

# Determinants of Housing Satisfaction from an Evaluation of HIV-Specific Supportive Housing

Heather Burgess<sup>1</sup>, Shenyi Pan<sup>1</sup>, Taylor McLinden<sup>1</sup>, Julia Zhu<sup>1</sup>, Sharyle Lyndon, Bernice Thompson<sup>1</sup>, Kate Salters<sup>1</sup>, Allison Enjetti<sup>1</sup>, Robert S. Hogg<sup>1,2</sup>, Surita Parashar<sup>1,2</sup>

1. BC Centre for Excellence in HIV/AIDS, Vancouver, BC; 2. Faculty of Health Sciences, Simon Fraser University, Burnaby, BC

Contact: hburgess@cfcenet.ubc.ca

## Background

- Supportive housing provides on-site supports in subsidized housing facilities for individuals at risk of homelessness<sup>1</sup>
- Self-reported housing satisfaction is a key component of housing stability<sup>1</sup>
- Housing stability improves health and well-being for people living with HIV (PLHIV), including clinical outcomes, immune response, and treatment adherence<sup>2,3</sup>
  - Housing satisfaction may therefore contribute to HIV clinical outcomes
- Compared to structural factors, self-reported housing satisfaction is less recognized as a contributor to housing stability and physical and mental health outcomes

### Study Objectives

- Determine the sociodemographic correlates of housing satisfaction
- Identify the dimensions of which housing satisfaction questions are reliable indicators

## Methods

### Data Collection

- Data were collected from a longitudinal evaluation of a **congregate, supportive housing facility for PLHIV at risk of homelessness in Vancouver, Canada**
- Peer Research Associates conducted interviews at baseline (within 18 months of participants moving in) and 12 to 18 months follow-up
- 59 participants (62% of sample) were included in this analysis
- Self-reported measures of housing satisfaction were converted into a **five-level ordinal outcome variable measuring change in satisfaction** between baseline and follow-up.

Ordinal Outcome Categories				
1	2	3	4	5
Substantial negative change	Mild negative change	Almost no change	Mild positive change	Substantial positive change

