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Understanding perceptions of citizen demeanor: Using an experimental design to understand the impact of encounter and observer characteristics

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Abstract: Systematic social observations of police-citizen encounters have revealed that citizen demeanor is an important predictor of outcomes (e.g., arrests, searches). Drawing from research on stereotypes and impression formation, we examine whether characteristics of the encounter and/or observer affect how respondents perceive demeanor. We exposed undergraduates (n = 255) to a randomly rotated series of five between-subjects design, in which characteristics of the encounter (citizen race, gender, or age; officer gender; neighborhood context) and the level of demeanor displayed were manipulated. OLS regression was used to examine how these manipulations interact to produce our dependent variable – perceptions of demeanor – and whether characteristics of the observer matter for perceptions, independent of the manipulations. We find that some aspects of the encounter, specifically officer gender and the socio-economic context of the neighborhood, influence perceptions of demeanor. Previous victimization, observers' race, and perceptions of the police also impact how demeanor is perceived. These findings suggest that understanding the impact of citizen demeanor on police-citizen encounters requires consideration of encounter and observer characteristics.

Keywords: demeanor, perceptions, police-citizen encounters, experiment

The Complexities of Demeanor

Police-citizen interactions create a valuable opportunity to understand how the police exercise their authority with citizens. Previous research reveals that citizen demeanor is a key factor in understanding police behavior (see Klinger 1994, Worden and Shepard 1996 for greater discussion). By demeanor, we mean ‘that element of the individual’s ceremonial behavior typically conveyed through deportment, dress, and bearing, which serves to express to those in his immediate presence that he is a person of certain desirable or undesirable qualities’ (Goffman 1956: 489). Thus ‘poor’ citizen demeanor reflects a lack of respect or deference toward the police, while ‘good’ demeanor is respectful, deferential citizen behavior. Increasingly, research shows that citizen demeanor influences a variety of policing outcomes, including officers’ decisions to comply with citizen requests (Mastrofski et al. 2000), initiate an arrest (Brown and Frank 2006, Engel and Silver 2001, Smith and Visher 1981, Swatt 2002), use force (Engel et al. 2000), and provide support to citizens (Sun and Payne 2004).

Much of our understanding regarding these encounters, however, is based on systematic social observation (SSO), a method that uses third-party observers to record characteristics of the encounter. This method is appealing for its ability to capture elements of police-citizen encounters, such as citizen demeanor, that are often absent in official data. At the same time, researchers have warned that these data collection efforts might be influenced by the presence of a third party (i.e., the observer) during these encounters, thereby increasing the likelihood of officer reactivity (Spano 2005). For example, data from a large-scale observational study (i.e., Project on Policing Neighbourhoods [PPN]) demonstrate that officers are less proactive (Spano 2007) and more likely to use force (Spano 2006) when data collectors were present. Additionally, Spano (2003) found officers were less likely to make an arrest if they had safety

concerns or when accompanied by female observers. Concerns of observer culture shock, burnout, and going native can also influence SSO data collection efforts (Spano 2005).

We maintain that observer characteristics may also compromise data collection efforts because perceptions and recording of police-citizen encounters may vary across observers (i.e., demographic characteristics), particularly when it comes to assessments of demeanor. We acknowledge that researchers overseeing observational police studies take great care to maximize reliability. To this end, some large-scale observational studies report that trained observers view the same video clips of police-citizen encounters and code those interactions to estimate inter-rater reliability (Frank, Novak, & Smith 2001; Mastrofski, et al. 1998).¹ Despite an intensive training protocol, Mastrofski et al. (1998) noted, “We have some items that present challenges to achieving reliability, such as establishing whether one party showed *disrespect* to another (criteria can vary among individuals as well as culture), the age of the citizen, the wealth of the citizen, and the display of emotions” (p. 9; emphasis added). Thus, suspect demeanor appears to be one of the more difficult concepts to capture reliably. Moreover, previous research does not explicitly test or control for the potential impact of observer characteristics on perceptions of demeanor. As a result, it is unclear whether demographic or even attitudinal differences across individual coders influence perceptions of demeanor.

It is equally likely that assessments of demeanor depend on the characteristics of those being observed (Engel et al. 2012). Prior research has shown that recorded demeanor varies by citizen race, gender, age, and neighbourhood context (Engel et al. 2012, Reisig et al. 2004). Reisig et al. (2004), for example, reported that citizens from poor neighbourhoods exhibited worse demeanor compared to citizens from other neighbourhoods. It is not clear, however,

¹ Importantly, neither study reports k , nor do any of the studies cited here list reliability estimates.

whether these recorded relationships accurately capture citizen demeanor or are a product of the observer's perception of the citizen's behavior as a result of encounter characteristics (in this case, the surrounding neighbourhood context).

Unfortunately, the SSO methodology does not offer an opportunity to unpack the complexities of measuring citizen demeanor and the associated implications for understanding its role in police decision-making. In particular, observational studies encounter difficulties in disentangling the extent to which recorded perceptions of demeanor are a function of a citizen's actual demeanor, the citizen's socio-demographic characteristics, or the observer's own characteristics.

In this paper, we employ an experimental vignette design to better understand whether the measurement of citizen demeanor is influenced by these two related but distinct sets of factors – characteristics that vary across *encounters* and characteristics that vary across *observers*. If encounter characteristics affect demeanor classifications, it suggests that demeanor at least partially acts as a justification for treating citizens differently as a function of their group status. If observer characteristics are found to impact perceptions of demeanor, previous findings regarding demeanor may partially be a function of the methodology used. Collectively, empirical evidence that either of these factors impact perceptions of demeanor would highlight the challenges associated with the measurement of demeanor, and suggest conclusions from previous research using third-party observations should be re-considered in light of such complexities.

Stereotypes, Observer Characteristics, and Perceptions of Others

Our first question regarding the measurement of demeanor is whether the characteristics of an encounter between police and citizens influence perceptions, namely due to the issue of stereotyping. Stereotyping should be considered whenever human perceptions are part of the

measurement process, given its pervasiveness and automaticity. Explanations for stereotyping are often based on evolutionary explanations: for most of human history, we have functioned in small groups of similar individuals to satisfy basic needs, while simultaneously desiring to be distinct from others (Brewer 2007). As a result, basic socio-demographic information that might distinguish one group from another is assessed almost instantaneously upon meeting a new person (Fiske 2000). Importantly, this information is typically associated with a constellation of beliefs about the group, which then influences the perceiver's impression of the other's behavior. From this perspective, these 'pictures in the head' (Lippmann 1922), or stereotypes, about group members are seen not only as natural, but also occurring automatically (Devine 1989, Fiske 2000). These processes are also described throughout the cognitive processing literature (e.g., Allport 1954, Drass and Spencer 1987, Good and Brophy 1990, Huesmann 1988) and increasingly within the policing literature (e.g., script theory - Smith, Makarios, and Alpert 2006; the social conditioning model - Smith and Alpert 2007). In the present study, we examined five characteristics that are not only of theoretical interest to the study of demeanor, but have also been shown empirically to impact perceptions.

