

# Co-Occurrence of Self-Damaging Behaviours in University Students Over 8 Months: Are Sexual Minority Students More at Risk?



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## Introduction

- Sexual minority (SM) undergraduates experience higher rates of self-damaging behaviours (i.e., self-injurious thoughts and behaviours [SITB], disordered eating [DE], and substance use [SU]) than non-SM students (e.g., McCabe et al., 2003; Schell et al., 2018).
- These three classes of self-damaging behaviours carry a high potential for physical harm and frequently co-occur, often resulting in complex clinical management, worse prognosis, and heightened health care costs (see Leblanc, 2014; see Turner et al., 2013).
- Yet, no studies have looked at whether SM undergraduates are more vulnerable to multiple self-damaging behaviours than non-SM students.

## Research Questions

- Do SM students engage in more SITB, DE, and SU in their first year of university than non-SM students?
- Does SM status predict the co-occurrence of self-damaging behaviours over time in first-year university students?
- Do SM students engage in greater numbers of self-damaging behaviours than non-SM students?
- Are SM students more at risk for cross-class co-occurring self-damaging behaviours than non-SM students?

## Methods

**Sample:** 307 non-SM and 49 SM first-year undergraduates at UVic

**Measures:** Self-reports, 7 time points (October – April 2018)

**Class 1:** SITB (SITBI; Nock, Holmberg, Photos, & Michel, 2007)

- Non-suicidal self-injury, suicidal ideation

**Class 2:** DE (EDDS; Stice, Telch, & Rizvi, 2000)

- Purging, fasting, binge eating

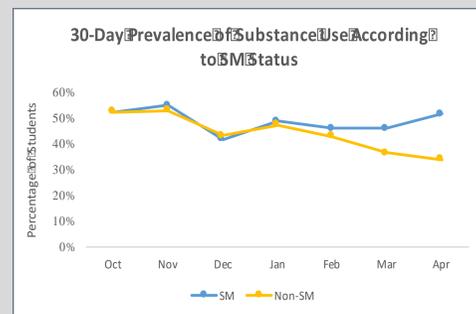
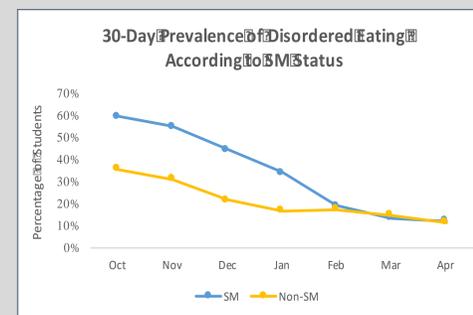
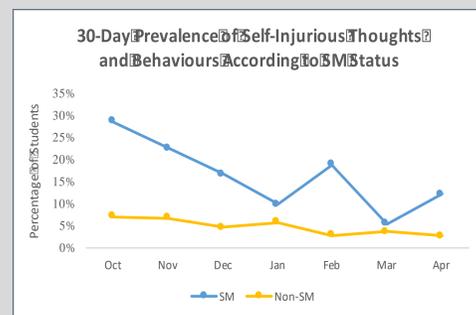
**Class 3:** SU (AUDIT; Saunders et al., 1993; DUDIT; Berman et al., 2003)

- Binge drinking, drug use (marijuana, illicit, prescription)

**Analyses:** SPSS 23

- Crosstabs and Chi-Square Tests of Independence
- Linear Multilevel Modeling
- Independent T-Tests
- Crosstabs and Chi-Square Tests of Independence

