

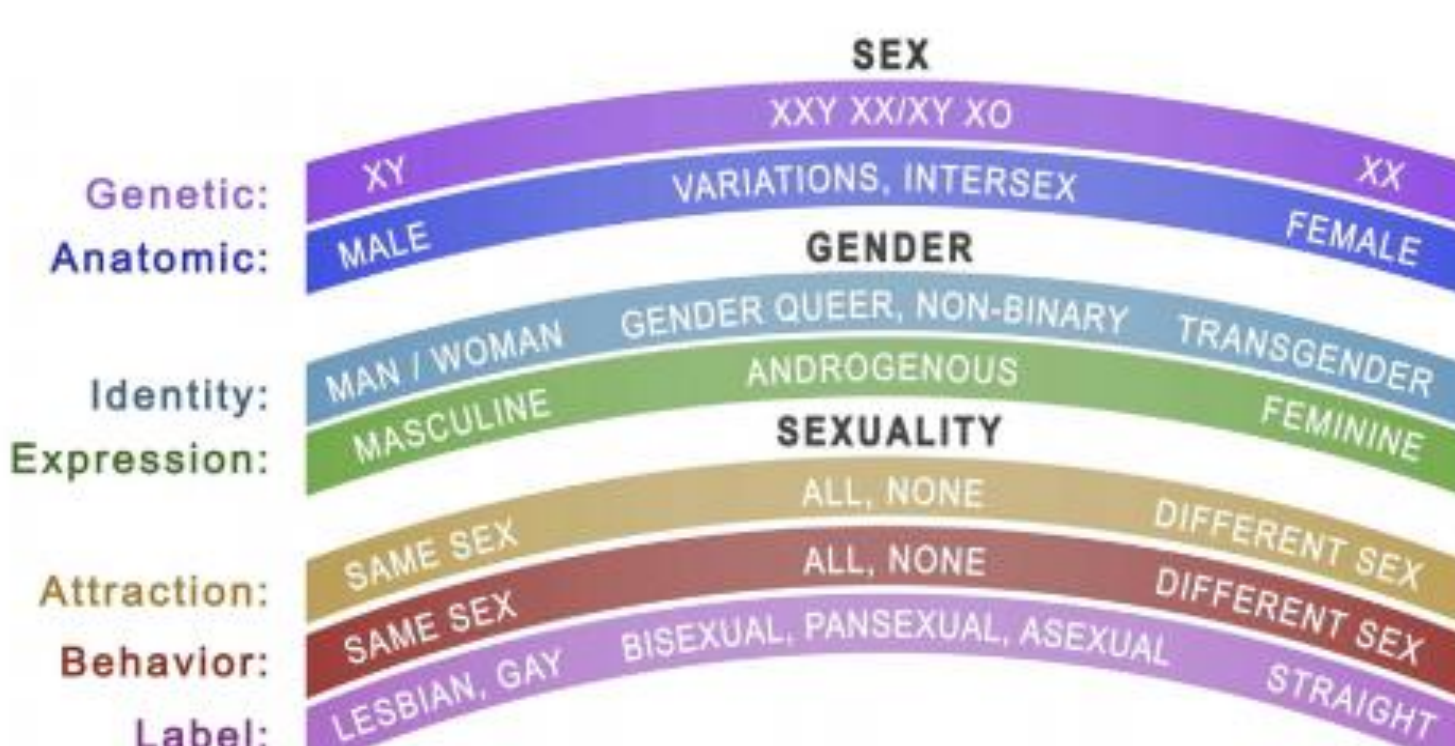
ABSTRACT

Introduction: Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) individuals face higher levels of stress than the general population in the form of minority stress, which are discriminatory, stigmatizing, and victimizing experiences. Minority stress has been suggested to be a factor that contributes to poorer smoking outcomes in LGBTQ populations, especially for those living in the Deep South states of Louisiana, Mississippi, Alabama, Georgia, and South Carolina. The objective of this study was to elucidate how minority stress influences smoking among LGBTQ smokers in the Deep South, using a mixed methods approach. **Methods:** A one-time, cross-sectional online survey was administered to 1,296 LGBTQ smokers in the Deep South. Survey measurements included previously validated measures of minority stress (prejudice events, perceived stigma, and internalized queerphobia), mental health, social support, smoking, quitting, LGBTQ and non-LGBTQ norms, self-efficacy, and smoking outcome variables (stage of change and nicotine dependence level). Multiple linear regression was used to assess the relationship between minority stress variables and smoking outcome variables. To expound on how minority stress affects mental health and subsequent stage of change, we conducted 15 individual, semi-structured online interviews with LGBTQ smokers in the Deep South. Interview topics spanned across 5 domains: LGBTQ identity, smoking/quitting, minority stress, mental health, and social support. **Results:** Survey findings showed that after adjusting for covariates, increased levels of internalized queerphobia were significantly associated with increased nicotine dependence level, and decreased levels of perceived stigma were associated with further stage of change. Themes that emerged throughout interviews included: struggles with LGBTQ identity, coping with minority stress, reasons for smoking, and barriers to quitting smoking. **Conclusion:** This research elucidates how increased levels of minority stress is associated with poorer smoking outcomes among LGBTQ individuals in the Deep South. Findings will help guide future smoking prevention and cessation programs for this population.

