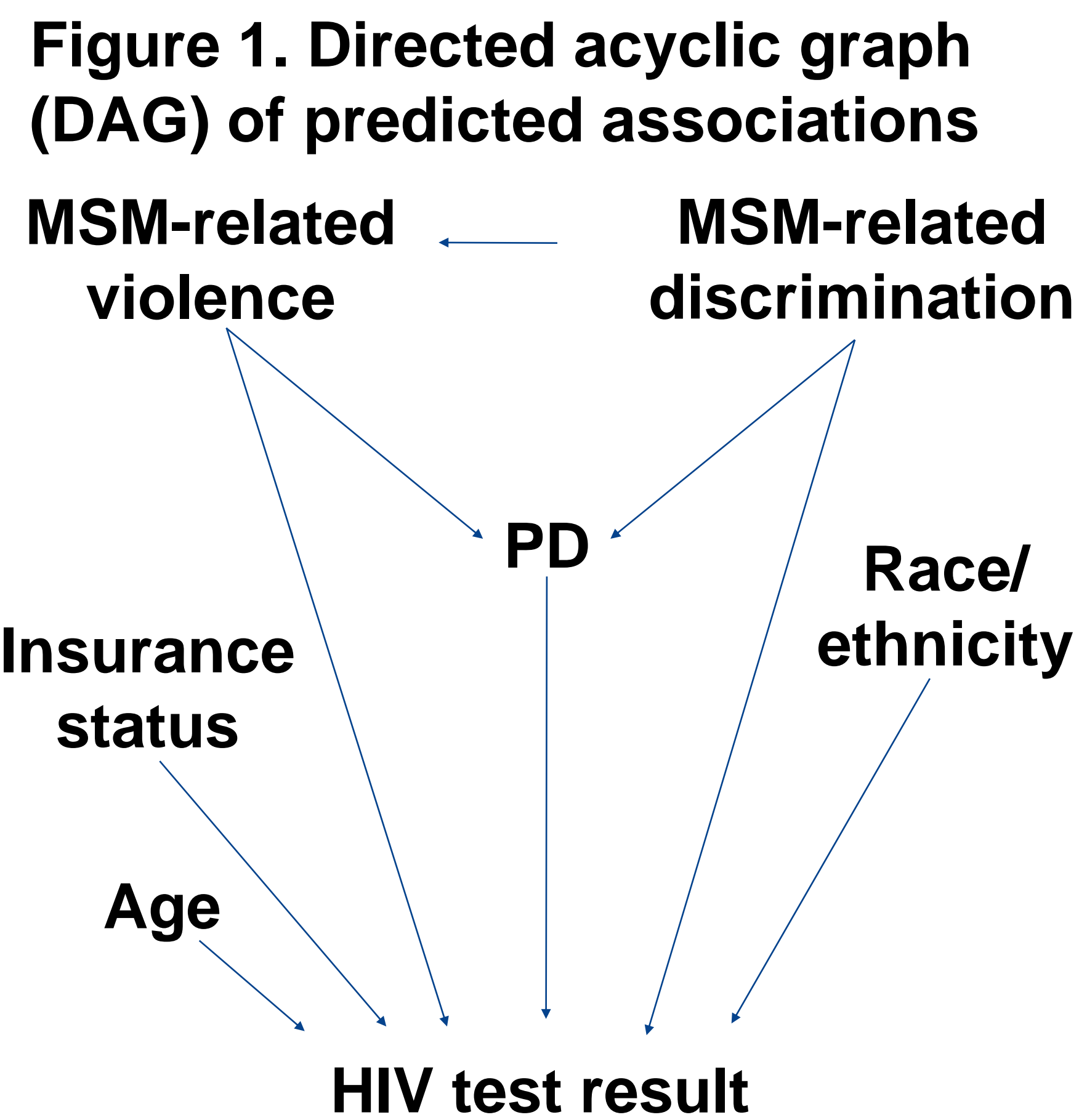


## Background

Gay, bisexual, and other men who have sex with men (MSM) are disproportionately impacted by HIV and thus a priority population for prevention services.

Each year, Memphis, TN ranks highest among U.S. cities' HIV diagnoses rates; MSM account for 70% of new diagnoses.

MSM-related discrimination, MSM-related violence, and severe psychological distress may influence engagement with HIV prevention services, which was assessed via analysis of 2017 National HIV Behavioral Surveillance (NHBS) data for Memphis-based MSM.



