

Community Crime, Poverty, and Proportion of Black Residents Influence Police Descriptions of Adolescents

Rebecca L. Fix¹, Jeffrey Aaron^{2, 3}, and Sheldon Greenberg⁴

¹ Department of Mental Health, Bloomberg School of Public Health, Johns Hopkins University

² Virginia Department of Behavioral Health and Developmental Services, Richmond, Virginia, United States

³ Institute of Law, Psychiatry, & Public Policy, University of Virginia

⁴ Department of Health, Behavior and Society, Bloomberg School of Public Health, Johns Hopkins University

Objective: Our study examined officers' attitudes and perceptions of adolescents in general (and challenges in policing adolescents) and the degree to which community variables affect those perceptions. **Hypotheses:** Our examinations of officers' descriptions of adolescents and challenges in policing adolescents were exploratory. We hypothesized that community characteristics would significantly influence officers' perceptions of adolescents, such that working in more impoverished, higher crime, and more proportionally Black communities would be associated with more negative perceptions of adolescents. **Method:** Data were obtained from 1,112 active law enforcement officers representing 30 police agencies/departments across the United States. Participating officers completed a survey about adolescents and challenges in policing adolescents. Publicly available data sets were used to measure select community and police agency/departamental characteristics. We examined qualitative data using an inductive methodological approach. **Results:** Police officers' descriptions of adolescents were significantly more negative than positive. Negativity was observed in the relative frequency of negative versus positive comments about adolescents as well as the use of inherently problematic descriptors. Police officers working in more impoverished, higher crime, and more proportionally Black communities displayed significantly more problematic attitudes and significantly fewer positive attitudes compared with those in less proportionally Black communities. The findings related to race were partially—but not completely—explained by other community variables. **Conclusions:** Officers' negative descriptors, their occasional use of inherently problematic terms, and the intensification of those tendencies when working in communities with more poverty, higher crime, and a larger proportion of Black residents suggest an urgent need for intervention to help officers better understand youth. Training that would help police officers better understand youth, recognize developmental influences, and see each youth individually rather than as a representative of a group could help officers interact more supportively with youth, be less likely to inadvertently create confrontation, and more effectively de-escalate situations involving distressed or activated youth.

Public Significance Statement

These findings suggest that police officers misperceive adolescents, that they exhibit racial biases also present in the broader society, and that they could benefit from training that helps them more accurately understand adolescence.

Keywords: teen, race, law enforcement officer, pedagogy

Police officers are among the primary gatekeepers between youth and the legal system (Goodrich et al., 2014). This study draws on police officers' description of adolescents and how the characteristics

of the communities they serve impact their perceptions of adolescents. Gaining expanded input from frontline officers is essential to understanding and addressing many of the issues stemming from police–youth encounters, especially those involving young people of color. Moreover, both police (Stogner et al., 2020) and youth (e.g., Fix, 2021; Lawson et al., 2020) are facing increased stress as a result of both the pandemic and social movements alleging systemic anti-Black racism in policing. Particularly in this context of escalating tension, it is critical that we consider (a) how police officers view adolescents and (b) the need for police officer training specific to interacting with adolescents to improve outcomes following police–youth encounters.

In 2018, police arrested approximately 745,000 adolescents (youth between the ages of 10 and 17 years old), which constitutes nearly 10% of all arrested individuals (Hockenberry & Puzanchara, 2020). A disproportionate number of arrested adolescents were identified as Black (Hockenberry & Puzanchara, 2020). Outside

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Rebecca L. Fix  <https://orcid.org/0000-0002-5506-3960>

Jeffrey Aaron  <https://orcid.org/0000-0003-3071-1607>

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Correspondence concerning this article should be addressed to Rebecca L. Fix, Department of Mental Health, Bloomberg School of Public Health, Johns Hopkins University, 415 N. Washington Street, Baltimore, MD 21231, United States. Email: rebecca.fix@jhu.edu

of police–youth encounters that end in arrest, adolescents also interact with police officers across multiple situations, yet officers are provided with limited training on working with adolescents (Thurau et al., 2013). Given the frequency and impact of police–youth encounters, it is commendable that some police departments and the International Association of Chiefs of Police are actively working to increase officer training on interacting with youth (e.g., International Association of Chiefs of Police, 2022; International Association of Chiefs of Police & Office of Juvenile Justice & Delinquency Prevention, 2018; Pennsylvania DMC Youth & Law Enforcement Corporation, 2021). Effective training should be supported by an understanding of existing police officer perceptions; however, little is known about how police officers actually perceive youth generally, and whether there are differences in perceptions of subgroups of youth based on social identity factors such as race, ethnicity, socioeconomic status, or sexual orientation. Such information is critical in meeting police officers’ training needs, namely developing a curriculum that promotes empathic and equitable support and response to adolescents. Our study used data from more than 1,000 police officers across the United States to begin filling in these knowledge gaps.

Information Processing, Police Agency Characteristics, and Policing Practices

Below, we briefly review two types of factors that could impact police officer interactions with adolescents that often fall outside of people’s immediate awareness but that can be modified through changes in individual practices, training, and institutional policy. First, we discuss how automatic cognitive processing can contribute to intended and unintended outcomes, such as effective problem solving or harm to adolescents during encounters with police officers. We extend this line of thinking to explain why biases and stereotypical views held by police officers about adolescents can impact police–adolescent encounters and outcomes. Although we recognize that youth also hold biases and stereotypes about police officers, we focus on the cognitions of police officers because they are professionals responsible for achieving positive outcomes in their interactions with youth. Second, we discuss how community and institutional factors can impact policing practices.

