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Megan M. Parry

Jessica Huff

University of Nebraska at Omaha, jessiehuff@unomaha.edu

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Divergent perspectives: Autistic adults' perceptions of the police

Megan M. Parry¹, Jessica Huff²

¹University of Rhode Island

²University of Nebraska at Omaha

ABSTRACT

Purpose: Much of the current criminological research regarding police and the autistic community focuses on police training for interacting with autistic individuals, or the experiences, fears, and perceptions of parents or caregivers. Largely absent from this research are the opinions and perceptions of autistic adults themselves. The purpose of this paper is to examine perceptions of the police and police-led initiatives among these individuals. **Design/methodology/approach:** We analyze data from 121 autistic adults regarding their perceptions of the police and police-led autism awareness efforts using OLS regression. Variables of interest include perceptions of procedural justice, police treatment of autistic individuals, fear of interacting with police, and perceptions of police Autism Awareness campaigns. **Findings:** Findings indicate that autistic respondents vary in their perceptions of the police. Prior negative experiences with police have a stronger influence on perceptions than do positive experiences. Support for awareness campaigns is also varied. **Originality:** Despite high-profile police incidents involving autistic individuals, there have been no empirical examinations of autistic adults' global perceptions of the police or police-led autism awareness campaigns. The current study addresses this oversight by directly examining autistic adults' perceptions. This approach is particularly salient given the ongoing police public scrutiny surrounding officer interactions with individuals from special populations, which is largely uninformed by research centering the voices of impacted individuals.

Introduction

Criminology has long focused on public perceptions of and satisfaction with criminal justice actors, particularly the police, and how those perceptions and experiences may impact trust, cooperation, and legitimacy (Hinds & Murphy, 2007; Mazerolle et al., 2013; Skogan, 2005; Weitzer & Tuch, 2005). It is well known that the chances of interacting with the police or having a negative police interaction are not evenly distributed: individuals in vulnerable, marginalized, and oppressed populations are more likely to experience these encounters (Kahn & Martin, 2016; Thompson & Kahn, 2016; Thorneycroft & Asquith, 2021). The neurodiverse community, specifically autistic individuals, is one such vulnerable population.¹ Contributing to the ongoing

police legitimacy crisis plaguing the US, there have been a number of high-profile events involving the police and autistic individuals. Often, these encounters involve police officers interpreting autistic individuals' natural behaviors, traits, and characteristics as suspicious or dangerous, which result in these individuals being arrested, experiencing physical and emotional trauma, and even death. For example, Elijah McClain, an autistic man, was walking home when police stopped him for acting suspiciously. Elijah asked the officers to respect his boundaries, but the officers perceived this as resistance and placed him into a chokehold that resulted in his death (Tompkins, 2021). Against this backdrop, every April police officers and departments across the US don special patches² and decorate police vehicles in brightly colored puzzle pieces in the name of "Autism Awareness."

While a substantial body of research has examined public perceptions of the police and police legitimacy broadly, relatively little work has examined perceptions of the police among members of neurodiverse communities. Much of the current research in this area has focused on police training and tactics for interacting with autistic individuals as well as the experiences, fears, and perceptions of parents or caregivers (Christiansen, et al., 2021; Chown, 2010; Gardner & Campbell, 2020; Wallace et al., 2020). Largely absent from the discussion are the opinions and perceptions of autistic adults themselves (for exceptions see: Salerno & Schuller, 2019 Salerno-Ferraro & Schuller, 2020).³ To that end, this study seeks to understand autistic adults' perceptions of the police and police-led Autism Awareness campaigns through examining the influence of demographic characteristics and prior police experiences among a sample of 121 autistic adults.

Background

Autism in the US

Research estimates that 1 in 54 children in the US are autistic, a marked increase from 1 in 150 twenty years prior (Baio et al., 2018; Maenner et al., 2020). Despite the relative commonness of autism, few in the general public have firsthand experience interacting with autistic individuals, and often what individuals do know about autistic individuals draws from representations in popular entertainment and news media (Christiansen et al., 2021). The American Psychiatric Association ([APA], 2013) defines autism as a neurological developmental disorder associated with marked differences in communication, social skills, and sensory perception compared to their neurotypical counterparts. Outward characteristics and traits can include repetitive motions or speech (e.g. hand flapping, pacing, rocking, echolalia), sensitivity/sensory issues (e.g. severe discomfort being touched, photophobia, phonophobia) and social or communication difficulties (e.g. trouble with verbalization, difficulty understanding verbal instructions or facial expressions, or difficulty making or maintaining eye contact). Autistic individuals vary in both the number and presentation of autistic characteristics and traits, as well as their need for day-to-day support, if any (APA, 2013).

