

# The Role of Minority Stress Processes on Smoking Behaviors among LGBTQ Individuals: A Systematic Review

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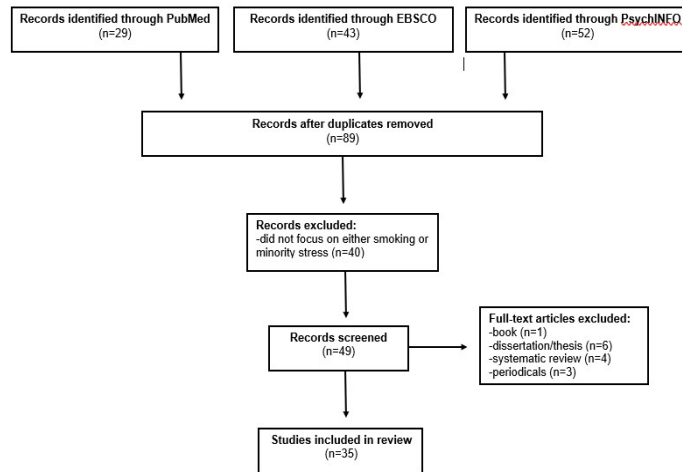
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## Background

- Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) individuals are more likely to smoke than non-LGBTQ individuals.
- 20.6% of LGB adults and 35.5% of trans adults smoke cigarettes, compared to 14.9% of straight adults. LGBTQ smokers may also be more nicotine dependent than non-LGBTQ smokers, which may decrease their likelihood of quitting successfully.
- Barriers to smoking cessation for LGBTQ smokers include higher nicotine dependence, low self-efficacy, community norms, and minority stress. An additional barrier is a lack of culturally tailored smoking cessation programs.
- Smoking cessation interventions that are only for LGBTQ smokers generally result in higher quit rates than interventions for the general public.
- The Minority Stress Model posits that discriminatory, stigmatizing, and victimizing experiences, aimed at individuals or groups of minority status, contribute to poor mental health in these populations.
- Smoking has been posited as a coping mechanism for LGBTQ individuals facing minority stress. However, no studies have examined the exact effect that minority stress has on smoking in LGBTQ populations.

## Figure 1: Article Screening Process



## Results

- 49 articles were flagged for inclusion and reviewed. 35 articles were included in the final review.
- The majority of studies were survey-based.
- 10 studies focused on gender and sexual minorities, 5 studies focused on racial or ethnic minorities, 3 studies focused on the general population, 1 study focused on HIV-positive individuals, and 1 study focused on restaurant/hotel workers and sex workers.
- Across all studies, increased levels of minority stress processes (internalized stigma, perceived stigma, and prejudice events) were associated with increased probability of historical or current cigarette use in LGBTQ individuals.
- Increased minority stress was also associated with greater psychological distress/mental health decline.

## Conclusions

The findings of this review suggest that minority stress processes represent a contributing factor to smoking health disparities in LGBTQ populations. These results highlight the need for smoking cessation and prevention programs to address minority stress and improve smoking disparities in these populations. Major areas of concern are the greater likelihood of poor mental health status and development of a Tobacco Use Disorder (TUD) in LGBTQ individuals afflicted by minority stress.



## Methods

- Recent relevant research was screened (see Figure 1) and compiled into a matrix for systematic review and analysis (see Figure 2).
- PubMed, EBSCO, and PsychInfo searches were conducted for smoking-, LGBTQ-, and minority stress-related terms.
  - No date or geographic limits were used.
  - These searches yielded 19, 43, and 52 articles, respective to each database.
- Inclusion criteria: The study must have: 1) been written in English, 2) had an LGBTQ group as the study population or a component of the study population, 3) assessed some form of smoking behavior, and 4) assessed at least 1 minority stress-related process (internalized stigma, perceived stigma, or prejudice events).

## Figure 2: Review Matrix (sample- 7 of 35)

Author and Date	Sample Characteristics	Smoking Variables Assessed	Minority Stress-Related Variables Assessed (and measure, if used)	Minority Stress-Related Variables that Increase Smoking
Burgess et al., 2007	Adults who identified as LGBT (n=472) or heterosexual (n=7,412)	• Smoker status • # of cigarettes smoked per day	• Perceived discrimination (experience of a major incident of discrimination over the past year) • Mental health status	• Higher perceived discrimination • Poor mental health status (higher levels of psychological distress, greater likelihood of depression or anxiety diagnosis, greater perceived mental health needs, greater use of mental health services)
Rosario, Schrimshaw, and Hunter, 2008	Lesbian and bisexual women (n=76)	• Average quantity of cigarette use per day	• Experience of gay-related stressful life events • Internalized homophobia (NHA) • Depressive and anxious symptoms in past week (BSI) • Conduct problems	• One or more events of gay-related stress • Higher internalized homophobia • Higher emotional distress (increased depressive and anxious symptoms, higher count of conduct problems)
Lombardi et al., 2008	HIV-negative gay men (n=691)	• Smoking status in the past month • Age of first cigarette use • # of years of cigarette use	• Depression (CES-D)	• Increased clinical depression (<12 CES-D scores)
Amadio & Chung 2008	LGB persons (n=207)	• Lifetime and monthly cigarette use	• Internalized homophobia in females (LIHS) • Internalized homophobia in men (NHA-I-R)	• Lower internalized homophobia in females significantly related to higher lifetime cigarette use
Hamilton and Mahalik, 2009	Gay men (n=315)	• Perceptions of normative tobacco use • # of days smoked during past 30 days • # of cigarettes smoked per day in past 30 days	• Internalized homophobia (IHP) • Stigma (Stigma Scale) • Antisgay physical attacks • Conformity to masculinity (CMNI)	• Increased internalized homophobia • Increased perceived stigma • Increased anti-gay physical attacks • Higher conformity to masculine norms
Ortiz-Hernández, Gómez Tello, Valdés, 2009	Adolescents and youths aged 12-29 (n=12,796)	• Lifetime cigarette use • Current cigarette use • # of cigarettes smoked per day	• Violence victimization (family violence, crime, violated rights) • Discrimination • Prejudice	• More frequent violence victimization • Increased discrimination • Increased prejudice
Gruskin et al., 2010	Relapsed smokers who were lesbians (n=35), heterosexual women (n=35)	• Smoking history • Reasons for relapse • Circumstances when started smoking	• Anger and sadness coping mechanisms • Depression diagnosis • Anxiety experiences • Identity-targeted discrimination	• High levels of stress due to sexual stigma • Increased need for emotional regulation • Increased negative emotions caused by family relationships • Increased discrimination

