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The Role of Social Network Structure on Mental Health Among Immigrant and Non-Immigrant Emerging Adults



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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

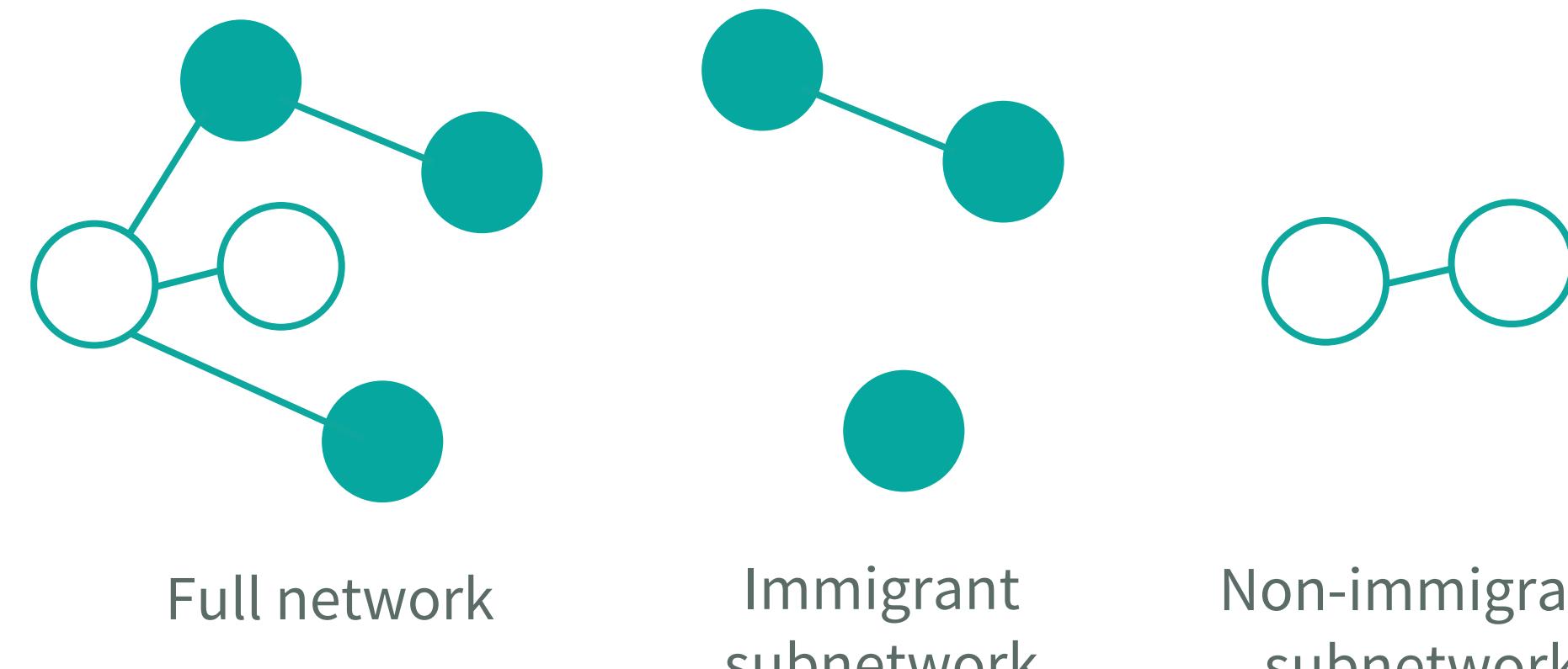
Participants nominated up to 20 people they regularly interact with at the school they are currently attending and outside of school.

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, Eigencentrality).