## Methods

Eligibility criteria to participate in NHBS-MSM2017 (8/17-12/17):

- Identify as cisgender male, ≥aged 18 years, and reported male-to-male sexual contact in their lifetime

Key variables:

- MSM-related violence: in lifetime, physically attacked or injured
- MSM-related discrimination: in lifetime, ≥1 report of verbal, poor service, mistreatment at work/school, health care discrimination
- Severe psychological distress (PD): Kessler-6 Scale score ≥13
- NHBS on-site rapid HIV test result

**Table 1. Analytic methods**

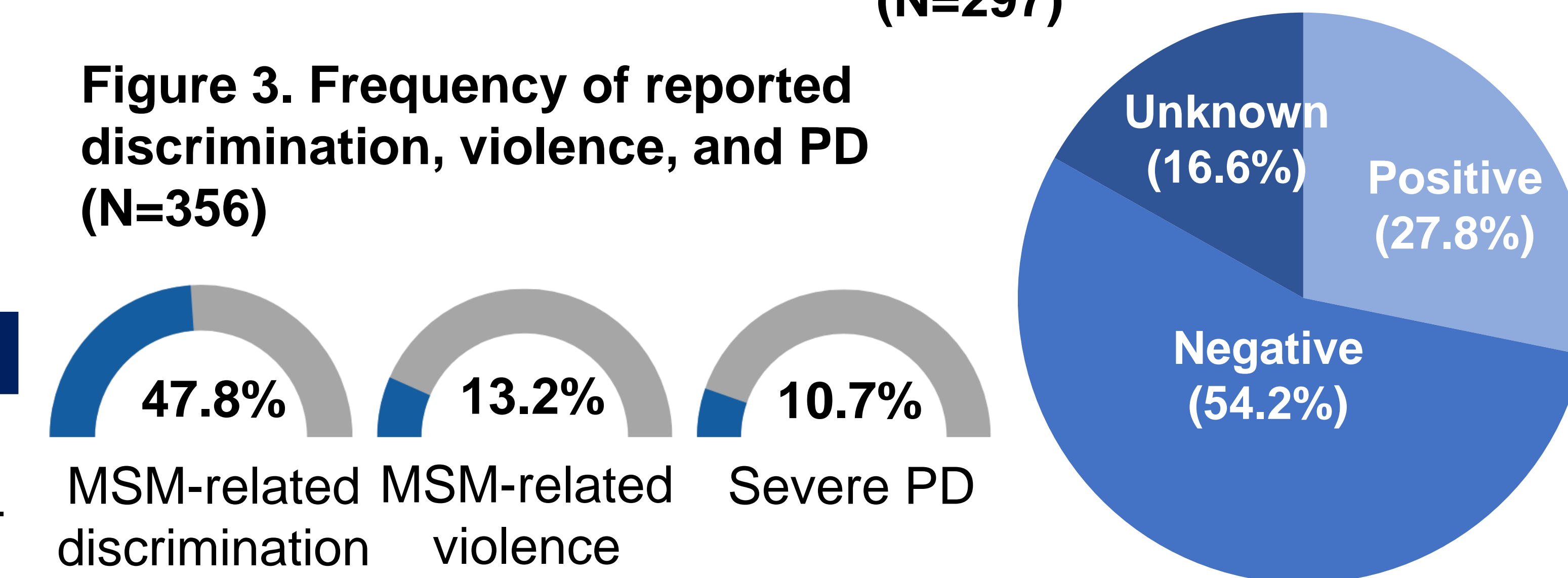
| Analysis                                  | Key Variables                                |                  | Outcome measure             |
|---|--|------------------|-----------------------------|
|   | Independent                                  | Dependent        |                             |
| <b>Descriptive statistics</b>             | Demographics                                 | None             | Counts and percents         |
| <b>Bivariate analysis</b>                 | Demographics, exposure variables             | HIV test results | Unadjusted odds ratios (OR) |
| <b>Multivariable logistic regressions</b> | Exposure variables and potential confounders | HIV test results | Adjusted odds ratios (OR)   |