Blacks in the US, for example, are attributed a number of stereotypes, some positive (e.g., athletic and musical), but others mostly negative (Brigham 1971, Devine 1989), including the stereotype that Blacks are hostile, aggressive (Peffley et al. 1997), and even criminal (Welch 2007). This would explain why in a video experiment, for example, an ambiguous shove was viewed as more violent when perpetrated by a Black individual than an identical shove perpetrated by a White individual (Duncan 1976). In a study of demeanor specifically, police officers assessed Black citizens as more disrespectful and non-compliant in police-citizen encounters relative to White citizens (Engel et al. 2012). However, as noted previously, third-

party assessments frequently fail to disentangle whether differing assessments of demeanor are due to objective differences in demeanor between Blacks and Whites or differences in subjective assessments as a function of stereotypes.

Recent evidence regarding the impact of racial cues has been more mixed, however. For example, an experiment that manipulated a job candidate's race and described trait information reported that subjects were *less* likely to believe a Black candidate was 'impulsive' compared to a White candidate, regardless of the information provided (Branscombe and Smith 1990). In other words, Black candidates were viewed as more self-controlled than White candidates, even when the Black candidate was described as impulsive. Furthermore, even though the researchers did not manipulate this trait information, participants also described impulsive (i.e., White) targets as more hostile. Given these results, the authors suggested that subjects 'went to great lengths to avoid appearing prejudiced against the black candidate' (p. 642). This aligns with work by Mendelberg (2001), who suggests that Whites are sensitive to explicit (i.e., verbal) race cues, given that egalitarianism and rejection of open racism is now considered normatively desirable. When explicitly alerted to the role that race and associated beliefs might play, Whites are able to 'override' their stereotypical first impressions and moderate their opinions. This stands in contrast to implicit (i.e., visual) racial cues that activates racial considerations among Whites but occurs outside of their awareness. Thus, while racial stereotypes remain, many Whites are sensitive to the explicit identification of race and moderate their perceptions as a result.

Gender is also evident, quickly assessed, and used to categorize individuals into known groups. Females are frequently viewed as gentle, yielding, and unassertive (Bem 1974), and assumed to be more compassionate, caring, and nurturing than males (Huddy and Terkildson

1993). In the aforementioned study, Branscombe and Smith (1990) found that subjects believed female candidates were more nurturing and less aggressive than males, again regardless of the described trait information accompanying each candidate. With respect to the gender of the citizen, Reisig and colleagues (2004) indicated that male citizens were, in fact, perceived to exhibit less respectful demeanor in police-citizen encounters compared to females, although interpretation of this result encounters the same problem as the Engel et al. (2012) study referenced above. With respect to officer gender, however, these stereotypes are ambiguous: demeanor may be seen as more disrespectful when aimed at female officers because they are gentler than their male counterparts, or less because they are considered unassertive and weak.

Age also comes with associated stereotypes, as younger individuals are generally seen as impulsive and disrespectful to authority (Schwartz 1987). This stereotype is reinforced by empirical evidence regarding the relationship between age and crime. That is, numerous studies document that participation in delinquency or criminality increases in teenage years and usually diminishes in the late 20s (e.g., Farrington 1986, Nagin et al. 1995). Given this stereotype, it is possible that citizen demeanor would be seen as more hostile or threatening based on perceived age. Indeed, the coders in Reisig et al.'s (2004) study reported that younger citizens exhibited less respectful demeanor when interacting with police officers relative to their older counterparts.

There is also evidence that environmental context impacts perceptions, though these studies have focused on traits that are peripherally related to police-citizen encounters. For instance, doctors who perceive their patients as coming from a low socio-economic background rated them as less self-controlled and more irrational than their higher socio-economic status counterparts (van Ryn and Burke 2000). Other experiments, however, have shown that individuals are perceived to be less friendly and warm than those shown in poor ones (Dittmar

1992). In line with the van Ryn and Burke (2000) study, Reisig and colleagues (2004) reported that citizens from lower socio-economic neighbourhoods were more likely to exhibit poor demeanor than those from higher socio-economic neighbourhoods. Once more, however, it is unclear whether these differences are a function of objective differences in demeanor or differences based on stereotypes associated with these neighbourhoods.

Complicating matters but in line with our concerns, research suggests that perceptions can also be influenced by the characteristics of an observer. Unfortunately, we are unaware of any published work that has explicitly examined the role of observer characteristics in perceptions of demeanor. The closest study comes from Engel et al. (2012), who controlled for officer characteristics. They found that White officers and those with more experience were more likely to perceive motorists' demeanor as disrespectful and noncompliant than Black and less experienced officers (Engel et al., 2012). In light of this study, and given a large body of literature showing gaps between Blacks and Whites with respect to other attitudes and perceptions regarding the criminal justice system (e.g., Hurwitz and Peffley 2005, Ugwuegbu 1979), it would not be surprising to find that observer race impacts perceptions of demeanor.

Finally, attitudes and experiences unique to observers might also be important to consider. For example, Frank et al. (1996) reported that citizen attitudes towards the police were influenced by their prior experience with both the police and victimization. As a result, it is important at least to consider whether observer demographics such as race and socio-economic status as well as their attitudes toward the police and previous experience with police affect perceptions of demeanor.

In sum, previous research clearly documents that stereotypes associated with encounter characteristics impact perceptions of others. With regard to citizen demeanor specifically, group

membership and contextual factors likely communicate expectations for behavior. The implication is that observers might view identical actions differently depending on the characteristics of the actor(s) involved and/or the environmental context in which it takes place. Additionally, we suspect that perceptions of demeanor vary across observers but, to date, no study of demeanor has explicitly considered this possibility.

The Current Study

To investigate whether characteristics of the police-citizen encounter and/or observer affect perceptions of demeanor, we recruited 255 observers undergraduate students enrolled in political science courses at a large university on the East coast of the United States. Each subject (observer) was exposed to five unique vignettes that described an interaction between a police officer and a citizen in which the citizen's demeanor ranged from compliant and respectful to hostile and resistant. For example, in the vignette describing the most respectful behavior – hereafter referred to as level 1 demeanor – the citizen answers ‘most of the [officer's] questions quickly,’ ‘looks the officer in the eye,’ and concludes by indicating ‘the officer has little problem getting the information needed in order to write up an official report.’ In contrast, a level 5 demeanor vignette describes the suspect walking away upon seeing the officer arrive, saying, ‘I don't know what you want from me, I was just trying to go home from work,’ and eventually slamming his or her fist against the wall. The other three vignettes (levels 2, 3 and 4) described behavior at varying levels between these two extremes. Appendix 1 contains a full transcript of all vignettes.