Immigrant alter

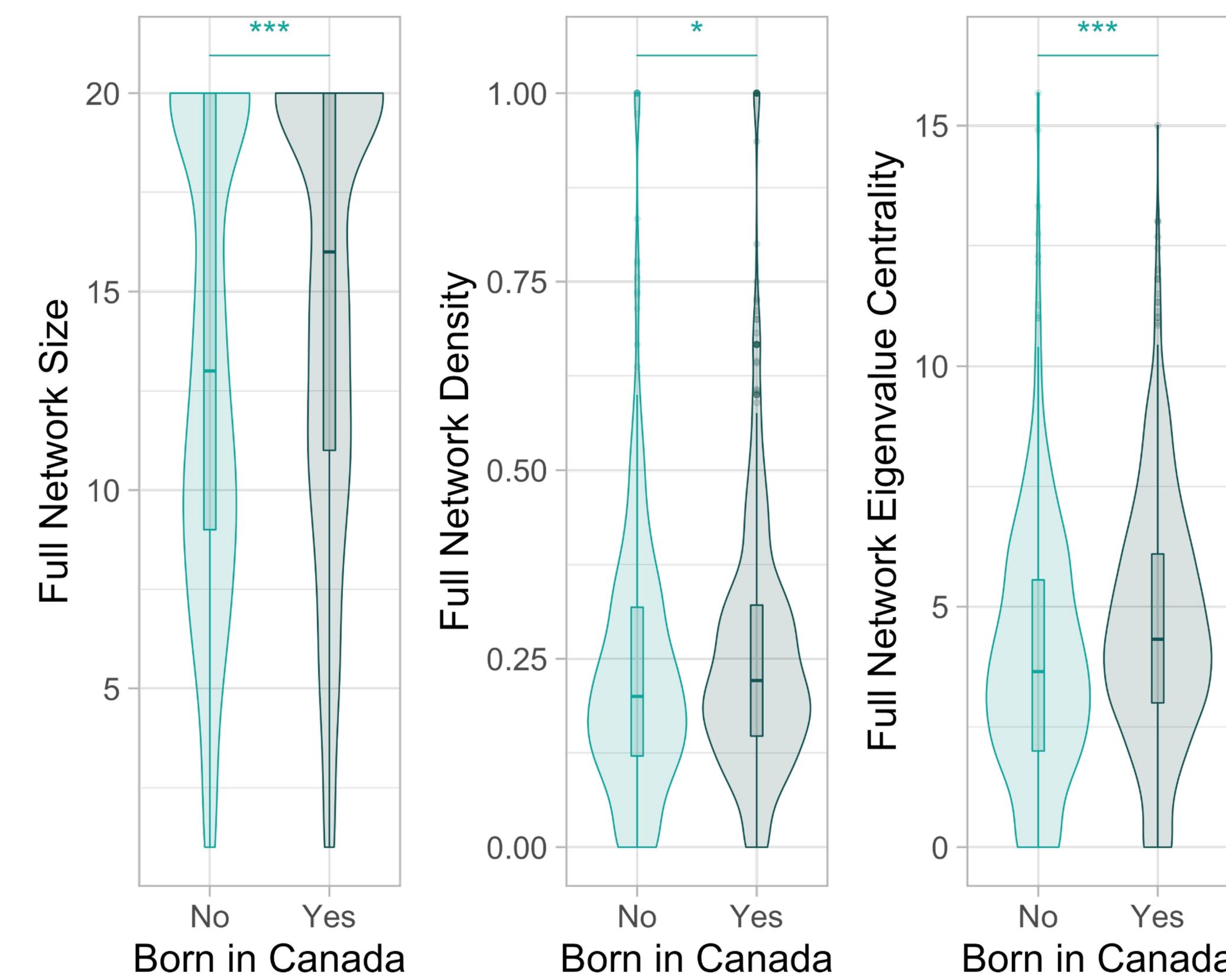
Non-immigrant alter



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...