BACKGROUND

LGBTQ Identity 101

Sex: constructed of physical characteristics that are typical of men or women
Gender: the socially constructed norms and characteristics of women, men, and other gender identities
Sexuality: emotional, romantic, or sexual attraction



Source: Hunt, L., Vennat, M., & Waters, J. H. (2018). Health and Wellness for LGBTQ. *Advances in Pediatrics*, 65(1), 41-54.

LGBTQ Smoking

- LGBTQ adults smoke at higher rates than the general population
- LGBTQ smokers are less likely to quit smoking, compared to non-LGBTQ smokers
 - Community norms
 - Targeted advertising
 - Low self-efficacy
 - Lack of culturally tailored smoking cessation programs
 - Higher nicotine dependence**
 - Minority stress**

Minority Stress Processes

- Internalized Queerphobia:** anti-LGBTQ sentiments that an individual may have towards their LGBTQ identity
- Perceived Stigma:** societal stigmatization of one's identity that may lead to low self-esteem, social exclusion, and insecurity
- Prejudice Events:** explicit displays of violence, rejection, or discrimination



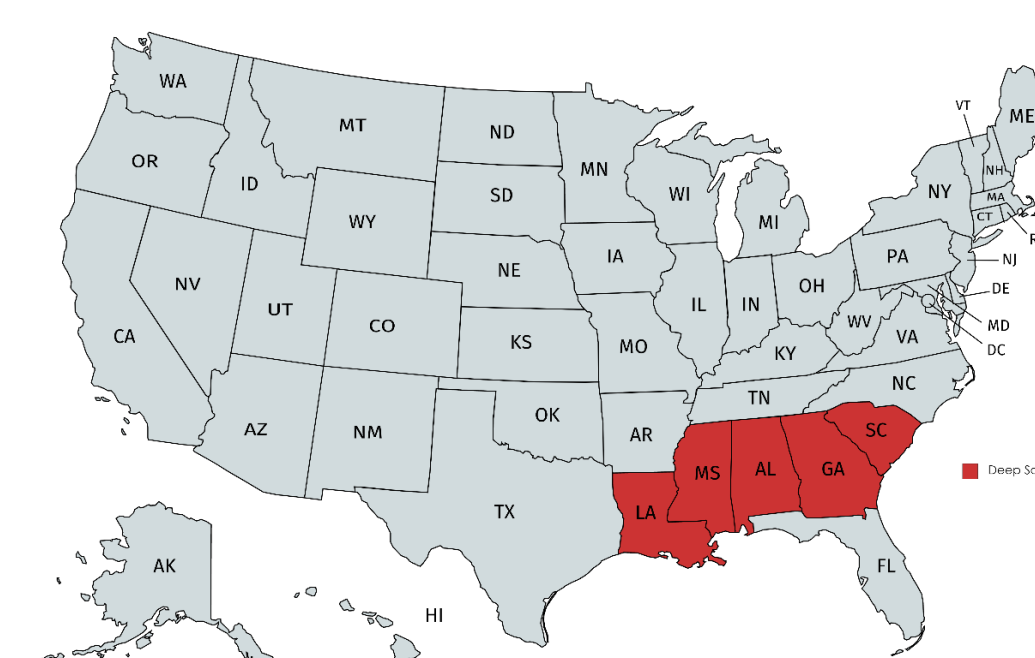
OBJECTIVE

Identify the relationship between minority stress and smoking cessation outcomes for LGBTQ smokers in the Deep South

Deep South definition: Louisiana, Mississippi, Alabama, Georgia, and South Carolina

- Consistently rank in the bottom half of the nation for smoking rates
- According to the Human Rights Campaign State Equality Index, every state in the Deep South has a "high priority to achieve basic equality"

Hypothesis: Increased levels of minority stress will be associated with **higher** nicotine dependence and **lower** stage of change in this population



METHODOLOGY

Study Design

- One-time, cross-sectional, online survey for LGBTQ smokers in the Deep South - Visa e-gift card raffle incentive
- 20-30 minute individual, semi-structured online interview - \$20 compensation

Eligibility

- Living in Louisiana, Mississippi, Alabama, Georgia, or South Carolina
- Age 18 or older
- English-speaking
- Self-identify as LGBTQ
- Current smokers
 - Have you smoked at least 100 cigarettes in your lifetime?
 - Do you now smoke cigarettes every day, some days, or not at all?

