



Race and Ethnicity of Driver and Traffic Stop Outcome in Connecticut: Associations with Intervention Techniques and Dispositions

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Introduction

- Traffic stops are one of the most common interactions between civilians and law enforcement in the U.S, and Prior research shows racial and ethnic disparities in searches, arrests, and police scrutiny (Shoub et al., 2020; Rojek et al., 2004).
- Police discretion plays a key role, especially in minor violations where officers have more decision-making flexibility (Childers, 2012; Iwama & McDevitt, 2025).
- However, most studies focus on severe outcomes (arrest), while less attention is given to lower-level outcomes (warnings, infractions) and type of stop (intervention technique). This study addresses these gaps by examining multiple stages of traffic stops.

Research Questions

- Are race and ethnicity associated with traffic stop outcomes (severity)?
- Do these differences vary by intervention technique?

Methods

Sample

- Data: 2024 Connecticut Traffic Stops dataset
- N = 405,534 stops
- Officer-reported data on driver races\ethnicities and stop characteristics

Measures

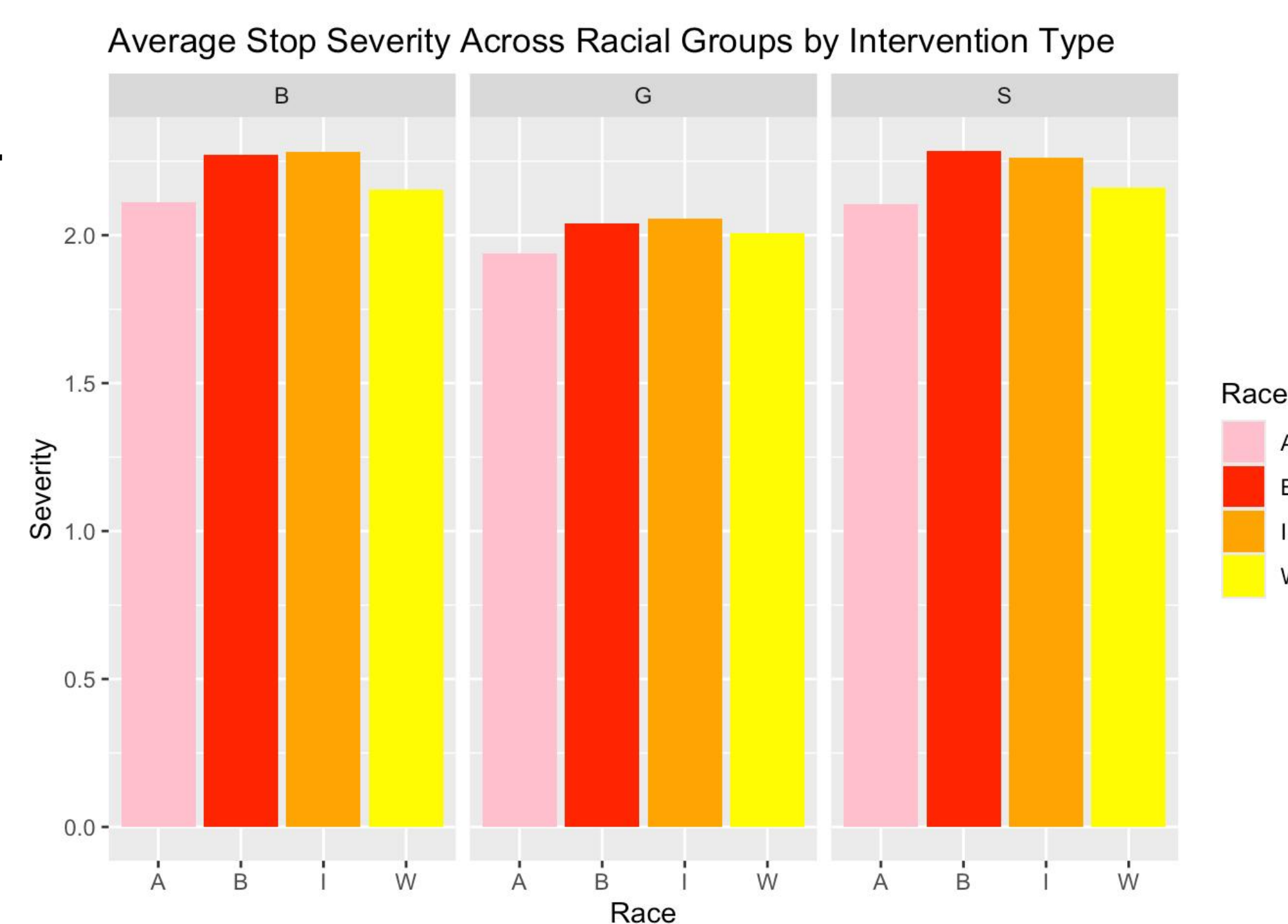
- Race: White, Black, Asian, Indian Ethnicity: Hispanic, Middle Eastern, Non-Hispanic
- Intervention Technique: Blind (discretionary stops), General (routine patrol), Spot (targeted enforcement)
- Stop Severity (ordinal): (1) Verbal warning, (2) Written warning, (3) Infraction, (4) Misdemeanor summons, (5) Arrest

Results

Two linear regression models were conducted to examine the relationship between Race/Ethnicity and stop disposition severity:

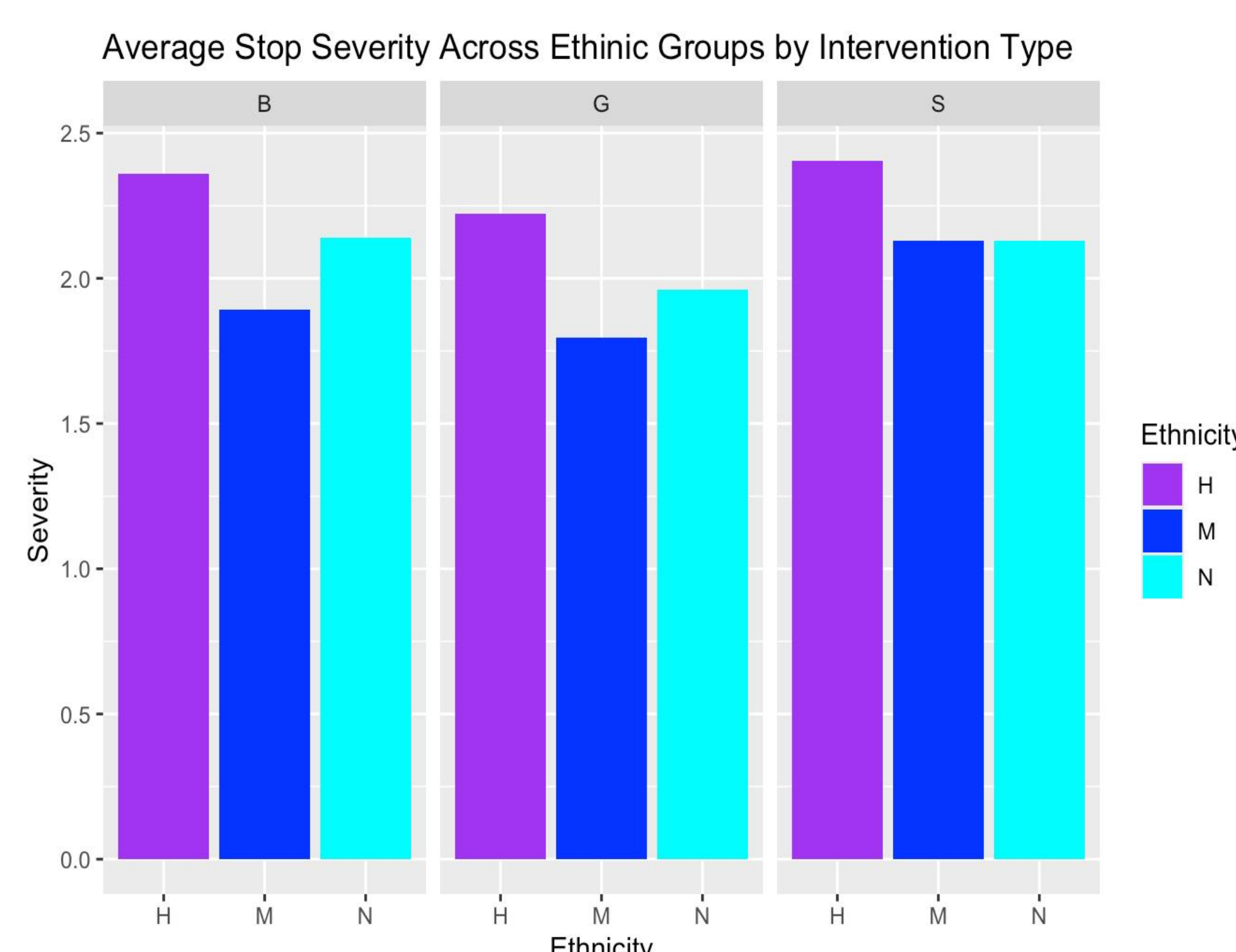
Race and Stop Severity with Intervention Type

- Race is a statistically significant predictor of stop severity ($F = 97.04, p < 0.001$).
- Black ($b = 0.0549, p < 0.001$) and Indian drivers ($b = 0.0881, p < 0.001$) show higher predicted severity compared to White drivers.
- Asian drivers show lower predicted severity ($b = -0.0551, p < 0.001$).
- These disparities are more pronounced in blind and spot stops than in general stops.
- This pattern suggests that contexts involving greater officer discretion may amplify racial differences in stop outcomes.



Ethnicity and Stop Severity with Intervention Type

- Ethnicity is also a significant predictor ($F = 2474, p < 0.001$).
- Hispanic drivers have higher predicted severity ($b = 0.2420, p < 0.001$) compared to Non-Hispanic drivers.
- Mid-Eastern drivers have lower predicted severity ($b = -0.1945, p < 0.001$). In contrast to race, variation across intervention techniques is minimal, with no consistent pattern across blind, general, and spot stops.
- Differences by ethnicity are less influenced by intervention context and appear smaller compared to racial disparities.



Discussion

- Results indicate that race and ethnicity are significant predictors of traffic stop outcomes. Black and Indian drivers, as well as Hispanic drivers, experience more severe stop dispositions, supporting prior research on disparities in policing.
- Intervention technique matters for race: Racial disparities are larger in blind and spot stops, where officer discretion is higher. This suggests that discretionary decision-making may amplify racial inequalities. Ethnicity shows a different pattern: Differences are consistent across intervention types, indicating they are less influenced by policing context.
- Overall, findings highlight that disparities occur not only in extreme outcomes (e.g., arrests), but also in routine enforcement decisions, emphasizing the role of police discretion.

References

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- Shoub, K., Epp, D. A., Baumgartner, F. R., Christiani, L., & Roach, K. (2020). Race, place, and context: The persistence of race effects in traffic stop outcomes in the face of situational, demographic, and political controls. *Journal of Race, Ethnicity, and Politics*, 5(3), 481-508.