



Introduction

- Structural social network characteristics – especially network size – have been shown to relate to mental health among immigrant populations (e.g., Fu & VanLandingham, 2012).
- Immigrant emerging adults may be particularly susceptible to mental health difficulties, given the developmental and social transitions from adolescence to young adulthood.
- We investigated the role of social networks in the mental health of immigrant and non-immigrant (Canadian-born) emerging adults in an online cross-sectional study.

Methods

Participants

- $N = 1280$ university students ($M_{age} = 19.10$, $SD = 1.50$)
- 75.5% women, 39.2% born outside of Canada

Measures

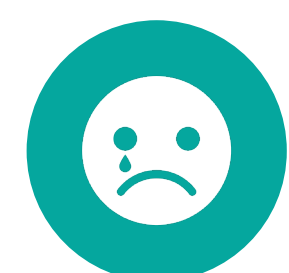


Anxiety symptoms

(GAD-7; Spitzer et al., 2006)

7 items rated on 4-point scale (0 = not at all to 3 = nearly every day)
 $\alpha = .91$

e.g., “Feeling nervous, anxious, or on edge.”



Depression symptoms

(CES-D-10; Andresen et al., 1994)

10 items rated on 4-point scale (0 = Rarely or none of the time (less than 1 day) to 3 = Most or all of the time (5-7 days))
 $\alpha = .84$

e.g., “I felt depressed.”



Egocentric Social Network Survey

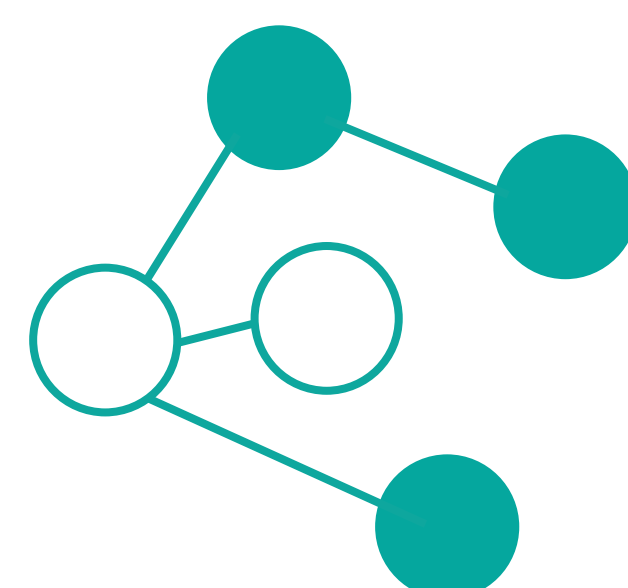
Participants nominated up to 20 people they regularly interact with at the school they are currently attending and outside of school.

Social Network Analysis

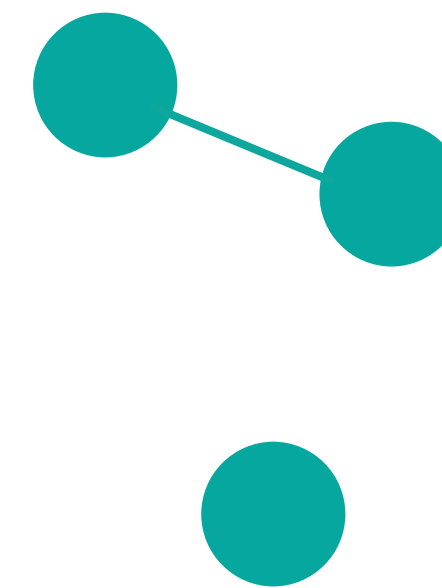
- Based on the ego and each alter’s country of birth, we created 2 subnetworks (i.e., immigrant, non-immigrant).
- We computed 3 network measures (i.e., size, density, Eigencentality).

