having need-based financial support for FGCS.

I really disagree that [our grades are] tied with funding...It's like you're competing for something. It shouldn't be like that. If this is a project to make suggestions to the university, I would say to make scholarships or loans not tied to our grades because we often have external circumstances...and an average student would not have [the scholarships] we've all mentioned that we have.

Thus, it would be helpful if the school or government could provide equity-based financial aid to firstgeneration students to help with their transition and retention in university.

3.4.2 FREE/AFFORDABLE SOCIAL EVENTS

Over one-third of the survey participants indicated that having more social activities would be helpful for them. Most interview participants expressed the same sentiment. Here is a field note I wrote on the day of the focus group.

November 25, 2022

When the focus group discussion ended, the night had fallen, but I could see sunshine on their faces. Erin asked the others if they wanted to exchange contacts. They all laughed. Zana said, "Yes, I was thinking about that too!" Thi also said yes and nodded. They were very happy about the suggestion. They took the three sticky notes I prepared for them and wrote down their emails for each other.

This scene highlights the participants' eagerness to connect with each other. It was demonstrated not only through their words but also through their behaviors. Throughout the discussion, they mentioned multiple

times that they feel they do not fit in with their classmates. None of the people surrounding them were isolating them on purpose. The sense of isolation comes from the fact that, first of all, they do not have money and time to participate in those expensive social events, and secondly, it is sometimes difficult for other students to understand the financial and emotional struggles they face. The willingness to exchange contact information shows that they felt connected and wanted to retain the connections.

When I was developing the leading questions for the discussion, I wanted them to be generic to avoid participants from feeling uncomfortable about sharing their personal experiences. To my surprise, they disclosed many personal stories and vulnerable feelings they had to the group. When Erin got emotional and started sobbing, Thi and Zana also had tears in their eyes. The discussion went on for over an hour, much longer than I previously planned. None of them showed impatience and were all engaged during the whole process. Maybe the discussion created a temporary "community" for them to share and connect.

The word "community" was mentioned over 12 times in the interviews. Many participants indicated that they had a hard time finding a community they belong to and were longing for it. Having affordable social events targeting FGCS could offer a welcoming space for them to connect and share their experiences. This can potentially make them feel less alone and more supported.

3.4.3 FIRST-GENERATION STUDENT ADVISING

Another type of assistance needed by most of the participants is advising and guidance. More than 47.32% of the survey respondents thought having faculty/staff mentors would be helpful for them. Stu shared why having a school entity designated for helping first-generation students would be beneficial.

Having a body at the school would be important. Just somewhere where you can go to talk with somebody or they can provide you with resources, or they can point you in the right direction, or they can even say "apply for this scholarship." I think it's important that it's a UBC-specific group and not a student-led organization. While that's also important and helpful, it should probably be bigger. To let first-generation students feel more accepted on campus, I think we need a department or a UBC specific resource where they can go, like a First-generation Student Help Center or something.

Zana proposed a similar suggestion:

A suggestion would be having specific academic advisors that are trained for first-generation students, who are sensitive and can help us in those kinds of equitable ways that we would need to be assisted in. Because right now just having a general academic advisor, I feel like it's not necessarily helpful because you feel a little discouraged after you go there and you don't [get understood]. It's like when I first started here...I don't understand [what the advisor was saying]. So I feel like having specific academic advisors and financial advisors for first-generation students would be a good thing. The struggle of not knowing where to find help was shared by most interviewees. Having a First-Generation Student Advisor or ideally an Advising Office would make it easier for FGCS to navigate campus resources and make them feel that they belong to the school. As suggested by several interviewees, it would also be helpful if the Office could provide introductory orientations and workshops for FGSC when they first arrive at the campus. The Office could also have programs that pair freshmen with senior students to provide peer mentorship. Last but not least, the Office needs to actively reach out to first-generation students to make the resources obvious and easy to access. Several participants mentioned that when they were already stressed, they sometimes did not have the mental capacity to search for help.

