

Executive Summary

We are a small group of UNC students who became interested in the Durham Police Department (DPD) satisfaction survey in 2016. We commend the DPD and the Durham City Council for surveying residents about their experiences and impression of policing in Durham. In that spirit, we wish to offer what we hope are two points of constructive criticism we hope can improve future surveys.

Having read the report of the most recent survey, we were left with questions about representativeness and group-specific experiences that the official report did not provide. Therefore, we reanalyzed the 2016 survey data to explore to these questions. As a follow-up to our analysis, we have **two specific recommendations** for future surveys, and offer a selection of group-specific results for consideration. We hope these are useful to DPD and city council.

1. **Assess and report survey representativeness.** Almost all surveys are at risk of collecting responses from a response group that doesn't represent the intended group to be generalized to. In this case, it is important to consider whether the group surveyed represents the resident population of Durham, if that is the intended survey population. If the demographics do not represent Durham, then the overall estimates for questions will be skewed and may not represent a Durham-wide experience.

We assessed this in two ways: first, by comparing the demographics of Durham (by income and race-ethnicity) with the demographics of those surveyed; and second, by reweighting survey responses to exactly match the demographics of Durham per the most recent US Census American Communities Survey (2016). We recommend always dedicating space in the report to assessing this first metric – **report the most recent demographics of Durham compared to the demographics of the survey respondents**. By our assessment, this survey was representative of Durham by race-ethnicity, though less so by income. One consequence of this is that, when using stratum-specific weighting to balance the survey responses to the demographics of Durham, the overall responses for sample questions changed by no more than a few percentage points. This is to be commended, but future surveys may not be as representative. It is important to verify the representativeness of a survey's overall estimates each time, and a comparison to underlying demographics is key to this assessment. Though nuanced statistical tests exist, we recommend a broad frame of ensuring survey respondents match population more distribution within a few percentage points for each group.

2. **Provide income and race-ethnicity group-specific results.** If groups have similar experiences, then an overall estimate (provided in the original report) represents well the experiences of survey respondents. However, if groups have very different experiences, an overall average may represent no group-specific experiences at all. In the case of this survey, we assessed whether groups by income or race-ethnicity had notably different survey responses. After converting most key multiple-choice questions to a binary response (e.g. strongly agree and agree as "any agree", any other non-missing response as "did not agree"), we found that by race-ethnicity, and

to a lesser extent by income, groups had very different responses, sometimes as high as a 50-percentage-point difference in agreement between race-ethnicity groups. This suggests that, unless race-ethnicity and income groups begin to have similar experiences with policing in Durham, it is important to report their different experience. Further, especially when the overall survey may not be perfectly representative of Durham, group-specific estimates will still be valid.

Further, to the concern that reporting these disparities in experience will exacerbate them – this question has been explored in other surveys, such as the CDC surveys on youth risk behaviors around drugs and sexual activity. The effect of measurement and reporting is often very small, if any effect at all, and the consequence of not reporting significant differences in experience by groups is often taken to be of much greater negative impact than measuring that difficult subject. For this reason, and to give voice to communities that have different experiences, **we recommend always reporting both overall and race-ethnicity / income specific results for this survey in the future**. If this requires an additional amount of money for analysis, we believe these differences are large enough to warrant it. Readers should note where there is more or less agreement between groups, taking both to be potentially meaningful survey results, and not only consider the overall estimate when group-specific estimates may differ.

We follow these two recommendations with a demonstration of what reporting (1) survey representativeness and (2) group-specific responses could look like, using data from the 2016 survey to demonstrate the importance of these two points. On (1), note the two graphs that compare Durham's by race-ethnicity and income with the population of Durham; on (2), note the wide variation by race-ethnicity status in their perceptions and experiences with DPD in the selected questions we reanalyzed using the raw 2016 survey data.

We are happy to field questions on these suggestions (email fliss@email.unc.edu) and wish the DPD and council the best in their future surveys.

Sincerely,



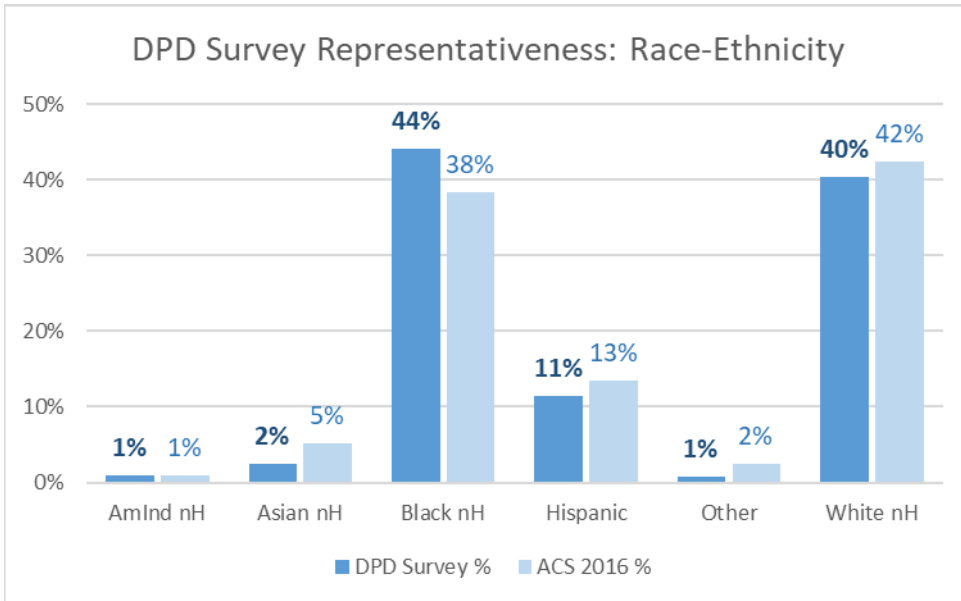
Mike Dolan Fliss MSW, Epidemiology PhD Student

CC: Arshya Gurbani, UNC MPH

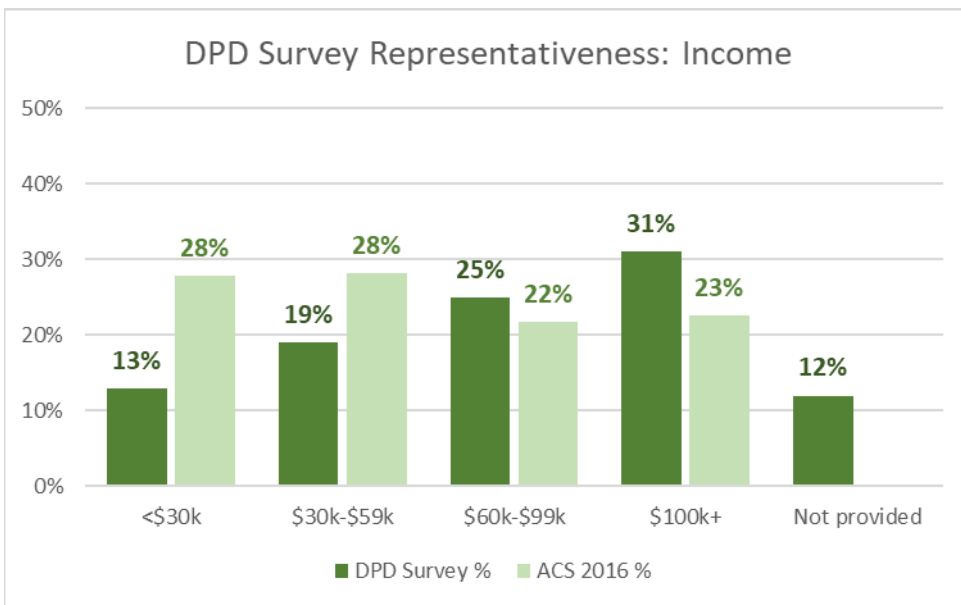
CC: Caroline Efird, UNC MPH

Survey Representativeness

The 2016 Durham Police Department Satisfaction Survey was **well-representative of the race-ethnicity distribution of Durham**. Reweighting responses to exactly match Durham’s demographic distribution had little effect on the overall estimates, though race-ethnic groups often had very different average answers to questions.



However, survey respondents **maybe not have been representative of Durham by income**. Though 12% chose not to provide their median household income, those who did suggested that the survey was systematically biased to have fewer low-income residents and more high-income residents responding to the survey than who live in Durham. Ensuring representativeness on surveys is difficult, though techniques like ensuring anonymity, offering small completion gifts or drawings, and targeted, local outreach can help improve representativeness.



