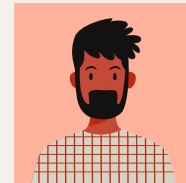
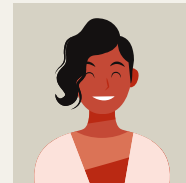
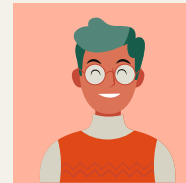
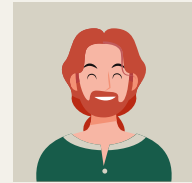
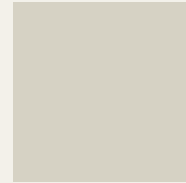
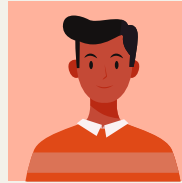
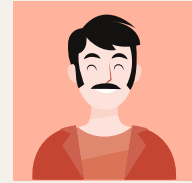
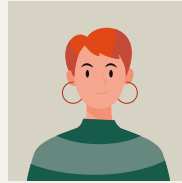


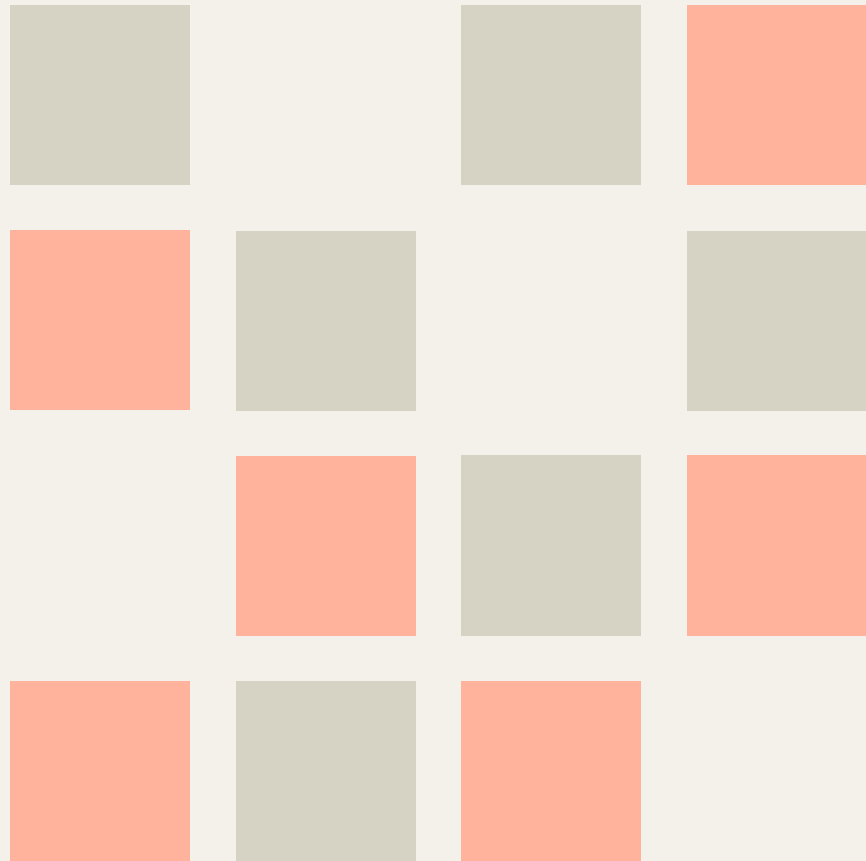
Sexual Minority Stress Processes Are Associated with Lower PrEP Engagement in Men Who Use Stimulants