Recruitment

- Word-of-mouth
- Social media
- LGBTQ community settings
- LGBTQ-focused listservs
- Flyers distributed within local LGBTQ-friendly businesses



Measurements

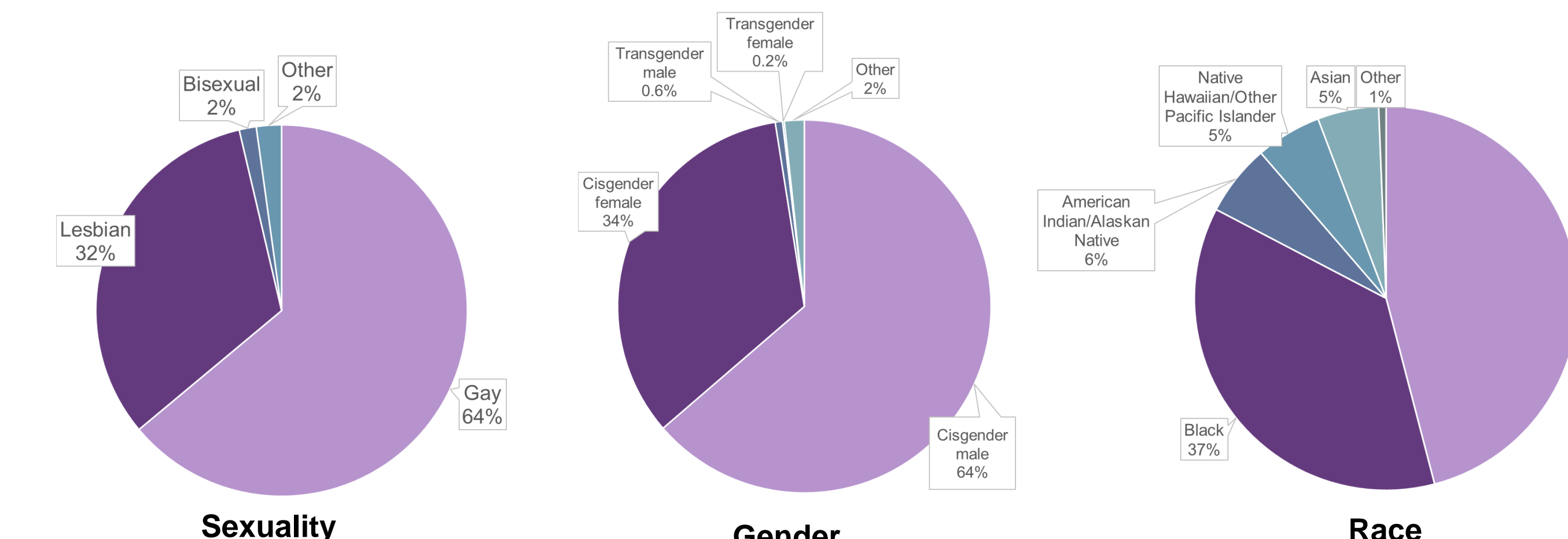
- Demographics**
 - Age, sexual identity, gender, race, ethnicity, income, education, health insurance, marital status, employment status
- Smoking habits**
- Nicotine Dependence Level**
 - Fagerström Test for Nicotine Dependence (6 items)
- Minority Stress**
 - Prejudice Events: Everyday Discrimination Scale (5 items)
 - Perceived Stigma: Stigma Consciousness Questionnaire (10 items)
 - Internalized Queerphobia: Internalized Homophobia Scale (5 items)
- Other variables**
 - Norms, mental health, social support, stage of change

Responses

Survey open: June 1, 2021 to August 1, 2021
1,360 survey attempts
1,296 eligible responses
15 interviews
Average age: 31.2 ± 7.4 years



RESULTS



Minority Stress Variable	Adjusted Model*	
	Nicotine Dependence Level	Stage of Change
Prejudice Events	-0.01 ± 0.02	0.00 ± 0.03
Perceived Stigma	0.01 ± 0.01	-0.03 ± 0.01**
Internalized Queerphobia	0.05 ± 0.02**	0.00 ± 0.02

*Adjusted for demographics (age, race, sexual orientation, gender, health insurance, marital status, employment status); **p<0.05

Table 1. Multivariate linear regression for the effect of minority stress variables on nicotine dependence level and stage of change.

"[Smoking is] a coping mechanism for me when I'm coping with anxiety and stress. And I do believe that part of my anxiety and stress comes from the fact that I'm a sexual minority."

"I think that queer folks, in general, shoulder a lot of kind of invisible burdens that stress us out. And, you know, smoking for some is stress relief. But I also think the two are kind of interconnected to an extent, because of, you know, smokers are outcasts in society, and, you know, sometimes being queer, you feel like an outcast already."

CONCLUSION AND IMPLICATIONS



Increased internalized queerphobia is significantly associated with higher nicotine dependence. Decreased perceived stigma is significantly associated with further stage of change.

Smoking is a coping mechanism for LGBTQ individuals facing minority stress.

Potential to reduce tobacco-related health disparities in LGBTQ populations

LIMITATIONS

- Convenience and snowball sample
- Self-reported
- Cross-sectional nature

STRENGTHS

- Uses previously validated measures
- Focuses on population that is in great need for improved smoking cessation outcomes

Future

- Mediating and moderating effects of mental health and social support, respectively
- Development of targeted smoking cessation programs for LGBTQ individuals

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