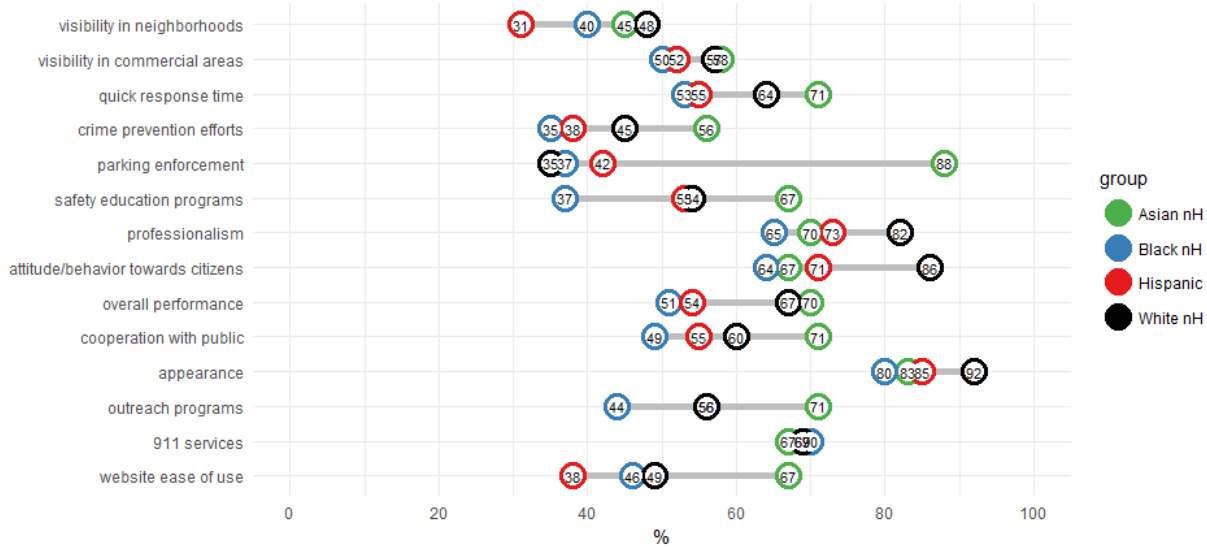
Group-Specific Responses

Question 1:

For each of the following, please rate your satisfaction with each item on a scale of 1 to 5, where 5 means "Very Satisfied" and 1 means "Very Dissatisfied."

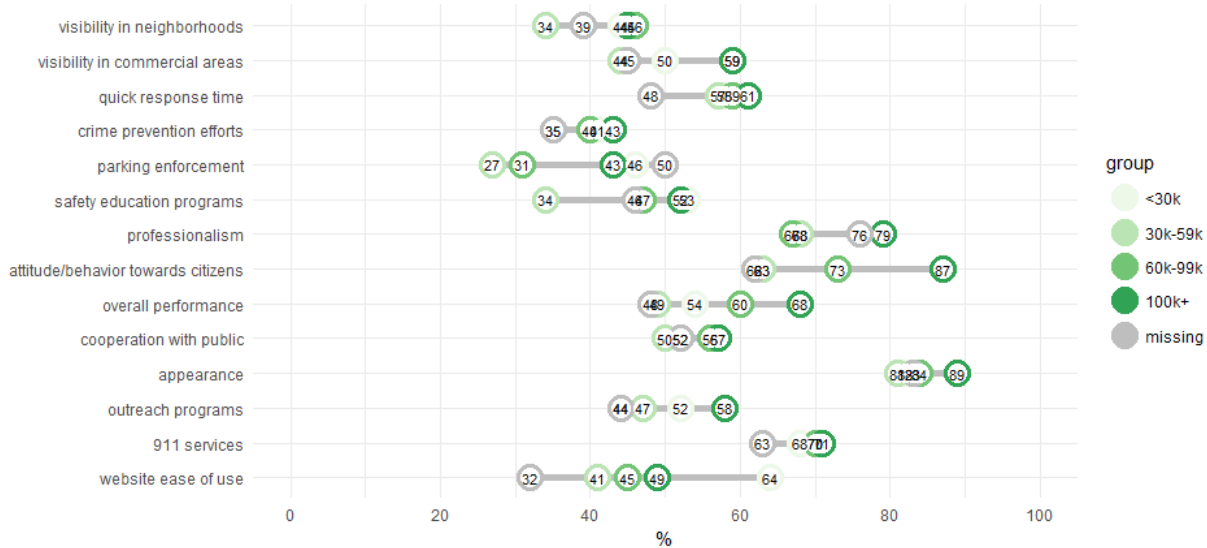
Q1: How Satisfied are you with...

Race-ethnicity groups. % Satisfied / Very Satisfied



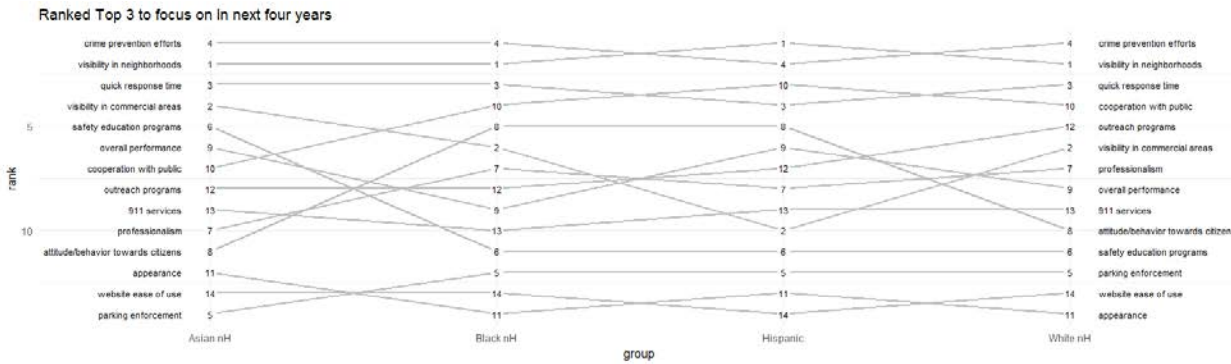
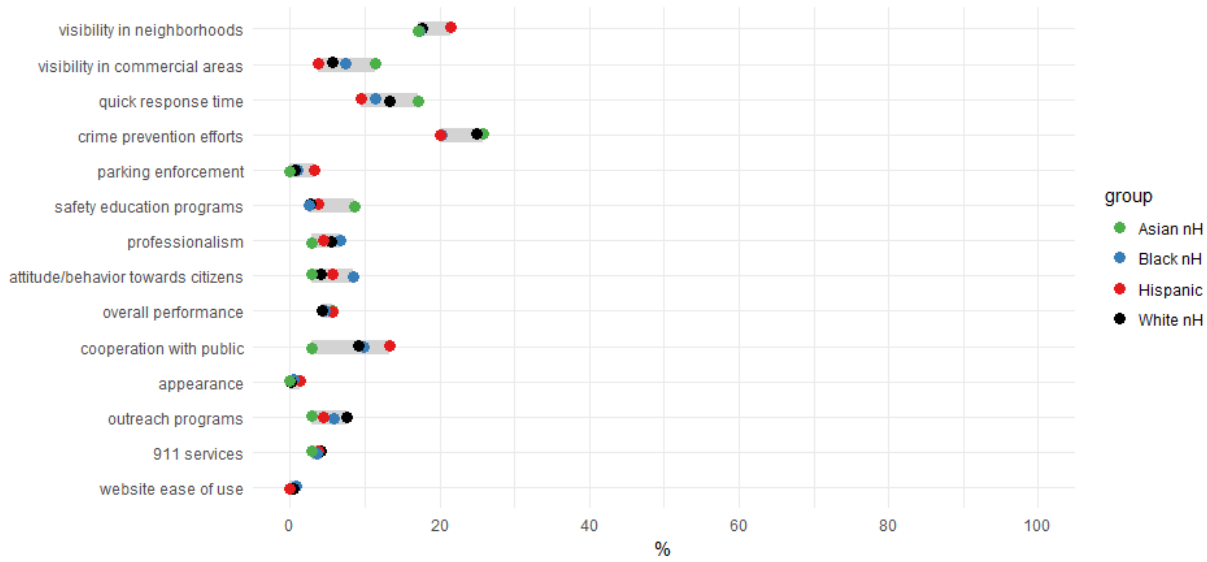
Q1: How Satisfied are you with...