Automatic Cognitive Processing and Policing Adolescents

Perceptions and expectations influence behavior, whether those perceptions are conscious and products of deliberative analysis or unconscious and automatic (Tamir & Bigman, 2018). Intuitions and biases are more likely to drive behavior when people respond quickly and automatically, and when facing situations in which they perceive risk, threat, or conflict or are otherwise emotionally activated (Evans et al., 2015; Kahneman, 2011). Planning and careful decision-making are more likely when there is enough time to deliberate and no perceived threat (Kahneman, 2011). Through media, socialization, and other societal and personal influences, we learn to automatically and often inaccurately associate people with stereotypes. For example, people might be predisposed to think that adolescents are disrespectful and entitled and that police are rigid and compelled to act (Johnson et al., 2016). Further, police are often placed in situations where they must respond quickly and potentially with force and where adolescents—who

are often impulsive—may be quick to immediately run from or show aggression toward police. These stereotypes are further complicated by intersectional social identifiers such as race, ethnicity, gender, and socioeconomic status (Priest et al., 2018). Both officers and the community members with whom they interact are influenced by these stereotypes and biases during decision making (Eberhardt, 2020; Goff, 2013; Hetey & Eberhardt, 2014; Kahn, 2018). Predispositions—those of adolescents and police officers—can independently or conjointly lead to positive or negative police–adolescent interactions (Mears et al., 2017).

Expectations and biases, challenges in working with adolescents, and police training matter in decision making. Negative stereotypes about adolescents abound at the societal level in the United States (Gross & Hardin, 2007). Police officers and other professionals in the legal system are no less susceptible to such stereotypes than other professionals and may face circumstances such as frustrating encounters, perceived threat, and an institutional culture that may amplify them (Mears et al., 2017; Parrish et al., 2021). In addition, adolescents present challenges associated with their neurodevelopmental status—for example, they are prone to rapidly fluctuating and intense emotions, impulsive responding, and showing off in front of their peers (Grisso et al., 2003; Hartley & Somerville, 2015; Steinberg & Scott, 2003). More research elucidating these perceptions and beliefs is warranted.

Community and Institutional Factors Influencing Police Officers’ Interactions With Adolescents

The characteristics of the communities or geographic areas in which police officers serve can impact both the experiences police officers have while on the job and their broader attitudes toward the adolescents they serve. Particularly salient community or geographic influences on disparate responding to adolescents in the criminal legal system include the racial composition/proportion of a population that is Black, economic composition, and crime rates of a community or geographic area in which officers work (Blalock, 1967; Lowery & Burrow, 2019; Zane, 2018). Empirical evidence shows a significant association between the proportion of Black residents in a community and punishment of Black adolescents in the criminal legal system (Lowery et al., 2018; Stolzenberg et al., 2004). As the proportion of Black community members rises, disproportionate police officer involvement and punishment of Black youth increases (Thomas et al., 2012). In more economically disadvantaged communities with higher crime rates, officers are apt to feel a greater sense of ever-present risk and threat, making them more likely to draw quick opinions or make assumptions that influence their decision making. This has greater implications for Black adolescents, who more frequently reside in disadvantaged and high-crime communities (U.S. Census Bureau, 2020).

Institutional factors within a police agency can also impact policing practices and officers’ perceptions of adolescents. Police agency culture and values conveyed or imposed by leaders and peers can impact officers’ integrity and performance (Blumberg et al., 2018; Greenberg, 2017; Ivković et al., 2016).

The Present Study

Improved understanding of individual, community, and law enforcement agency characteristics that shape expectations about

working with adolescents can guide relevant and effective officer training. Two important components of training are buy-in (willingness to actively support or accept) and engagement. Previous research (Fix et al., 2021) demonstrated that self-identified training needs of police officers varied by position in working with adolescents. The authors further found that the number of years in policing did not significantly impact self-identified training needs specific to working with adolescents. A solid baseline about existing perceptions of adolescents will best support a training program designed to help officers better understand and interact with adolescents.

We designed our present study to improve understanding of police officers' perceptions of adolescents and officers' challenges in policing youth. Furthermore, given Black/White racial disparities in outcomes of police-youth interactions, we further sought to elucidate whether and how characteristics of the community served by a police department (e.g., proportion of Black residents, crime rate, demands for service) and, to the limited extent that we could identify and measure them, police agency characteristics (e.g., number and assignment of personnel) shape perceptions of adolescents and challenges in working with adolescents. We focused on the proportion of Black residents in the community given that structural racism in the American legal system—and in American policing—impacts Black community members more severely than White and Asian American community members (e.g., Jindal et al., 2022). Accordingly, we had two research questions.

Research Question 1

What is the nature of police officers' descriptions of adolescents generally, and what do officers find challenging about working with youth? We did not have hypotheses about police officers' descriptions of adolescents and challenges in policing adolescents—these analyses were exploratory.

Research Question 2

Is the proportion of Black residents in communities in which police officers work associated with how they perceive adolescents, and what challenges do officers experience during police-adolescent interactions? We hypothesized that working in more impoverished, higher crime, and predominantly Black communities would be significantly associated with more negative perceptions of adolescents.