● Immigrant alter

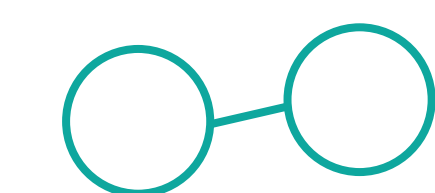
○ Non-immigrant alter



Full network



Immigrant subnetwork

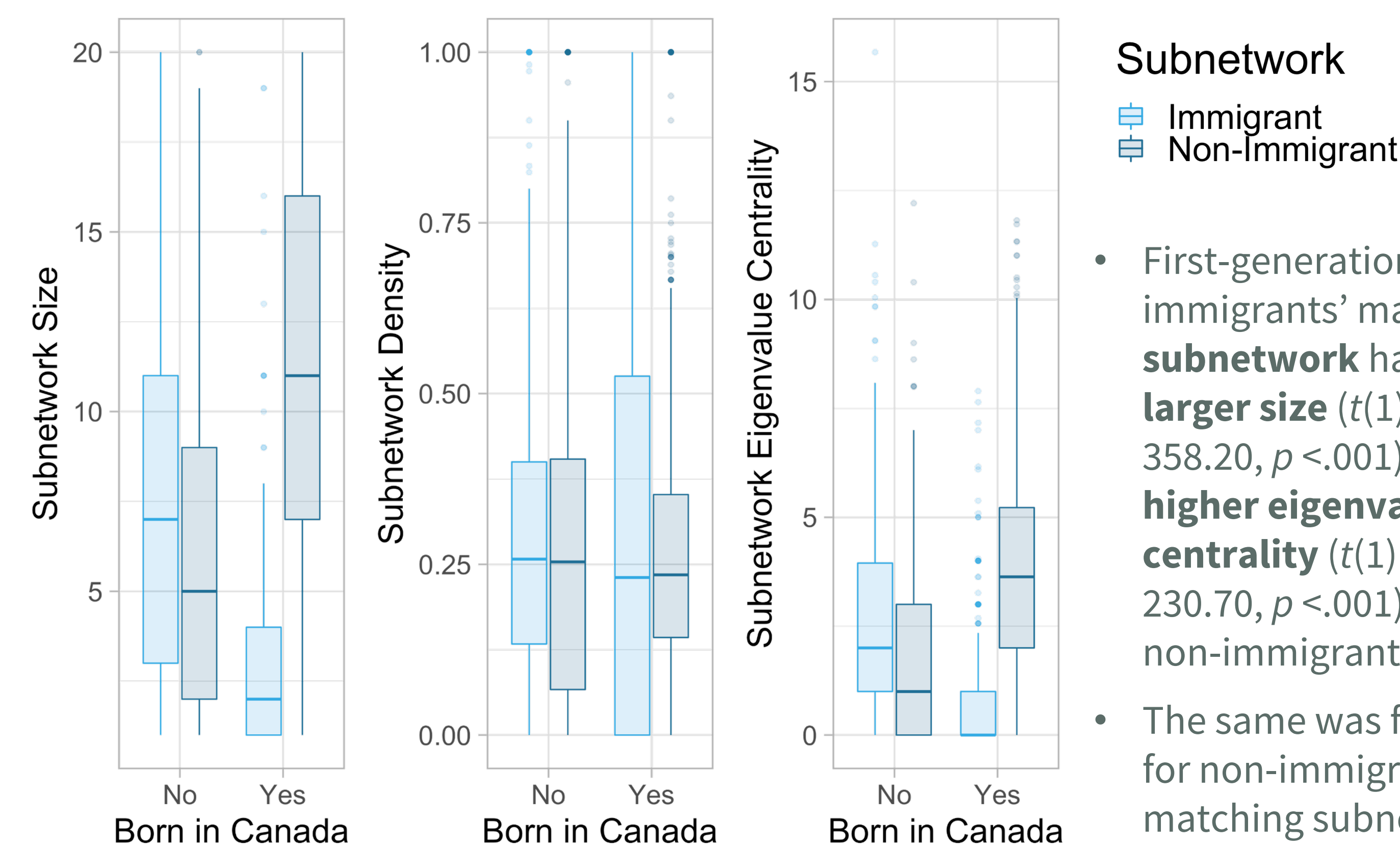
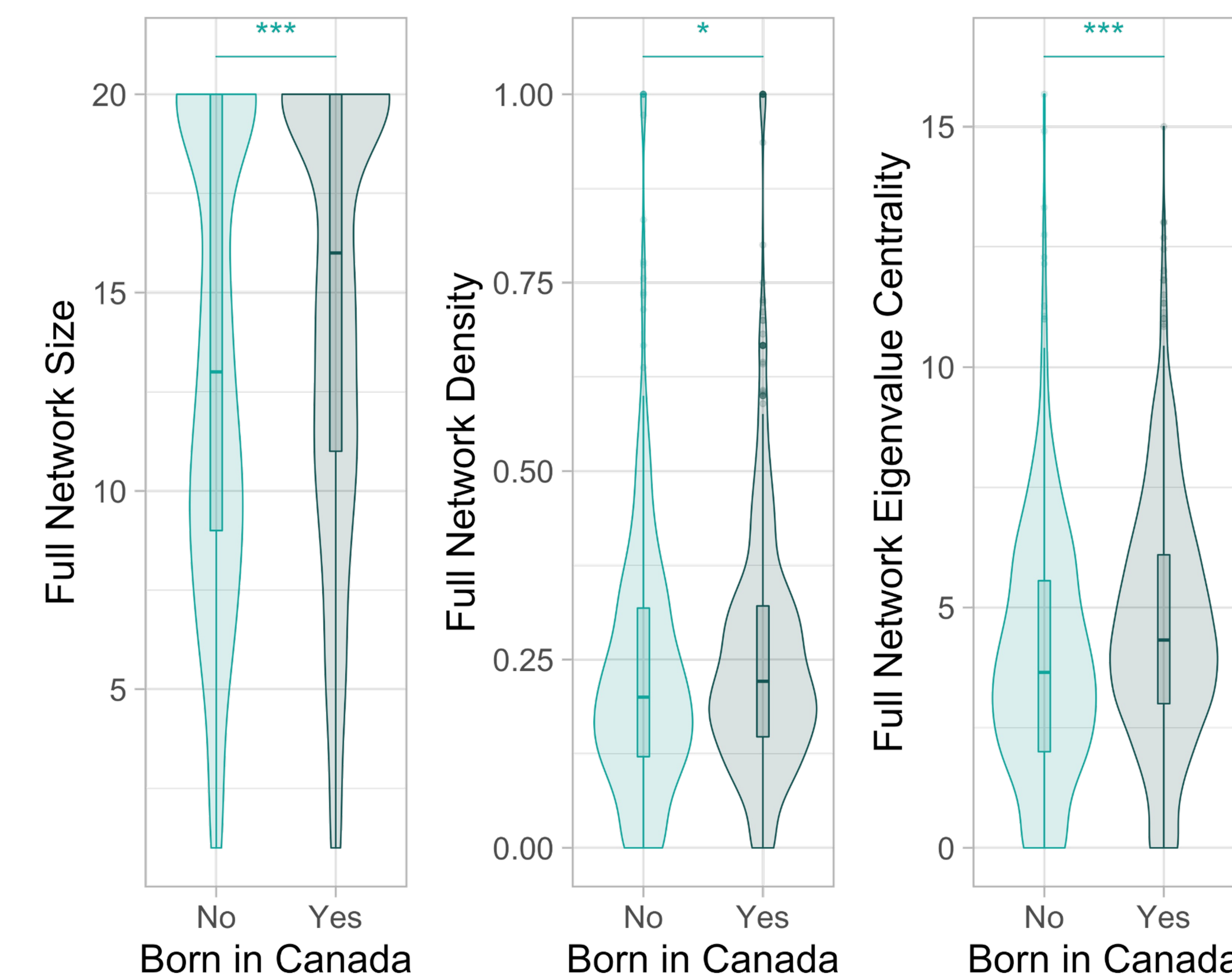