Income groups. % Satisfied / Very Satisfied



Question 2:

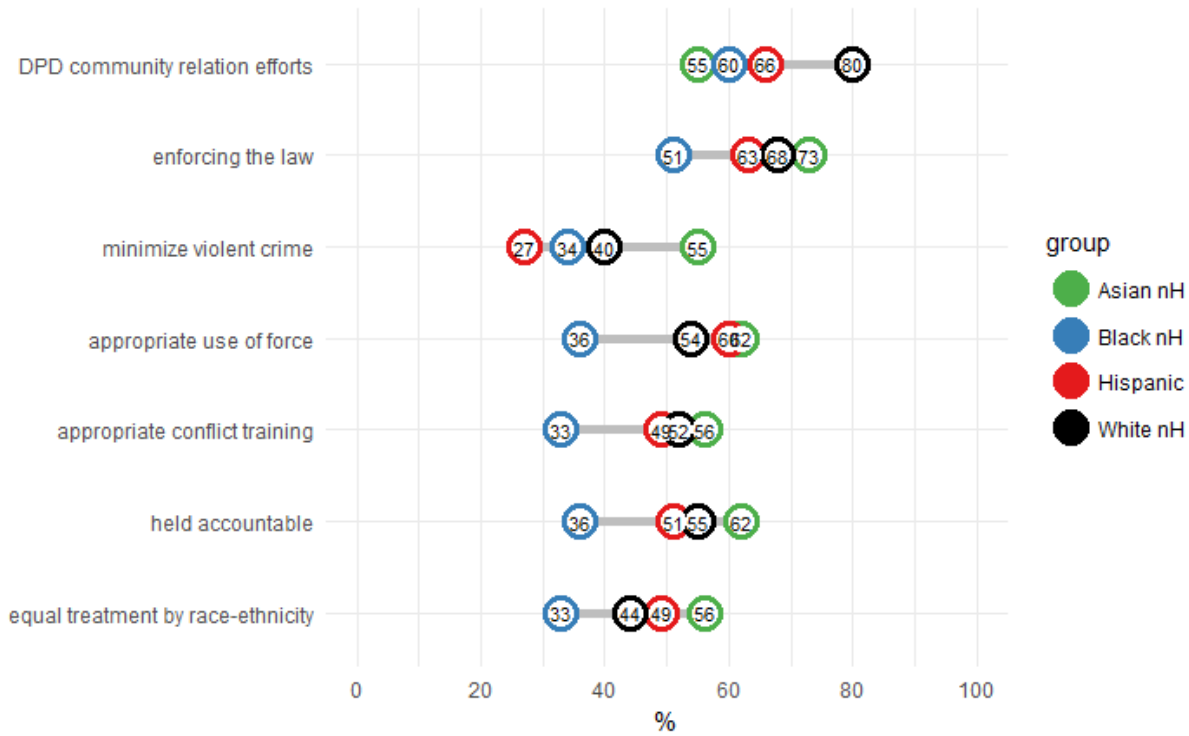
Which THREE of the items listed in Question 1 do you think should receive the MOST EMPHASIS from City leaders over the next two years? [Write-in your answers below for your top three choices using the numbers from the list in Question 1.]



Question 3: On a scale of 1 to 5, please indicate your level of agreement with the following statements related to the Durham Police Department, where 5 means "Strongly Agree" and 1 means "Strongly Disagree."

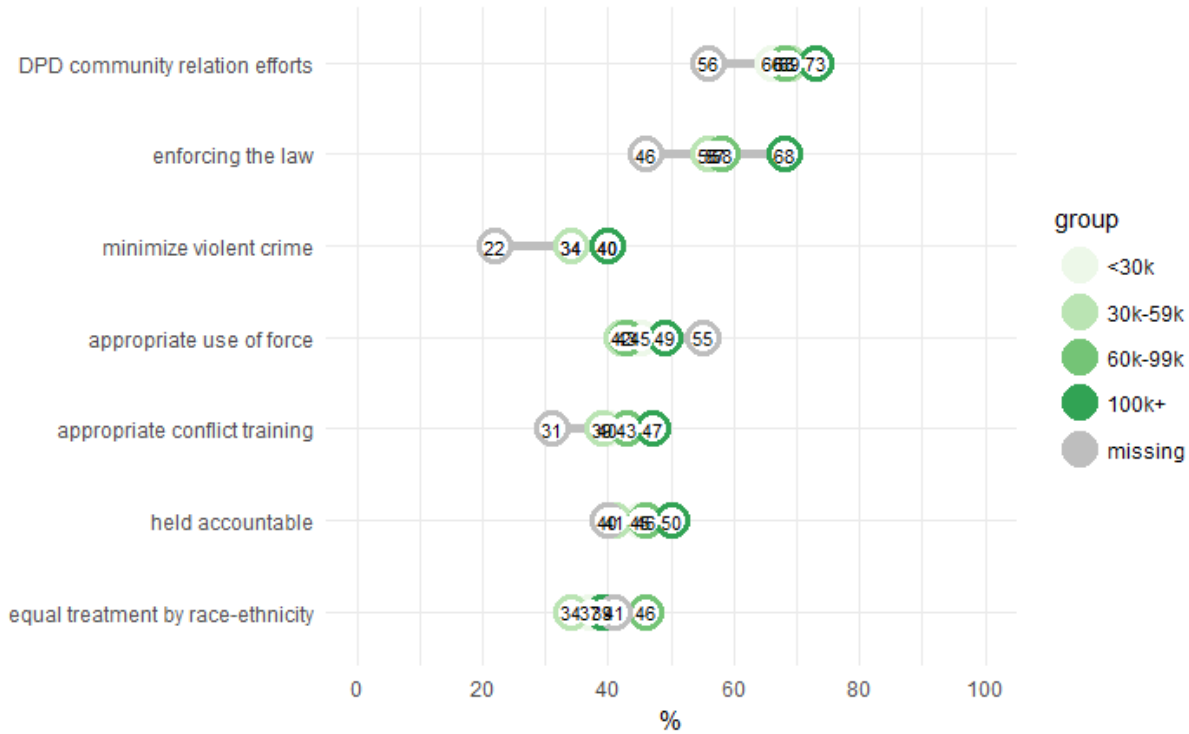
Q3: How Confident are you With...

Race-ethnicity groups. % Agree / Strongly Agree



Q3: How Confident are you With...

Income groups. % Agree / Strongly Agree

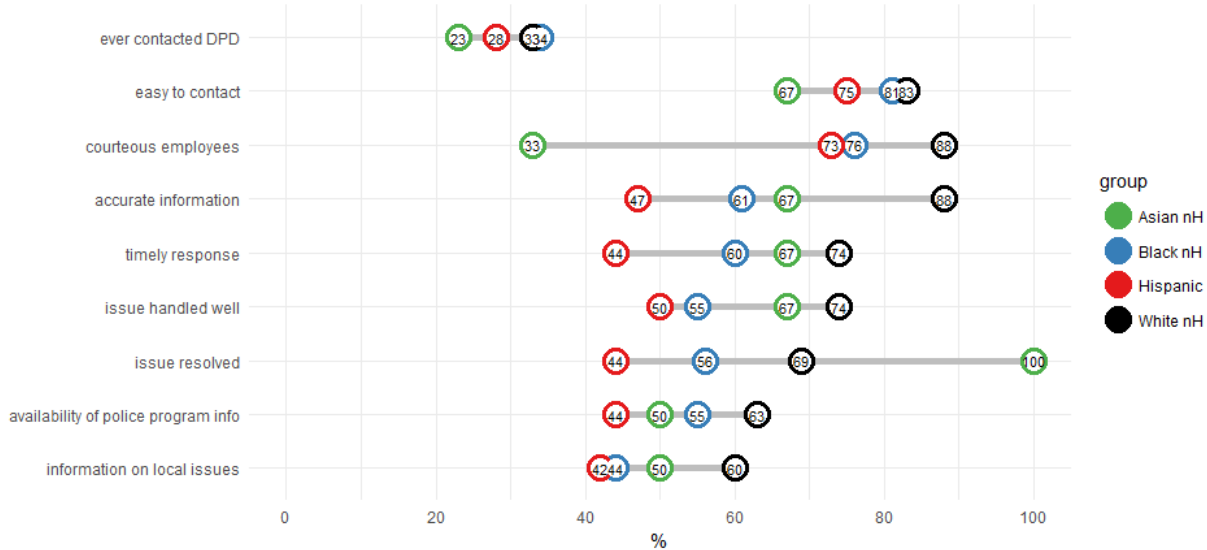


Question 5:

During the past year, have you or other members of your household contacted employees of the Durham Police Department to seek services, ask a question, or file a complaint?