For each vignette, a single encounter characteristic was randomly manipulated while the others were absent from the description. Thus, citizen race (White or Black), gender (male or female), age (mid-20s [younger] or mid-50s [older]), officer gender (male or female), or the

description of the neighbourhood (upscale or disadvantaged) was explicitly identified in each of the five vignettes. For example, a single vignette described the citizen as male, but their race and age were left unidentified, along with the officer's gender and any description of the neighbourhood. Another vignette described the neighbourhood as upscale, but the citizen and officer characteristics were left unidentified.

The experiment proceeded with each observer exposed to five vignettes that randomized the demeanor displayed and the encounter characteristics identified, resulting in five, randomly rotated two by five mixed design experiments.² However, the design of the experiment ensured that subjects saw each of the five levels of demeanor, but only one level of each of the five encounter variables. Appendix 2 provides an example of how the information was presented to three hypothetical participants.

Although technically unnecessary given that the order of the vignettes was randomized, we created a variable that indicated the *placement*, or order in which a vignette was shown with respect to the level of demeanor displayed. This was coded as an ordinal variable ranging from one to five, with one indicating the vignette was seen first. By indicating at which point in the experiment the subject saw this vignette, this variable controls for potential order effects (i.e., if observers moderated their perceptions of demeanor over time as a function of repeated exposure to the task).

² Technically, each of the five socio-demographic characteristics had two levels each, and the demeanor displayed had five levels varying from respectful to disrespectful. Thus, there were ten different versions of each vignette describing a given level of demeanor, or 50 vignettes altogether. Subjects were randomly assigned to receive five of these vignettes, with the stipulation that each subject saw one and only one version of the five levels of demeanor, and one and only one level of each of the five socio-demographic manipulations. Because of this stipulation, the experiment is best described as a mixed design, which involve one within-subject (A) and one between-subject (B) factor. Subjects in our study received every level of factor A (level of demeanor displayed) and only one level of five distinct B's (encounter characteristics). With a sample size of 255 and 50 vignettes, each possible vignette was seen by roughly 25 subjects (255 subjects * 5 vignettes each = 1,275 observations; 1,275 observations / 50 vignettes = 25.5 observations/vignette).

After exposure to each vignette, subjects were asked to ‘[p]lease rate the behavior of the SUSPECT (i.e., citizen) on the following scale, from one to ten, where one means the suspect was compliant and respectful, five means the suspect was somewhat non-compliant, and ten means the suspect was resistant and disrespectful.’ This *perceived demeanor* is our dependent variable. The primary independent variables include an *indicator* variable, which represents the manipulation of the five factors across the vignettes. These variables were coded one when the vignette involved a ‘Black,’ ‘male,’ or ‘young’ citizen, a ‘male officer,’ or took place in a ‘disadvantaged neighbourhood.’ Vignettes involving ‘White,’ ‘female,’ or ‘older’ citizens, ‘female officers,’ or taking place in an ‘upscale neighbourhood’ were coded as zero. The *displayed demeanor* in each vignette was coded as an ordinal variable ranging from one to five, with one indicating the most respectful demeanor and five the most disrespectful demeanor. Finally, we created an interaction term by multiplying the indicator variable by the demeanor level variable (i.e., *indicator by displayed demeanor*). This variable allows us to capture all possible combinations of the indicator and level of demeanor displayed in the experiment.

In order to test for potential effects of observer characteristics, we requested additional information about the subjects after presentation of the vignettes. Race/ethnicity was measured using a series of dummy variables for *Black*, *Hispanic*, and *Other*³; for analysis, Whites are the reference category. Gender was also measured as a dummy variable with *male* observers coded as one. Previous victimization was measured by asking subjects, ‘Have you ever been a victim of a crime?’ Previous encounters with the police were measured by asking observers, ‘Have you ever been involved in a police-initiated encounter OTHER THAN a traffic stop? In other words,

³ The Other category represents Asians, Middle Easterners, Pacific Islanders, Native Americans, and those identifying with more than one racial category. Although Asians comprise the bulk of this Other category, including a separate dummy variable for Asians specifically does not affect the key results and reveals no significant differences between Asians and Whites with respect to perceptions of demeanor.

the police approached or stopped you; the police did not respond because you called them.’ Both questions were asked as yes/no questions; responses were coded into dummy variables with 1 indicating the subject has been a *victim* of crime and had a previous *police encounter*, 0 otherwise. Perceptions of the police were measured using two questions: ‘In general, how much do you trust the police to act professionally while carrying out their job?’ and ‘In general, how much do you trust the police to act ethically while carrying out their job?’ Both questions offered four response options: trust a lot, trust somewhat, trust a little, or do not trust at all. Responses to these questions correlated highly ($r = .78$) and were averaged to form a reliable summated scale ($\alpha = .88$) of *police perceptions* ranging from one to four, with four indicating the highest levels of trust.⁴

-- Table 1 About Here --

As Table 1 reveals, the sample was predominately White (45%) with a slight female majority (52%). Roughly one-third of subjects (34%) reported previous victimization and slightly more than two-fifths (42%) reported previous encounters with the police.⁵ Subjects also reported largely positive views of the police, with 51% indicating they trusted the police a lot and/or somewhat to act professional and ethically, and only 5% saying they had no trust at all in the police.

Results

⁴ We also measured subjects’ age, income (‘What was your family’s annual income in 2009? If you are a dependent, we are interested in *your parents’ or guardians’* annual income. If you are financially independent, we are interested in *your* income. If you are not sure, please give us your best guess.’), and media consumption (‘Do you watch any television shows that focus on the police? This includes reality TV shows [such as COPS], dramas [such as NYPD Blue], comedies [such as Reno 911], and TV specials [such as Lockup], but NOT local or national news programs [such as CNN or News12].’). When included, none of these variables were significantly related to perceptions of demeanor in any model, and had no meaningful impact on the results reported below. They are thus omitted in the models presented and not discussed further.

⁵ Observers were asked whether they were involved in such an encounter, not whether s/he was the suspect in a police-initiated encounter or the suspect of an offense. Nonetheless, it is worth noting that previous victimization and experience with the police were related ($\chi^2 = 20.36, p < .001$).