Method

Participants and Procedure

A total of 1,112 police officers from 30 police departments across the United States filled out a survey prior to completing a *Policing the Teen Brain* training—a program designed to advance officer understanding of and response to adolescents (Strategies for Youth, 2022). Data were collected between 2017 and 2019. When the survey was initiated, officers had not received any training, information, or guidance that might have served to modify their perceptions of youth. Data on perceptions of youth were not measured after the intervention, so we used only baseline data.

Police officers were categorized into four groups based on the number of years they worked in policing: 0–5 years ($n = 315$, 36.2%), 6–10 years (21.1%), 11–15 years (19.8%), and 16 or more years (22.9%). Most participants were patrol officers ($n = 443$,

56.1%). The other participating officers were identified as SROs (10.7%), commanders (e.g., executive, mid-manager), instructors (6.8%), or as new recruits (4.3%). Another 17.7% were classified as “other” (e.g., juvenile detective, community relations officer). Data were not collected on individual officers' race, ethnicity, age, or gender to ensure anonymity and improve survey completion rates. Our sample of 1,112 participants (and the smaller subsample of 809 participants whose cases were included in regression analyses) provided ample power (.99) to detect even a small effect (.04). The Johns Hopkins—Bloomberg School of Public Health Institutional Review Board approved the use of these data for the present study.

Measures

Police Officer Information

Participants filled in details about the number of years they served and their current role or assignment.

Community and Police Department Characteristics

We used publicly available data sets (<https://www.city-data.com>) to measure characteristics of communities and characteristics of the police departments in which participating officers served. Community characteristics included population, percentage of urban and rural residents, percentage of residents living in poverty, percentage of the population who identified as Black (proportion of Black residents), homicide rate, and crime index. We categorized the proportion of Black residents for a subset of our analyses into low (0.5%–12.8%), moderate (21.7%–29.0%), and high (44.1%–61.8%; note that we only list values available in our data set here). Police department characteristics included the department size and the percentage of police officers who were identified as Black or White. We used the Governing website, which is an archive of race and ethnicity demographic data within many police departments and agencies in the United States, to obtain these data (Maciag, 2015). In our final models, we excluded community percentage of urban residents, community percentage of rural residents, and percentage of police officers identified as White because of problems with measure uniformity and collinearity.

Qualitative Data About Adolescents

In the initial survey, police officers were asked to provide written responses to two free-response items. On these items, participants were asked to use four words to describe adolescents and to describe what they find challenging about working with adolescents. Obtaining one-word descriptors from officers provided a useful opportunity to evaluate their spontaneously generated and possibly less-filtered perceptions. For each item, the research team identified recurring items and themes and created a codebook categorizing responses, as described below. Two trained coders coded all responses and reached an interrater agreement of .85 or better.

We coded descriptions of adolescents by type of attribution (dispositional - i.e., related to adolescents' character or nature; or environmental/contextual), and whether the attribution was positively or negatively valenced. Neutral words were those that did not fall into the four primary coding categories. We then further

categorized (internal or external) attributions as only positive, only negative, or both positive and negative. We also coded descriptions of what police officers found challenging about working with adolescents into five categories: policing skills, adolescent attributes, adolescent disrespect toward police, family problems, and community problems. Table 1 provides examples of officers' responses by category for both descriptions of adolescents and descriptions of challenges in working with adolescents.

Results

Data Analysis

Our primary aims were to first evaluate how participating police officers viewed adolescents and challenges in working with them and then measure and compare the frequency of the different types of responses. We further tested whether officers' perceptions of adolescents or of challenges associated with working with them were affected by community or agency characteristics. We used a series of chi-square tests and regressions for these research questions. We ran a family-wise Bonferroni correction for chi-square tests (.050/9) and follow-up chi-square tests and logistic regressions (.050/8) and made *p* value adjustments so that only those below .006 and .0063, respectively, were designated as significant. Because we were unable to obtain data on the proportion of Black residents from 10 police departments (a total of 303 participants), we omitted these cases from related analyses.

Descriptions of Adolescents

Figure 1 displays the 45 words that police officers most frequently used to describe adolescents. The top five words were "disrespectful" (*n* = 226), "entitled" (*n* = 134), "angry" (*n* = 63), "loud" (*n* = 57), and "misguided" (*n* = 52). A modest proportion (39.5%) of police officers used at least one positive term, and 79.5% of police officers used at least one negative term (internal or external). Participants also used a variety of neutrally coded terms to describe adolescents, such as "diverse," "kids," "people," "sports," "education," "digital," and "transition."

In describing adolescents, most officers used terms suggesting internal attributions. Whereas 36% of officers used at least one positive dispositional descriptor, 75% used at least one negative internal/dispositional descriptor. Positive internal attributions included words such as "active," "vibrant," "happy," "athletic," and "playful." Negative internal attributions consisted of words such as "aggressive," "lost," "impulsive," "troubled," and "selfish."

Police officers also used contextual descriptors: 2.2% and 23.1% of officers used at least one positive and one negative external attribution, respectively. Positive external attributions for adolescents included words such as "sports," "school," "guidance," and "love." Words designated as negative external attributions included, "neglected," "underprivileged," "drugs," "un-parented," and "peer pressured."