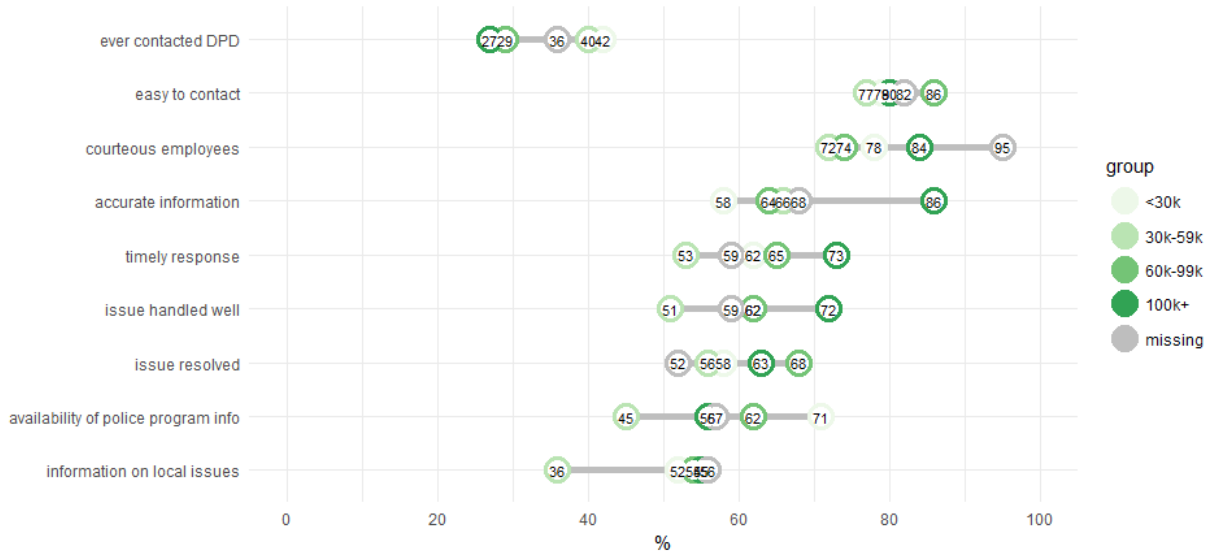
Q5: Contact with DPD

Race-ethnicity groups. % Satisfied / Very Satisfied



Q5: Contact with DPD

Income groups. % Satisfied / Very Satisfied

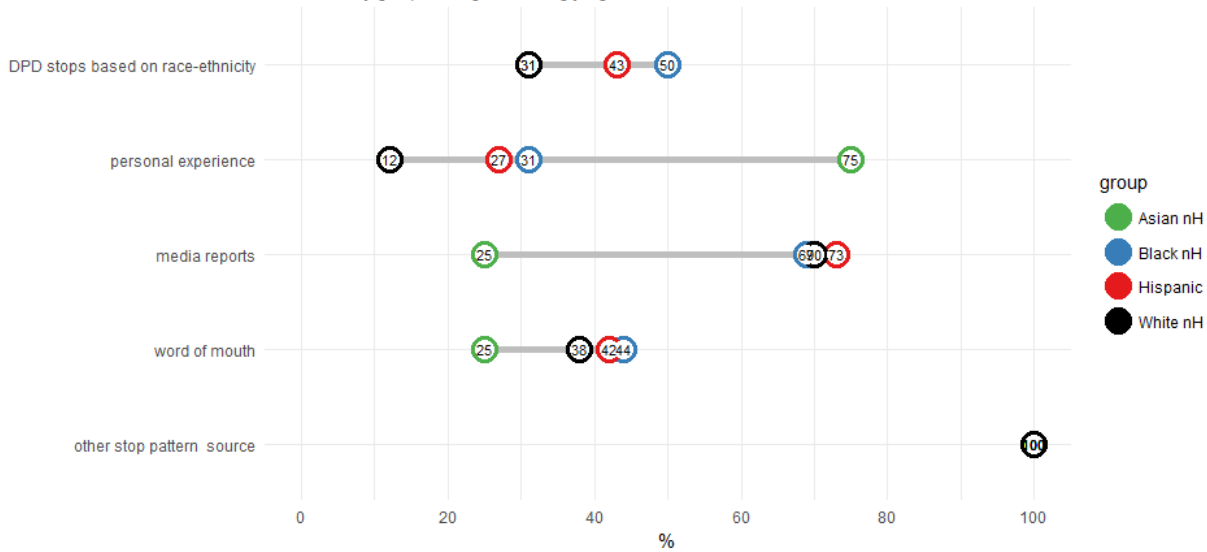


Question 7:

White people were less likely to believe **stop patterns** were partly based on race-ethnicity. Close to 1/3 of Black and Hispanic respondents had personal experience of discrimination in traffic stops. Personal experience, media reports

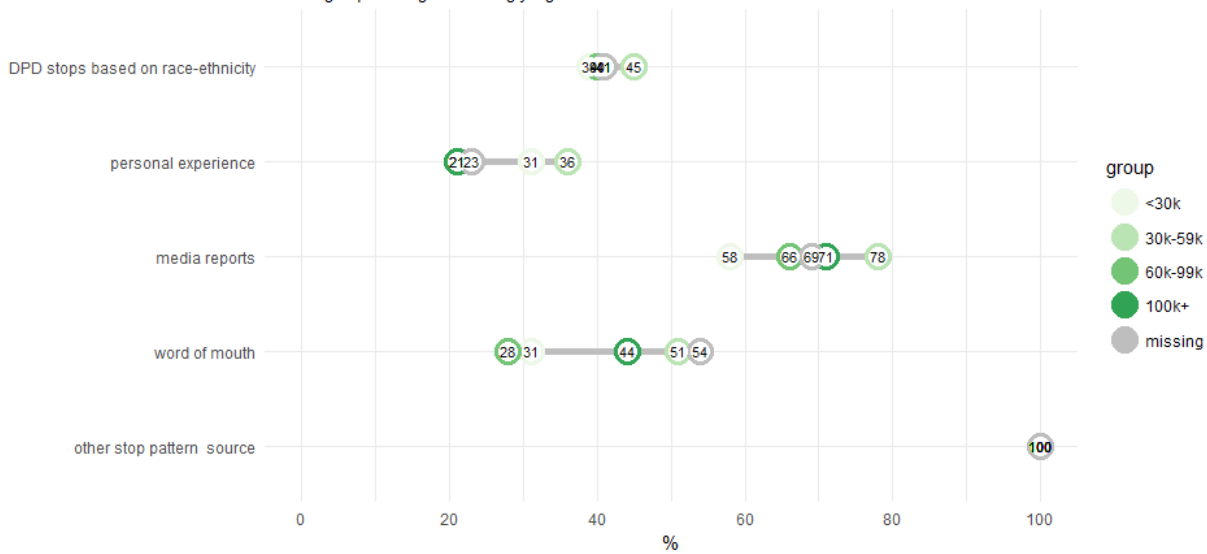
Q7: Stop patterns

Race-ethnicity groups. % Agree / Strongly Agree



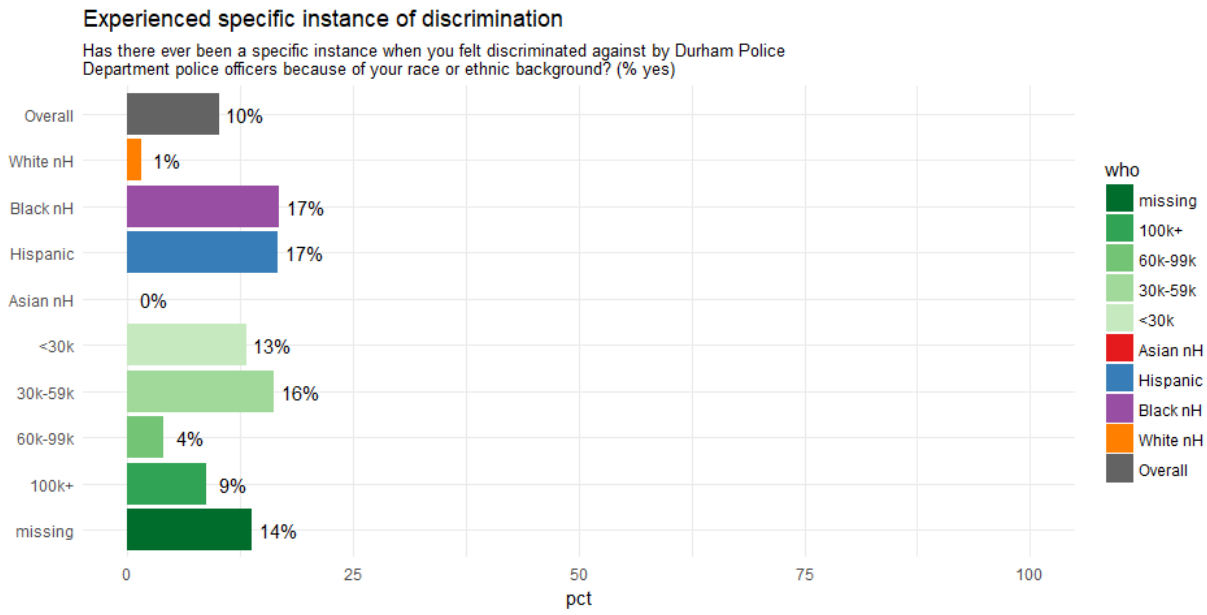
Q7: Stop patterns

Income groups. % Agree / Strongly Agree



Question 8:

Black and Hispanic individuals and low-income people were more likely to feel discriminated against (Q8).

