**ELIKEM ASUDO TSATSU GALE-ZOYIKU**

**4TH MARCH 2023**

From my research, I found that individuals who identify as lesbian, gay or bisexual are at an increased risk for experiencing depression compared to their heterosexual peers. This increased risk of depression is thought to be due to a range of factors, including minority stress, discrimination, and social stigma. Minority stress refers to the unique stressors that members of minority groups face due to their marginalized status. For LGBT individuals, this may include experiences of discrimination, rejection, harassment and internalized homophobia that can develop due to living in a heteronormative society. In addition to minority stress, LGBT individuals may face challenges related to their relationships and social support networks. For example, they may experience rejection or disapproval from family members, friends, or romantic partners, contributing to isolation and loneliness. An interesting observation I made was that different sexual minority subgroups reported different levels of depression or other mental health episodes, such as anxiety or substance abuse. For example, women who identify as bisexual or lesbian report fewer depressive indicators (e.g., anxiety, use of antidepressants, substance abuse) than men who identify as gay or bisexual. This could be because the factors mentioned in the first paragraph are exacerbated by something not wholly explored by contemporary research on the relationship between sexual orientation and depression.

Another association I explored is the relationship between sexual orientation and income/poverty level. Research suggests some association between sexual orientation and poverty, with individuals who identify as lesbian, gay, or bisexual at a higher risk of experiencing poverty than their heterosexual peers. Several factors may contribute to this relationship. First, LGBT individuals may experience discrimination in the workplace, which can limit their access to employment opportunities or lead to lower wages. In addition to employment discrimination, LGBT individuals may face challenges related to their family and social support networks. For example, they may experience rejection or disapproval from family members, limiting their access to financial support or leaving them without a safety net in times of need. LGBT individuals may also be less likely to have children, which can reduce their eligibility for specific government programs that provide financial support to families.

Poverty level/income may be associated with depression, implying that the lower a person's income is, the more depressive indicators they will report. It then follows that depression is related to a person's sexual orientation. I will explore this association further to determine if men who identify as gay or bisexual earn less than women who identify as bisexual or lesbian and if this can explain why men who identify as gay or bisexual report depression/depressive indicators more often than women.

My new research question is, "Is there an association between the sexual orientation of cis-males, depression levels, and their income? Can education explain any association if there is?" The associations I will be testing are:

Is there an:

* Association between Gender and depression levels
* Association between sexual orientation and depression levels
* Association between gender and income (measured as a ratio of the person's income to the poverty line)
* Association between sexual orientation and income (calculated as a ratio of the person's income to the poverty line)
* Association between education level (highest educational attainment) and income
* Association between education level (highest educational attainment) and gender
* Association between education level (highest educational attainment) and sexual orientation

**ANNOTATED BIBLIOGRAPHY**

APA Citation:Han, B., & Hernandez, D. C. (2022). Sexual Orientation and Food Hardship: National Survey of Family Growth, 2011-2019. *Public Health Reports*, 1. <https://doi.org/10.1177/00333549221091784>

General topic:

Food insecurity and assistance among low-income sexual minority and heterosexual adults.

Hypothesis being tested:

The study investigates the prevalence and correlation of food hardship, including food insecurity, receipt of free or reduced-cost food, and SNAP participation among low-income sexual minority and heterosexual adults.

Explanatory and response variables & how they are measured:

The study used four waves of pooled data from the National Survey of Family Growth for adults aged 18-44. Sexual orientation was the explanatory variable, and food insecurity, receipt of free or reduced-cost food, and SNAP participation were the response variables. The data were collected through self-reported measures.

Summary of results and key findings:

The study found that compared to their heterosexual counterparts, gay and bisexual men had higher odds of experiencing food insecurity. Additionally, bisexual men had significantly higher odds of receiving free or reduced-cost food, but gay men did not. However, the odds of participating in SNAP did not differ considerably among gay, bisexual, and heterosexual men. Among women, only bisexual women had higher odds of experiencing food insecurity than heterosexual women. Moreover, bisexual women had significantly higher odds of participating in SNAP, whereas lesbian women had significantly lower odds of SNAP participation than heterosexual women. The findings suggest different patterns of food hardship, assistance, and SNAP participation among sexual orientation subgroups and emphasize the need for group-specific, nuanced approaches to address food insecurity.

