

Advancing understanding of structural sexism and population health inequities: Introducing a novel modeling approach to capture life-course and intersectional effects

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INTRODUCTION

- Evidence links structural sexism to gendered health inequities in the U.S.¹
- However, few studies have considered *life-course* and/or *intersectional effects*.

METHODS

- Here we describe a novel analytic approach to address these gaps:

- Leveraging longitudinal indicators U.S. gender inequality (e.g., wage gaps, abortion bans),² states are classified as having higher vs. lower levels of structural sexism in a given year.
 - **Cumulative exposure** = mean time spent living in a high structural sexism state.
- Sequential conditional mean models are used to address time-varying confounding (**Fig 1**).³

- To illustrate, we apply this method to examine how cumulative exposure to structural sexism from late childhood through young adulthood contributes to depression inequities in the Growing Up Today Study (N=13,414; 1996–2016).

- Overall associations, compared to using a “point-in-time” exposure operationalization.
- Tested for differences by gender, and among girls/women, by sexual orientation and race.

CONCLUSION

Sequential conditional mean models are a promising approach for examining how structural sexism shapes population health patterns **over time** and at the intersection of **multiple social identities**.

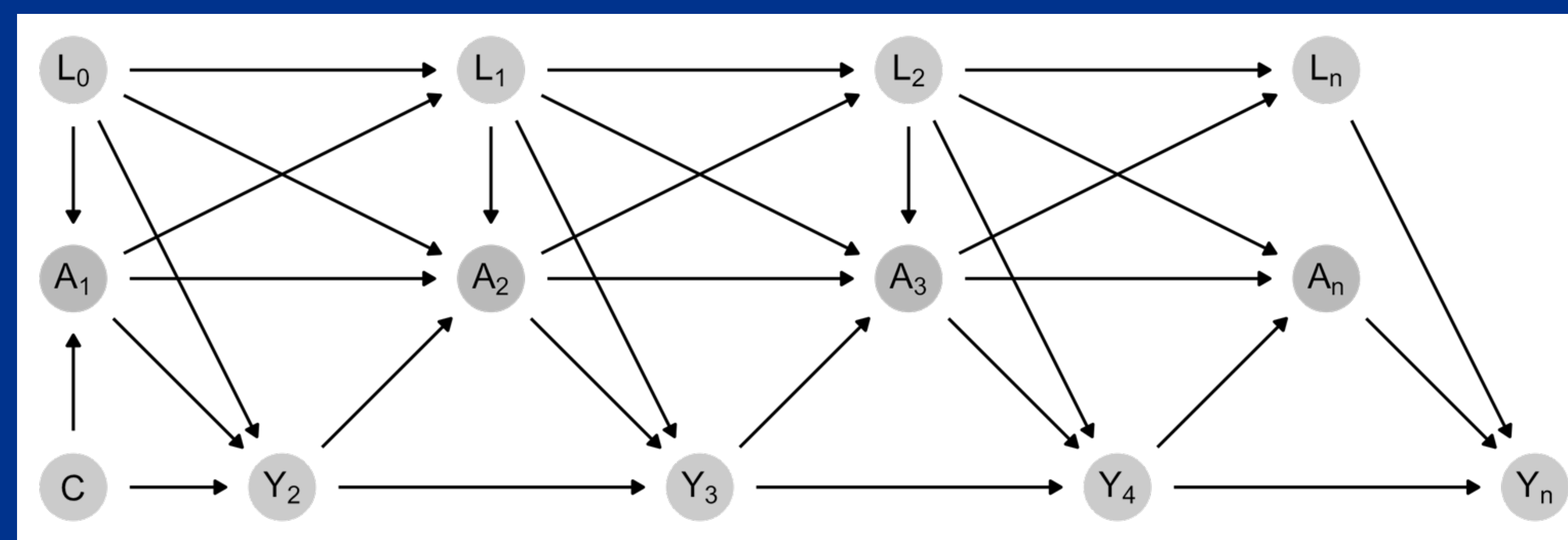


Figure 1. Directed acyclic graph (DAG). A_n represents cumulative exposure to structural sexism through time $t - 1$; Y_n represents depression at time t ; L_n is a vector of time-varying covariates (state demographics) at time $t - 2$; and C is a vector of baseline covariates (individual demographics).



← Scan to read our preliminary work!

RESULTS

- A 1-unit \uparrow in cumulative exposure to structural sexism through $t - 1$ was associated with a 15% \uparrow risk of depression at t . Estimates for a point-in-time exposure operationalization were non-significant (**Table 1**).

Table 1. Risk ratios (RR) for the association between structural sexism and subsequent depressive symptoms

	RR	95% CI
Cumulative exposure through $t - 1$	1.15	1.02, 1.30
Point-in-time exposure at $t - 1$	1.03	0.90, 1.17

Adjusted for age, race/ethnicity, median household income, and GINI ratio.

- Effect sizes differed both *between* and *within* gender groups (**Table 2**).

Table 2. Risk ratios (RR) for the association between structural sexism and subsequent depressive symptoms, stratified by gender, sexual orientation, and race/ethnicity

	RR	95% CI
Boys/men	0.99	0.77, 1.28
Girls/women	1.21	1.05, 1.40
Sexual minority	1.42	1.06, 1.90
Heterosexual	1.20	1.01, 1.42
Racial/ethnic minority	0.68	0.31, 1.51
Non-Hispanic White	1.23	1.06, 1.42

Adjusted for age, race/ethnicity, median household income, and GINI ratio.

REFERENCES:

¹ Homan P (2019). ² Institute for Women's Policy Research. ³ Keogh RH, et al. (2018).