According to Rava and colleagues (2017), 20% of autistic individuals in the US will be stopped and questioned by the police and 5% will be arrested by the time they turn 21 years old. During these stops, autistic individuals with sensory or responsiveness issues in particular may react in ways which are inconsistent with dominant social norms or officer expectations. Officers who do not recognize these behaviors as indicators of autism may instead perceive them as resistance and possibly respond with suspicion and/or force (Wallace, et al. 2021).

The media documents just how dangerous interactions between autistic individuals and the police can be. For example, Ricardo Hayes was wounded in 2017 when he was shot as he ran from an off-duty Chicago police officer (Mitchell, 2020). In 2019, Elijah McClain died after his encounter with the police, which saw him placed in a chokehold and given an injection of ketamine (Hutchinson, 2021). Thirteen-year-old Linden Cameron was left physically disabled after he was shot eleven times by Utah police who were called by his mother to help transport him to the hospital (Aaron, 2021). These events have placed renewed attention to police interactions with individuals experiencing developmental disabilities.⁴

Although the training and response models vary widely by department, they typically emphasize increasing officer awareness of various mental health, behavioral health, and intellectual and developmental disabilities. However, evaluations of the effectiveness of these approaches for improving police interactions with individuals experiencing developmental disabilities are mixed. Even less research has assessed the influence of these approaches on the perceptions of individuals who are intended to benefit from these initiatives.

Perceptions of Police

Police-citizen relationships and citizen perceptions of police have traditionally been framed around police legitimacy and procedural justice, often in conjunction with race/ethnicity, gender, or age (Brunson, 2007; Lind et al., 1994; Weitzer & Tuch, 2004). Legitimacy is “a property of an authority that leads people to feel that the authority or institution is entitled to be deferred to and obeyed” (Sunshine & Tyler, 2003, p. 514). In process-based models of police legitimacy, police gain or lose legitimacy through their interactions with the public, which can be personal, vicarious, or facilitated through the media (Graziano & Gauthier, 2018; Parry et al., 2019; Reisig et al., 2007; Tyler, 2003). Procedural justice, which posits that how the police treat people during an encounter will ultimately inform their beliefs about authority, is central to maintaining or increasing legitimacy (Lind & Tyler, 1988; Mazerolle et al., 2013; Tyler, 1994). As Mazerolle and colleagues (2013) have delineated, procedural justice is generally conceptualized to encompass four elements: citizen participation/voice (input in outcome of interaction), decision-making processes (how officers decide what to do), respect (how individuals are treated), and fairness (whether different types of individuals are treated equally). When individuals feel they are treated in a procedurally just manner, they will tend to view police as more legitimate. The groupvalue model of procedural justice posits that

perceptions of procedural justice are important because they deliver subtle, but powerful, messages to individuals via interactions with legal authorities (Tyler 1989; Tyler et al., 1996). The messages accompanying fair treatment include that the individual is respected and valued within their group. Conversely, unfair or biased treatment communicates disrespect, and reinforces the individual's marginal status in comparison to the authority (Tyler 1994; Tyler & Lind, 1992; Lind & Tyler, 1988). As such, autistic individuals could have different perceptions of the police from their neurotypical counterparts due to both personal and vicarious experiences.

Current study

Given the robust body of literature finding that perceptions of police vary across civilian demographic characteristics (see: Brunson, 2007; Skogan, 2005; Weitzer & Tuch, 2004, 2005), it is important to assess the perceptions of individuals from the neurodiverse community, especially as they face unique challenges during police interactions. To our knowledge, there have been no empirical examinations of autistic adults' global perceptions of the police through the lens of police legitimacy or procedural justice.⁵ Additionally, there have been no empirical examinations of autistic adults' perceptions of police-led autism awareness campaigns. This study begins to fill this gap by analyzing autistic adults' perceptions of the police and police-led initiatives focused on autism. It asks two research questions: 1. *How do autistic adults perceive the police?* and 2. *How do autistic adults perceive police-led autism awareness campaigns?* This framing expands the literature to not only include but in fact center the voices and experiences of autistic individuals in policing research. This is a critical first step to inform future efforts intended to improve police relations with the autistic community.

