

Suicide Ideation and Attempts Among First-Year Undergraduates at The University of British Columbia

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Executive Summary

- We examined suicide ideation and attempts by surveying approximately 2,000 first-year undergraduates at the University of British Columbia (Vancouver).
- During their lifetime, 19% of students considered suicide, 15% planned an attempt, and 4% attempted suicide (Table 1).
- During their first term at UBC, 8% of students considered suicide, 5% planned an attempt, and 0.6% attempted (Table 3).
- Most of the student characteristics we assessed did not predict suicide ideation or attempts, including numbers of friendships and acquaintances, location of housing (on- vs. off-campus), awareness of mental health resources, and most demographic variables (Tables 6-9).
- Suicide ideation and attempts were elevated in students reporting: a minority sexual orientation, a disability (Table 6), interpersonal stressors (e.g., parents' expectations of grades, getting along with family), stress about "getting the grades I want," and social anxiety (Tables 14 and 15).
- Similar to findings at other large universities, hundreds of UBC undergraduates are affected by suicidal thoughts and behaviors, and a robust suicide prevention plan should be in place.

Study 1

Suicide Ideation and Attempts:
Prevalence, Demographics,
Mental Health Resource Knowledge/Utilization,
and On-Campus Social Connections

Introduction

This large-scale study examined the prevalence of suicide ideation (thoughts) and suicide attempts in first-year undergraduate students transitioning onto the UBC Vancouver Campus. We also examined potential predictors of suicidality, including: demographics, living on- or off-campus, awareness of and visits to on-campus mental health resources, and quantity of social connections.

Students were invited to complete a survey about “first-year living conditions, friendships, and mental health awareness”. Students completed the survey twice, at the beginning of their first academic term at UBC (between August/September 2016), and second at the end of their first term (November/December 2016). These surveys were emailed by the UBC Student Experience Evaluation and Research (SEER) team to all first-year undergraduate students.

Objectives

1. Identify the prevalence of suicide ideation and attempts in first-year students.
2. Identify which demographic variables predict higher rates of suicide ideation or attempts.
3. Understand how a) awareness of and visits to mental health resources and b) relationship variables (e.g., number of friendships) relate to suicide ideation and attempts.

Student Respondents

The UBC 2016/17 Annual Report on Enrolment (Redish & Mathieson, 2017) stated that a total of 10,702 new domestic and international undergraduate students were registered in 2016.

At the beginning of their first term, 1919 students consented to the study, 1775 students completed the survey, and 1638 students provided enough data to complete analyses (about 15% of the first-year student population). At the end of the term, 1890 students consented to the study, 1868 students completed the survey, and 1846 students provided enough data to complete analyses (about 17% of the first-year student population). Across the beginning and end of the term, 866 students consented to both parts of the study, 821 students completed the study, and 694 students provided enough data to complete longitudinal analyses (about 6% of the total first-year student population).

Most students were between 17 to 22 years old, with a few students over age 25. Of those completing the survey, 41% identified as female, 22% as male, 1% either reported being transgender or having another gender identity, and 36% did not report their gender identity. Of the sample, 53% of students identified as heterosexual students, 4% as bisexual, 2% as unsure about their sexual orientation, 1% as gay or lesbian, 1% as queer, 1% as another sexual orientation, 1% preferred not to answer, and a remaining 37% of students did not report their sexual orientation. 46% were domestic students, 18% were international students, and 35% did not list their student status.

Objective 1: Prevalence

Table 1. Suicide Ideation, Plans, and Attempts: Lifetime

	Yes	No	Prefer not to answer
<i>Have you ever seriously thought about killing yourself?</i>	19.4%	75.7%	4.9%
<i>Have you ever made a plan about how you would kill yourself?</i>	14.7%	81.0%	4.3%
<i>Have you ever tried to kill yourself?</i>	3.5%	93.6%	2.9%

Table 2. Suicide Ideation, Plans, and Attempts: During the 6 Months Prior to UBC

<i>During the past 6 months,</i>	Yes	No	Prefer not to answer
<i>Did you ever seriously consider attempting suicide?</i>	7.0%	91.1%	1.9%
<i>Did you make a plan about how you would attempt suicide?</i>	5.4%	92.6%	2.0%
	0 times	1, 2, or 3 times	Prefer not to answer
<i>During the past 6 months, how many times did you actually attempt suicide?</i>	97.9%	0.8%	1.4%