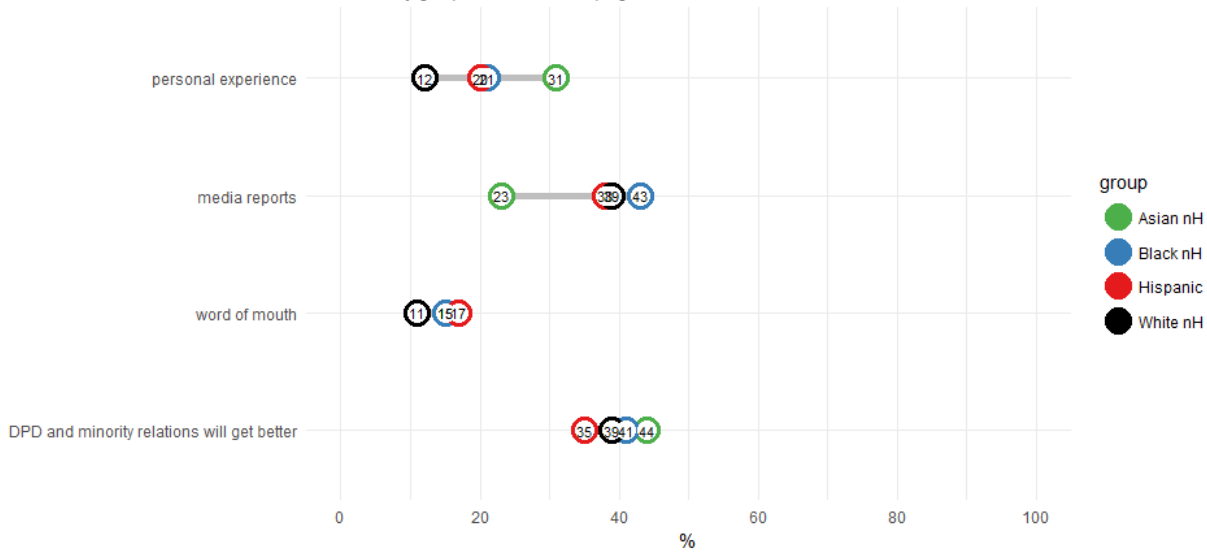


Question 9 & 9-2:

Over the next year, do you think relations between Durham Police Department police and the minority community will get better, get worse, or stay about the same? What is the reason for the view you indicated having in Question 9?

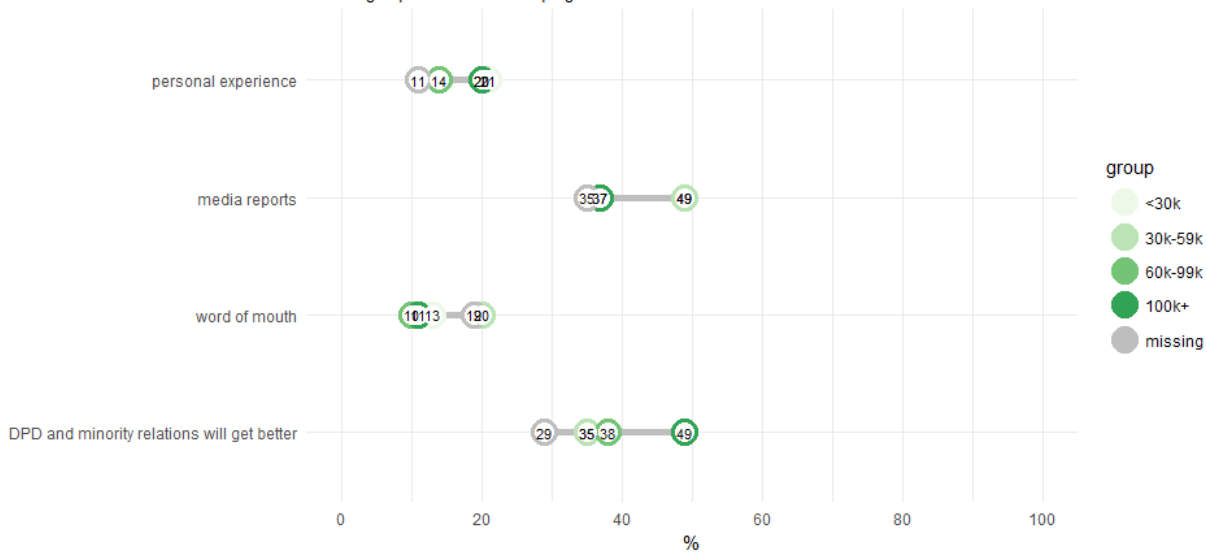
Q9: Will Relations Improve Next Year?

Race-ethnicity groups. % familiar with program



Q9: Will Relations Improve Next Year?

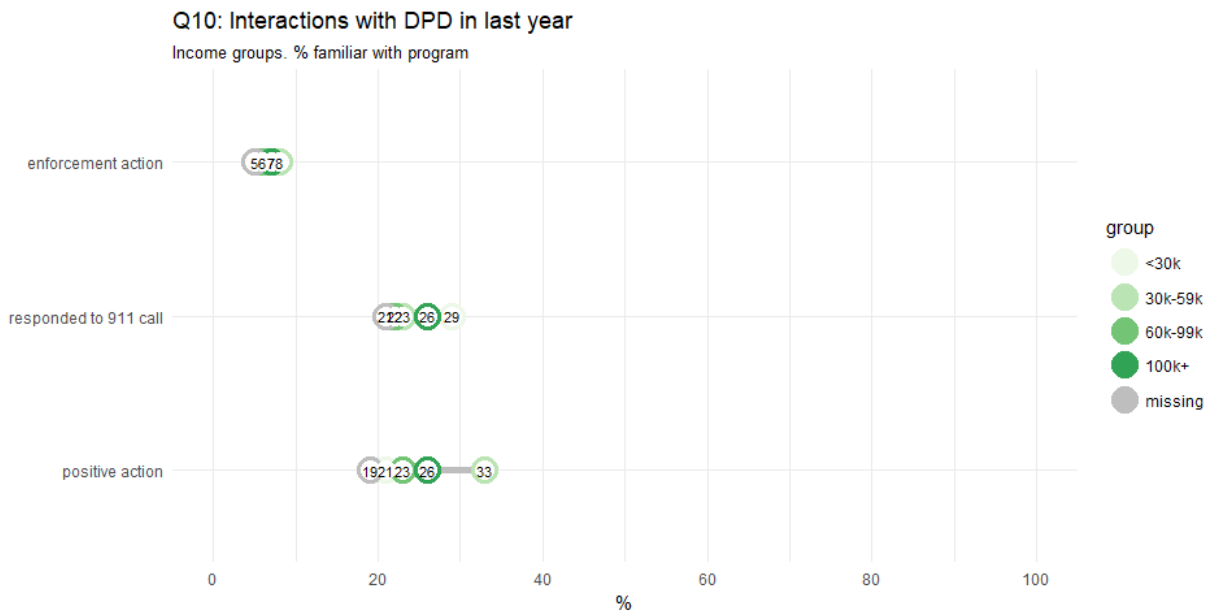
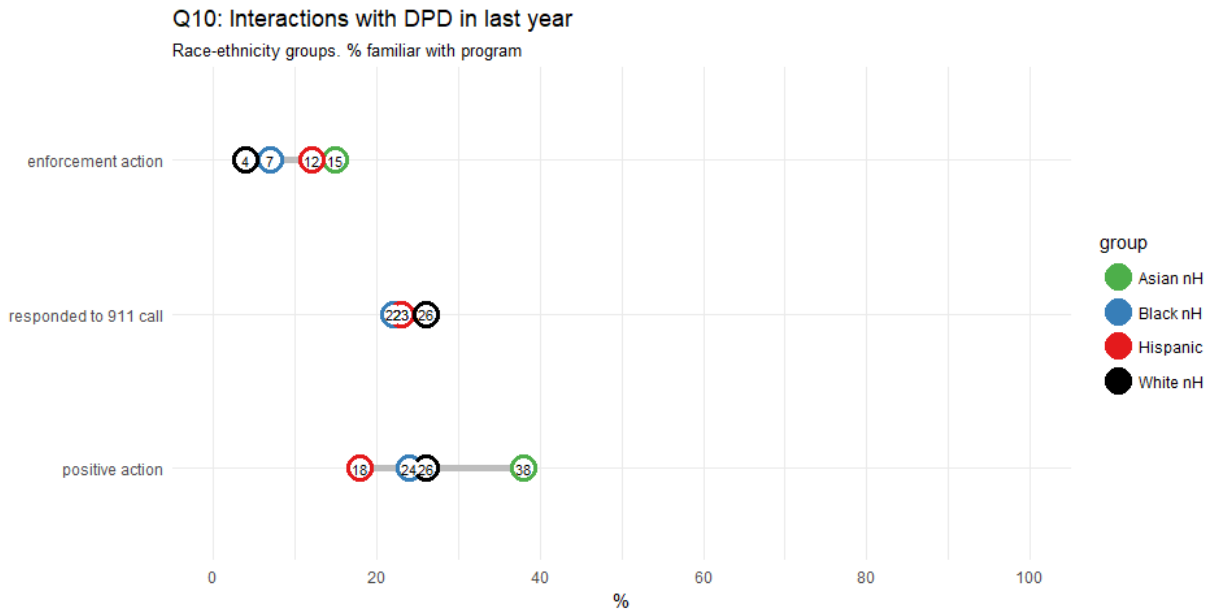
Income groups. % familiar with program



Question 10

Please indicate if you have had any interaction with a Durham Police Officer in the past 12 months for any of the following reasons. [Check all that apply.]