Finally, we identified some descriptors as simply problematic in their nature or degree of negativity and because the use of these descriptors raised concerns about the possibility of reflexively

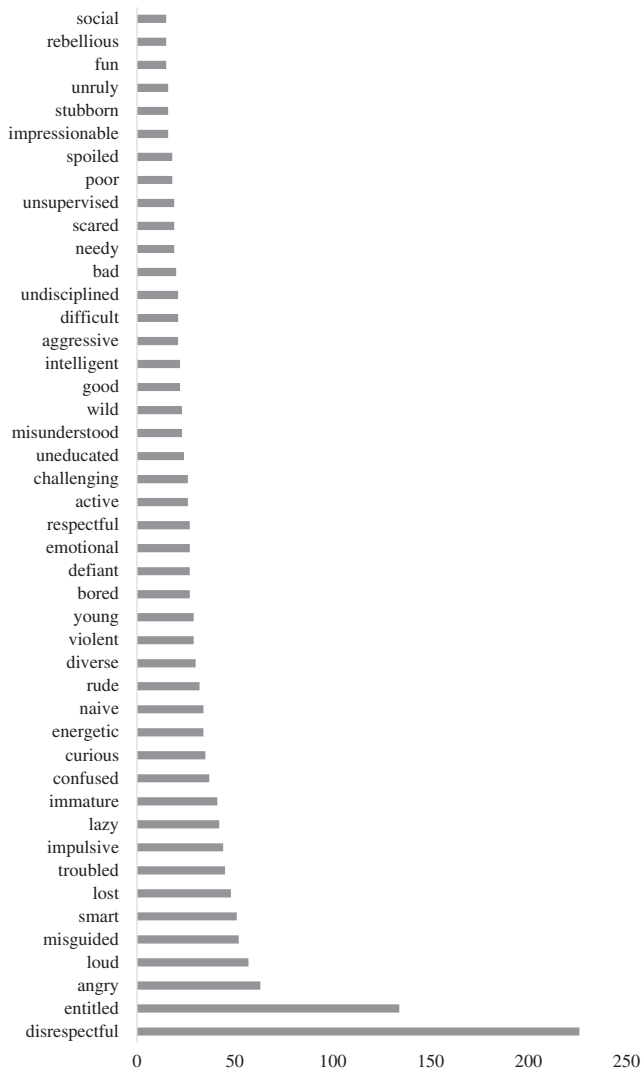
Table 1

Coding Categories for Descriptors of Adolescents and Challenges in Policing Adolescents

Category	Broad definition	Example words and statements
Describing adolescents		
Internal positive	Positively valenced individual-level attributes or behaviors	"approachable," "inquisitive," "willing to try anything," "funny," "active"
Internal negative	Negatively valenced individual-level attributes or behaviors	"bad," "disrespectful," "rude," "trouble," "uncontrollable," "undisciplined"
External positive	Positively valenced environmental factors	"education," "sports," "school"
External negative	Negatively valenced environmental factors	"stranded," "drugs," "underprivileged," "financially challenged," "unsupervised"
Problematic attitudes	Words reflecting concerning thoughts about adolescents	"unruly," "angry," "filthy," "savage," "violent"
Empathic concern	Words reflecting actual or attempted understanding of adolescents	"misunderstood," "neglected," "traumatized," "disadvantaged," "untrusting"
Challenges in working with adolescents		
Policing skills	Describing a lack of skills; describing difficulties interacting with adolescents because of a lack of skills or experience	"(teens) communication," "relating/understanding their mentality," "kids don't understand consequences," "experiencing children in the inner city will be a new experience"
Adolescent attributes	Police identified internal attributes as the most challenging aspects of working with adolescents	"ignorance," "they don't listen and only do what they want ... which happens to be robbing people and stealing cars," "majority of the youth are misguided and lack discipline"
Lack of respect for police/ negative view of police	Adolescents, their families, or their communities holding negative views of police/authority figures	"disrespect for authority," "kids are told police are not good guys," "they probably fear police," "the lack of respect"
Family problems	Responses that describe external attributes regarding the adolescent's family	"parents not involved with their children," "unparented," "dealing with their parents," "fatherlessness," "years of bad parenting"
Community problems	Responses that describe lack of resources to serve community members and community problems more broadly	"crime," "a broken justice system," "education," "not enough services for acute mental health"

Note. This table references the coding used to categorize written responses from law enforcement professionals in answer to two questions: "In your experience, what four words best describe youth in your community" and "What do you find challenging about working with adolescents?"

Figure 1
Frequency of the 45 Words That Police Most Commonly Used to Describe Adolescents



Note. Words are displayed if they were used by 15 or more participants.

unempathic judgments and responses. Problematic attributions included words such as “fucked up,” “horrible,” “angry,” “filthy,” “incorrigible,” and “savage.” We also identified descriptors that, in contrast, suggested empathic concern. These descriptors included terms such as “misunderstood,” “traumatized,” “distrustful,” “disadvantaged,” “misguided,” and “stressed.” About one fifth of all participants (20.7%) used at least one attribution indicating a negative attitude toward adolescents, and almost one quarter (23.4%) of officers used a term demonstrating empathic concern for adolescents.