**Table 3. Suicide Ideation, Plans, and Attempts: First Academic Term
(Assessed Nov/Dec 2016)**

<i>During the past 3 months,</i>		Yes	No	Prefer not to answer		
<i>Did you ever seriously consider attempting suicide?</i>		7.7%	89.5%	2.8%		
<i>Did you make a plan about how you would attempt suicide?</i>		5.3%	92.3%	2.4%		
		0 times	1 time	2-3 times	6 or more times	Prefer not to answer
<i>During the past 3 months, how many times did you actually attempt suicide?</i>	1744	8	2	1	19	
	98.3%	0.4%	0.1%	<0.1%	1.1%	

Table 4. Current “Wish to Die”

	Percentage of Students	
	August/September 2016	November/December 2016
<i>I have no wish to die</i>	81.9%	75.8%
<i>I have a weak wish to die</i>	14.4%	18.2%
<i>I have a moderate to strong wish to die</i>	2.1%	4.1%
<i>Prefer not to answer</i>	1.6%	1.9%

Table 5. Current “Desire to Kill Myself”

	Percentage of Students	
	August/September 2016	November/December 2016
<i>I have no desire to kill myself</i>	88.6%	84.6%
<i>I have a weak desire to kill myself</i>	8.8%	11.4%
<i>I have a moderate to strong desire to kill myself</i>	0.7%	1.2%
<i>Prefer not to answer</i>	1.9%	2.7%

Objective 2: Demographics

Table 6. Correlations between Suicide Ideation and Demographic Variables

	Suicide Ideation Aug/Sept 2016	Suicide Ideation Nov/Dec 2016	Increase in Suicide Ideation from Aug/Sep 2016 to Nov/Dec 2016
Age	.12*	.05	-.09*
Gender ¹	.01	-.04	-.04
Sexual Orientation ²	.23*	.23*	.12*
Born in Canada	-.05	-.04	-.01
Age of Migration to Canada	-.03	-.01	-.01
Commuting (vs. on-campus living)	.03	.02	-.01
Disability status ³	.22*	.21*	.06

Note. Correlations below |.3| are generally considered small; * indicates $p < .05$.

¹Positive correlations indicate more common in females.

²Positive correlations indicate more common in non-heterosexual students (gay, lesbian, queer, unsure about their sexuality).

³Disability status included mental health, neurological, chronic health, hearing, vision, physical, and other self-identified disabilities. For dichotomous demographic variables, point-biserial correlations with suicide ideation were reported.

Table 7. Correlations between Suicide Attempts and Demographic Variables

	Lifetime Suicide Attempts Assessed at Aug/Sept 2016	Lifetime Suicide Attempts Assessed at Nov/Dec 2016	Attempts Between Aug/Sep 2016 and Nov/Dec 2016
Age	.01	.00	-.01
Gender ¹	.01	.05*	-.03
Sexual Orientation ²	.13*	.14*	.01
Born in Canada	.02	.07*	.03
Age of Migration to Canada	-.02	-.02	-.01
Commuting (vs. on campus living)	.01	-.02	.03
Disability status ³	.18*	.18*	.02

Note. Correlations below $|\ .3 |$ are generally considered small; * indicates $p < .05$.

¹Positive correlations indicate more common in females.

²Positive correlations indicate more common in non-heterosexual students (gay, lesbian, queer, unsure about their sexuality).

³Disability status included mental health, neurological, chronic health, hearing, vision, physical, and other self-identified disabilities. Point biserial correlations were utilized for associations between attempt status and dimensional variables, and phi coefficients were utilized for associations between attempt status and categorical variables.

Objective 3: Mental Health Resources and On-Campus Social Connections

Mental health resources inquired about in this study:

- Speakeasy
- UBC Mental Health Awareness Club
- UBC Counselling
- Sexual Assault and Support Centre (SASC)
- The Kaleidoscope

Social connection variables:

- *Friendships/acquaintances made:* At the end of the term (November-December 2016), students were asked how many new friends and acquaintances they had on-campus.
- *Friendships/acquaintances expected:* Students were asked at the beginning of the term (August-September 2016) how many new friends and acquaintances they expected to make on-campus during their first 3 months at UBC.
- *Discrepancies between the number of friendships/acquaintances made vs. expected:* A difference score was used to evaluate how making less friends or acquaintances than expected would affect suicidality (e.g., made friendships – expected friendships).