Significance to my research question:

The significance of this paper to my research question is that it suggests a potential association between sexual orientation, depression levels, and income among cisgender males. The abstract highlights that sexual minority individuals, particularly gay and bisexual men, are at a higher risk of experiencing poverty and depression than their heterosexual counterparts. This information can help me to better understand the potential factors contributing to depression levels among cisgender males and to explore the relationship between income and sexual orientation within this population. Additionally, the paper suggests that there may be gender differences in the relationship between sexual orientation and depression, with women who identify as bisexual or lesbian reporting fewer depressive indicators than men who identify as gay or bisexual. This information may also be relevant to my research question, as it suggests that gender may play a role in the relationship between sexual orientation and mental health.

APA Citation:Rutter, T. M., Flentje, A., Dilley, J. W., Barakat, S., Liu, N. H., Gross, M. S., Muñoz, R. F., & Leykin, Y. (2016). Sexual orientation and treatment-seeking for depression in a multilingual worldwide sample. *Journal of Affective Disorders*, *206*, 87–93. <https://doi.org/10.1016/j.jad.2016.07.003>

General topic: Treatment-seeking for depression among individuals with different sexual orientations

Hypothesis being tested: Individuals who identify as sexual minorities may seek different types of treatment for depression compared to heterosexual individuals.

Explanatory and response variables & how they are measured: The explanatory variable is sexual orientation, measured through self-identification and an option to decline to state. The response variable is treatment-seeking for depression, measured through self-reporting past and current treatment-seeking for depression.

Summary of results and key findings: The study found that individuals who declined to state their sexual orientation were less likely to seek any treatment for depression than individuals endorsing any orientation. Bisexual individuals sought psychotherapy and alternative therapies more than other groups and lesbian women were especially likely to have used psychotherapy. Other variables that emerged as significant predictors of treatment-seeking for depression included age and the participant's language.

Significance to my research question: This study provides evidence that sexual orientation may be related to treatment-seeking behaviours for depression. The finding that individuals who decline to state their sexual orientation may be less likely to seek effective treatments for depression suggests that my research question about the association between sexual orientation of cis-males, depression levels, and their income should consider the potential impact of reluctance to disclose sexual orientation on treatment-seeking behaviours and outcomes.

APA Citation:

Sayers, R., Levendis, J., & Dicle, M. (2017). The Sexual Orientation Wage Gap in the USA. *International Journal of Social Economics*, *44*(12), 1846–1855.

General topic: Wage gap by gender and sexual orientation

Hypothesis being tested: The study aims to determine the nature of the wage gap between genders and sexual orientation.

Explanatory and response variables & how they are measured: The study uses OLS (ordinary least squares) regression analysis on pooled repeated cross-section data to examine the relationship between gender, sexual orientation, and wages. The explanatory variables include gender and sexual orientation (gay/straight), while the response variable is wages.

Summary of results and key findings: The study finds that the wage differences between gay/straight men and women are more likely due to differences in labour force attachment than direct heterosexism. The wage gap between gay and straight men is small and insignificant, while the gap between men and women is large and statistically significant. The study suggests that gender, rather than sexual orientation, plays a more substantial role in explaining the wage gap.

Significance to the research question: This study is significant to the research question because it provides insight into the nature of the wage gap between genders and sexual orientation. The findings suggest that gender is more significant than sexual orientation in explaining the wage gap, which could inform further research into strategies to address the gap.

APA Citation:

Barnes, D., Hatzenbuehler, M., Hamilton, A., & Keyes, K. (2014). Sexual orientation disparities in mental health: The moderating role of educational attainment. *Social Psychiatry & Psychiatric Epidemiology*, *49*(9), 1447–1454. <https://doi.org/10.1007/s00127-014-0849-5>

General topic: Mental health disparities among sexual minorities and heterosexuals.

Hypothesis being tested: The study aims to test whether education modifies the association between sexual orientation and mental disorders.

Explanatory and response variables & how are they measured: The study uses data drawn from the National Epidemiologic Survey on Alcohol and Related Conditions and compares the odds of past 12-month and lifetime psychiatric disorder prevalence between lesbian, gay, and bisexual (LGB) and heterosexual individuals by educational attainment. To adjust the results, the study uses covariates such as age, race/ethnicity, income, and marital status.

Summary of results and key findings: The study finds that sexual orientation disparities in mental health are smaller among those with a college education. Specifically, the gap between those with versus those without a bachelor's degree was attenuated for any current mood disorder, Axis-I disorder, current anxiety disorder, current substance use disorder, and current comorbidity. The interaction between sexual orientation and education was statistically significant for any current Axis-I disorder, mood disorder, and anxiety disorder.

Significance to my research question: This study's findings suggest a relationship between sexual orientation, educational attainment, and mental health disparities. This may have implications for the association between sexual orientation, depression levels, and income, as education may also play a moderating role in this relationship, as a better education might mean a healthier income.