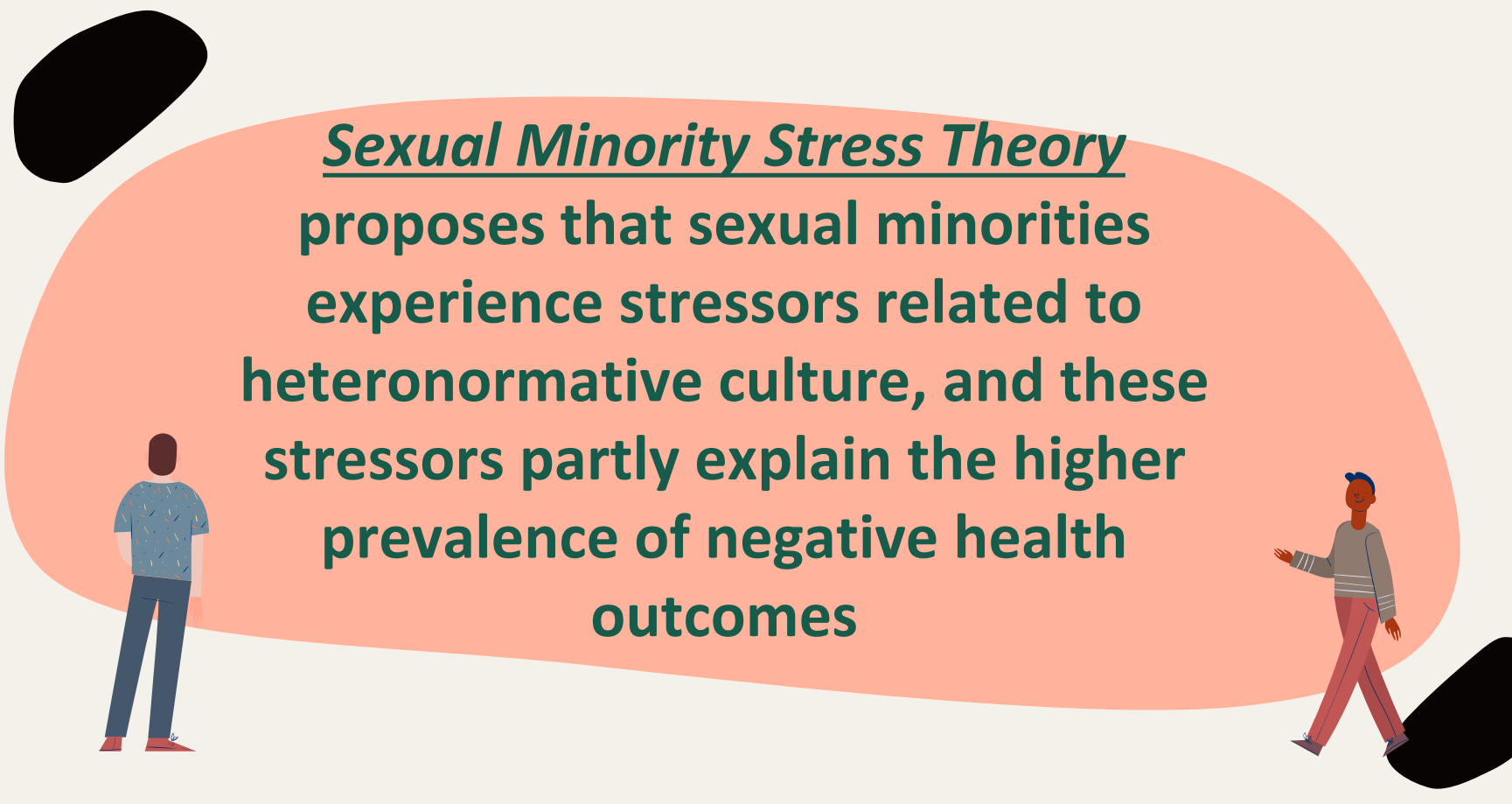
Ariana Johnson MPH, PhD
Leah Davis-Ewart, MPH, PhD
Renessa S. Williams PhD, RN
Adam Carrico PhD



Disclosures

None.