Descriptions of Adolescents by Proportion of Black Residents in Communities Served

Table 2 illustrates that police officers’ descriptions of youth varied depending on the proportion (low, moderate, high) of Black

residents in communities served by their police department. Officers serving communities with the largest proportion of Black residents used fewer positive terms compared with officers serving communities with both the lowest ($p < .001$, odds ratio [OR] = 0.4, 95% confidence interval [CI] [0.3, 0.5]) and moderate ($p < .001$, OR = 0.6, 95% CI [0.4, 0.8]) proportions of the population identified as Black. Police officers who served communities with the greatest proportion of Black residents were significantly more likely to describe adolescents using terms that demonstrated negative or critical attitudes compared with those who served communities with the lowest proportion of Black residents ($p < .001$, OR = 2.3, 95% CI [1.7, 3.1]). Police serving more proportionally Black communities were significantly more likely to use only negative attributions to describe adolescents relative to communities with both low ($p < .001$, OR = 2.5, 95% CI [1.9, 3.3]) and moderate ($p < .001$, OR = 2.0, 95% CI [1.4, 2.8]) proportions of Black residents. Relatedly, officers serving the least proportionally Black communities were significantly more likely to use a mixture of positive and negative terms when describing adolescents ($p < .001$, OR = 2.4, 95% CI [1.8, 3.1]) compared with those serving more proportionally Black communities.

Influence of Police Agency and Community Characteristics on Adolescent Descriptions

To further explore the relationship between proportion of Black residents in communities and other community and departmental variables, we ran a series of logistic regressions in which we considered independent contributions of proportion of Black residents in a community; community size, poverty, and crime rates; and police department racial composition and size (see Table 3). Analyses indicated that some community variables (specifically crime index, homicide rate, and poverty) partly—but not completely—explained the relationship between the proportion of Black residents in the community and police officers’ descriptions of youth. However, most community variables and both police department variables were not otherwise associated with officers’ descriptions. For example, a higher homicide rate was significantly associated with greater empathic concern.

Challenges in Police Officers’ Interactions With Adolescents

Table 1 provides an overview of officers’ categorized responses to questions about challenges in working with adolescents. The most common type of challenge described (33%) was associated with adolescent attributes (e.g., “their lack of knowledge and perception of reality,” “mental health issues”). The second most common type of challenge described (23%) was police officers’ knowledge and skills (e.g., “establishing relationships,” “understanding their perspective”). It is also noteworthy that multiple police officers cited challenges associated with working with adolescent groups, as contrasted to individuals.

Proportion of Black Residents in Communities Served and Challenges in Policing Adolescents

Table 4 displays the challenges specific to policing adolescents described by participants in brief written responses based on the

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Table 2*Police Attributions for Adolescents by Low, Moderate, and High Proportions of Black Residents in Communities Served*

Attribution	Overall (%)	χ^2	<i>p</i>	Proportion of Black residents		
				Low (%; <i>n</i> = 265)	Moderate (%; <i>n</i> = 190)	High (%; <i>n</i> = 491)
Individual attributions						
Individual positive	38.2	48.3	<.001	50.8 _a	41.1 _b	27.7 _{a,b}
Individual negative	74.4	5.5	.062	73.2	68.9	77.4
Contextual positive	2.2	11.9	.002	0.5	1.1	3.9
Contextual negative	23.5	9.4	.009	18.3	23.7	27.3
Problematic attitudes	20.7	30.6	<.001	12.0 _a	20.1 _b	27.5 _{a,b}
Empathic concern	24.0	3.1	.215	19.9	25.8	24.0
Aggregate perceptions						
Only positive	6.6	1.2	.574	7.4	7.4	5.7
Only negative	45.4	45.0	<.001	34.2 _a	38.9 _b	56.2 _{a,b}
Both positive and negative	33.0	33.7	<.001	43.4 _a	34.2	24.6 _a

Note. Within a row, values with the same subscripts are significantly different from one another. We used Fisher's exact test for cells with fewer than 10 cases. Participants were able to use four different words or phrases to describe adolescents; thus, percentages of individual attributions may exceed 100%. Some responses were neutral or not coded as positive or negative, and therefore aggregate perceptions may not sum to 100%. The low category includes populations with 0%–20% Black citizens, moderate includes populations with 21%–40% Black citizens, and high includes populations with 41% or more Black citizens.

proportion of the population identified as Black. Officers serving communities with the highest proportion of Black residents were significantly more likely to indicate inadequate skills compared with those serving communities composed of both low ($p < .001$, $OR = 1.8$, 95% CI [1.3, 2.6]) and moderate ($p < .001$, $OR = 2.9$, 95% CI [1.8, 4.7]) proportions of Black residents. Challenges that included descriptions of adolescents were also reported significantly more by officers serving communities with a high proportion of Black residents compared with those serving communities with a moderate proportion of Black residents ($p = .002$, $OR = 1.8$, 95% CI [1.3, 2.9]). Compared with police officers serving communities with a low Black population, those serving communities with a moderate Black population were significantly more likely to say that attributes of adolescents were a major challenge to successful policing ($p = .003$, $OR = 1.9$, 95% CI [1.3, 2.9]). Proportion of Black residents was also significantly associated with challenges of working with families of adolescents. This effect was significantly higher among communities with a low proportion of Black residents compared with high ($p < .001$, $OR = 2.4$, 95% CI [1.6, 3.7]) and moderate ($p = .003$, $OR = 2.4$, 95% CI [1.3, 4.2]) proportions of Black residents.