Table 8. Correlations between Suicide Ideation and Mental Health Resources and Social Connection Variables

	Suicide Ideation Aug/Sept 2016	Suicide Ideation Nov/Dec 2016	Increase in Suicide Ideation from Aug/Sep 2016 to Nov/Dec 2016
Awareness of at least one MHR	.09**	.02	-.01
Visited at least one MHR	.18*	.15*	.12*
Number of friendships made ¹	-.03	.00	-.06
Number of acquaintances made ¹	-.05	-.08*	-.04
Number of expected friendships ²	-.05	-.03	-.01
Number of expected acquaintances ²	-.01	.04	-.03
Discrepancy in friendships ³	.04	.02	-.03
Discrepancy in acquaintances ³	.01	-.10*	-.01

Note. Correlations below $|.3|$ are generally considered small; * indicates $p < .05$.

MHR = mental health resource

¹Reported in Nov/Dec 2016.

²Reported in Aug/Sept 2016.

³Difference score between expected and made friendships.

For dichotomous demographic variables, point-biserial correlations with suicide ideation were reported.

Table 9. Correlations between Suicide Attempts and Mental Health Resources and Social Connection Variables

	Lifetime Suicide Attempts Assessed at Aug/Sept 2016	Lifetime Suicide Attempts Assessed at Nov/Dec 2016	Attempts Between Aug/Sep 2016 and Nov/Dec 2016
Awareness of at least one MHR	.01	.06*	<.01
Visited at least one MHR	.13*	.14*	-.02
Number of friendships made ¹	.06	.00	.01
Number of acquaintances made ¹	.02	.03	.03
Number of expected friendships ²	-.01	.04	-.07*
Number of expected acquaintances ²	.02	.10**	-.02
Discrepancy in friendships ³	.00	-.01	.14*
Discrepancy in acquaintances ³	-.06	-.06	.08*

Note. Correlations below $|.3|$ are generally considered small; * indicates $p < .05$.

MHR = mental health resource.

¹Reported in Nov/Dec 2016.

²Reported in Aug/Sept 2016.

³Difference score between expected and made friendships.

Point biserial correlations were utilized for associations between attempt status and dimensional variables, and phi coefficients were utilized for associations between attempt status and categorical variables.

Study 1 Summary

- Upon arrival at UBC, 19% of first-year students reported having experienced suicide ideation in their lifetime, and 3.5% reported having made a suicide attempt (Table 1).
- During their first term at UBC, 7% of students reported considering suicide, and 0.6% (11 of 1755 participants) reported making a suicide attempt. For 8 of these students, it was their first attempt (Table 3).
- There was a small statistically significant increase in rates of suicide ideation between the beginning and end of the first term (Tables 4 and 5).
- In general, demographics, quantity of relationships, commuting or living on-campus, and awareness of mental health resources were not related to suicidality (Tables 8 and 9).
- Students reporting a minority sexual orientation or a disability were more likely to report suicide ideation and attempts (small association, see Tables 7 and 8; for disability status and type see Appendix 1).

Study 2

Suicide Ideation and Attempts:
Stressors and Social Anxiety

Introduction

This follow-up study examined two additional potential correlates of suicide ideation among first-year undergraduate students: academic stress and social anxiety. In addition, comments from participants about how UBC can improve the transition to university were obtained and are included in Appendix 2.

For this study, students were recruited from the Department of Psychology's Human Subject Pool (HSP) System. HSP allows students enrolled in psychology courses to participate in research studies in exchange for course credit. Although HSP allows students from all years to participate, this study only included first-year undergraduate students. Thus, this sample may be representative of UBC first-year undergraduates who take psychology courses and participate in studies for credit, but not the larger population of UBC first-year undergraduates.

Objectives

1. Investigate how academic stress relates to suicide ideation among first-year undergraduates.
2. Investigate how social anxiety symptoms relate to suicide ideation among first-year undergraduates.

Student Respondents

This study included 146 students recruited from the Psychology Department HSP who completed an online survey about stressors, social anxiety, and suicidality during their second term on the UBC Vancouver campus (January 2018-February 2018).

Students' ages ranged from 16 to 20 years old. 42% were international students and 57% were domestic students. More female students (78%) completed this online survey than male students (20%). Most students reported being heterosexual (80%) and the remaining reported being either non-heterosexual or gender questioning (19%).