APA Citation:

Li, G., Pollitt, A., Russell, S., Pollitt, A. M., & Russell, S. T. (2016). Depression and Sexual Orientation During Young Adulthood: Diversity Among Sexual Minority Subgroups and the Role of Gender Nonconformity. *Archives of Sexual Behavior*, *45*(3), 697–711. <https://doi.org/10.1007/s10508-015-0515-3>

General topic: Mental health disparities among sexual minorities

Hypothesis being tested: Sexual minority individuals will report higher levels of depression than heterosexual individuals, with differences in depression status varying across sexual minority subgroups and being influenced by young adult gender nonconformity.

Explanatory and response variables & how they are measured: Sexual orientation was measured by self-identification as heterosexual, mostly heterosexual, bisexual, or gay/lesbian. Depression was measured through self-reported symptoms and diagnosis. Gender nonconformity was assessed by self-reported behaviour that did not conform to traditional gender norms.

Summary of results and key findings: Mostly heterosexual and bisexual young adults reported significantly higher concurrent depression than heterosexuals, and mostly heterosexuals had higher depression levels 6 years later. Young adult gender nonconforming behaviour was associated with more concurrent depression regardless of sexual orientation, but its negative impact on mental health decreased over time. Previous gender nonconformity predicted decreased prospective depression among lesbians and gay men but was not associated with prospective depression among heterosexual individuals.

Significance to my research question: The study suggests that there may be an association between sexual orientation and depression levels, with bisexual and gay individuals reporting higher levels of depression compared to heterosexuals.

APA Citation:

Argyriou, A., Goldsmith, K. A., & Rimes, K. A. (2021). Mediators of the Disparities in Depression Between Sexual Minority and Heterosexual Individuals: A Systematic Review. *Archives of Sexual Behavior*, *50*(3), 925–959. <https://doi.org/10.1007/s10508-020-01862-0>

General topic: The mediating factors that explain the increased rates of depression among sexual minorities compared to heterosexual individuals.

Hypothesis being tested: The review examines the evidence for mediating factors that may help explain the disparities in depression rates between sexual minority and heterosexual individuals. Minority stress theory suggests that stigma contributes to reduced coping/support resources and increased vulnerability processes for mental health problems.

Explanatory and response variables & how they are measured: The explanatory variable is the sexual orientation (heterosexual versus sexual minority participants), and the response variable is depression outcomes. The mediating factors examined in the review include stressors such as victimization, harassment, abuse, increased stress, lower social and family support, and psychological processes such as self-esteem and rumination.

Summary of results and key findings: The review included 40 studies that examined mediators of sexual minority status and depressive outcomes, and the most common findings suggest that stressors and lower social support contribute to differing depression rates in sexual minorities compared to heterosexual individuals. Differences in psychological processes may also play a role, but more research is needed. However, caution is required due to the methodological shortcomings in many of the studies.

Significance to my research question: The review's findings are significant to the research question by providing evidence that sexual minority individuals are at a higher risk of depression and highlighting potential mediators such as stressors and social support. These findings may inform future research exploring the association between sexual orientation, depression levels, and income among cis-males.

APA Citation:Ehlinger, P. P., & Blashill, A. J. (2016). Self-perceived vs actual physical attractiveness: Associations with depression as a function of sexual orientation. *Journal of Affective Disorders*, *189*, 70–76. <https://doi.org/10.1016/j.jad.2015.08.071>

General topic: The relationship between physical appearance evaluation and depression, focusing on sexual orientation.

Hypothesis being tested: The "beauty is good" stereotype suggests that physically attractive individuals are psychologically healthier than less attractive individuals. The study aims to assess the relationship between subjective and objective appearance evaluations and depressive symptoms, focusing on sexual orientation.

Explanatory and response variables & how they are measured: The study uses data from a U.S. nationally representative dataset, Add health. Participants (N = 4882) completed self-report questionnaires assessing their subjective and objective appearance evaluations, sexual orientation, and depressive symptoms.

Summary of results and key findings: The study found that negative subjective appearance evaluation was associated with higher rates of depressive symptoms. In contrast, objective appearance evaluation was not significantly related to depressive symptoms. The results also suggest that sexual orientation moderates the relationship between subjective appearance evaluation and depression, with a stronger association noted among sexual minority individuals than heterosexual individuals.

Significance to my research question: The findings of this study are relevant to the research question of whether there is an association between the sexual orientation of cis-males, depression levels, and income. The study highlights the importance of considering the relationship between subjective appearance evaluation and depression among sexual minority individuals, which may be relevant to understanding the mental health disparities experienced by this population.