Influence of Police Agency and Community Characteristics on Reported Challenges

The population size and police department size meaningfully impacted perceived challenges in working with adolescents only in larger communities (see Table 3). The proportion of the community population living in poverty significantly impacted multiple reported challenges in working with adolescents. Further, both the proportion of Black residents and of Black police officers within a department significantly impacted outcomes beyond the community poverty level.

Discussion

Our study examined police officers' perceptions of adolescents and challenges in policing youth and tested whether and how characteristics of the community served by a police department

(e.g., demographics, crime rate) shaped police officers' perceptions of adolescents and challenges in working with adolescents. Results of our study indicated that police officers' descriptions of youth were both largely negative and suggestive of inadequate appreciation of developmental influences. Further, these characteristics were particularly present in communities with a higher proportion of Black residents. In a free response, four of the five terms that officers most frequently generated to describe adolescents were negatively valenced, and none of the five was positive. Only three of the 25 most-used terms were unambiguously positive, and 60% of officers used no positive terms when describing youth. The focus was overwhelmingly skewed toward words conveying negative or critical perceptions of adolescents. Further, more than one in five officers used at least one term that included content so negative or judgmental that the use of the term might be seen as a source for concern about how that officer perceived and might interact with youth.

It should be noted that officers' perceptions of youth were not entirely negative. In addition to neutral descriptors and those that simply identified attributes of the developmental stage (e.g., impulsive, immature, impressionable), some terminology (e.g., scared, misunderstood) suggested empathy. Other terminology (e.g., smart, curious, respectful) implied appreciation and liking.

Officers' self-generated descriptors skewed substantially toward dispositional attributions that did not account for developmental context. This finding might be seen as an unsurprising manifestation of the fundamental attribution error (Ross, 1977), with developmental context being considered an element of adolescents' "situation"—that is, a factor specific to the individual's circumstances rather than distinct to the individual (i.e., dispositional). Whatever the reason, however, the finding suggests a lack of officer appreciation for what might be one of the most important facts about adolescents: that they are passing through a stage and that developmental factors critically influence their functioning. Results also suggest that officers' views toward the challenges in policing adolescents come primarily from the adolescents themselves rather than limitations in their own skill sets or external factors, such as limited resources, training, or other forms of support.

Table 3
Impact of Community and Police Department Characteristics Associated With Problematic and Empathic Descriptions of Adolescents and With Police Descriptions of Challenges in Working With Adolescents

Characteristic	Adolescent attributes			Challenges working with adolescents					
	Positive attribution	Negative attribution	Empathic concern	Problematic attitude	Policing skills	Adolescent attribution	Negative view of police	Family	Community
	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)	β (<i>p</i>)
Community characteristics									
Population size	0.9 (.683)	1.1 (.447)	1.1 (.622)	1.3 (.393)	1.6 (.138)	1.2 (.343)	1.1 (.714)	1.1 (.657)	3.8 (.044)
Percentage in poverty	1.4 (.157)	0.6 (.044)	1.1 (.833)	0.9 (.763)	2.6 (.012)	1.5 (.129)	2.0 (.170)	3.2 (.005)	3.3 (.014)
Percentage of Black residents	0.4 (.047)	1.0 (.997)	0.7 (.648)	1.4 (.618)	0.1 (.001)	0.1 (<.001)	0.8 (.025)	0.02 (<.001)	0.3 (.309)
Homicide rate	0.7 (.281)	1.5 (.315)	2.4 (.016)	1.6 (.182)	3.3 (.002)	3.8 (<.001)	1.5 (.485)	5.6 (<.001)	4.7 (.004)
Crime index	2.2 (.002)	1.2 (.632)	0.7 (.212)	0.7 (.189)	1.0 (.945)	1.0 (.978)	2.4 (.029)	0.9 (.630)	0.1 (<.001)
Police department characteristics									
Department size	0.9 (.527)	1.0 (.661)	1.2 (.116)	0.8 (.190)	1.0 (.766)	1.4 (.012)	1.6 (.013)	1.5 (.003)	0.6 (.050)
Percentage of Black residents	1.2 (.535)	0.8 (.417)	0.9 (.821)	1.0 (.954)	5.9 (<.001)	2.4 (.022)	3.9 (.056)	4.9 (.007)	2.5 (.080)
Nagelkerke R^2	.14	.04	.04	.11	.12	.08	.07	.13	.11

Note. Police role and years working in a police department or agency were included as covariates in all tested models.

Perceptions, including unconscious perceptions, influence behavior (Evans et al., 2015). Police officers’ perceptions of adolescents likely influence their behavior during interactions (Tamir & Bigman, 2018). Concurrently, the automatic assumptions and related reactions of officers to adolescents may influence adolescents’ responses to officers and outcomes from a police–adolescent encounter. Given people’s tendency to respond positively toward those who demonstrate warmth, compassion, or liking (Cuddy et al., 2011), and adolescent tendencies toward hypersensitivity and even distortions (e.g., the hostile attribution bias) concerning others’ attitudes (Blakemore, 2018; Farrell et al., 2017), police officers’ attitudes may have a decisive impact on the direction a police–adolescent encounter takes.