Non-immigrant subnetwork

How do immigrant and non-immigrant emerging adults differ in structural social network characteristics?

Compared to non-immigrant emerging adults, first-generation immigrants had **full networks** that had...

- **Smaller size** ($t(1) = 514.00$, $p < .001$)
- **Lower density** ($t(1) = 4.35$, $p = .04$)
- **Lower eigenvalue centrality** ($t(1) = 20.70$, $p < .001$)



Subnetwork

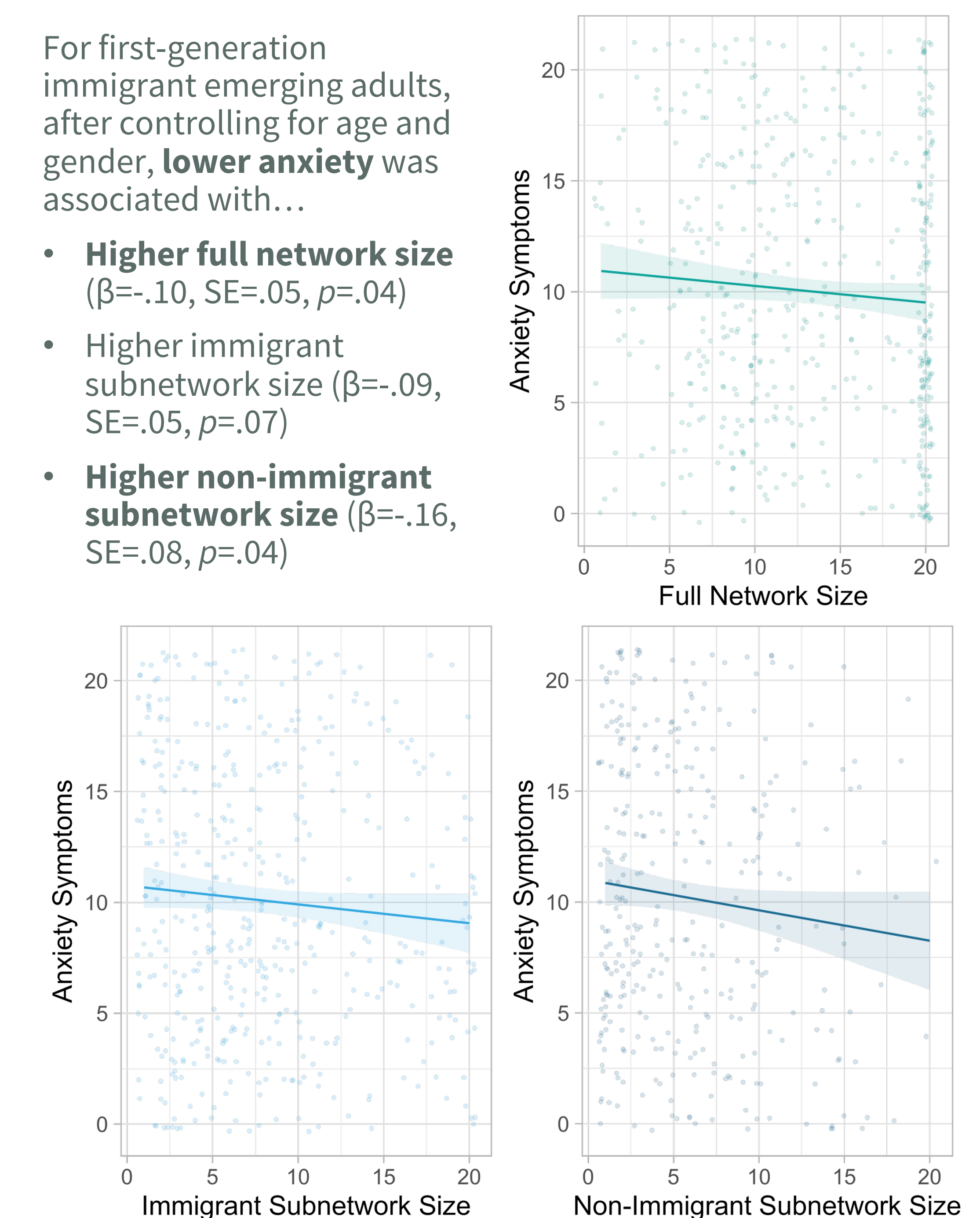
- Immigrant
- Non-Immigrant

- First-generation immigrants’ matching **subnetwork** had **larger size** ($t(1) = 358.20$, $p < .001$) and **higher eigenvalue centrality** ($t(1) = 230.70$, $p < .001$) than non-immigrants’.
- The same was found for non-immigrants’ matching subnetwork.

How are immigrant emerging adults’ social networks associated with mental health?

For first-generation immigrant emerging adults, after controlling for age and gender, **lower anxiety** was associated with...

- **Higher full network size** ($\beta = -.10$, $SE = .05$, $p = .04$)
- Higher immigrant subnetwork size ($\beta = -.09$, $SE = .05$, $p = .07$)
- **Higher non-immigrant subnetwork size** ($\beta = -.16$, $SE = .08$, $p = .04$)



- Anxiety was not significantly associated with full network, immigrant subnetwork, nor non-immigrant subnetwork density and eigenvalue centrality.
- Depression was not significantly associated with any structural network characteristics.

Discussion

- First-generation immigrant emerging adults had smaller, less interconnected, and less strongly influential social network than their non-immigrant peers.
- Consistent with existing literature, first-generation immigrant emerging adults’ overall network size and non-immigrant subnetwork size seemed to buffer against anxiety symptoms, after controlling for demographic variables.
- Taken together, our findings highlight the role of social network structure in the mental health of immigrant and non-immigrant emerging adults.

Selected References

Fu, H., & VanLandingham, M. J. (2012). Mental health consequences of international migration for Vietnamese Americans and the mediating effects of physical health and social networks: results from a natural experiment approach. *Demography*, 49(2), 393-424.
Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, 166(10), 1092-1097.

Acknowledgments

We are grateful to all participants for their valuable time and energy completing our study. We also thank the INSNA for the opportunity to present our work at Sunbelt 2022.



Social Sciences and Humanities Research Council of Canada

Conseil de recherches en sciences humaines du Canada



Canada