Design and procedure

The current study uses self-administered, online survey data collected between January and August 2021. Autistic individuals are a hidden and hard-to-reach population such that traditional sampling methods are ineffective. Some may advocate for venue-based sampling (Muhib et al., 2001) but there are few largescale in-person organized events catering to autistic adults. Further, while snowball or referral sampling is often used to access vulnerable or hidden populations (Atkinson & Flint, 2001), the "hidden" nature of autism makes it difficult to connect with enough initial participants with knowledge of others to make in-person or traditional snowball approaches feasible for the purposes of this study. Thus, we employ a modified sampling strategy utilizing social media for participant recruitment (Twitter and Facebook) that conceptualized these platforms as venues where individuals gather, and advertised the study using relevant subject matter hashtags⁶ (Dusek et al., 2015). Individuals who viewed the advertisements were also invited to retweet/repost. This allowed for the widest possible reach for participants given the nature of the population in question, and was in-line with other studies highlighting autistic adults' experiences (Crane et al., 2016; Salerno & Schuller, 2019; Salerno-Ferraro & Schuller, 2020). While no formal compensation was

provided, individuals were offered an opportunity to enter into a raffle for a \$100 gift card.

Instrument

The purpose of the current study was to assess perceptions of the police across two domains: 1) perceptions of the police, including procedural justice, treatment of autistic individuals, and fear of interacting with the police, and 2) perceptions of police efforts to promote awareness and support for the autistic community. An autistic educator and community advocate served as a subject matter expert and sensitivity reader for the survey instrument and design of survey advertisements, which took an average of 25 minutes to complete. Questions regarding perceptions of the police were drawn from prior research (Reisig et al., 2007; Sunshine & Tyler, 2003; Tankebe, 2009) while autism-specific questions were created for this study.

The survey included two photo sets to assess respondent perceptions of two different police-led awareness efforts: 1) “autism awareness” uniform patches and 2) specially- decorated “autism awareness” vehicles. A variety of images from different departments were included showcase the diversity of these campaigns throughout the US. Respondents were presented with both Likert and open-ended questions about their perceptions of the campaigns after viewing each photo set,

Photo 1: Patches. The first photo array depicted four uniform shoulder patches worn by officers in different departments in the US. All patches feature colorful puzzle pieces and the words “autism awareness” in addition to the departmental identifiers.

Photo 2: Vehicles. The second photo array depicted four police vehicles from different departments decorated for awareness campaigns. Each vehicle was decorated in a colorful puzzle piece motif ranging from complete overall coverage to a more minimal racer style stripe down the driver’s side of the vehicle. All four vehicles show the words “autism awareness” printed on them.

Sample

A total of 139 autistic adults responded to the survey, with responses populated in Qualtrics. Those individuals with missing information in any of the key variables were removed prior to analysis, resulting in a final sample of 121 autistic adults.⁷ Respondents were an average of 30 years old (SD=7.70) and the majority of the sample identified as male (62.8%), followed by female (28.1%), and gender nonconforming/non-binary (9.1%). About 17% of respondents also identified as transgender.⁸ Most respondents were white (65.3%), followed by other race/ethnicity (14.9%), Black (13.2%), and Hispanic (6.6%). Most respondents reported either completing some college/Associate’s degree (43.8%), followed by a Bachelor’s/advanced degree (38.8%).⁹ Almost 75% of respondents reported a prior interaction with the police (75.6%). The greatest portion who have interacted with the police reported somewhat positive encounters (33.9%), followed by somewhat negative encounters (13.2%). An

equal share of respondents reported very negative or very positive encounters (9.1%, respectively) and 8% reported a mix of positive and negative interactions. These demographic and background characteristics are included as control variables in each of the multivariate analyses conducted.

Key variables and analytic strategy

Our dependent variables involve five scales: perceptions of procedural justice, perceptions of police treatment of autistic individuals, fear of interacting with the police, perceptions of special patches, and perceptions of special vehicles. The questions included in these scales were intentionally written into separate sections of the survey instrument to address respondent perceptions across various domains of interest. Individual exploratory factor analyses were examined for each of our domains of interest to determine whether the items in each scale sufficiently loaded onto a single concept. These results indicated that every subscale had an eigenvalue over one, factor loadings exceeding 0.7, and alphas ranging from 0.88 to 0.96 (see Appendix A). All items included in the scales were measured on a scale of 1 “Strongly disagree” to 4 “Strongly agree”.

To examine views of the police, we first assessed perceptions of procedural justice using an 8-item scale, including measures such as: police treat people fairly, police officers treat people with respect, and I trust police officers (mean=2.74). A 3-item scale was used to assess perceptions of *police treatment of autistic individuals* based on responses to: police treat autistic people with respect, police are well trained to interact with autistic individuals, and police treat people like me with respect (mean=2.71). Finally, we assess *fear of interacting with the police* using a 6-item scale, including: I worry that a police officer may treat me differently because I am autistic, I worry that a police officer may misinterpret what or how I say things, and I worry that a police officer may misinterpret my actions or behaviors (mean=3.13).