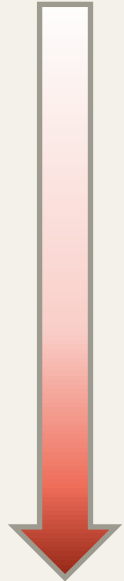


Sexual Minority Stress Theory
proposes that sexual minorities
experience stressors related to
heteronormative culture, and these
stressors partly explain the higher
prevalence of negative health
outcomes



Sexual Minority Stress

Distal
Stressors



1

Prejudice Events (i.e., discrimination, violence)

2

Expectations of Rejection

3

Concealment of Sexual Orientation

4

Internalized Homophobia

Proximal
Stressors

Aim 1

Characterize distinct patterns of sexual minority stress using latent profile analysis.

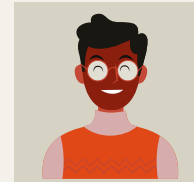
Aim 2

Examine correlates of latent profile membership relevant to the PrEP continuum

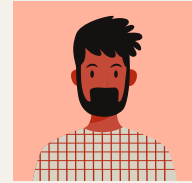
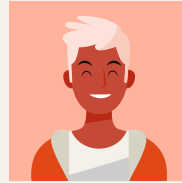
Sample

- **PrEP Readiness Interventions for Supporting Motivation (PRISM)**

- US national sample of 105 sexual minority men in 2021-2022
- Self-reported stimulant use (e.g., methamphetamine, crack, or cocaine) in the past 3 months
- Baseline data for an intervention aimed at PrEP uptake among sexual minority men who are not currently on PrEP using MI or CM
- SMART trial using distinct combinations of MI and CM
- Recruited via men seeking men social networking apps



Methods/Analysis



Latent Profile Analysis

- To identify underlying patterns of covariance in the data structure to identify ‘profiles’ or sub-groups of participants who experience sexual minority stress.
- Scores were standardized on a scale from 0-10.



Correlates

- Descriptive mean and standard deviations of theoretical and empirical correlates of sexual minority stress.
- ANOVA and Chi Square analysis to determine significant associations and differences.

LPA Model



Cultural Assessment of Risk for Suicide (CARS)

Assesses rejection sensitivity and isolation

Outness Inventory

Assesses outness by the number of people who know about sexual orientation.

Internalized Heterosexism

Negative feelings and homophobic attitudes towards one's self as a product of social bias against sexual minorities.

Sexual Minority Stress Events

Experiences of threats, discrimination, and violence.

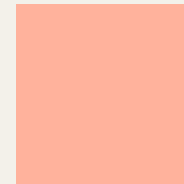
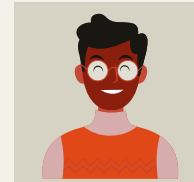
Correlates

- **Demographics and Health**

- Age
- Race
- Ethnicity
- U.S Born (yes or no)
- Highest education completed
- Primary relationship partner (yes or no)
- Self-identified as gay (yes or no)
- Homeless in the past year (yes or no)
- On disability (yes or no)
- Insured (yes or no)
- Employed full-time (yes or no)

- **PrEP**

- PrEP intention sum
- PrEP self-efficacy sum
- PrEP knowledge sum
- PrEP attitudes sum