3.4.4 OTHER PROPOSED SUGGESTIONS

Other proposed suggestions include more resources devoted to disadvantaged high schools to assist with FGCS's university applications, and a guidebook or online orientations for parents explaining the costs and other important information about the university.

4. DISCUSSION

The purpose of the study was to examine first-generation students' perceptions of first-generation status and their perceived barriers in post-secondary education. The participants expressed five sentiments about being first-generation students: pride, responsibility, appreciation, a sense of independence, and being able to offer unique perspectives to the classroom. These sentiments lead to a conflicted feeling – a mixture of motivation and pressure. The results also revealed that financial burdens, mental and emotional struggles, and lack of knowledge and guidance were the most common challenges faced by the participants. Finally, three suggestions were proposed to UBC and the governments: equity-based financial aid, free/affordable social events targeting FGCS, and designating a First-generation Student Officer or an Advising Office to help FGCS in the university.

The results provided evidence that FGCS tend to have multiple equity-seeking identities (Ives & Castillo-Montoya, 2020). This highlights the necessity of assisting this student group in post-secondary education. Interestingly, over eighty percent of the research participants were female. Another study also had a similar percentage of female participants (McCallen & Johnson, 2020). This might partially result from the fact that there is a higher proportion of female students in the FGCS student group in Canada (Henderson & Gordon, 2014). Other relevant factors are also worth looking into.

The findings about perceptions of first-generation students are fairly consistent with the existing literature. Most of the sentiments identified also appeared in other studies. In Sterk (2022)'s study, nearly all participants had a conflicting "Proud, but..." statement. While family pride bought them joy and satisfaction, it also implied high family expectations and pressure. Safdar et al. (2022)'s study also identified the appreciation FGCS feel for having the opportunity to attend university. They suggest that sometimes this appreciation is also related to the feeling of indebtedness due to family sacrifice. This might partially explain why many first-generation students felt that they have the responsibility to create a better life for their families (Evans, 2013;

Spiegler & Bednarek, 2013). Besides, the results suggest that participants from immigrant families tend to have higher aspirational burdens from their families compared to non-immigrants.

An interesting finding is that while the participants are highly independent, they tend to have more interdependent motives, meaning their academic learning is driven more by family and/or community interests than personal interests (Ives & Castillo-Montoya, 2020). Similarly, other studies suggest that many first-generation students tend to be prosocial and interdependent learners who enjoy learning with others, value the sense of community, and want to give back to their communities (Eddy & Hogan, 2014; Stephens et al., 2012). Based on the interview findings, these interdependence preferences might partially result from their feelings of isolation and loneliness. Collaborative activities and a more interdependent learning environment can potentially increase their sense of belonging to the university.

Another approach that can cultivate a sense of belonging for FGCS is to incorporate their cultural and social backgrounds into the classroom (Jehangir, 2010). There is an increasing awareness that first-generation students have knowledge and ways of thinking that can bring cultural wealth to academia (Ives & Castillo-Montoya, 2020). This might not only enhance deep learning for the students themselves but also advance the means of knowing and doing in relevant disciplines, especially in the humanity fields (Castillo-Montoya & Torres-Guzmán, 2012). While some interviewees and survey respondents mentioned that they had unique perspectives to contribute to the classroom, the majority of the survey respondents were unsure whether their backgrounds and identities are beneficial for their academic learning. The findings indicate two possible reasons. Firstly, due to financial concerns, many participants tend to choose majors that can make them competitive in the job market and secure employment right after graduation. Therefore, they might be more likely to study non-humanities majors (Davis, 2012; Lehmann, 2009). Secondly, first-generation status seemed to be rarely mentioned at the university, and not much attention or recognition has been given to this student group. Stephens et al. (2014)'s study tested the influence of a difference-education intervention on students' academic performance, mental health, and campus engagement. The intervention was having senior university students share their experiences in PSE as well as how their backgrounds (e.g., first-generation status, income level) influenced them. The students in the controlled group heard presentations from the same senior students but there was no mention of their different backgrounds. The intervention was approved to improve FGCS' grades, increase their tendency to seek help, and facilitate their mental health (Stephens et al., 2014). When FGCS are encouraged to share and reflect on their experiences, they might be more likely to feel that they are accepted by the school and to see the positive sides of first-generation status. Meanwhile, like other historically disadvantaged groups, celebrating the knowledge and experiences of FGCS would promote equality, diversity and creativity in universities.