## Results

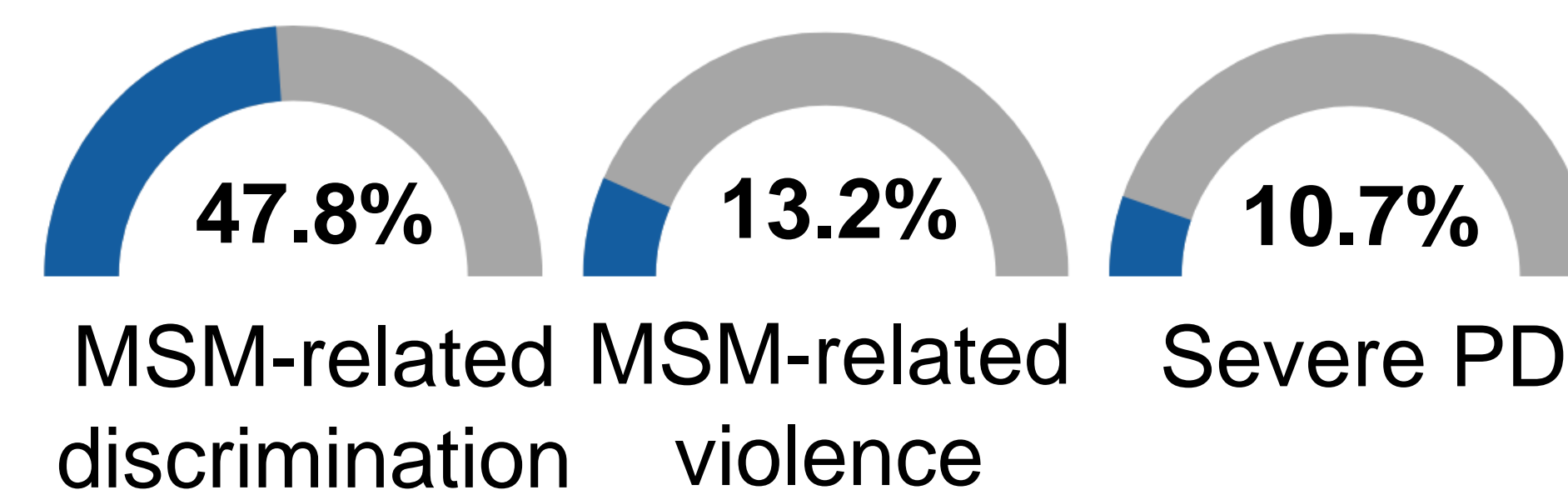
**Figure 2. Characteristics of NHBS-MSM2017 participants (N=356)**



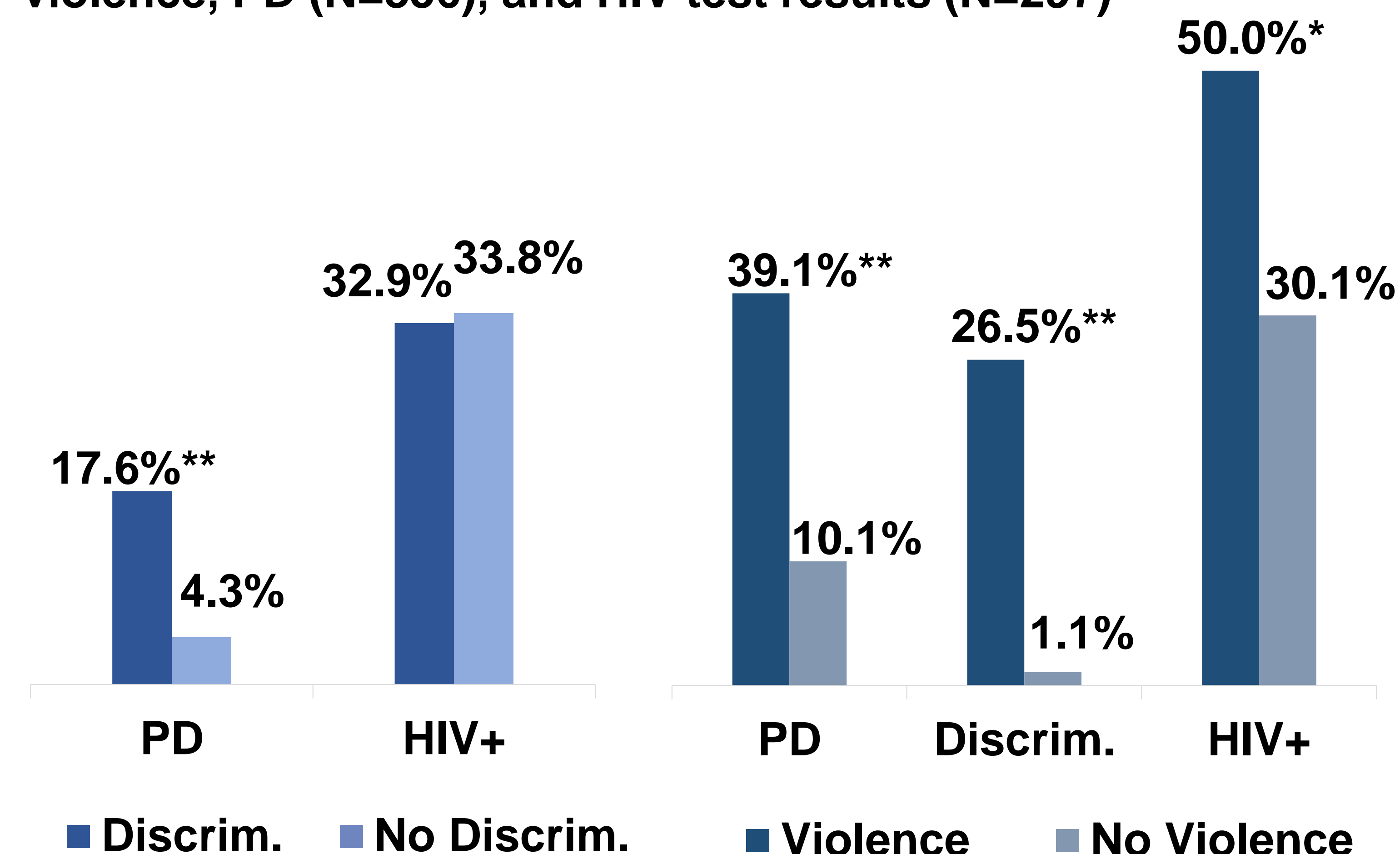
**Figure 4. NHBS HIV test result (N=297)**