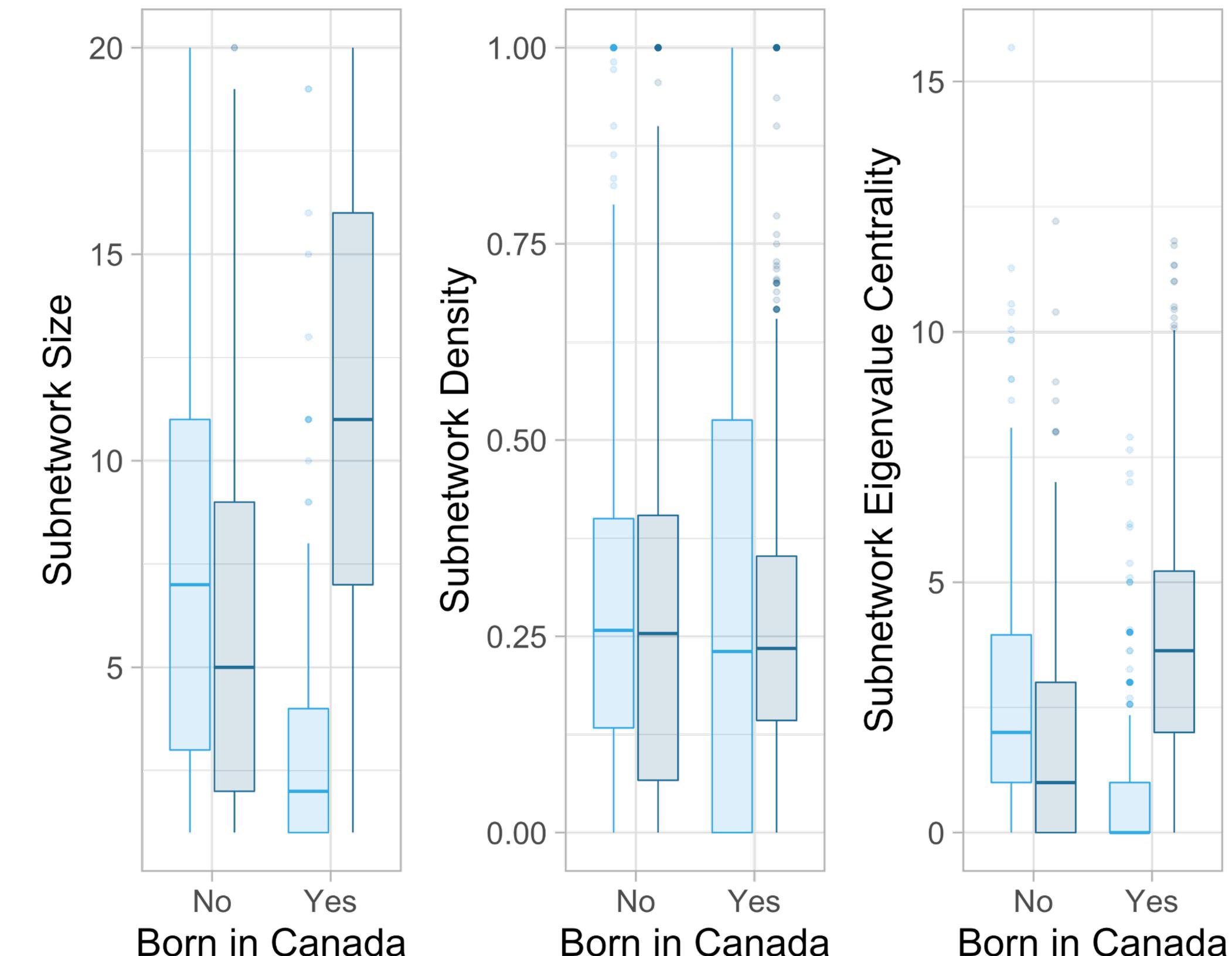
- Smaller size** ($t(1) = 514.00$, $p < .001$)
- Lower density** ($t(1) = 4.35$, $p = .04$)
- Lower eigenvalue centrality** ($t(1) = 20.70$, $p < .001$)



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.



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.