## Results 1



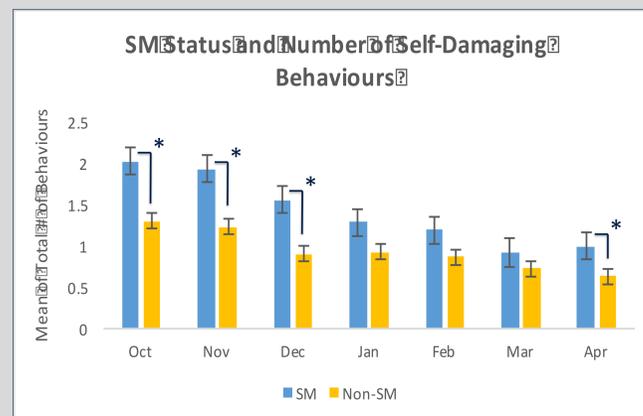
- SM students reported more:
- SITBs in their first year ( $\chi^2 = 6.45$  to  $18.38$ ,  $ps < .05$ ), except in January and March ( $\chi^2 = .25$  to  $.96$ ,  $ps > .05$ ).
  - DE in their first semester of study and in January ( $\chi^2 = 6.81$  to  $8.64$ ,  $ps < .05$ ).

There were no significant differences between SM students and non-SM students' self-reported SU in their first year of study ( $\chi^2 = .001$  to  $3.78$ ,  $ps > .05$ ).

## Results 2 & 3

A Linear Multilevel Analysis revealed:

- A fixed effect of SM status, where SM students reported significantly more co-occurring self-damaging behaviours ( $M=1.44$ ,  $SD=1.48$ ) in their first year than their heterosexual counterparts ( $M=.96$ ,  $SD=1.08$ ;  $\beta = -.753$ ,  $t(873) = -3.651$ ,  $p < .001$ )
- A fixed effect of time, indicating that rates of co-occurring behaviors declined over the course of the year ( $\beta = -.170$ ,  $t(1244) = -4.145$ ,  $p < .001$ ).
- No interaction effect between SM status and time ( $\beta = .058$ ,  $t(1245) = 1.304$ ,  $p = .192$ ).



- Independent T-Tests showed:
- SM students experienced greater numbers of co-occurring behaviours than their non-SM counterparts in their first semester of study as well as in their last month of first year ( $ts = -2.11$  to  $19.60$ ,  $ps < .05$ ).

## Results 4

Cross-Class Co-Occurrence	% SM Students	% Non-SM Students
SITB + DE	3.0 – 23.8	0.9 – 3.2
SITB + SU	3.0 – 21.4	0.9 – 5.9
DE + SU	7.2 – 39.0	6.9 – 21.2
SITB + DE + SU	2.7 – 21.4	0.5 – 2.8

*Note.* N(Oct) = 299. N(Nov) = 294. N(Dec) = 250. N(Jan) = 269. N(Feb) = 249. N(Mar) = 254. N(Apr) = 222. SM = Sexual Minority. SITB = Self-Injurious Thoughts and Behaviours. DE = Disordered Eating. SU = Substance Use.

- SM students were at greater risk for co-occurring:
- SITB and DE ( $\chi^2 = 6.79$  to  $35.90$ ,  $ps < .05$ ) and all three classes of self-damaging behaviours ( $\chi^2 = 8.33$  to  $38.15$ ,  $ps < .05$ ) in their first term of study only.
  - SITB and SU in their first term of study ( $\chi^2 = 4.27$  to  $20.29$ ,  $ps < .05$ ), and in February ( $\chi^2 = 8.22$ ,  $p < .05$ ).
  - SU and DE in October ( $\chi^2 = 6.23$ ,  $p < .05$ ), December ( $\chi^2 = 7.72$ ,  $p < .05$ ), and January ( $\chi^2 = 6.43$ ,  $p < .05$ ).

## Conclusions

- SM students engage in significantly more self-damaging behaviours in first year than non-SM students.
- While SM and non-SM students report similar rates of SU, SM students have higher rates of co-occurrences that cross over classes of self-damaging behaviours.
- However, for both SM and non-SM students, rates of co-occurring behaviours seem to decline over the course of their first year of university, suggesting no difference in trajectory.
- The first term of study, known as a particularly stressful time for students, may be exacerbating SM students' risk for co-occurring self-damaging behaviours.

## References

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