We initially conducted a manipulation check by calculating the average perceived demeanor within each level of displayed demeanor, averaging across the encounter characteristics. Table 2 summarizes the results of observers' perceptions of demeanor within each level of demeanor displayed. As expected, observers' perceptions of poor demeanor increased as the level of displayed demeanor became increasingly disrespectful. At demeanor level 1, for example, observers indicated an average perceived demeanor of 1.89, whereas at demeanor level 2, the average perception of demeanor was 4.48. This incremental increase is also shown in demeanor levels 3 and 4, though to less a dramatic degree than between levels 1 and 2. However, at demeanor level 5, the observers perceived slightly and significantly *less* disrespectful behavior relative to levels 3 and 4. Paired t-tests indicated that perceptions of demeanor at each level were significantly different from one another.⁶ Because of this tapering off in perceptions, we re-ran all models excluding the most disrespectful demeanor vignettes (i.e., level 5). Not surprisingly, inclusion of the level 5 vignettes attenuates the results; excluding these data results in slightly larger coefficients for both displayed demeanor and the interaction

⁶ Given the unexpected drop in perceptions of demeanor for level 5, we investigated this pattern further. A programming error was uncovered that may have resulted in a small number of responses being incorrectly recorded. In particular, observers were asked to rate their perceived demeanor on a scale from 1 to 10, for which they had the option of either clicking the appropriate number on the computer screen or entering the number on the keypad. If using the keypad, the program recorded only single-digit responses. Thus, subjects who tried to enter '10' manually (but not those who used the mouse to click the number 10 on screen) had their responses recorded as '1.' Fortunately, prior screens in an unrelated experiment forced observers to use the mouse (i.e., there were several 'select all that apply' questions that required the use of the mouse). Thus, it is unlikely a large number of observers were affected by this error. While we cannot say with 100% confidence exactly how many subjects were affected, we can make an educated guess. To estimate the extent to which the data were affected, we examined the distribution of '1' responses across the 5 levels of demeanor. Out of 1,275 total responses (255 observers * 5 vignettes each), 163 were '1'; of these 163 responses, all but 4 were recorded when the observer saw a vignette displaying one of the two lowest levels of demeanor. Specifically, 3 observers recorded a perceived demeanor of '1' after exposure to the second highest level of demeanor, and 1 observer recorded a perceived demeanor of '1' after exposure to the highest level of demeanor. As a robustness check, we re-ran all the models excluding these observers; the results were substantively and significantly identical.

between displayed demeanor and the socio-demographic indicator variable. Given that the results are substantively and significantly identical, we utilize all the data in our models.

-- Table 2 About Here --

Ordinary least squares (OLS) regression was used to predict perceived demeanor as a function of the level of displayed demeanor, the indicator variable, and their interaction. Separate models were estimated for each of the five indicator variables with encounter variables (see the left-hand side of Table 3, which displays the encounter models) and observer variables (see the right-hand side of Table 3, which displays the observer models). It should be noted that due to the inclusion of an interaction term, interpretation of the constituent variables is different than it would be in standard OLS models. Rather than indicating the effect of a variable when all other variables are held constant, the constituent coefficients (*displayed demeanor* and *indicator*) reveal the effect of a variable when the other variable in the interaction equals zero. As a result, the displayed demeanor variables should be interpreted as the effect of demeanor displayed when the indicator variable equals zero (indicating White, female, or older citizens; female officers; or upscale neighbourhoods). Similarly, each indicator variable is interpreted as the effect of that demographic characteristic when the displayed demeanor variable equals zero; since displayed demeanor ranges from one to five, however, this effect is not directly meaningful. As a result, we focus on differences in actual group means as well as the estimated coefficients to fully understand the results of our experiment.

-- Table 3 About Here --

First, we consider whether the order in which a vignette was seen affected perceptions of demeanor. A positive coefficient for the placement variable indicates that later vignettes were perceived as more disrespectful regardless of the demeanor displayed, while a negative

coefficient indicates that demeanor displayed in later vignettes were perceived to be less disrespectful. Looking across the encounter models, the results indicate that observers receiving a vignette identifying citizen gender or age perceived demeanor to be more disrespectful when seen later than those who received the vignette earlier, all else constant. On the other hand, when the neighbourhood vignette was viewed earlier in the sequence, observers were more likely to report more disrespectful demeanor, all else constant. Substantively speaking, suspects for whom gender and age were identified were perceived to be .7 and 1 point more disrespectful when seen last than first. In contrast, vignettes identifying the neighbourhood were, on average, seen as 2 points *less* disrespectful when seen last than first. These findings suggest that observers may moderate *or* exaggerate their perceptions of demeanor over time as they observe various police-citizen encounters.

Turning to the results of interest in the encounter models, and reflecting the manipulation check in Table 2, displayed demeanor consistently, positively, and significantly predicts perceived demeanor among observers exposed to vignettes involving White, female, or older citizens, female officers, or an upscale neighbourhood. Nonetheless, some differences are evident across the five models. In particular, vignettes identifying the neighbourhood context elicited the strongest reactions among subjects. That is, increasingly disrespectful demeanor was perceived as more disrespectful in upscale neighbourhoods relative to when other encounter information was given (i.e., citizen or officer characteristics). Vignettes describing a female citizen or officer elicited the next strongest reactions to increasingly disrespectful demeanor, with vignettes describing other socio-demographic characteristics of the citizen (i.e., a white or older suspect) eliciting the least dramatic differences in perceived demeanor across the five levels of displayed demeanor.

Next, we interpret the indicator variable and the interaction simultaneously to understand how the indicator affects perceived demeanor across all levels of displayed demeanor. To better understand the impact of these variables, Figure 1 visually demonstrates the relationship between displayed and perceived demeanor as a function of the five indicator variables at the extremes of demeanor (i.e., the most and least respectful vignettes).

-- Figure 1 About Here --

The regression results suggest that while none of the citizen's socio-demographic characteristics (i.e., citizen race, gender, and age) significantly influenced perceived demeanor, the officer's gender and the neighbourhood context were influential. In particular, the expected differences in perceived demeanor for these two indicators was larger at lower levels of displayed demeanor than at higher levels. Among subjects who read a vignette identifying officer gender, perceived demeanor was considered .7 and 1 point⁷ more disrespectful for male than female officers at levels 1 and 2 of displayed demeanor, respectively. In contrast, the gap in perceived demeanor between male and female officers was 0 and .2 points on a 10-point scale at levels 4 and 5, respectively.

The gap in perceived demeanor was even greater across the levels of displayed demeanor as a function of the neighbourhood context. At the lowest two levels of displayed demeanor, suspects in disadvantaged neighbourhoods were perceived to be .5 and .3 points more disrespectful than their counterparts in upscale neighbourhoods, respectively. In contrast, suspects in disadvantaged neighbourhoods were perceived to be .1 and 1.3 points *less* disrespectful than their counterparts at the two highest levels of displayed demeanor.

⁷ Differences in group means are based on actual rather than predicted differences in perceived demeanor.

Finally, analyses were conducted to assess the impact of observer characteristics on perceptions of demeanor by considering observers' race, gender, previous victimization, prior experience with the police, and perceptions of the police. Three main findings emerged from this analysis (see the right-hand side of Table 3, observer models). First, neither gender nor previous police encounters were related to perceptions of demeanor in any model. Second, the dummy indicators for observer race revealed some interesting patterns. Hispanic observers reacted less strongly to demeanor in the age model, while "other" races were significantly harsher in their perceptions in the gender model. However, neither of these variables are consistently signed and do not lend themselves to any obvious conclusions. In contrast, the dummy variable for Black is positive and significant in the race model but negative and significant in the neighbourhood model. In other words, relative to White observers, Black observers perceived demeanor to be more disrespectful when the race of the citizen was identified, but less disrespectful when the neighbourhood in which the encounter takes place was described; we return to this interesting finding in the discussion.