The three identified challenges are also proved in other studies. First-generation students are more likely to come from low-income families (Engle, 2007; Redford & Mulvaney Hoyer, 2017), and they are twice as likely to have financial burdens compared to non-FGCS (RTI International, 2019; Saenz et al., 2007). Research has also shown that FGCS' work responsibilities can lead to having less time for study and social activities, contributing to a sense of isolation (Engle, 2007; Evans et al., 2020). A lower sense of belonging can further lead to lower academic confidence and performance (Safdar et al., 2022). In addition to work responsibilities, over two-thirds of the participants were also taking loans, which can cause additional pressure (Davis, 2012; Lehmann, 2009). An increase in debt increases the likelihood that first-generation students drop out, while increasing financial aid helps their persistence in university (Lohfink & Paulsen, 2005). Proposed need-based financial aid will potentially

alleviate the pressures FGCS face, facilitates their academic and social integration, and increase their retention rate. Reduced financial burdens can also potentially facilitate FGCS' mental health as the interviewees indicated that their fear partially came from financial insecurity. Sterk (2022)'s study also found that FGCS had fear of doing things wrong and not being accepted by other students. Having affordable social events targeting FGCS can allow them to connect and discuss their concerns. Integrating them with the university environment can also help with their cognitive and psychological development (Padgett et al., 2012)

Nevertheless, only having social events would not be sufficient because they can only occur occasionally, and not everyone will be available to attend. A permanent space for FGCS to seek help is also needed. Schools and staff play significant roles in promoting FGCS' success (Spiegler & Bednarek, 2013). The proposed First-generation Student Advising Office could be a space where FGCS can feel safe and comfortable to ask any questions they have. The advisors should be trained to understand FGCS' concerns and backgrounds. Like many interviewees indicated, studies have found that FGCS are often hesitant to ask for help, thus the Office needs to actively reach out to FGCS to offer help and to assist them in building a support network (Padgett et al., 2012). Implementing a peer mentoring program that pairs freshman FGCS with senior FGCS would also be beneficial. The Office can be both a resource center and a bridge that connects first-generation students.

Limitations

One limitation is sample representativeness. The survey was distributed completely online within a short time frame. It might not have reached students who do not use those online platforms. Having diverse channels for participant recruitment can potentially obtain a more representative sample. The second limitation is that there is high heterogeneity within the sample. Even though the research participants are all first-generation students, they vary largely in terms of cultural and economic backgrounds. Other demographic and socioeconomic factors could also have influenced their perceptions and challenges.

5. RECOMMENDATIONS

5.1 RECOMMENDATIONS FOR ACTION AND IMPLEMENTATION

5.1.1 EQUITY-BASED FINANCIAL AID

The first recommendation for UBC and governments is to establish equity-based financial aid for firstgeneration students, especially during their first year of study. The grant should be provided according to their financial situation instead of grades or achievements. The application process needs to be easy to understand and easy to complete. Information about the grant needs to be advertised through all high schools and the university's website. More research needs to be carried out to determine the amount of the grant and the dispersion mechanism. Successful establishment of the grant can alleviate the financial burdens faced by firstgeneration students, reduce their mental stresses, and help with their academic and social integration in postsecondary education institutions.

5.1.2 FREE/AFFORDABLE SOCIAL EVENTS

The second recommendation is to provide free or affordable social events for first-generation students. According to the research participants, existing social events organized by school departments and clubs tend to be too expensive for them to attend. In addition, there have not been opportunities for them to get to know other first-generation students. Having social events targeting FGCS can help them form a community that offers understanding and support. This can potentially reduce their sense of isolation and make them feel more welcomed and recognized on campus.

