HIV TESTING BARRIERS IN STRUCTURALLY VULNERABLE COMMUNITIES IN ST. LOUIS: BEST-WORST SCALING SURVEY

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BACKGROUND

- Missouri was designated as a priority state in the Ending the HIV Epidemic Initiative.
- In 2021 in the St. Louis area, the rate of newly diagnosed HIV cases was 7.4 times higher among Black/African American people compared to White people.
- This illustrates the need for testing strategies that align with community preferences to overcome barriers to testing.

METHODS

- To understand community preferences, perceived risks, and barriers to HIV testing in the St. Louis region, we conducted a cross-sectional survey that utilized a Best-Worst Scaling (BWS) exercise.
- Individuals aged 16 years and older in the St. Louis region were eligible to participate. We recruited particularly among Black, queer, and young people,
- The BWS survey was used to score participants perceived significance of 13 potential barriers (attributes) to HIV testing where participants' chose most and least relevant barriers among 4 options across 13 choice sets (Figure 1)
- Mean Preference Weights (MPWs) calculated from were rescaled using Hierarchical-Bayes estimation (out of 100).
- Explored preference heterogeneity by comparing subgroups and using latent class conditional logit models

Figure 1. Best-Worst Scaling Instrument Choice Task

Choose the reason that would matter the MOST and the LEAST when deciding if you would get an HIV test.

I would get an HIV test, but... (*pick two different statements*)

	Matters Most	Matters Least
I am afraid of being HIV positive.	○	○
Someone with a medical background hasn't suggested an HIV test.	○	○
I don't know where to get an HIV test.	○	○
I don't know what the next steps are if I am HIV positive.	○	○

*Participants **did not believe they were at risk for HIV** or were **concerned about stigma or fearful of HIV positivity.***

RESULTS

Table 1. Participant characteristics (n=129)

Characteristic	N(%)
Age, median (IQR)	29.0 (24.0-37.0)
Gender identity	
Man	51 (39.5%)
Woman	68 (52.7%)
Non-binary or third gender	8 (6.2%)
Transgender	
Yes	7 (5.4%)
No	115 (89.1%)
Education	
Less than high school	7 (5.4%)
High school graduate or GED	31 (24.0%)
Some college/vocational	46 (35.7%)
Bachelor's degree or higher	43 (33.3%)
Race	
White	51 (39.5%)
Black or African American	62 (48.1%)
Other	12 (9.3%)
Relationship	
Single	82 (63.6%)
In a relationship/married	41 (31.8%)
Widowed/divorced/separated	5 (3.9%)
Sexual Orientation	
Straight or heterosexual	67 (51.9%)
Queer/gay/questioning/bi/pan	61 (47.3%)

- 76.0% felt they did not need an HIV test; 24% indicated they had never tested for HIV

The top 4 most relevant barriers to HIV testing were (Figure 2):

1) participant not thinking they were at risk for HIV (MPW: 13.86, 95% CI 12.54-15.19)
2) someone with a medical background not recommending testing (9.97, 95% CI 8.90-11.03)
3) worry about being stigmatized or shamed if HIV positive (9.65, 95% CI 8.48-10.83)
4) fear of testing positive for HIV (9.20, 95% CI 7.96-10.45)

Figure 2. Mean Preference Weights: Relative Importance of Barriers to HIV Testing

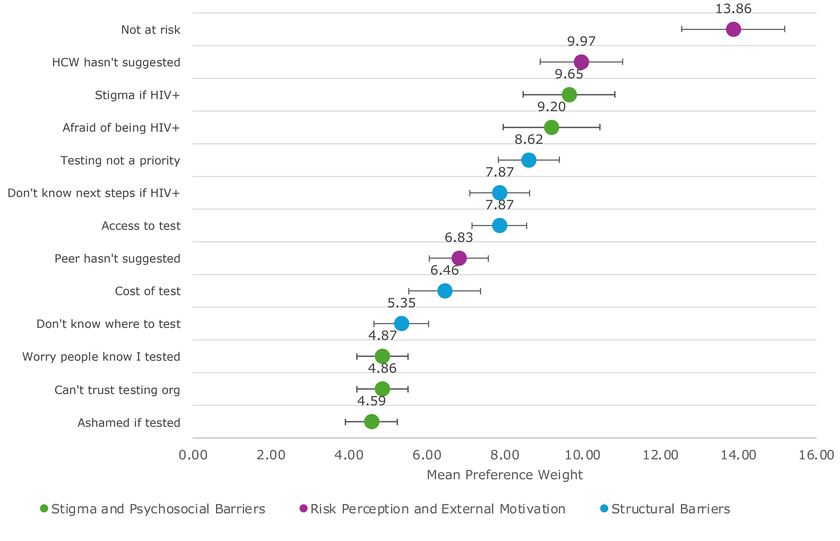
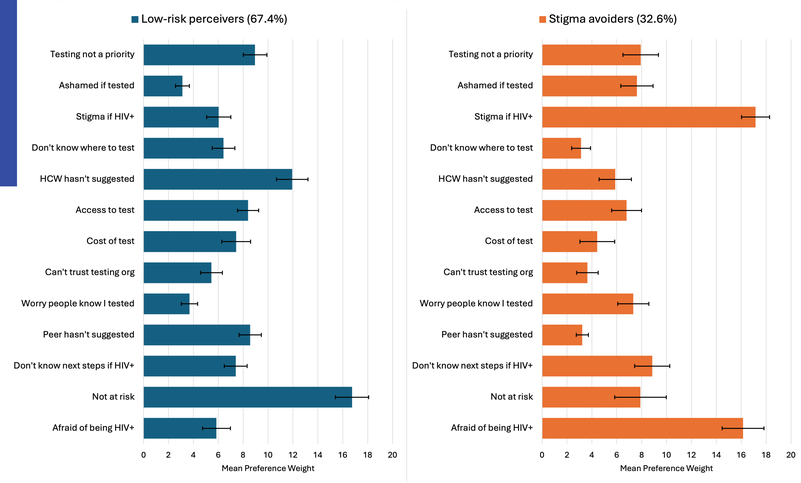


Figure 3. Mean Preferences Weights by Latent Class



Using latent class models, two underlying groups emerged (Figure 3):

1) "Low-risk perceivers" (67.4%) who selected low perceived risk for HIV (16.74, 15.41-18.07) and that testing had not been recommended by healthcare workers (HCWs) (11.94, 10.68-13.21)
2) "Stigma avoiders" (32.6%) who were worried they would be stigmatized if HIV positive (17.14, 16.03-18.26) and were afraid of being HIV positive (16.14, 14.46-17.82).

- Black participants selected distrust and lack of peer recommendations more than White participants (p=0.03, 0.003).
- Queer participants selected stigma, access issues, and fear of results more than heterosexual participants (p<0.001, 0.023, 0.004).

CONCLUSIONS

- Our BWS survey informed us of community preferences to HIV testing in the St. Louis region. Most participants reported that they believe they are not at risk for HIV, nor do they need an HIV test.
- Our results indicate the need for effective and evidenced-based education, outreach, and testing strategies that incorporate the perceptions and barriers of community members.

ACKNOWLEDGEMENTS

This work is supported by the Opportunity Fund through the Missouri Foundation for Health awarded to Dr. Virginia McKay. We would also like to thank our survey participants.

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