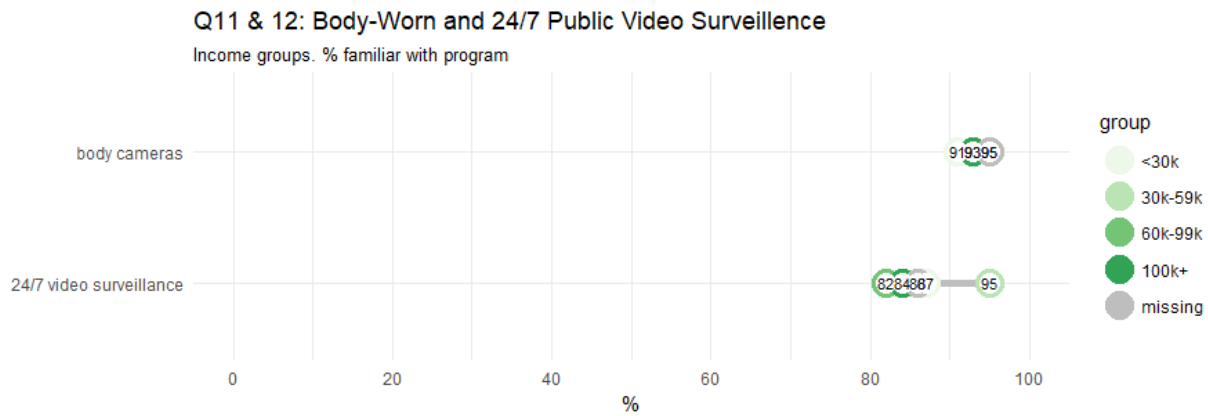
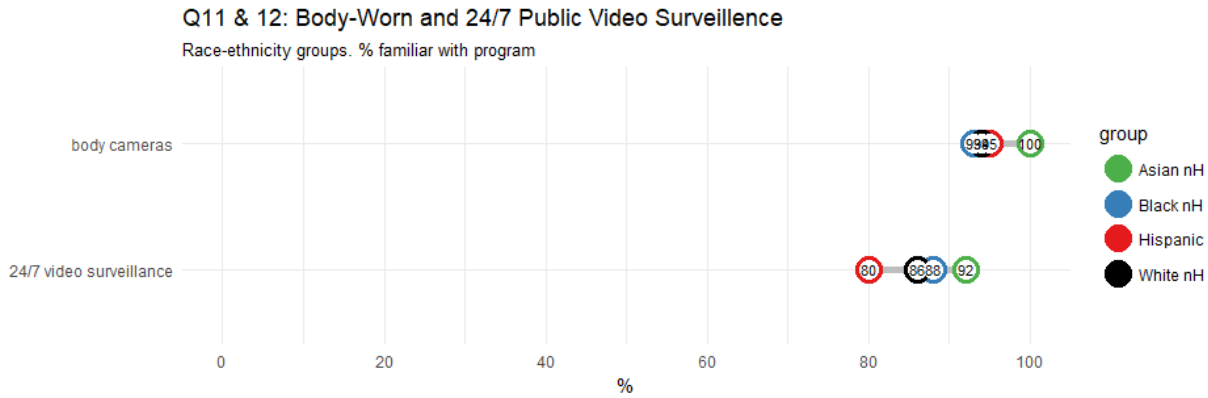
(Fix subtitle - % any interaction)



Question 11 & 12

Do you favor or oppose police officers wearing video cameras which would record events and actions as they occur?

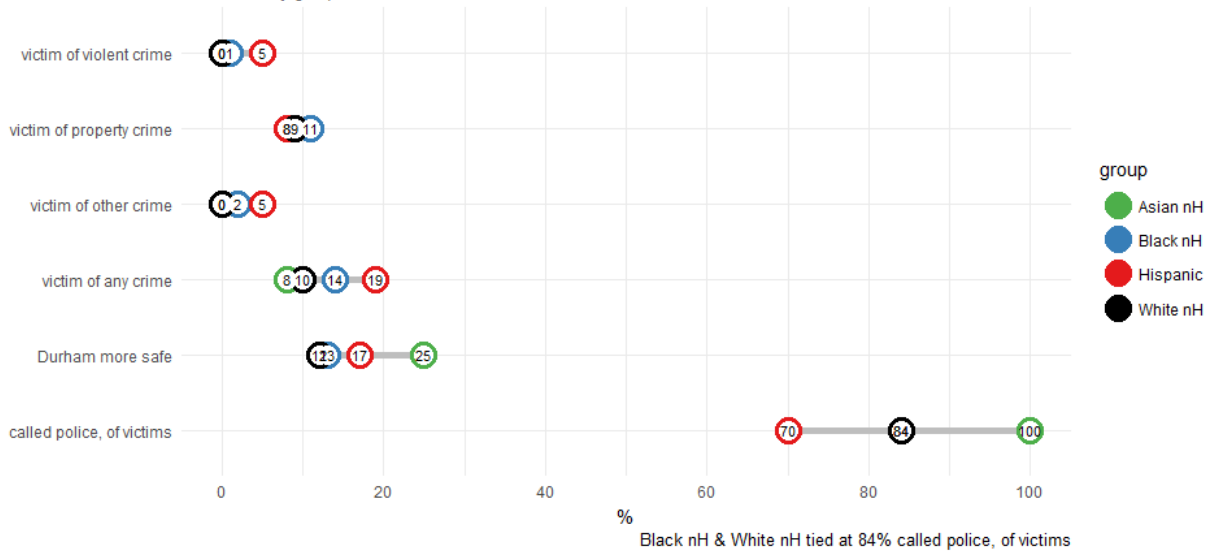
(Fix subtitle – favor or strongly favor)



Question 13

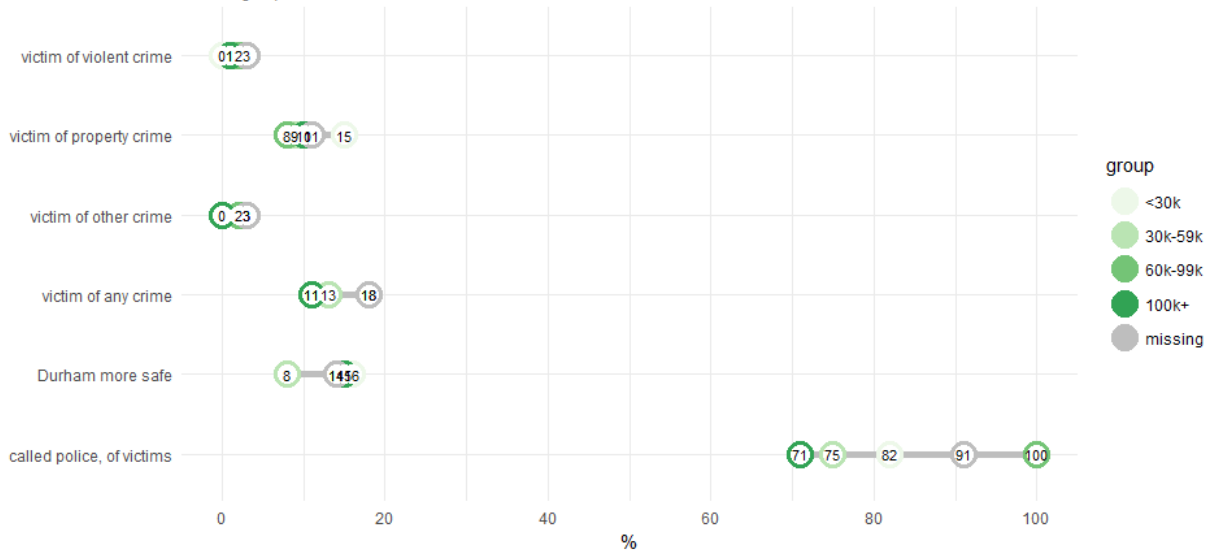
Q13 & 14: Survey respondent or any in household victim of crime in Durham / Durham more safe