### Data Analysis

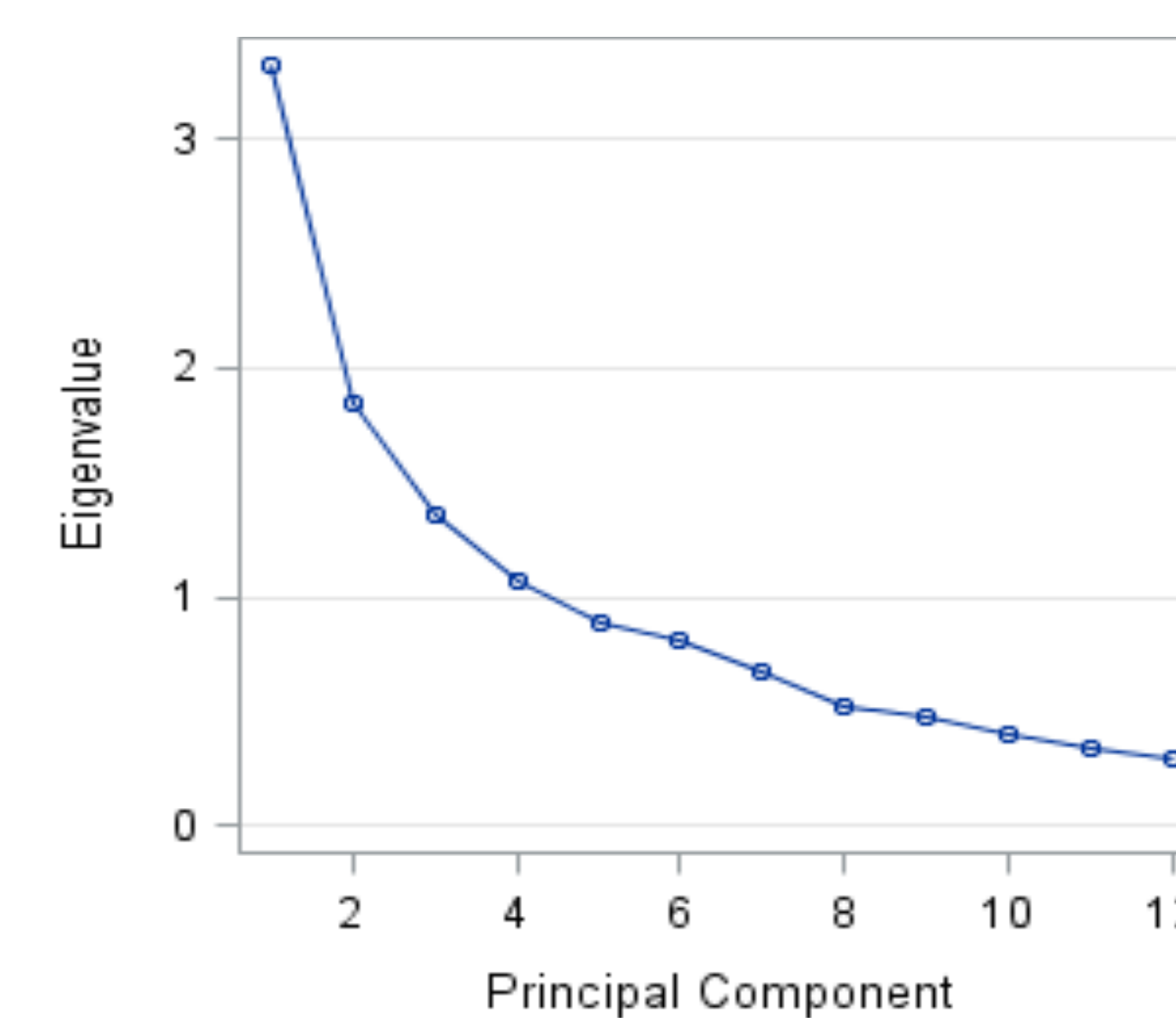
- Univariate ordinal logistic regression** was used to quantify the relationships between sociodemographic variables and change in housing satisfaction
- Odds ratios indicate odds of a lower ordinal outcome category, relative to the reference group
- Principal component analysis (PCA)** was conducted to identify groupings of variables that account for greatest variation within the data
- Principal components (PCs) with notably higher Eigenvalues accounted for greater variance, and were selected for interpretation
- Variables with component loadings  $\geq 0.3$  and  $\leq -0.3$  were included in PC interpretations

