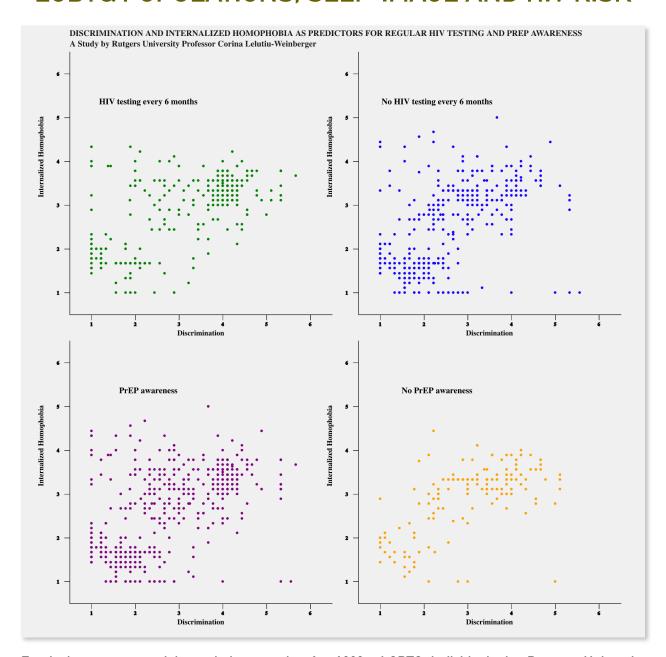
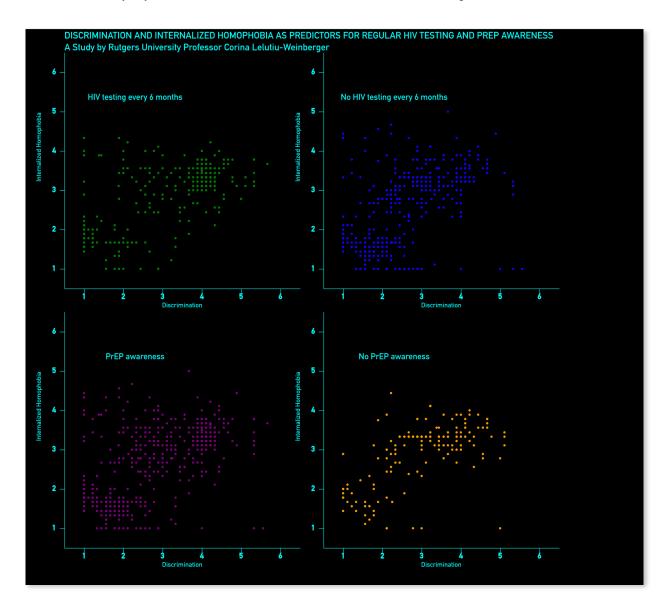
LGBTQ POPULATIONS, SELF-IMAGE AND HIV RISK



Employing a new social psychology study of 1000+ LGBTQ individuals by Rutgers University Professor Corina Lelutiu-Weinberger, this visualization explores the relationship between respondents' self-worth and HIV risk. Self-worth is represented in the data by two composite scores for: discrimination and internalized homophobia, as well as its own score. (Higher scores mean greater reported discrimination, internalized homophobia and self-esteem.) HIV risk is measured by two indicators: HIV testing every 6 months, and awareness of Pre-Exposure Prophylaxis (PrEP). (Both as 1/0 Booleans.) The visualization employs scatterplot and bar graph approaches to explore the relationships between the four variables.

Scatterplots

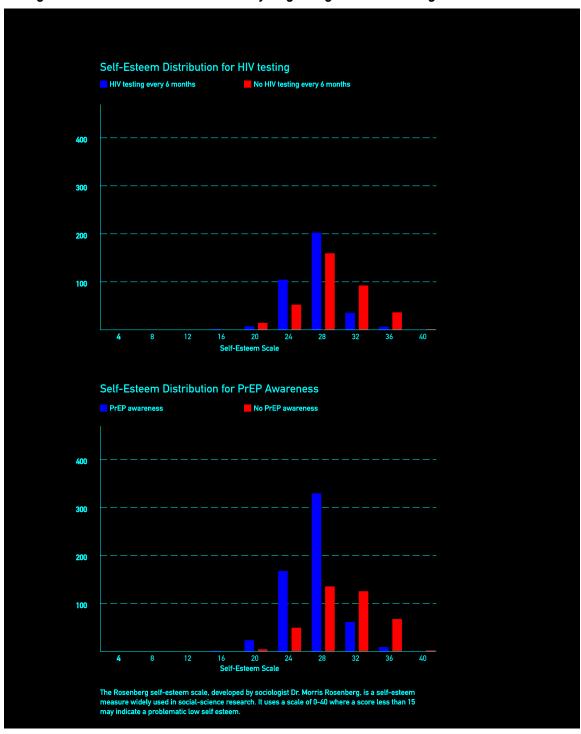
Four scatterplots (presented below in an alternative dark color scheme) visualize discrimination on the X axis and internalized homophobia on the Y axis, with health outcomes bound to data points representing HIV testing and Pre-Exposure Prophylaxis awareness. The upper pair of charts represent people who get HIV tests every 6 months (left) and those who don't (right). The lower pair of charts show people with PrEP awareness (left) and those without (right).



- The Discrimination score utilizes the Everyday Discrimination Scale, developed by Williams, D. R., Yu, Y., Jackson, J., & Anderson, N. (1997).
- The Internalized Homophobia score utilizes a scale developed by Herek, Gillis & Cogan (2009).

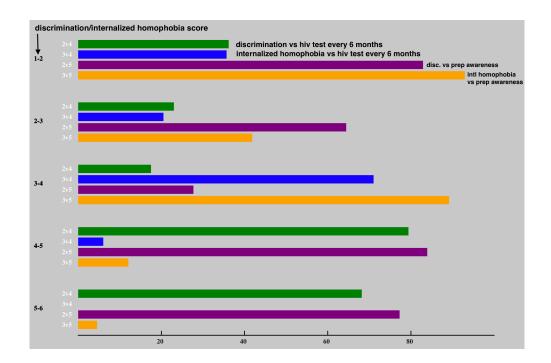
Self-esteem histograms

The next step was to plot histograms of the unused variable "self-esteem" based on the Rosenberg scale against HIV testing and Pre-Exposure Prophylaxis awareness. This process used Google sheets to make four histograms. These were later combined, and the resulting table visualized in p5. The non-professional takeaway from the histograms is that subjects with greater self-esteem are less likely to get regular HIV testing and be aware of PrEP.



Alternative visualizations

An initial bar graph explored the relationships of predictors discrimination and internalized homophobia by way of bar graphs that divide the 1-6 scores into buckets and plot the HIV testing and PrEP awareness.



Another scatterplot explores the relationship between discrimination, internalized homophobia, and self-esteem. Discrimination is on the X axis, internalized homophobia on the Y, while dot size represents self-esteem. Due to the high incidence of clustering, low transparency is employed to show as many circles as possible, but the closeness in circle size limited the effectiveness of this visualization.