Results

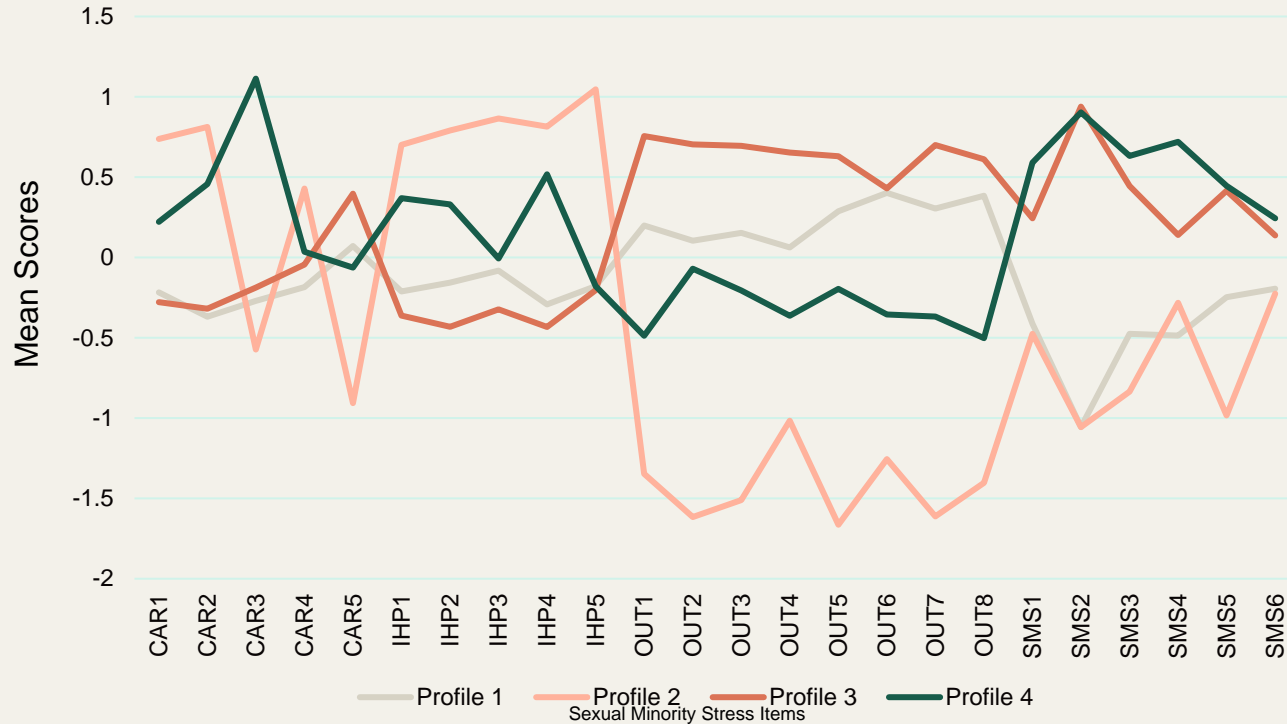
Latent Class Indices for Selecting the Number of Groups for Sexual Minority Stress

Classes	AIC	BIC	ABIC	Entropy	LMR LRT	BS LRT
2 Class	8740.995	8949.902	8700.341	0.98	515.899; p = 0.01	520.013; p = <0.01
3 Class	8573.297	8853.602	8518.748	0.97	219.944; p = 0.41	221.698; p = <0.01
4 Class	8485.499	8837.203	8417.055	0.984	140.677; p = 0.73	141.798; p = <0.01
5 Class	8443.46	8866.563	8361.122	0.982	95.279; p = 0.76	96.038; p=<0.01

AIC =Akaike Information Criterion ; **BIC** = Bayesian Information Criterion; **ABIC** = Adjusted Bayesian Information Criterion ; **LMR LRT** = Lo-Mendell-Rubin adjusted likelihood ratio test ; **BLRT** = Bootstrap Likelihood Ratio Test