## Results

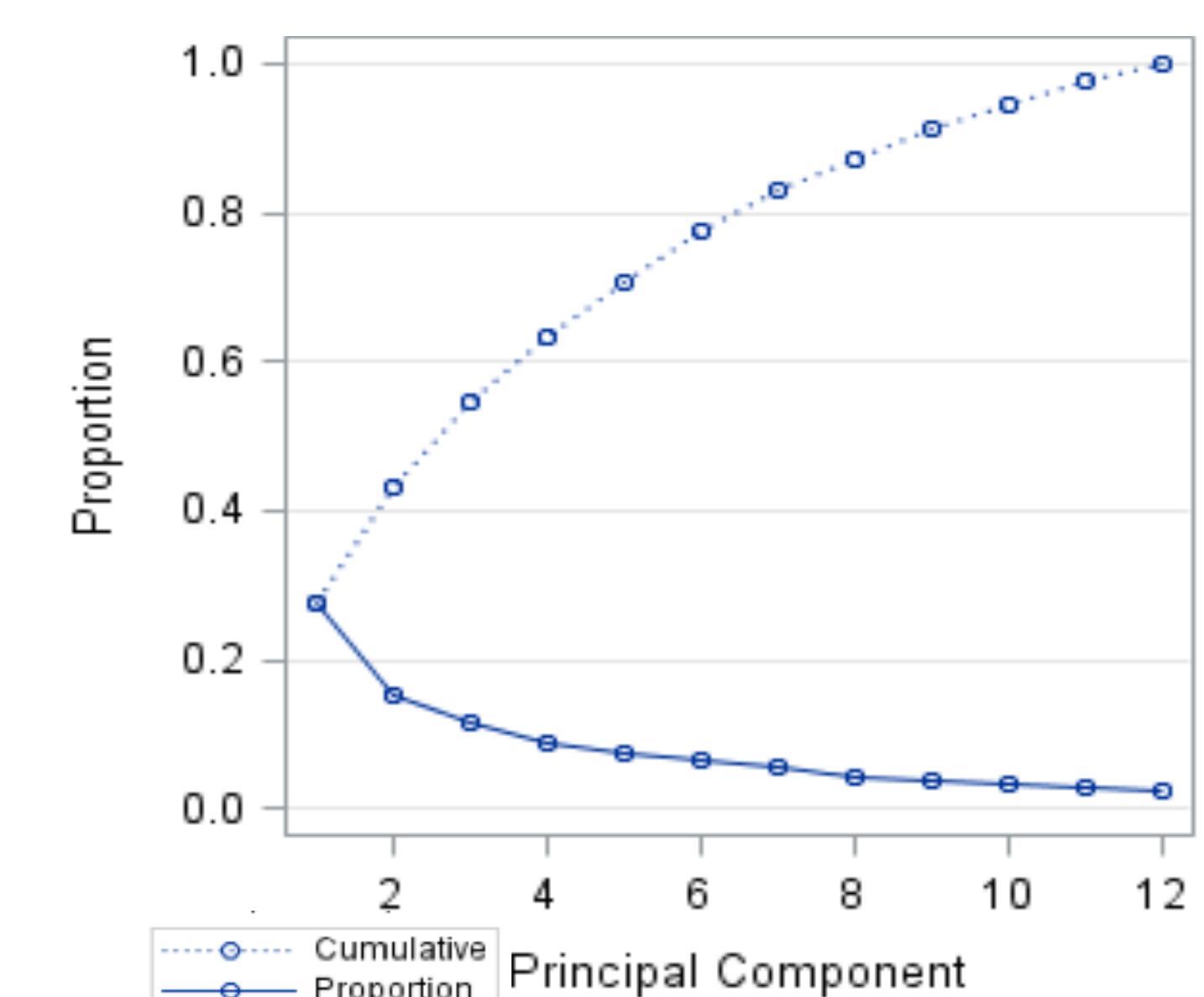
**Table 1. Univariate Ordinal Logistic Regression of Change in Housing Satisfaction (n = 59)**

	Odds Ratio (95% Confidence Interval)	P-Value
<b>Ethnicity</b>		
Caucasian	Reference	
Indigenous	1.29 (0.48, 3.51)	0.043
People of colour	0.21 (0.05, 0.96)	0.019
<b>Homelessness</b>		
No	Reference	
Yes	4.94 (1.29, 18.90)	0.020

**Figure 1. Scree Plot**



**Figure 2. Variance Explained**



**Table 2. PCA Results**

Principal Component	Eigenvalue	Variance Explained	Variables
1	3.32	27.70%	Entire residence; Pride in neighbourhood; Pride in showing visitors home; Life Skills workers
2	1.84	15.37%	Negative loading: Sense of belonging in neighbourhood & Location Positive loading: Inability to tolerate home; Life Skills workers; Support workers; Community Kitchen
3	1.36	11.37%	Home as a reflection of self; Control in the home
4	1.07	8.95%	Inability to tolerate being at home; Concern about being forced out

**Table 3. PCA Interpretation**

Principal Component	Housing Satisfaction Dimensions
1	Satisfaction with built environment
2	Satisfaction with accessibility of supports
3	Satisfaction with autonomy within facility
4	Satisfaction with perceived housing stability

## Discussion

### Summary and Implications

- People of colour (not including Indigenous peoples) had greater odds of more favourable changes in satisfaction, while participants with histories of homelessness had greater odds of less favourable changes in satisfaction
  - There may be differences in housing needs and expectations across ethnicities and housing histories
- Four main dimensions may be constructs of which housing satisfaction survey questions are indicators: the built environment, accessibility of supports, degree of autonomy in the facility, and perceived housing stability
  - These constructs may explain demographic differences in housing satisfaction

### Limitations

- Sample size limitations precluded multivariable modeling
- Further research is needed to control for confounders and associate principal components with relevant sociodemographic variables

### Acknowledgements

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