As first responders, police officers often encounter people in difficult, tense, and critical situations and regularly encounter inappropriate, uncontrolled, aggressive, and/or illegal human behavior. A negative view of people in general would be an understandable response to such exposure, and negative views of adolescents might simply reflect this perspective and not be specific to adolescents. However, negative perceptions do not necessarily translate into negative behavior (Forscher et al., 2019; Greenwald et al., 2020). Many officers approach people, including youth, in a respectful and equitable manner, maintaining proper perspective and regulating whatever internal biases they may have. Nonetheless, although there is a paucity of research examining this phenomenon, a recent study by April et al. (2019) demonstrated that police endorsement of color-blind racial beliefs impacted officers’ propensity to interact with Black adolescents. This suggestion of a link between police officers’ perceptions and behavior highlights the need to further explore whether the findings of officers’ negative attitudes toward youth might be associated with actual behavior.

Proportion of Black Residents in Communities and Officer Perceptions

Our study also found that the proportion of Black residents in a community impacts officers’ general perceptions of adolescents. More specifically, the higher the proportion of Black residents in a police agency’s jurisdiction, the less likely its officers were to identify positive traits in adolescents. Officers did not differ in their general use of negative terminology based on the proportion of Black residents in a community, but they were more likely to use problematic or critical terms when they policed a community with a higher proportion of Black residents. Importantly, these differences were partially explained by other variables, including overall crime and homicide rates and poverty in the community, which are also often associated with systemic racism (Bailey et al., 2017).

Although officers’ descriptions of youth did not directly address race, both race itself and other variables associated with race were correlated with differences in officers’ descriptions. Directly, even after controlling for other community factors, the racial make-up of the community in which officers worked influenced officers’ descriptions, with a larger proportion of Black residents in the community associated with less use of positive descriptors. In addition, officers working in communities with greater proportions of Black residents gave more problematic descriptors and were more likely to include only negative descriptors. Although we found those differences to be a function of community variables other than race

Table 4*Described Challenges in Policing Adolescents by Low, Moderate, and High Proportions of Black Residents in Communities Served*

Challenge	Overall (%)	χ^2	<i>p</i>	Proportion of Black residents		
				Low (%; <i>n</i> = 366)	Moderate (%; <i>n</i> = 190)	High (%; <i>n</i> = 491)
Policing skills	20.8	25.7	<.001	16.9 _a	11.6 _b	27.3 _{a,b}
Adolescent attributes	28.7	10.7	.005	30.9 _a	18.9 _{a,b}	30.8 _b
Disrespect/negative view of police	8.4	1.3	.529	8.7	6.3	9.0
Family problems	11.6	21.2	<.001	17.8 _{a,b}	8.4 _a	8.1 _b
Community problems	11.5	8.6	.013	7.7	12.1	14.1

Note. Within a row, values with the same subscripts are significantly different from one another. We used Fisher's exact test for cells with fewer than 10 cases.

(i.e., poverty, crime rate), those variables are nonetheless linked to the effects of structural racism (Bailey et al., 2017). Thus, both unconscious racial bias and bias related to other factors associated with race appeared to influence officers' descriptions.

Findings suggest that unconscious racial bias plays a role in officers' perceptions of adolescents—both as a direct influencer and as a proxy for other variables. This has important implications. We found it disturbing and disheartening—yet understandable given the role of structural racism in our perceptions—that police officers serving communities with the highest proportion of Black residents generated the fewest positive descriptors and more problematic, negative, or critical descriptions of youth. There is no reason to believe that this finding is specific to police officers; rather, it is likely a reflection of what would be observed generally given the overwhelming evidence of systematic racial bias both inside and outside the juvenile legal system in the United States (Bailey et al., 2017). Nevertheless, our finding that officers view adolescents more negatively in communities with higher rates of crime, poverty, or proportionally more Black residents can be interpreted to mean that these factors influence officer perceptions and thus possibly their interactions. Although racial (or other) biases may not be specific to police officers, the presence of bias among officers is of particular concern given that their interaction with youth may have life-altering consequences. Also, beyond the risk that negative preconceptions lead to negative interactions, such preconceptions also may limit the likelihood of positive and supportive interactions with youth. Much attention has been given to the risks and negative outcomes associated with police contact. But it is also important to recognize that police officers can be supportive and mentoring figures whose presence encourages growth, connection, and prosocial behavior among youth (Goodrich et al., 2014; Lee et al., 2017).

Training Implications

In the wake of the COVID-19 pandemic and increased participation in social movements focused on systemic racism and policing, it is essential for us to consider how to best prepare police officers to have effective, safe, and enduring interactions with adolescents. Not surprisingly, police officers have been significantly impacted by the COVID-19 pandemic (Stogner et al., 2020). Alongside these changes, officers (apart from those working as SROs) have been more likely to have increased contact with adolescents who, as a result of issues related to COVID-19, may experience increased disruption to their prior normalcy, anxiety, depression, and other stresses (Lawson et al., 2020; Racine et al., 2020; Whaling et al., 2020).

Current national conversations about the proper role of police officers and problems in policing are highly charged and deeply politicized. In this climate, law enforcement officers may feel misunderstood or more fearful of extreme scrutiny of interactions with adolescents. At the same time, adolescents may feel increasingly wary of officers but may be more outspoken and even confrontational—including during interactions with police officers.