Third, observers' perceptions of the police were consistently influential in assessing demeanor. That is, observers who had more trust in the police to act ethically and professionally also perceived demeanor to be more disrespectful on average, compared to observers with less trust in the police. This relationship was positive in every model and statistically significant at conventional levels in four of the five models. Because the variable ranges from one to four, observers who had a great deal of confidence in the police perceived demeanor to be between .9 and 1.2 points more disrespectful on average than those who have no confidence in the police.

Discussion

A large number of police behavior studies conducted since the mid-1990s have relied on SSO to collect data on police-citizen encounters. Without a doubt this methodology has distinct strengths, including the ability to document the specific elements of police-citizen encounters related to policing outcomes (i.e., search, arrest, use of force, etc.). As a result, scholars have compiled compelling evidence that citizen demeanor influences officer decision-making, with less respectful demeanor associated with more severe police actions (Brown and Frank 2006; Engel et al. 2000, Sun and Payne 2004, Swatt 2002). While we do not discount the valuable insights provided by the SSO methodology, we contend that understanding the impact of demeanor on police outcomes requires consideration of how encounter and observer characteristics might affect perceptions of demeanor. Given the difficulties in disentangling these influences on perceptions in observational settings, this is a question best addressed by an experimental design that allows for control over variables that are conflated in the real world.

The results of our study indicate that encounter characteristics, and specifically officer gender and the neighbourhood context, impact perceptions of demeanor. In the case of officer gender, demeanor was perceived to be more disrespectful when aimed at male than female officers, but only at low levels of demeanor. We interpret these differences as a function of stereotyping and associated expectations regarding others' behavior. Police departments are disproportionately male, and a citizen's behavior appears to be perceived differently when interacting with a female officer. Given the differing relationship between displayed and perceived demeanor for male and female officers, it may well be the case that at even higher levels of demeanor – beyond what we presented in our study – observers would perceive identical behaviors to be more disrespectful toward female than male officers.

In the same vein, observers clearly have different expectations for demeanor depending on the neighbourhood context and the level of demeanor displayed. In line with previous studies showing that lower socio-economic contexts lead observers to form more negative evaluations, respectful behavior was seen as less respectful in disadvantaged than upscale neighbourhoods. At the other extreme, however, observers appear to expect disrespectful behavior. As a result, disrespectful behavior was more offensive in upscale neighbourhoods than in disadvantaged ones. This has important implications for the police, given that they spend a considerable amount of time in disadvantaged neighbourhoods due to higher crime rates and demand for police services in these areas. If we accept the notion that stereotyping is automatic, on-going, and unintentional, our results may lend important insights into how officers view suspects, including whether citizen behavior is perceived differently depending on the socio-economic context of the encounter.

At the same time, it is important to consider these findings in light of Klinger's (1997) ecological theory of policing, which suggests that officers develop a normalized view of deviance based on their level of exposure to deviant behavior. Thus, when exposure to deviance is high, lower level deviant behavior might not be interpreted as such by police. This normalizing function might occur with regard to how officers interpret citizen demeanor. Over time, officers could become accustomed to some disrespectful behaviors and, thus, perceive them as relatively normal and not truly disrespectful. If true, the same behaviors assessed by an observer who has not been exposed to this type of behavior might perceive it as disrespectful. The inability to actually measure the exact amount of discordance between officer and observer perception of demeanor limits our understanding of how citizen demeanor might actually influence policing

outcomes. This limitation notwithstanding, our results do support the notion that neighbourhood context is a crucial factor in unpacking the complexities of citizen-police encounters.

One of the most interesting results from the encounter models is that none of the citizen characteristics achieved statistical significance. That is, observers' perception of demeanor did not vary by citizen race, gender, or age. Thus, our results offer some validation for previous research that used a SSO methodology. Recall, however, that our experiment only manipulated one demographic factor at a time. As Figure 1 revealed, while there were only significant differences in perceptions as a function of officer gender and neighbourhood context, other intriguing patterns emerged across various indicators. For example, vignettes displaying respectful demeanor and describing the citizen's age elicited higher levels of perceived respectful demeanor relative to when the citizen's race or age was described. Thus, situations in which an observer is exposed to several pieces of information simultaneously – as occurs in an SSO study – may result in additive or even multiplicative effects. As an initial attempt at addressing the problem of conflation in actual police-citizen encounters, we felt it prudent to examine the influence of these variables one at a time. Nonetheless, analyses that examine the interactive effect of these variables (e.g., Black males vs. White females) would be an interesting and worthwhile avenue for future research.

Our second area of interest, observer characteristics, also produced some noteworthy results. Similar to the encounter characteristics, almost no observer demographic characteristics were related to perceptions of demeanor. One interesting exception to this pattern of null results was that respondent race predicted perceptions of demeanor in the race and neighbourhood models, but not the other three models. At first glance, it may be puzzling that Blacks perceive equivalent demeanor to be *more* disrespectful than Whites when the citizen's race is identified

but *less* disrespectful when the neighbourhood is described. However, such findings align with research that suggests citizens, and particularly White citizens, are keenly attuned to explicit racial cues, in some cases moderating their attitudes to avoid appearing racially antagonistic (Branscombe and Smith 1990). Thus, it appears as though when the citizen's race is identified, Whites were alerted to the racial cue and moderated their perceptions of demeanor toward the more respectful end. In contrast, the description of the neighbourhood is a more subtle racial cue (see Hurwitz and Peffley 2005). As a result, Whites' perceptions shifted toward the more disrespectful end of the demeanor scale. Without a measure of observers' racial attitudes, this is merely one possible explanation for such findings. Nonetheless, an interesting (and pressing, given the recent dialogue concerning race, suspect demeanor, and police use of force in the US) avenue of future research could explore the role of race and racial cues on perceptions of demeanor more fully.

Beyond observer demographics, perceptions of demeanor were also related to views of the police, such that those with a greater degree of trust in the police had lower standards for acceptable citizen behavior. This is consistent with the notion that as individuals become more aware and informed of a topic/issue/entity, they modify their beliefs and attitudes. In this case, those with greater trust in the police likely develop a greater degree of respect for officers and expect others to treat the police with a reasonable degree of deference. Thus, a citizen's demeanor may be perceived as more disrespectful by an observer with more favorable views of the police compared to an observer who has less trust in the police.