To assess perceptions of police-led awareness campaigns, we examine perceptions of *special patches* based on responses to ten items including: officers wearing these types of patches would be good at interacting with autistic individuals, officers wearing these types of patches make me feel safe, and I can trust officers wearing these types of patches (mean=2.80). We then examined respondent perceptions of *special vehicles* based on responses to 8-items, such as: I support departments having at least one car like this, seeing these cars makes me feel like part of the community, and these cars promote safety for autistic individuals (mean=2.79).

To control for differences in perceptions of the police across individuals with different demographic characteristics, we include respondent age, gender identification, race/ethnicity, and educational attainment in our models. We additionally include perceptions of prior police contacts to account for potential differences based on positive or negative police encounters. The coding of each variable is provided in Table 1. Given that all of our dependent variables are continuous, we use five OLS regression

models to assess correlates associated with each of our subscales. Prior research examining police perceptions employed similar modeling strategies (e.g., Nix et al., 2020).¹⁰

Table 1. Descriptive statistics (n=121)		
		n. (%) / Mean (SD)
	Procedural justice	2.74 (0.93)
	Police treatment of autistic individuals	2.71 (0.88)
	Fear of interacting with police	3.13 (0.60)
	Perceptions of patches	2.80 (0.80)
	Perceptions of vehicles	2.79 (0.81)
	Age	29.74 (7.70)
	Gender	
	Male (=0)	76 (62.81%)
	Female (=1)	34 (28.10%)
	Gender non-conforming/non-binary (=2)	11 (9.09%)
	Transgender	
	No (=0)	100 (82.64%)
	Yes (=1)	21 (17.36%)
	Race/ethnicity	
	White (=0)	79 (65.29%)
	Black (=1)	16 (13.22%)
	Hispanic (=2)	8 (6.61%)
	Other (=3)	18 (14.88%)
	Education	
	< High school (=0)	9 (7.44%)
	High school (=1)	12 (9.92%)
	Some college/Associate's (=2)	53 (43.8%)
	Bachelor's + (=3)	47 (38.84%)
	Perception of prior police interaction	
	I've never interacted with the police (=0)	32 (26.45%)
	Very Negative (=1)	11 (9.09%)
	Somewhat Negative (=2)	16 (13.22%)
	A mix of Positive and Negative (=3)	10 (8.26%)
	Somewhat Positive (=4)	41 (33.88%)
	Very Positive (=5)	11 (9.09%)

Results

Table 2 presents the results related to respondent perceptions of the police. Beginning with procedural justice, female ($p < 0.05$) and gender non-conforming respondents ($p < 0.01$) reported significantly more negative perceptions of police, relative to males. Individuals with a high school diploma and those with some college ($p < 0.05$)

reported more negative perceptions of procedural justice than individuals with less than a high school degree. Individuals with very negative and somewhat negative perceptions of prior interactions with police reported significantly more negative perceptions of procedural justice than those who have never interacted with the police ($p < 0.01$).

In terms of police treatment of autistic individuals, older respondents reported significantly more negative perceptions than younger respondents ($p < 0.05$) and female and gender non-conforming respondents again reported significantly more negative perceptions relative to their male counterparts ($p < 0.01$). Individuals who reported very negative or somewhat negative prior interactions with the police were significantly less likely to agree that the police treat autistic individuals well compared to individuals with no prior police interactions ($p < 0.01$). Similar to the above results, respondents who reported positive prior experiences with the police did not report significantly different perceptions of police treatment of autistic individuals than individuals who have never interacted with the police.

We also assessed respondent fear of interacting with the police. Gender nonconforming respondents were significantly more fearful of interacting with the police than males ($p < 0.05$). Relative to individuals who have never interacted with the police, individuals who reported a very negative prior interaction with the police were significantly more likely to report being fearful of interacting with the police ($p < 0.01$). Those who reported somewhat negative and even a mix of negative and positive prior experiences with the police were also significantly more likely to report being fearful of interacting with the police, relative to those who have never had a police contact ($p < 0.05$).