Altogether, our data suggest the need for police officers to better understand youth and highlight the paucity of training that most officers, other than SROs, receive in this area (Blumberg et al., 2019; Perrett, 2020; Thurau & Pollack, 2018). Our data also suggest that more tailored or comprehensive training specific to adolescents is warranted in police academies. Indeed, whereas some police departments have made steps toward training that focuses on working with adolescents, departments incorporating such changes reflect a small percentage of the thousands of police departments in the United States (e.g., International Association of Chiefs of Police, 2022). Police training on understanding and interacting with adolescents varies by agency (Blumberg et al., 2019; Perrett, 2020; Thurau & Pollack, 2018). Training curricula or training objectives on police interaction with adolescents is inconsistent across states (setting standards for police training) and police academies. Indeed, there are no nationally accepted curricula on police interaction with adolescents—except for the SRO courses provided by the National Association of School Resource Officers.

Our study further suggests that training about the developmentally distinct presentation of adolescents is needed. Observed training implications align with findings from Fix et al. (2021), in that police officers have self-identified and implicitly observed (in the case of the present study) training needs that are going unmet but could have an important influence on police-adolescent interactions, outcomes for adolescents, and perceptions of police officers at a broader community level. Even among police officers who report recognition of adolescent developmental differences, that understanding may not translate to actual behavior (Kostelnik & Reppucci, 2009; Reppucci et al., 2010). Certainly, officers who fail to appreciate developmental differences will be unlikely to respond to adolescents in developmentally informed ways.

Limitations and Future Directions

In interpreting the findings of this study, readers should consider a few limitations. Some were imposed by the method of data collection—specifically, eliciting single-word descriptors. First, single words might leave out nuance and clarification that could be

captured by phrases or more elaborated descriptions. Second, and perhaps most importantly, such a response might or might not be linked to police officers' actual behavior when interacting with youth. In future research, it would be useful to pair such information with more detailed information about officers' beliefs and perceptions, including questions about their direct experiences with adolescents (positive and negative), what they like and dislike about working with adolescents, and what is useful and still needed in trainings specific to effectively interacting with adolescents. It would also be helpful to conduct follow-up research that included prompts allowing officers to write in phrases or longer statements about their perceptions of adolescents and perhaps to ask about positive and negative traits of adolescents. Moreover, police officers' descriptions may or may not be related to how they treat adolescents. There is ample reason to posit a link, but follow-up research is needed to verify this association, perhaps by including a quantitative real-world metric, such as arrest rates over time or behavioral coding of body cam footage, or by obtaining police officers' responses to scenarios that are more closely tied to behavior. Further, we collected data on descriptions of adolescents only at baseline, so we were unable to examine changes before and after intervention. In future studies, it would be informative to include similar metrics of how police view adolescents using their own words.

Additional research is needed on how police academies develop, gain approval for, and assess curricula presented to recruits and in-service officers on interacting with adolescents. An important factor in this expanded research would be a review of how curricula are presented and the obvious and subtle messages sent by instructors, most being highly experienced officers, in delivering the curricula.

Information in the present study was collected from police officers and was based on self-report. Follow-up studies should collect data from additional respondents who might have a complementary perspective about police-adolescent interactions, especially adolescents themselves. In addition, future research should collect data beyond self-report, including police behavioral information such as arrest records (by type of delinquent or illegal behavior and for youth of different racial and gender backgrounds) and implicit bias tasks. Other data that would be useful in follow-up research might include measures of knowledge about adolescent development and racial bias and behavioral tasks assessing racial bias, gender bias, and bias based on socioeconomic status. It would also be informative to assess whether police officers' descriptions of adults differ from their descriptions of adolescents.

Although our study included a large sample of officers from many different areas, it was far from a random or representative sample. Sampling issues include the differing sample sizes from different departments and the departments themselves being inherently not necessarily representative of the average national agency (i.e., because Strategies for Youth was involved). Because participants completed surveys immediately prior to engaging in a training specific to adolescents, demand characteristics may have interfered with responses and promoted more prosocial or positive written responses in descriptions of adolescents. Collecting similar data from police officers outside of trainings specific to policing adolescents is another important next step in characterizing how officers view adolescents. We also had limited data about the individual police officers, departments, and communities in which officers worked. This led us to be able to look only very broadly at

department and community characteristics. More demographic and individual information about each officer is needed to fully understand existing attitudes toward adolescents, challenges in policing adolescents, and whether and how trainings should be modified to fit the needs of officers across police officers' social identification categories, such as race and gender.

Last, community information was limited to the entire county or city in which police work. Collecting information about the individual community or neighborhood in which each police officer worked could more clearly elucidate how community characteristics impact policing behaviors and attitudes. Further, having more detailed information available about police agencies could inform understanding of how police department composition, resources, culture, and policies influence policing practices and training needs.

Conclusion

The findings of our study suggest that many police officers have strongly negative perceptions of youth and do not adequately consider the influence of youths' developmental status on their behavior. Further, these problems appear to be exacerbated by bias related to race and other community factors. Our results also highlight the need for police agencies to provide consistent and comprehensive training to advance skills and reduce outcomes that could result from harmful biases and attitudes. Training, beyond simple orientation or awareness, will better equip officers to effectively interact with adolescents and could help officers understand adolescents and provide skills to interact with and engage youth. Such training should incorporate real-time interactions with adolescents. Quality training can influence officer behavior to achieve more positive and just outcomes. Overall, our results highlight the need for training that specifically helps police officers better understand youth and move past racial (and other social identity-based) biases and misperceptions.

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