This result suggests that studies using third-party observers need to at least consider the impact of the observers' characteristics. Given that attitudes about the police impact perceptions of demeanor, it is possible that subjective assessments of police-citizen encounters used in

previous studies may have been influenced by trained observers' characteristics, including the likelihood that they held favorable views of the police. Although we cannot draw definitive conclusions on this issue, our results suggest that some unmeasured influences on observers' characteristics likely impacted the results of previous studies. If this were the case, significant differences in demeanor based on *citizen* characteristics would likely remain after controlling for *observer* characteristics, although the average level of demeanor would be affected. In other words, if observers tend to be more 'pro-police' than the average citizen, they will perceive demeanor to be worse on average compared to individuals who have less positive views of law enforcement.

This is an important point for two reasons. First, third-party data collection efforts are used as a proxy for actual officer perceptions. That is, assessments of demeanor are drawn from a trained observer, but not from the actual decision maker within the encounter, the police officer. As a result, perceptions of demeanor will differ between officers and coders to the extent that officers and coders have different views of the police (as well as other unmeasured attitudinal differences). Second, the perceptions of ordinary citizens and not trained observers are typically the drivers of the national discussion on police-citizen relations. The cases of Michael Brown and Eric Garner are two recent examples of this point: indeed, as more encounters are captured on film by both citizens (with cellphones or other recording devices) *and* police officers (with body cameras), citizens will increasingly be able to 'witness' an encounter and form their own judgment of the suspect's demeanor. The fact that observer characteristics matter for perceptions of demeanor suggests that, at a minimum, future studies using an SSO methodology should measure and control for trained observers' characteristics.

As with any study, our results should be considered with the recognition of some limitations. Our sample was drawn from an undergraduate student population and therefore questions may appropriately be raised about the generalizability of our results. In particular, results may be attenuated or accentuated if the unrepresentative aspects of our sample interact with the manipulations. In other words, if age or formal education influences how individuals perceive demeanor as a function of encounter characteristics, then a more representative sample may reveal different results (for a more complete discussion of this point, see Druckman and Kam 2011). Similarly, the lack of variation particularly with respect to age and education means that more representative samples may reveal these observer characteristics to be important for perceptions of demeanor. For example, previous research has demonstrated the importance of formal education for predicting police success and police behavior (Paoline and Terrill 2007, Worden 1990). It is quite plausible that education also matters for perceptions of demeanor. Similarly, differences between junior and senior police officers are not uncommon (Kop and Euwema 2001, Paoline and Terrill 2007, Terrill and Mastrofski 2002, Worden et al. 2013), and a sample with greater variation in age might reveal interesting differences that our sample is unable to reveal.

Another potential limitation is rooted in the nature of our manipulations. While a text-based experiment has many desirable properties, it is a fundamentally different experience than viewing an interaction in a video or “outside of the lab” in general. The differences in delivery have consequences: for example, descriptions of violent crimes are better remembered when presented in text than in audiovisual form (Furnham and Gunter 1987). Other work has also found that information such as an eyewitness testimony is more informative and less confusing in text than audiovisual form (Pezdek, Avila-Mora, and Sperry 2010). Even within audiovisual

formats, live ‘on the scene’ reporting results in less recall of an event than traditional news broadcasting (Snoeijer, de Vreese and Semetko 2002). Intuitively, text-based descriptions give subjects more time to consider a scenario than an audiovisual format. However, this should allow stereotypes to have a *stronger* impact in real life or in audio-video format relative to when subjects are given time to process information in a more critical way (such as in a text-based study).

In a related vein, recent work in psychology has demonstrated, for example, that Whites are much more apt to notice race cues when they are explicit (i.e., written or spoken, as in our experiment) rather than when they are implicit (i.e., visual; Mendelberg 2001, 2008). Thus, the conscious recognition of race, particularly in the context of an overtly racialized issue such as crime, may lead many Whites to moderate responses and respond in a socially desirable manner. This basic fact has led to a great deal of effort spent on developing innovative measurement strategies for assessing racial attitudes implicitly, rather than explicitly (e.g., Greenwald et al. 1998, Payne et al. 2005). An important next step would be to manipulate the demographic characteristics of the citizen implicitly (e.g., by showing images that manipulate the race of the citizen), rather than explicitly as our experiment does. These limitations notwithstanding, we feel that the current study raises several important considerations with respect to the measurement of demeanor.

Measurement of citizen demeanor (and other constructs) is a challenging endeavor. Our results indicate that the ‘who’ and ‘what’ being observed as well as ‘who’ is doing the observing interact to form the final measure of demeanor. This issue is further complicated by the definitional challenges associated with demeanor and the distinction between subjective and objective assessments. Accurate, subjective assessments of demeanor would ideally go well

beyond simply characterizing verbal and behavioral cues and also include elements of physical behaviors, appearance, subtle gestures, emotion, and speech – all of which might be culturally defined (i.e., might vary based on the perceiver). We suggest that future studies examining demeanor attempt to reflect both the complexities and subjective nature of studying such issues. We have attempted to offer some clarity to this issue by approaching the issue from a methodology that can separate out these subjective and objective influences, and contend that additional research that seeks to explain perceptions of demeanor is crucial for understanding whether police officers are treating all citizens equally and fairly.

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Table 1: Sample Characteristics

	Min	Max	Mean	S.D.
Race				
<i>White</i>	0	1	.45	
<i>Black</i>	0	1	.07	
<i>Hispanic</i>	0	1	.07	
<i>Other</i>	0	1	.41	
Male	0	1	.48	
Major				
<i>Social Sciences</i>	0	1	.61	
<i>Natural Sciences</i>	0	1	.09	
<i>Humanities</i>	0	1	.09	
<i>Other</i>	0	1	.21	
Previous Victim	0	1	.34	
Previous Police Encounter	0	1	.42	
Police Perceptions	1	4	2.63	.75

Note: N=255. Other is comprised of Asian, Middle Easterner, Pacific Islander, Native American, and multi-racial observers.

Table 2: Perceived Demeanor

	Min	Max	Mean	S.D.
Demeanor Level 1	1	10	1.89	1.57
Demeanor Level 2	1	10	4.48	1.67
Demeanor Level 3	1	10	6.62	1.82
Demeanor Level 4	1	10	6.87	1.99
Demeanor Level 5	1	10	6.33	1.97