Results

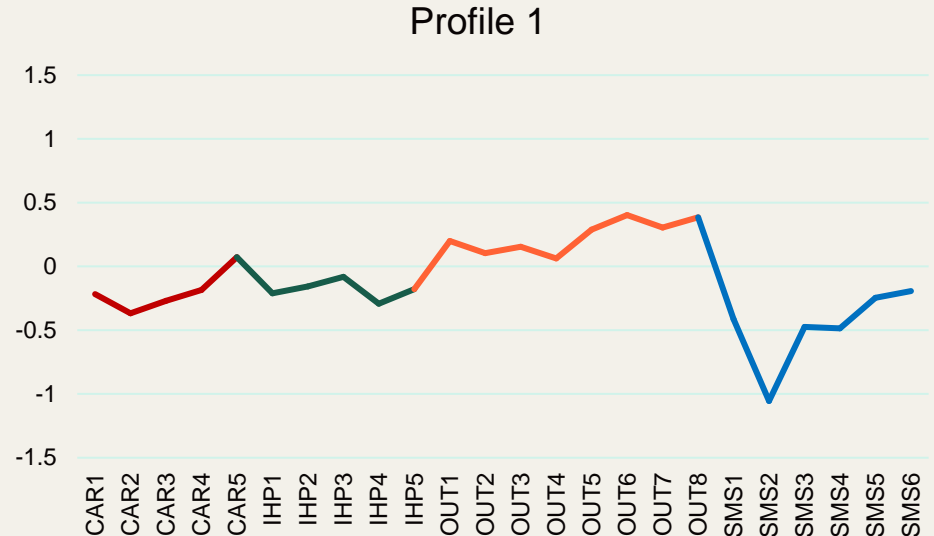
Sexual Minority Stress Items



Profile 1: Low Minority Stress

Profile 1 (n=24) had a low internalized stigma with moderate outness and prejudice events:

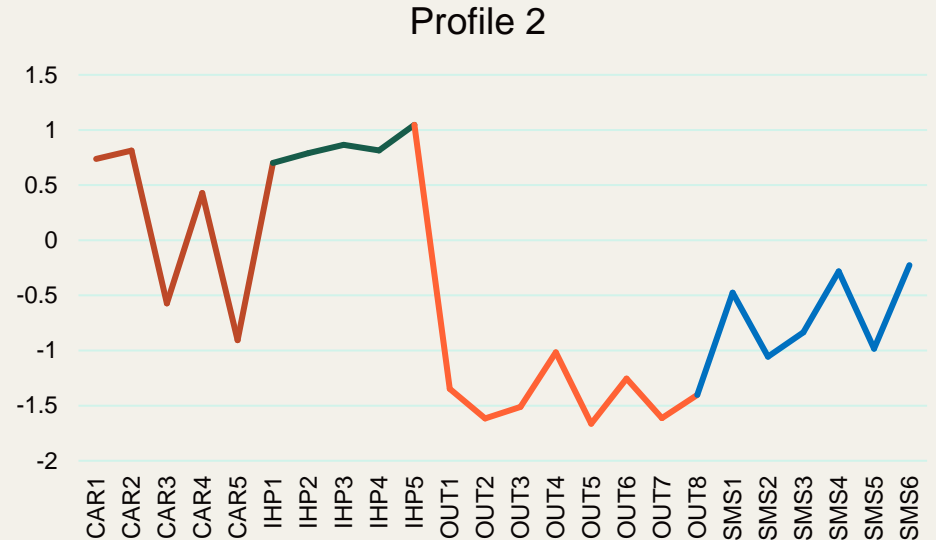
- Mean age: 43.5 years old
- 16.7% were persons of color
- 83.3%% self-identified as gay
- 58.5% reported having health insurance
- 17% were homeless in the past year



Profile 2: Low Integration

Profile 2 (n=17) had a high internalized stigma with low outness and low prejudice events:

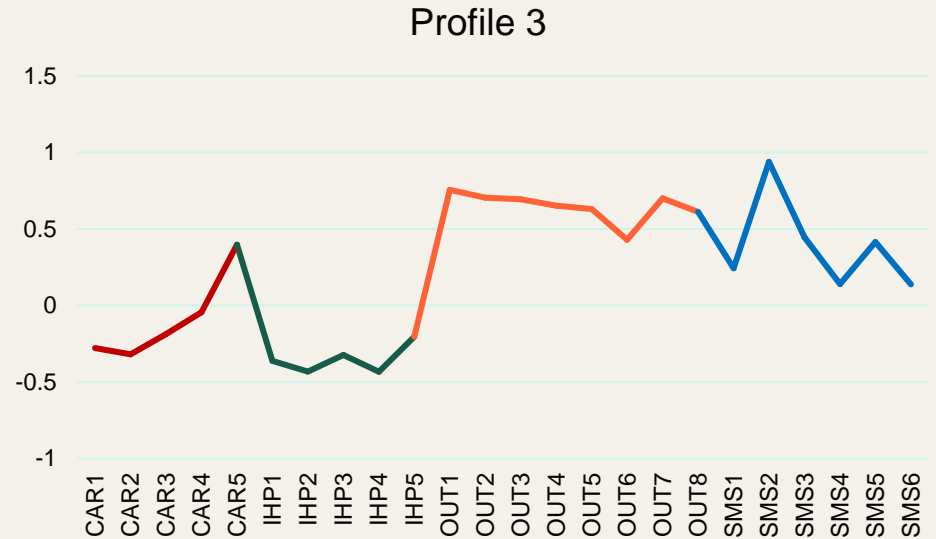
- Mean age: 39.8 years old
- 35.3 % were persons of color
- 29.4% self-identified as gay
- 94.1 % reported having health insurance



Profile 3: Vulnerable

Profile 3 (n=28) had low internalized stigma, high outness, and high prejudice events:

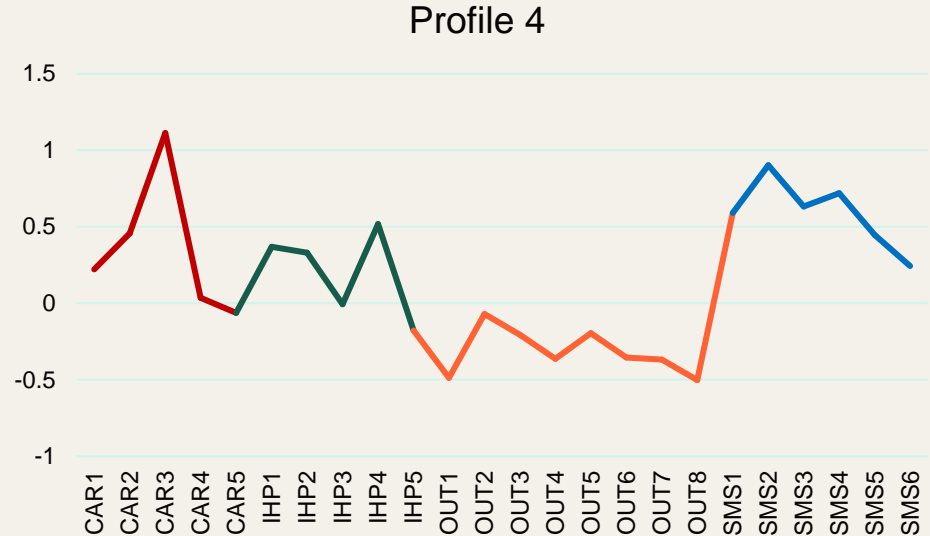
- Mean age: 37.2 years old
- 25.7% were persons of color
- 82.9% self-identified as gay
- 71.4% reported having health insurance



Profile 4: Conflicted

Profile 4 (n=16) had moderate internalized stigma, moderate outness, and high prejudice events:

- Mean age: 38.1 years old
- 44.8% were people of color
- 86.2% self-identified as gay
- 82.8% reported having health insurance