5.1.3 FIRST-GENERATION STUDENT ADVISING

The third recommendation is to designate a First-Generation Student Officer or ideally an Advising Office to help FGCS. The purpose is to provide first-generation students with accessible resources and guidance. The Office will act as both a resource hub and a bridge that connects first-generation students. Firstly, if resources permit, it would be helpful to have academic and financial advisors specifically trained to help first-generation students at the Office. It could also organize introductory workshops for first-generation students at the beginning of each school year. Potential topics for the workshops could be campus resources, study tips, and budgeting. Secondly, it would also be helpful to create a peer mentorship program that pairs new students with senior students. The program can potentially be beneficial as FGCS tend to be prosocial learners, and they tend to enjoy collaborative activities and a more interdependent learning environment (Ives & Castillo-Montoya, 2020).

5.2 RECOMMENDATIONS FOR FUTURE RESEARCH

Firstly, it will be helpful to conduct comparison studies between first-generation students and non-firstgeneration students while controlling demographic and socioeconomic factors. This can help distinguish the influences caused by first-generation status from those resulting from other factors. Secondly, as schools and staff play an important role in first-generation students' success, it will also be beneficial to understand the perceptions of faculty and staff about first-generation status. Lastly, future research is also needed to examine the effectiveness of existing assistance provided for first-generation students in other places and countries.

6. CONCLUSION

First-generation college students are an underserved student group in post-secondary education around the world. They face many disadvantages compared to non-first-generation students, but they also have valuable assets to contribute to universities. It is clear from the literature that Canada and the Province of British Columbia need to pay more attention to the challenges faced by first-generation students. This pilot study aimed to understand the perceptions and experiences of first-generation students at the University of British Columbia. The results provided evidence that first-generation status comes with disadvantages but also brings motivation and unique perspectives to students. The findings suggest that financial burdens, mental struggles, and a lack of knowledge and guidance were the most common challenges faced by the participants. To better integrate FGCS into the university environment and to realize their potential and assets, the university and governments need to provide financial and social support such as an equity-based grant, affordable social events, and First-Generation Student Advising services. Being the first of the family to attend university means unfamiliarity and unease, but it also means courage, hard work, and resilience. Creating a more welcoming environment for first-generation students in university will help them thrive, and at the same time, it will allow their cultural wealth to enrich and inspire the university.

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APPENDICES

Appendix A. Survey Questions

Q1 Are you identified as a first-generation college student at UBC (whose parents have not attended a college or university)?

- o Yes
- o No

Q2 Are you an undergraduate or graduate student?

- o Undergraduate
- o Graduate

Q3 Do you self-identify with the following equity-seeking groups? (Please select all that apply)

- Woman
- Racialized minorities
- Indigenous Peoples
- People with disabilities
- LGBTQ+
- Other (please specify) _____
- Prefer not to answer

Q4 What factors have influenced your decision to pursue post-secondary education? (Please select all that apply)

- My parents/guardians encouraged higher education
- My siblings encouraged higher education
- My friends and/or other relatives encouraged higher education
- My high school teacher/counselor encouraged higher education
- A majority of my friends and classmates were/are going to college
- I was self-motivated
- Other (please specify) _____
- Prefer not to answer

Q5 Who encouraged, supported and/or guided you the most in your decision to pursue post-secondary education?

- o Parents/guardians
- o Siblings

- o Other relatives
- o Friends
- o High school teacher/counselor
- o No one
- o Other (please specify) _____
- o Prefer not to answer

Q6 What kind of barriers have you faced while pursuing post-secondary education at UBC? (Please select all that apply)

- Application process
- Application fee
- D Tuition
- Living expenses (e.g., rent, transportation, food)
- Little knowledge about college systems (campus resources, financial aid, required documents, etc)
- Family attitude
- Mental and emotional barriers (e.g., sense of alienation, self-doubt, guilt)
- Cultural shock
- I have not encountered any of the barriers indicated above
- Q7 How do you cover your tuition and living expenses? (Please select all that apply)
- Family support
- Merit-based scholarships
- Need-based grants or bursaries
- Loans
- Personal savings
- Other (please specify) ______
- Prefer not to answer

Q8 How many hours do you usually work per week?