Race-ethnicity groups. % victim of crime



Q13 & 14: Survey respondent or any in household victim of crime in Durham / Durham more safe

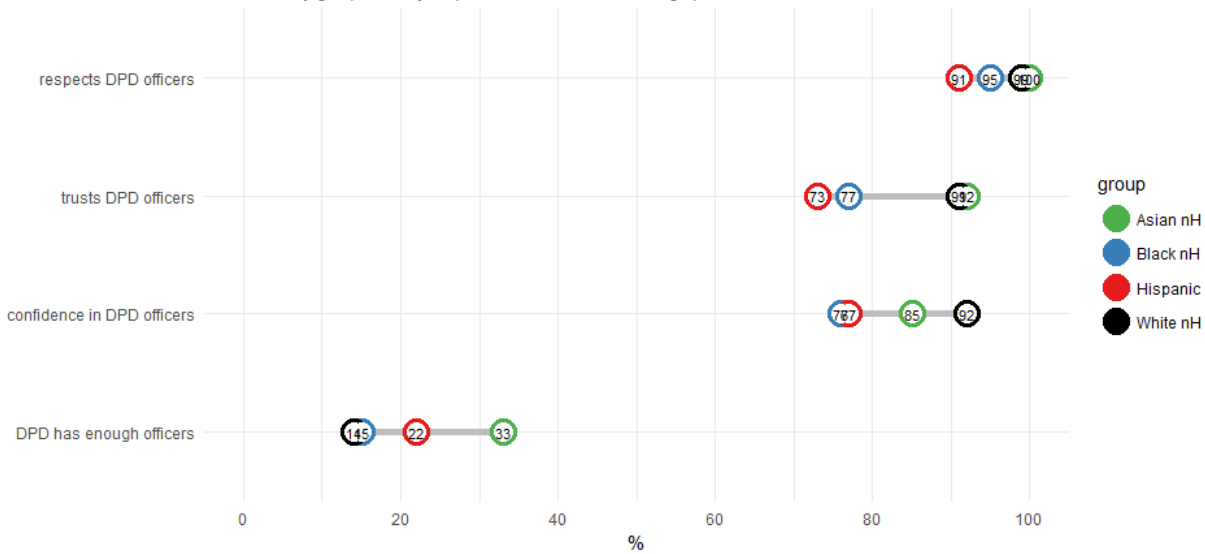
Income groups. % victim of crime



Question 15-18

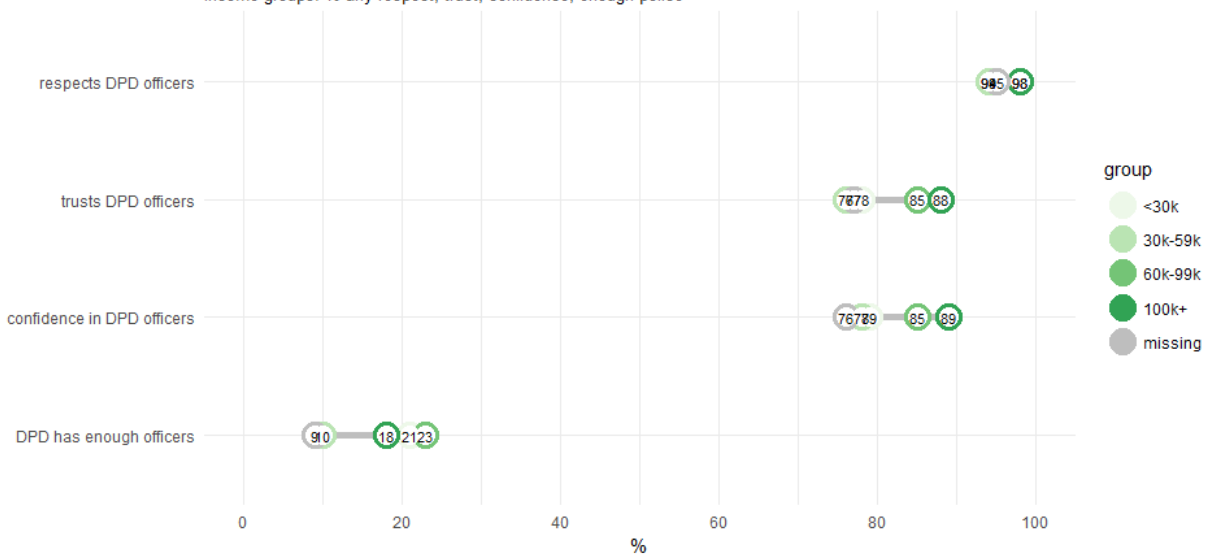
Q15, 16, 17, 18: Respect, trust, confidence, enough police

Race-ethnicity groups. % any respect, trust, confidence, enough police



Q15, 16, 17, 18: Respect, trust, confidence, enough police

Income groups. % any respect, trust, confidence, enough police



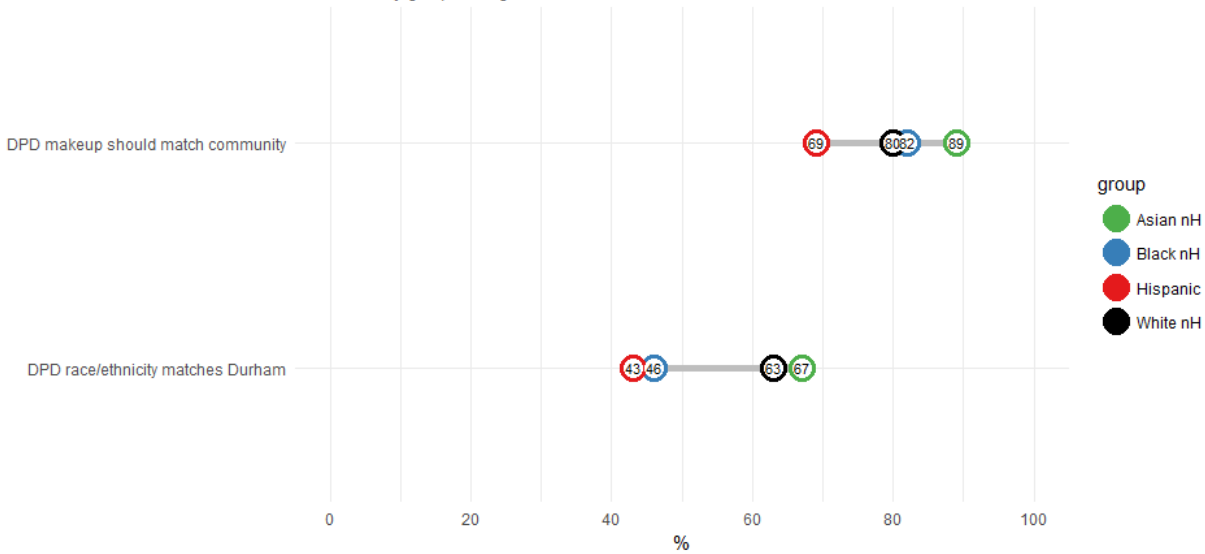
Trust and confidence in DPD officers was different by race-ethnicity, with 73% of Black non-Hispanic and Hispanic respondents having trust/confidence and over 9 of 10 White non-Hispanic respondents responding similarly.

Trust and confidence in DPD officers was similarly different by income, to 18% of lowest-income respondents to 9 of 10 highest income respondents.