Significant Correlates - Demographics

	Profile 1 (N=24)	Profile 2 (N=17)	Profile 3 (N=35)	Profile 4 (N=29)	Overall (N=105)	p-value
Age						T = 40.63, <0.01
Mean (SD)	43.5 (8.71)	39.8 (9.21)	37.2 (8.52)	38.1 (9.43)	39.4 (9.13)	
Median [Min, Max]	42.8 [26.3, 64.3]	38.7 [25.7, 61.4]	36.7 [19.3, 51.6]	38.4 [24.4, 64.3]	39.1 [19.3, 64.3]	
Race						F = 1.56; 0.05
Black	0 (0%)	3 (17.6%)	6 (17.1%)	4 (13.8%)	13 (12.4%)	
White	20 (83.3%)	11 (64.7%)	26 (74.3%)	16 (55.2%)	73 (69.5%)	
Asian	1 (4.2%)	1 (5.9%)	0 (0%)	1 (3.4%)	3 (2.9%)	
American Indian	0 (0%)	0 (0%)	0 (0%)	1 (3.4%)	1 (1.0%)	
Middle Eastern	0 (0%)	0 (0%)	0 (0%)	1 (3.4%)	1 (1.0%)	
Multi-Racial	0 (0%)	1 (5.9%)	3 (8.6%)	4 (13.8%)	8 (7.6%)	
Other	3 (12.5%)	0 (0%)	0 (0%)	1 (3.4%)	4 (3.8%)	
Has health insurance?						F = 0.146, 0.03
No	10 (41.7%)	1 (5.9%)	10 (28.6%)	4 (13.8%)	25 (23.8%)	
Yes	14 (58.3%)	16 (94.1%)	25 (71.4%)	24 (82.8%)	79 (75.2%)	
Missing	0 (0%)	0 (0%)	0 (0%)	1 (3.4%)	1 (1.0%)	
Self identifies as gay						F = 1.62, <0.01
No	4 (16.7%)	12 (70.6%)	6 (17.1%)	3 (10.3%)	25 (23.8%)	
Yes	20 (83.3%)	5 (29.4%)	29 (82.9%)	25 (86.2%)	79 (75.2%)	
Missing	0 (0%)	0 (0%)	0 (0%)	1 (3.4%)	1 (1.0%)	

Significant Correlates – PrEP Behaviors

	Profile 1 (N=24)	Profile 2 (N=17)	Profile 3 (N=35)	Profile 4 (N=29)	Overall (N=105)	p-value
PrEP Intention Sum						t = 29.06; <0.01
Mean (SD)	8.54 (2.30)	9.59 (1.66)	9.43 (2.12)	9.48 (1.96)	9.27 (2.06)	
Median [Min, Max]	9.00 [3.00, 12.0]	9.00 [6.00, 12.0]	10.0 [3.00, 12.0]	10.0 [6.00, 12.0]	9.00 [3.00, 12.0]	
PrEP Self Efficacy Sum						t = 66.99; <0.01
Mean (SD)	27.5 (4.17)	27.4 (3.50)	28.1 (3.10)	26.6 (3.81)	27.4 (3.63)	
Median [Min, Max]	28.5 [17.0, 32.0]	28.0 [18.0, 31.0]	29.0 [21.0, 32.0]	27.0 [17.0, 32.0]	28.0 [17.0, 32.0]	
PrEP Knowledge sum						T = 7.25, <0.01
Mean (SD)	1.42 (0.830)	1.55 (0.887)	1.67 (0.957)	1.71 (0.976)	1.60 (0.916)	
Median [Min, Max]	1.00 [1.00, 3.00]	1.00 [1.00, 3.00]	1.00 [1.00, 3.00]	1.00 [1.00, 3.00]	1.00 [1.00, 3.00]	
PrEP Attitudes sum						T = 11.803, <0.01
Mean (SD)	4.25 (1.36)	5.10 (1.48)	4.61 (1.41)	4.61 (1.03)	4.62 (1.33)	
Median [Min, Max]	4.00 [2.00, 7.00]	5.00 [4.00, 10.0]	5.00 [1.00, 8.00]	4.00 [2.00, 6.00]	4.00 [1.00, 10.0]	

Discussion

01

Heterogeneity in Experiences

Important to understand different sexual minority stress profiles might impact PrEP uptake/adherence, substance use and mental health outcomes

02

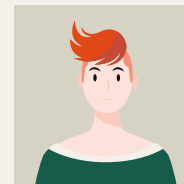
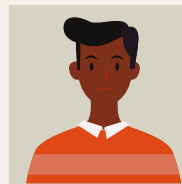
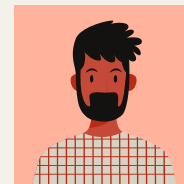
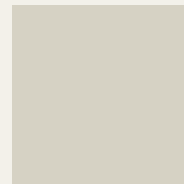
Health Insurance

Potentially significant barrier to PrEP use

03

Self-identification

Non-exclusively dating male partners (e.g., bisexual) may have greater probabilities of experiencing high internalized stigma.