**Figure 3. Frequency of reported discrimination, violence, and PD (N=356)**



**Figure 5. Bivariate analysis and overlap of discrimination, violence, PD (N=356), and HIV test results (N=297)**



\* $P < .05$ , \*\* $P < .0001$

## Results, cont'd

**Table 2. Unadjusted/adjusted ORs: NHBS HIV testing (N=297)**

|  | Unadjusted |         |             | Adjusted |         |             |
|--|------------|---------|-------------|----------|---------|-------------|
|  | OR         | P       | 95% CI      | OR       | P       | 95% CI      |
| <b>Age</b>                             |            |         |             |          |         |             |
| 18-24                                  | REF        | .       | .           | .        | .       | .           |
| 25-34                                  | 2.1        | 0.03    | (1.1, 4.2)  | 2.6      | < .01   | (1.3, 5.3)  |
| 35-44                                  | 3          | 0.01    | (1.2, 7.0)  | 5.5      | < .001  | (2.1, 14.6) |
| 45+                                    | 5.1        | < .0001 | (2.4, 10.8) | 8.1      | < .0001 | (3.4, 19.0) |
| <b>Race/ethnicity</b>                  |            |         |             |          |         |             |
| Non-Hispanic Black                     | 6          | < .001  | (2.3, 15.6) | 11.7     | < .0001 | (4.1, 33.4) |
| Non-Hispanic White                     | REF        | .       | .           | .        | .       | .           |
| <b>Insurance status</b>                |            |         |             |          |         |             |
| Insured                                | 2.6        | < .01   | (1.4, 4.8)  | 3.3      | < .01   | (1.6, 6.7)  |
| Not Insured                            | REF        | .       | .           | .        | .       | .           |
| <b>Individual social-level factors</b> |            |         |             |          |         |             |
| Psychological distress                 | 1.6        | 0.2     | (0.8, 3.3)  | 1.3      | 0.6     | (0.5, 3.3)  |
| MSM-related discrimination             | 1          | 0.9     | (0.6, 1.6)  | 0.9      | 0.7     | (0.5, 1.7)  |
| MSM-related violence                   | 2.3        | 0.02    | (1.2, 4.4)  | 3.6      | < .01   | (1.5, 8.8)  |

Older age, non-Hispanic Black race/ethnicity, and being insured were associated with a positive HIV test; participants reporting violence were 3.6 times more likely to have a positive HIV test.

## Conclusions

MSM-related discrimination, violence, and PD co-occur among Memphis-based MSM, potentially increasing HIV vulnerability.

Utilizing on-site testing as an opportunity to screen and offer comprehensive care, such as trauma-informed therapies, may be a strategy for the successful implementation of HIV prevention and treatment programs, particularly among young, non-Hispanic Black MSM in Memphis.

## Acknowledgements

Monica Kent and Iran Yarbrough, the NHBS-MSM2017 field team, and participants. This project was supported by the Centers for Disease Control and Prevention (PS 16-1601).

## Contact Information

Meredith Denney, Vanderbilt MPH candidate: [Meredith.r.Denney.1@vanderbilt.edu](mailto:Meredith.r.Denney.1@vanderbilt.edu)