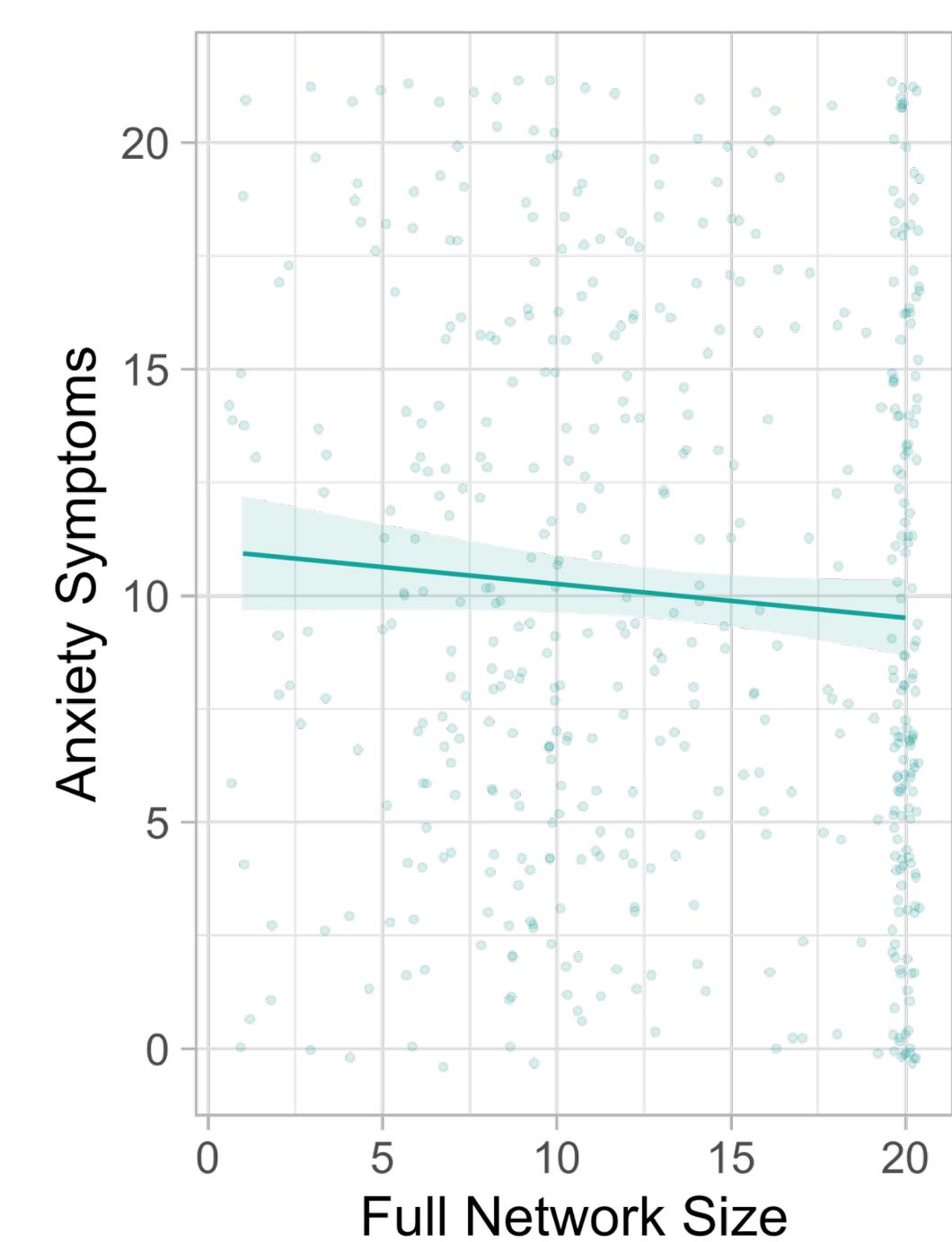
Selected References

- 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.