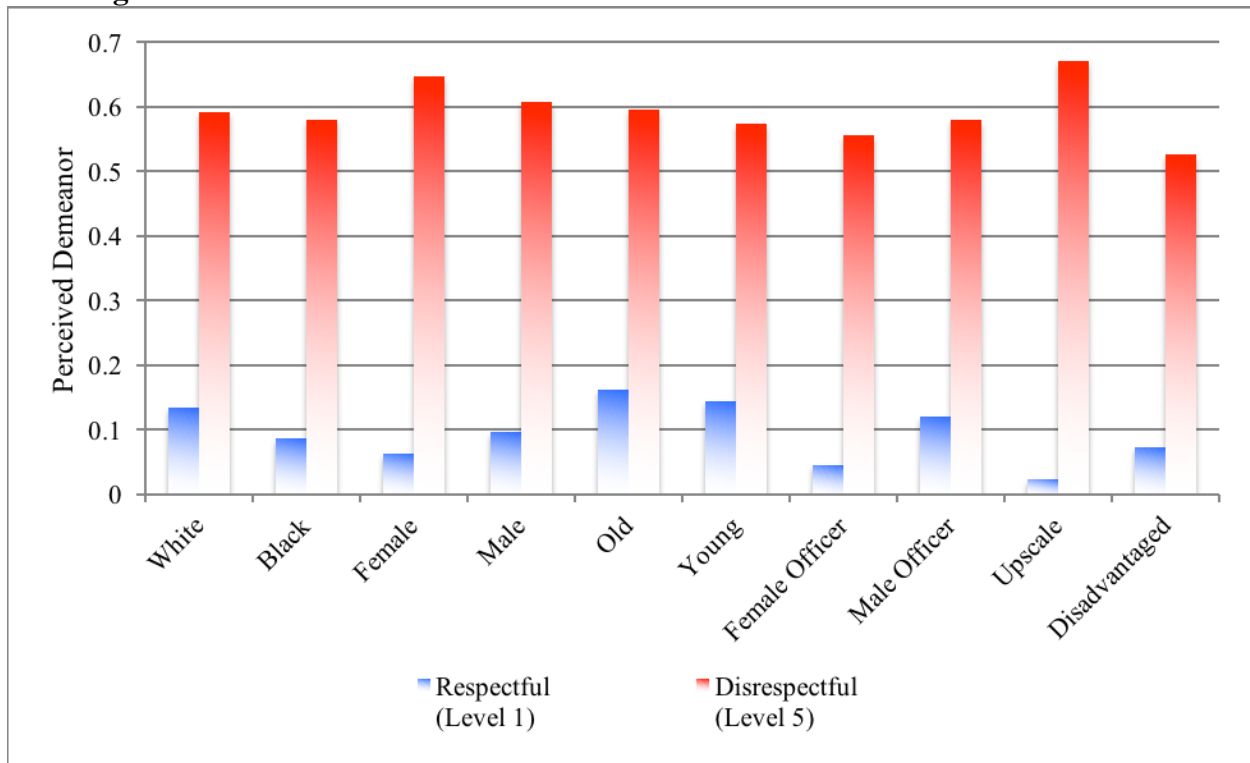
Note: N=255. All group means are significantly different from one another at the .05 level.

Table 3: Effects of Encounter and Observer Characteristics on Perceived Demeanor

	Encounter Models					Observer Models				
	Black Citizen	Male Citizen	Young Citizen	Male Officer	Disadvantaged	Black Citizen	Male Citizen	Young Citizen	Male Officer	Disadvantaged
<i>Encounter Characteristics</i>										
Displayed Demeanor	1.074** (.126)	1.171** (.126)	1.070** (.134)	1.262** (.136)	1.384** (.117)	1.019** (.124)	1.147** (.126)	1.100** (.134)	1.282** (.137)	1.408** (.117)
Indicator	-.434 (.627)	-.062 (.585)	.421 (.643)	1.269** (.641)	1.159** (.529)	-.861 (.619)	-.057 (.595)	.589 (.645)	1.347** (.652)	1.160** (.524)
Interaction (Demeanor by Indicator)	.079 (.186)	-.010 (.177)	-.063 (.192)	-.327* (.190)	-.512** (.086)	.223 (.184)	.003 (.180)	-.106 (.193)	-.349* (.194)	-.412** (.163)
<i>Observer Characteristics</i>										
Black	--	--	--	--	--	1.417** (.534)	.147 (.500)	-.027 (.545)	-.421 (.584)	-1.325** (.477)
Hispanic	--	--	--	--	--	-.127 (.523)	.193 (.490)	-1.085** (.536)	.615 (.572)	.675 (.468)
Other	--	--	--	--	--	-.341 (.390)	.635* (.362)	-.587 (.398)	-.290 (.423)	.035 (.344)
Male	--	--	--	--	--	-.207 (.263)	-.178 (.248)	.114 (.273)	-.259 (.287)	-.363 (.233)
Victim	--	--	--	--	--	-.585** (.283)	.432 (.268)	.540* (.291)	-.172 (.311)	.238 (.252)
Police Encounter	--	--	--	--	--	-.105 (.281)	-.235 (.265)	-.356 (.288)	.160 (.311)	-.240 (.251)
Police Perceptions	--	--	--	--	--	.352* (.181)	.394** (.171)	.315* (.187)	.347* (.200)	.155 (.163)
Placement	-.012 (.098)	.186** (.088)	.259** (.093)	.068 (.103)	-.512** (.086)	.000 (.097)	.172* (.088)	.223** (.094)	.091 (.104)	-.525** (.085)
Constant	2.099** (.553)	1.086** (.448)	1.331** (.487)	1.121** (.552)	2.640** (.461)	1.610** (.764)	.074 (.691)	.565 (.740)	.221 (.878)	2.403** (.702)
F (4,250) (12, 243) =	37.00**	47.10**	32.92**	34.28**	69.00**	16.16**	18.60**	13.66**	13.02**	26.69**
Adj. R ² =	.36	.42	.33	.34	.52	.40	.44	.35	.34	.53

Note: N=255 ** p < .05 * p < .10, two-tailed tests. Entries are OLS coefficients (standard errors in parentheses). For the indicator variables, citizen race (1=Black); citizen gender (1=male); citizen age (1=young); officer gender (1=male); neighbourhood (1=disadvantaged).

Figure 1: Perceived Demeanor as a Function of Citizen Race, Gender, Age, Officer Gender and Neighbourhood Context



Caption: Note: N=255. Group means are displayed.

Appendix 1: The vignettes, displaying the demeanor and socio-demographic manipulations simultaneously