- o < 10 hours
- o 10-20 hours
- o > 20 hours

o I don't work

Q9 Have you received any support due to the status of being a first-generation student from the school, government, NGOs or other organizations?

- o Yes
- o No
- o Unsure

[Display This Question:

If Have you received any support due to the status of being a first-generation student from the scho... = Yes] Q10 Please indicate the type of support you received and who provided it.

Q11 Please choose up to three of the following types of assistances that you would find most helpful for your academic learning and school life.

- Academic guidance and tutoring
- Faculty/stuff mentors
- Peer mentors
- Financial support
- Social activities

Q12 Do you think being a first-generation student and/or your other lived experiences ever assists you in academic learning? (e.g., feeling motivated to learn and make changes, feeling more connected to course content, having relevant personal stories to share in class discussion, incorporating personal insights into the studied discipline)

- o Yes (please briefly explain how) _____
- o No
- o Not sure

Q13 Do you want to enter the random prize draw to win 1 of 2 \$25 gift cards? If yes, please enter your email address below.

Q14 Are you interested in participating in an interview and/or a focus group for the study? If yes, please enter your email below, and our graduate student investigator will contact you in the following days.

Appendix B. Semi-structured Interview Guide

Q1: The definition of first-generation college students in the study is "students whose parents have not attended a college or university." Are you a first-generation college student according to this definition?

Q2: Could you tell me about your education journey and how you made the decision to attend UBC and your program? Is there a particular moment or a person you can think of?

Q3: Have you ever worked during your time at UBC? If yes, please explain the type of work, how many hours per week and why you decided to work. If no, please explain why you chose not to work.

Q4: How often do you participate in campus events (e.g., activities organized by clubs, student societies, student associations)? Why is that? Are these important to help you succeed in school/ on campus? If so, can you explain why?

Q5: How active are you in class discussions and how often do you go to professors' office hours? Why is that? Are these important to help you succeed in school? If so, can you explain why?

Q6: What are some of the impacts of being a first-generation college student on your school life and/or academic learning (positive or negative)?

Q7: Can you recall an instance where you incorporated your life stories/identities into your academic learning (e.g., class discussion, course assignments, club events)? If yes, please explain the instance. If no, do you think that kind of opportunities would be helpful and why?

Q8: When applying to and studying at UBC, what kind of difficulties or challenges have you experienced? Is there a specific instance you can share to highlight such challenges for me? Which of those do you think is the most significant?

Q9: Have you ever tried to search for assistance from the school, government or other organizations that support first-generation students? Why or why not? If yes, what type of assistance were you looking for and were you able to find or receive any?

Q10: If you had the chance to make a recommendation to UBC or the government on how to better support first-generation students, what would you suggest? Can you explain why you think this would be helpful?

Appendix C. Focus Group Discussion Guide

1. First of all, let's know more about each other by going around the room one at a time. Please tell us your name, your program and how long you have been studying at UBC.

2. Could anyone share how you feel about being a first-generation college student?

Follow up: Do you resonate with the feelings shared by others?

3. Could anyone share a classroom or campus experience where you felt that your experience as a firstgeneration student stands out to you, and why?

Follow up: Do you have similar experiences as ...?

4. Based on the results of the survey we conducted, some students indicated that being a first-generation student is to some extent beneficial to their academic learning and for the school. Does anyone want to say something about that?

5. The survey results showed that mental and emotional struggles are the one of the most common difficulties experienced by the participants. What do you think might be some of the reasons? Can you help explain and understand the results?

6. The other most common challenge indicated by the survey is financial burdens. What do you think about that?

7. What other types of challenges do you think first-generation students usually face in college?

8. Some suggestions brought up by the interview respondents for UBC and governments include financial aid for first-generation students, networking and social opportunities, introductory workshops, application assistance, a guidebook for parents which explains students' expenses, and creating a First-Generation Students Help Centre. Which of those do you think would be helpful? What other suggestions would you like to propose?