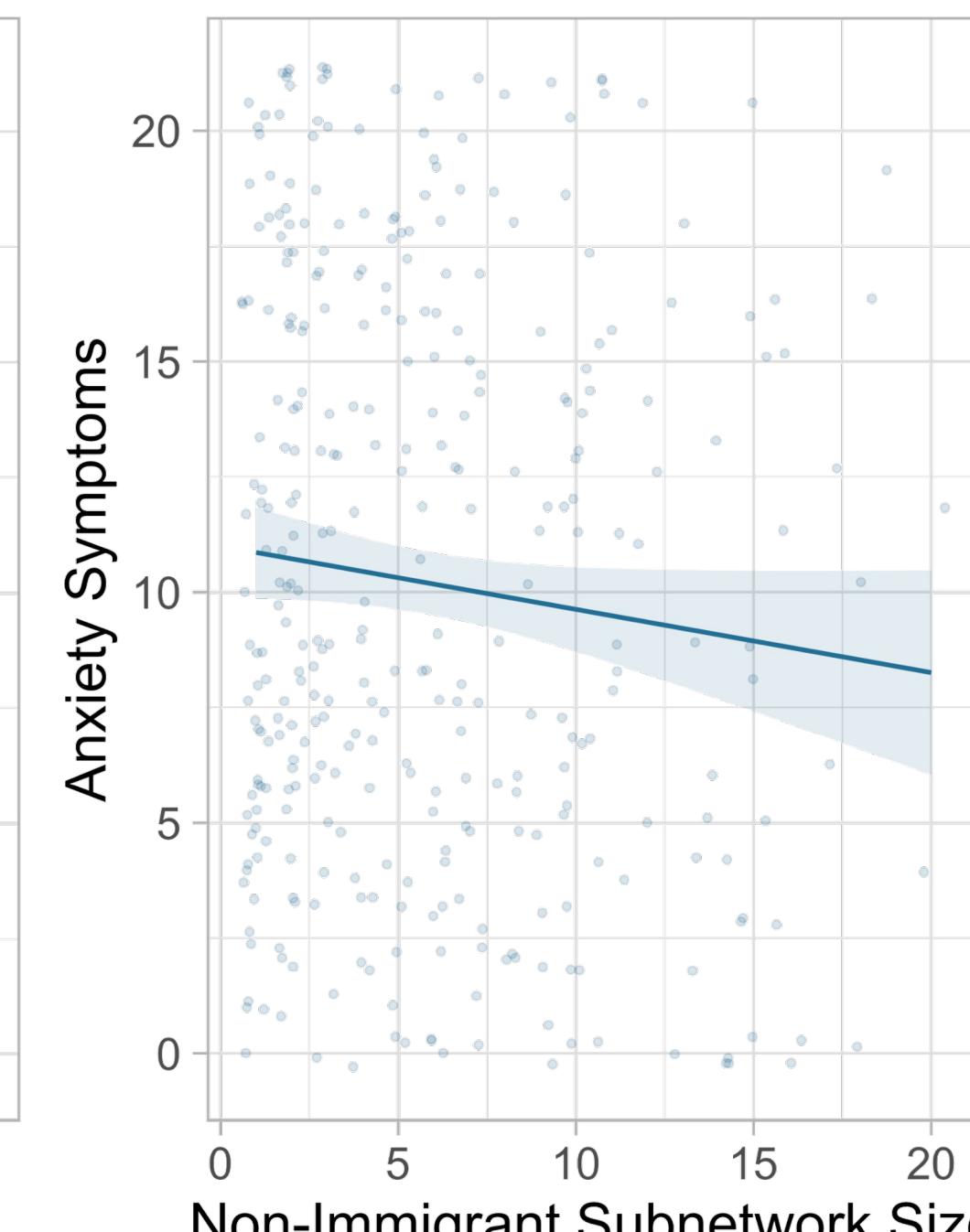
How are immigrant emerging adults' social networks associated with mental health?

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.



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