<p>Least Disrespectful (1) Officer Smith</p>	<p>Officer Smith is called to a house [located in a(n) disadvantaged/upscale neighbourhood] in response to an apparent burglary. Upon arriving, Smith [a male/female officer] is met by the owner of the home. The citizen describes the events leading to the 911 call, and indicates that the suspect lives next door. Officer Smith then walks to the neighbor’s home and is greeted immediately by a [white/black] [male/female] citizen [who appears to be in their mid-20’s/50’s]; the 911 caller yells to Officer Smith, ‘That’s who it is!’ Smith asks about the specific events leading to the call: ‘Were you in your neighbor’s home without their permission? Do you have a key to the house? Why do you think your neighbor claims you broke into their house? Do you and your neighbor have an ongoing dispute?’ As the officer asks each question, the suspect appears to be answering to the best of their ability and looks the officer in the eye. The suspect is able to answer most of the questions quickly, although has some trouble explaining the relationship with the neighbor over the years. However, the suspect appears eager to answer all of the questions, and the officer has little problem getting the information needed in order to write up an official report.</p>
<p>(2) Officer Jones</p>	<p>Officer Jones responds to a call made by a disgruntled neighbor for loud music. Upon arriving at the scene, Jones [a male/female officer] clearly hears music coming from the home and realizes the owner is hosting a house party. Officer Jones approaches the home [which is located in a(n) disadvantaged/upscale neighbourhood] and rings the doorbell several times. Realizing no one can hear the doorbell due to the loud music, the officer enters a gate that leads to the backyard of the house where the party seems to be taking place. Upon entering the backyard, the officer is approached by a [white/black] [male/female] suspect who [who appears to be in their mid-20’s/50’s and] claims to be the owner of the home. The officer explains that a neighbor placed a call to the police and complained about the loud music. Officer Jones proceeds to inquire about specific details regarding the party: ‘What are you celebrating this evening? How many people are at the party?’ The officer also asks, ‘Are any drugs or alcohol being consumed on the premise?’ and ‘Is everyone in attendance over 21?’ As the officer asks these questions, the owner of the home seems irritated about the complaint being filed, and once or twice interrupts the officer to respond, seemingly to speed up the process. The suspect also seems distracted and more interested in the other guests at the party than with the officer’s questions. After answering the questions, the homeowner says impatiently, ‘Okay, fine, I’ll turn down the music. Can I get back to my guests now?’</p>
<p>(3) Officer Michaels</p>	<p>Officer Michaels responds to a call made by a local tavern [located in a(n) disadvantaged/upscale neighbourhood] to break up a bar fight. Upon arriving at the scene, Michaels [, a male/female officer,] sees a group of people standing outside the tavern and asks to speak with the owner of the establishment and anyone else who witnessed the event. The owner as well as other witnesses at the scene provide Officer Michaels with all the details of the altercation and point out a [white/black] [male/female] suspect who [who appears to be in their mid-20’s/50’s and] the witnesses claim started the fight. The officer then asks the suspect about the specific events that led up to the alleged bar fight. The officer asks, ‘Who are you here with? How much have you had to drink this evening? Were you provoked by someone else at the bar? Do you know the other person involved in the fight?’ As the officer asks these questions, the suspect does not pay much attention and paces back and forth. At one point, the suspect says, ‘I’ve had a</p>

	<p>few drinks, so sue me,’ then points back at the witnesses and says, ‘It’s their fault anyway.’ The suspect fails to answer some of the officer’s questions and, after Officer Michaels requests the suspect to stop pacing, they continue anyway, saying ‘This is a free country, I can walk around if I want to.’</p>
<p>(4) Officer Scott</p>	<p>Officer Scott is called to a local department store [located in a(n) disadvantaged/upscale neighbourhood] in response to an apparent case of shoplifting. Upon arriving at the store, Scott [a male/female officer] speaks with the manager on duty and the sales associate who witnessed the suspect attempting to steal a digital music player. After documenting the employee’s account of the situation and seizing the evidence, a [white/black] [male/female] suspect [who appears to be in their mid-20’s/50’s] is brought to the officer for questioning. Officer Scott asks the suspect some questions regarding the incident and their personal background: ‘Do you live in the area? Were you shopping alone? Do you shop at this location on a regular basis?’ As the officer asks these questions, the suspect at times ignores the officer’s questions altogether, asking ‘I get a lawyer, don’t I? I don’t have to answer your questions.’ The suspect insists that they did nothing wrong, cursing at the officer at one point and demanding they watch the surveillance tape. ‘Why do you automatically believe this guy’s story?’ the suspect asks, pointing at the sales associate. The suspect then attempts to leave the room, crying out ‘this whole thing is completely unfair!’</p>
<p>Most Disrespectful (5) Officer Williams</p>	<p>Officer Williams is called to a local business [located in a(n) disadvantaged/upscale neighbourhood] in response to a suspicious person hanging out in the parking lot. Upon arriving at the location, Williams [a male/female officer] sees the [white/black] [male/female] suspect [who appears to be in their mid-20’s/50’s] loitering near the location identified by the caller. Upon seeing the officer’s cruiser, the suspect begins to quickly walk away, as if trying not to be seen. The officer pulls up to the suspect in their cruiser, and says, ‘Please stand against the wall so I can ask you a few questions.’ Officer Williams proceeds to get out of the car and ask, ‘What are you doing hanging out here? Did you know this is a private lot? Where do you live? Why did you walk away as soon as I got here?’ As the officer asks these questions, the suspect appears frustrated. At one point, the suspect begins to put their hands in their pockets, and the officer quickly says, ‘Put your hands to your side and stay against the wall.’ The suspect puts their hands down, but then steps toward the officer, saying, ‘Hey, I don’t know what you want from me, I was just trying to go home from work.’ When the officer ignores this comments and continues asking questions, the suspect becomes highly agitated and slams their fist against the wall, ‘Don’t you have anything better to do than harass people?’</p>

Appendix 2: Three examples of the experimental design

		Respondent 1	Respondent 2	Respondent 3
<i>1st Vignette</i>	Demeanor displayed Indicator manipulated	Level 2 (Officer Jones) Officer Gender (female)	Level 1 (Officer Smith) Citizen Race (black)	Level 4 (Officer Scott) Neighbourhood (disadvantaged)
<i>2nd Vignette</i>	Demeanor displayed Indicator manipulated	Level 1 (Officer Smith) Neighbourhood (upscale)	Level 3 (Officer Michaels) Citizen Age (old)	Level 1 (Officer Smith) Officer Gender (male)
<i>3rd Vignette</i>	Demeanor displayed Indicator manipulated	Level 5 (Officer Williams) Citizen Gender (female)	Level 2 (Officer Jones) Officer Gender (male)	Level 2 (Officer Jones) Citizen Race (black)
<i>4th Vignette</i>	Demeanor displayed Indicator manipulated	Level 4 (Officer Scott) Citizen Age (young)	Level 5 (Officer Williams) Neighbourhood (disadvantaged)	Level 3 (Officer Michaels) Citizen Age (young)
<i>5th Vignette</i>	Demeanor displayed Indicator manipulated	Level 3 (Officer Michaels) Citizen race (white)	Level 4 (Officer Scott) Citizen Gender (male)	Level 5 (Officer Williams) Citizen Gender (female)

Appendix 2 provides examples of the process by which respondents were exposed to the vignettes. The first respondent was exposed to a vignette containing the second level of disrespectful demeanor (i.e., Officer Jones scenario) and a female officer. The second vignette described an encounter with the lowest level of disrespectful demeanor (i.e., Officer Smith scenario) and an upscale neighbourhood. The third vignette possessed the highest level of disrespectful demeanor (i.e., Officer Williams scenario) and a female citizen. The final two vignettes involved the fourth and third most disrespectful demeanors (i.e., Officers Scott and Michaels scenarios, respectively), a young citizen, and a White citizen, respectively. Thus, the degree of demeanor and the five indicator variables were randomly assigned to each respondent.