Question 19

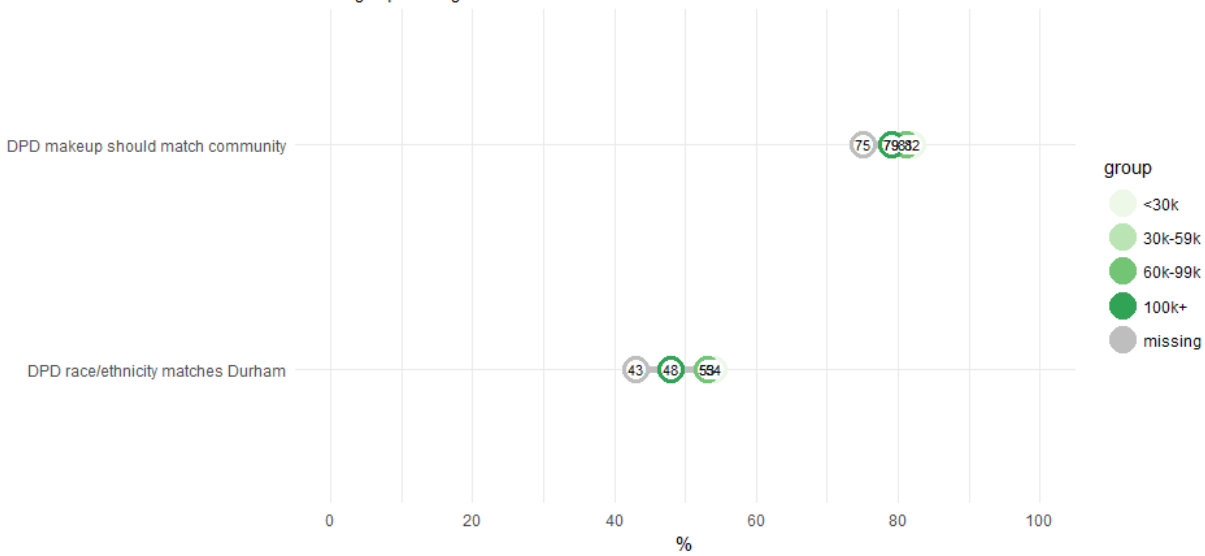
Q19: Police make-up matches community (important / currently reflects)

Race-ethnicity groups. % agree



Q19: Police make-up matches community (important / currently reflects)

Income groups. % agree



Belief in the importance of DPD make-up matching demographics and whether the demographics currently match are different by race-ethnicity. Hispanic respondents

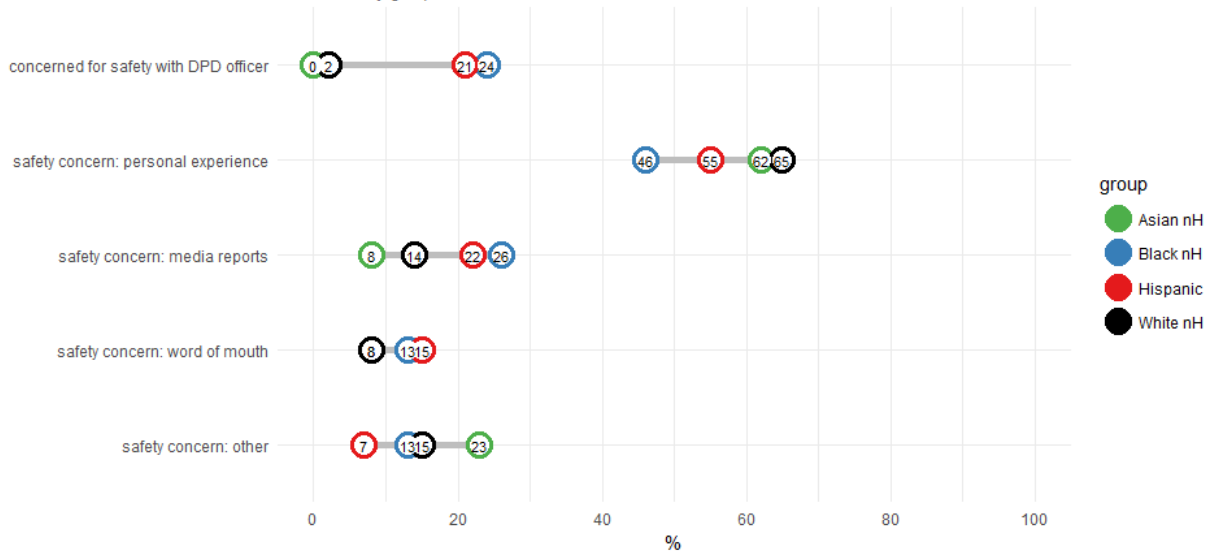
Just under 7 in 10 Hispanic respondents thought DPD staff race-ethnicity should match the community, vs. 4 of 5 Black non-Hispanic, 4 of 5 White non-Hispanic and 9 of 10 Asian non-Hispanic respondents.

Less than half of Black nH and Hispanic residents felt DPD's race/ethnicity demographics matched Durhams, compared to 2/3 of White nH and Asian nH respondents.

Question 20

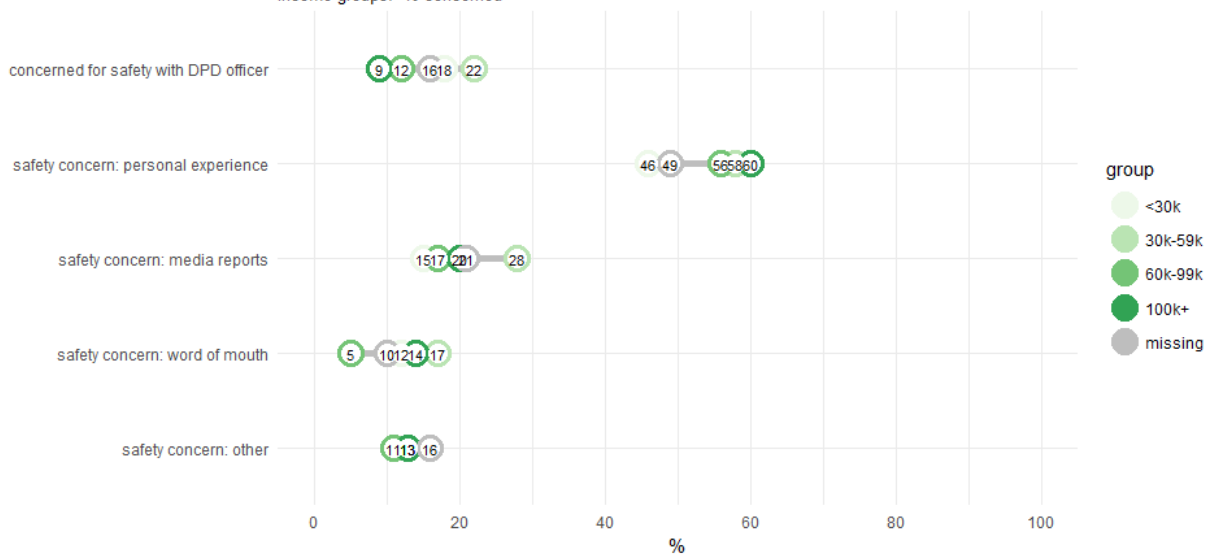
Q20: Personal safety concerns with DPD

Race-ethnicity groups. % concerned



Q20: Personal safety concerns with DPD

Income groups. % concerned

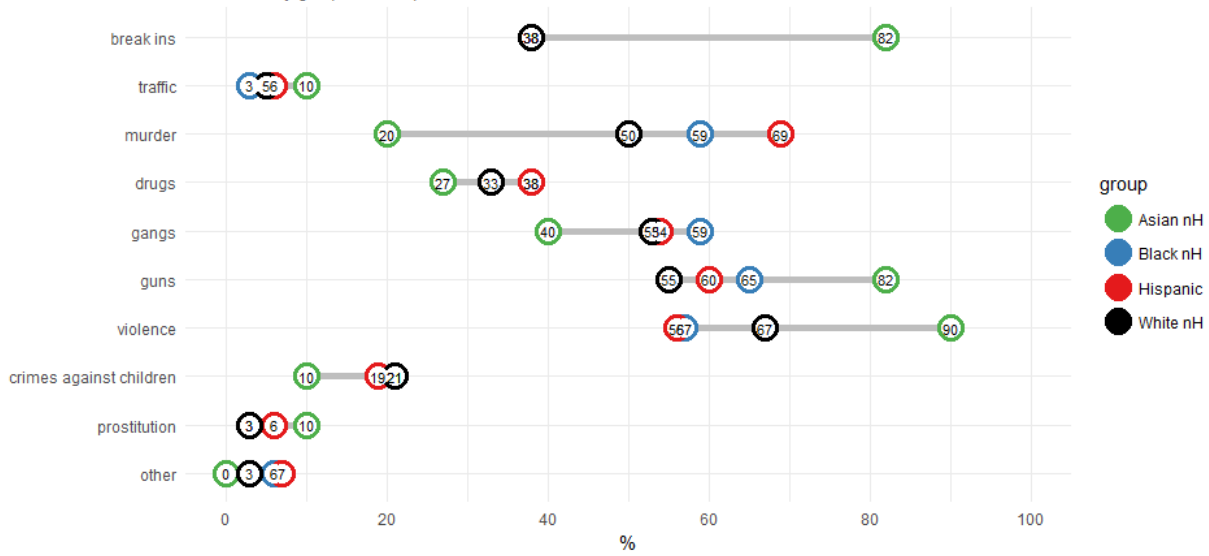


Black nH and Hispanic respondents were more likely to be concerned with their safety around a DPD officer (>20%), compared to White nH and Asian nH respondents (<3%).

Question 21

Q21: Greatest concern for city of Durham

Race-ethnicity groups. % in top three concerns



Q21: Greatest concern for city of Durham

Income groups. % in top three concerns