Limitations and Future Directions

01

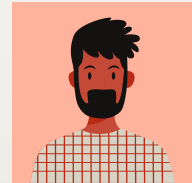
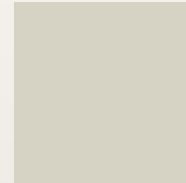
Cross sectional

Temporality concerns

02

Generalizability

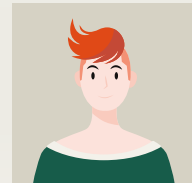
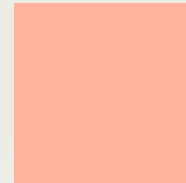
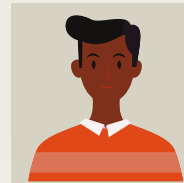
Mostly White sexual minority men who use stimulants

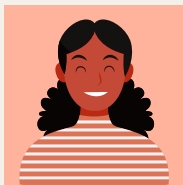
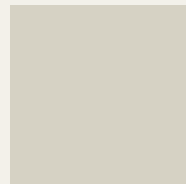


03

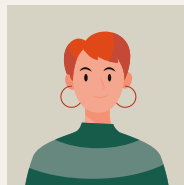
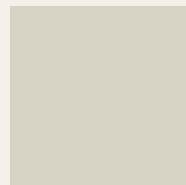
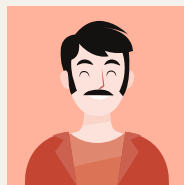
Intersectionality

Other forms of minority stress related to race, class, gender, etc.





Thank You !



CARS1	1	The decision to hide or reveal my sexual orientation to others causes me significant distress.
	2	Because of my sexual orientation, no one understands my pain or distress.
	3	I was rejected by a family member or friend after telling him/her my sexual orientation.
	4	I feel confused or conflicted by my sexual orientation.
	5	I feel comfortable revealing my sexual attractions and/or behavior.
	6	People treat me unfairly because of my sexual identity.
	7	At times, I feel I stick out because of my sexual attractions.
	8	Stereotypes about gay and bisexual people hurt my self-esteem or the way I see myself.
IHP	1	I wish I weren't gay/bisexual.
	2	I have tried to stop being attracted to men in general.
	3	If someone offered me the chance to be completely heterosexual, I would accept the chance.
	4	I feel that being gay/bisexual is a personal shortcoming for me.
	5	I would like to get professional help in order to change my sexual orientation from gay/bisexual to straight.
Outness	1	To which degree do <u>your new straight friends</u> know about your sexual orientation?
	2	To which degree do <u>your work peers</u> know about your sexual orientation?
	3	<u>Your work supervisors?</u>
	4	<u>Strangers?</u>
	5	<u>Your mother?</u>
	6	<u>your father</u>
	7	<u>Your siblings?</u>
	8	<u>Your extended family relatives?</u>
SMS	1	Have you ever been the victim of anti-gay violence? That is, were you harmed because you were gay?
	2	Have you ever been threatened with physical violence as a result of your sexual orientation? That is were you threatened because you were gay?
	3	Have you ever been discriminated against in any way because of your sexual orientation?
	4	In the next year, do you believe you will experience discrimination, threats, or violence due to your sexual orientation?
	5	Have you ever been called names or insulted because of your sexual orientation?
	6	Have you ever attended a church that held negative beliefs about gay or lesbian people?