Sample Characteristics: Suicide Ideation, Plans, and Attempts

Table 10. Lifetime History (Assessed Jan/Feb 2018)

	Yes	No	Prefer not to answer	
<i>Have you ever seriously thought about killing yourself?</i>	35.6%	58.2%	6.2%	
<i>Have you ever made a plan about how you would kill yourself?</i>	16.4%	78.8%	4.8%	
<i>Have you ever tried to kill yourself?</i>	9.6%	87.0%	3.4%	
	0 times	1 time	2-3 times	Prefer not to answer
<i>How many times did you actually attempt suicide?</i>	126	7	7	6
	86.3%	4.3%	4.3%	4.1%

Table 11. Current “Wish to Die” (Assessed Jan/Feb 2018)

	Percentage of Students
<i>I have no wish to die</i>	74.0%
<i>I have a weak wish to die</i>	24.7%
<i>I have a moderate to strong wish to die</i>	1.3%

Table 12. Current “Desire to Kill Myself” (Assessed Jan/Feb 2018)

	Percentage of Students
<i>I have no desire to kill myself</i>	89.0%
<i>I have a weak desire to kill myself</i>	8.9%
<i>I have a moderate to strong desire to kill myself</i>	2.1%

Sample Characteristics: Stressors

Students were given a list of 27 tasks from the Academic Self-Efficacy subscale (Zajacova, Lynch, & Espenshade, 2005) which included academic, interpersonal, and other stressors. Students rated how stressful they perceived each task on a scale from 0 (*not stressful at all*) to 10 (*extremely stressful*).

Table 13. Most Common Stressors

Academic Stressor	Mean rating out of 10
<i>Doing well on exams</i>	8.95
<i>Having more tests in the same week</i>	8.87
<i>Getting the grades I want</i>	8.63
<i>Doing well in my toughest class</i>	8.32
<i>Writing term papers</i>	8.06
<i>Preparing for exams</i>	7.88
<i>Managing time efficiently</i>	7.78
<i>Asking questions in class</i>	7.18
<i>Getting papers done on time</i>	7.52
<i>Keeping up with required readings</i>	7.00

Objective 1: Stressors and Current Suicide Ideation

Table 14. Correlations Between Stressors and Current Suicide Ideation

Talking to college staff	.32**
My parents' expectations of my grades	.31*
Getting along with family members	.28*
Getting the grades I want	.26**
Asking questions in class	.25*
Making friends at school	.24*
Understanding professors	.23*
Talking to my professors	.22**
Finding time to study	.21*
Participating in class discussions	.21*
Doing well in my toughest class	.20*
Getting help and information at school	.19*
Improving my reading and writing skills	.18*
Keeping up with the required readings	.17*
Studying	.15
Doing well on exams	.15
Managing both school and work	.15
Having enough money	.11
Preparing for exams	.10
Having more tests in the same week	.10
Understanding my textbooks	.08
Understanding college regulations	.05
Researching term papers	.04
Writing term papers	.03
Taking good class notes	-.03
Managing time efficiently	-.00
Getting papers done on time	-.00

Note. Correlations below $|\ .3 |$ are generally considered small; * $p < .05$ two-tailed, ** $p < .01$

Objective 2: Social Anxiety and Suicide Ideation

Students completed a 3-question measure of social anxiety (MiniSPIN; Connor, Kobak, Churchill, Katzelnick, & Davidson, 2001).

Table 15. Correlations Between Social Anxiety and Suicidality

Current	
Suicide ideation	.24**
Lifetime	
Suicide ideation	.16*
Plan to attempt suicide	.07

Note. Correlations below $|.3|$ are generally considered small; * $p < .05$ two-tailed, ** $p < .01$

Study 2 Summary

- Students reported experiencing a range of stressors during their first year at UBC (Table 13).
- The stressors most predictive of suicide ideation were interpersonally orientated (e.g., parents' expectations of my grades, getting along with family) (Table 14).
- Endorsement of the stressor "Getting the grades I want" was modestly predictive of suicidal ideation (Table 14).
- Social anxiety symptoms among first-year undergraduate students were also modestly predictive of suicide ideation (Table 15).

Appendix 1: Study 1 Sample Characteristics

Table 17. Sexual Orientation

<i>What is your sexual orientation?</i>	Percentage of students
Heterosexual	53.2%
Gay/lesbian	1.2%
Bisexual	3.8%
Queer	0.7%
Unsure	2.2%
Other	1.2%
Prefer not to answer	1.1%
Missing data (n = 1062)	36.6%

Table 18. Disability Status

	Percentage of students
No disability	76.1%
At least 1 disability	23.9%

Table 19. Disability Type

	Percentage of students
Physical	0.5%
Vision	5.5%
Hearing	0.2%
Mental health	7.1%
Neurological (learning disability, ADHD, etc.)	43.0%
Chronic health	34.0%
Other	28.0%

Note. Due to students identifying with multiple disability types, the total percentage exceeds 100%.

Appendix 2: General Student Feedback Transitioning to University

Students were asked: “How can the university better support first-year undergraduates transitioning into university? Any feedback is welcome – from academics, social life, resources, to policy.” Some comments from students are included below to illustrate suggestions, concerns, or praise in regards to their transition to UBC.

Students expressed concerns about cultivating new friendships during their transition to UBC.

“Making new friends is tough and I found that to be the most stressful part of my university life so far.”

“I felt that getting to know people is easy but making friends is very hard. Normally I’m a very easy person to be friends with and so it’s so easy for me to make friends, however, it is being really hard at UBC. ... I simply feel it’s so hard to get to have that deep connection with people simply because UBC is a very impersonal uni[versity], you see someone in a course and it never becomes anything else than a classmate.”

“As a domestic student, I originally thought it would fairly easy to make friends however that doesn’t seem to be the case. ... making friends has seemed to be a difficult task, even now being almost 5 months into school”

Students suggested more social opportunities may help ease their transition to UBC.

“The university can help better support first-year students by creating more events and publicizing them to interact with the students on a social level”

“I think it would be very helpful to have more bonding activities in each faculty because it is quite hard to make friends at times, especially if you miss the first (and only) faculty event meant for first-years to get to know each other.”

“Have more social events for commuters.”

“More orientation events for domestic students to encourage socialization with students within and between faculties”

Students proposed that having an upper-year mentor would help address their concerns about university life.

“Provide a mentor in our transition to university as we may have troubles and questions but are afraid to ask.”

“For second years to be kind of like a mentor for first-year, someone they can talk to and ask questions regarding the university.”

Students expressed concerns about accessing academic resources.

“I think if the university is able to provide a bit more guidance in how to choose courses and how this is important especially in how it reflects on upper year courses. This would really help as most first-year students are not sure exactly how important this process is.”

“Provide lots of resources for planning the courses based on chosen major.”

“It would be helpful if we can have easy access to academic resources and policies.”

Students recognized the presence of mental health resources, but raised concerns about the accessibility or awareness of these resources.

“I’m sure there are support systems in place for people to go to if there’s a need but I think the support should be emphasized and more ‘promoted.’”

“I think it would be helpful if it was made clearer what mental health support was available and how to get the support you might need. What is available to me didn’t seem very obvious.”

“Making seeking out counseling easier. I tried to see someone at the end of December during exams and no one was available. I think you should make more people available during these high-stress times like exams.”

“I think maybe more clarity about what mental health resources are available and how to access them would be helpful.”

“Making sure students know what kind of resources are available to help them through their physical and mental health. Most students, including myself, have no idea what is there for us and what procedures we need to take in order to be able to benefit from them.”

Other students suggested different kinds of efforts to aid the transition to UBC.

“Provide a variety of resources, workshops and activities to help students cope with stress, relieve stress, and events that engage students with other upper year students where they can provide advice to succeed in university.”

“Better support for living a healthy lifestyle. Affordable exercise programs and better food options.”

“Offering more talks or seminars about mental health is important because the transition to university can be difficult.”

“Bring up mental health support available at UBC during the assemblies on Imagine Day to promote awareness and letting people know that there are resources available. Have instructors mention the importance of mental health, especially prior to exams.”

“Perhaps have professors or TAs be more acknowledging and understanding of those who suffer from mental illness”

“UBC representatives could do YouTube videos or talk at high schools about what university might be like. The hardest part of transitioning to university is not knowing what to expect at all. Having a better overall knowledge may help the transition.”

Students praised UBC’s existing efforts to assist first-year undergraduates with their university transition.

“As an international student, I find the jumpstart was very helpful to get to know the campus and life in Vancouver. ... I am currently in [Coordinated Arts] program, and I feel this is also very helpful. Because 3 courses in the program move at similar pace, and also because all 3 professors are in touch, they arrange exam schedules to be not overlapped. Because all students in the program take the same 3 courses, we can get to know each other well and can befriend [each other] very easily.”

“From my experience, transitioning into university at UBC has been a wonderful, hiccup-less experience. ... I think living on campus ... has a lot to do with that, because I can’t say the same for my friends who live off-campus.”

“Like Imagine Day, small groups to welcome new students. It is very stressful to enter knowing nobody. A more inclu[sive] feeling would be good, it feels like I’m solely coming to school to learn and not actually have a well rounded good time.”

“I think UBC does a pretty good job. I attended Jumpstart, which I think was really integral to my transition. I’m in the Coordinated Arts Program, and having classes with the same 100 people has helped, too. I think it’s really up to students to attend/take advantage of these support systems, and not everyone does.”

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