Table 2. OLS results predicting perceptions of the police				
		Procedural justice	Police treatment of autistic individuals	Fear of interacting with police
Age		-0.02	-0.02*	0.00
		(0.01)	(0.01)	(0.01)
Gender (male ref.)				
	Female	-0.38*	-0.44**	0.18
		(0.16)	(0.14)	(0.12)
	Non-conforming/non-binary	-0.80**	-0.70**	0.56
		(0.28)	(0.26)	(0.22)
	Transgender	-0.14	-0.17	-0.16
		(0.22)	(0.20)	(0.17)
Race/ethnicity (white reference)				
	Black	0.23	0.26	0.30
		(0.21)	(0.19)	(0.16)
	Hispanic	-0.30	-0.43	0.32

		(0.28)	(0.26)	(0.22)
	Other race/ethnicity	0.22	0.20	-0.03
		(0.19)	(0.18)	(0.15)
Education (<high school ref.)				
	High school	-0.74*	-0.56	-0.10
		(0.34)	(0.31)	(0.26)
	Some college/Associate's	-0.73*	-0.58	-0.28
		(0.32)	(0.29)	(0.25)
	Bachelor's degree+	-0.56	-0.42	-0.34
		(0.30)	(0.28)	(0.23)
Perception of prior police interaction (no interaction ref.)				
	Very negative perceptions of prior police interaction	-0.85**	-0.81**	0.72**
		(0.28)	(0.26)	(0.22)
	Somewhat negative perception of prior police interaction	-0.83**	-0.87**	0.41*
		(0.24)	(0.22)	(0.18)
	Mix of positive and negative perceptions of prior police interaction	-0.02	-0.05	0.47*
		(0.27)	(0.25)	(0.21)
	Somewhat positive perceptions of prior police interaction	0.34	0.20	0.21
		(0.21)	(0.19)	(0.16)
	Very positive perceptions of prior police interaction	0.51	0.49	0.04
		(0.28)	(0.26)	(0.22)
	Constant	4.04**	3.95**	2.93**
		(0.36)	(0.33)	(0.28)
	Observations	121	121	121
	R-squared	0.50	0.51	0.27

Note: ** p<0.01, * p<0.05; standard errors in parentheses; ref. = reference category

Turing to respondent perceptions of police-led awareness campaigns, Table 3 indicates that several demographic characteristics were associated with these perceptions. Female and gender non-conforming respondents had significantly more negative perceptions of police use of special patches and vehicles relative to male respondents ($p<0.01$). Black respondents were significantly more likely to support police use of special patches than their white counterparts ($p<0.01$), though no other differences across race/ethnicity emerged in support for police-led awareness efforts. Educational attainment was also associated with support for police-led awareness efforts, generally indicating that those with higher levels of education were less supportive of these measures than those respondents with lower levels of education. Support for the use of special patches was significantly lower among individuals with a high school education ($p<0.01$), some college ($p<0.01$), and those with a Bachelor's

degree ($p < 0.05$), relative to individuals with less than a high school education. Support for special vehicles was significantly lower at all higher levels of education, relative to those with less than a high school diploma ($p < 0.05$).

Prior experience with the police was also related to respondent support for these special measures, though the results were less robust than anticipated. Those who reported having very negative perceptions of prior police interactions were significantly less likely to support police use of patches ($p < 0.01$) and special vehicles ($p < 0.05$), relative to those who had not experienced a prior police contact. Those who reported somewhat negative prior interactions were also significantly less likely to support the use of patches and vehicles ($p < 0.01$) compared to individuals who had no prior police contact. In contrast, those individuals who reported very positive prior interactions with the police were significantly more supportive of patches ($p < 0.05$) relative to individuals who had not experienced a police contact.

Table 3. OLS results predicting support for police-led awareness campaigns			
		Perceptions of patches	Perceptions of vehicles
Age		0.00	0.00
		(0.01)	(0.01)
Gender (male ref.)			
	Female	-0.40**	-0.52**
		(0.13)	(0.14)
	Non-conforming/ non-binary	-0.95**	-0.81**
		(0.23)	(0.25)
Transgender			
		-0.11	-0.23
		(0.18)	(0.20)
Race/ethnicity (white reference)			
	Black	0.54**	0.35
		(0.17)	(0.19)
	Hispanic	-0.20	-0.34
		(0.23)	(0.25)
	Other race/ ethnicity	0.07	0.11
		(0.16)	(0.18)
Education (< high school ref.)			
	High School	-0.75**	-0.72**
		(0.28)	(0.30)
	Some college/ Associate's	-0.73**	-0.71*
		(0.26)	(0.29)
	Bachelor's degree+	-0.54*	-0.57*
		(0.25)	(0.27)
Perception of prior police interaction (no interaction ref.)			

	Very negative perceptions of prior police interaction	-0.68** (0.23)	-0.61* (0.25)
	Somewhat negative perceptions of prior police interaction	-0.53** (0.20)	-0.59** (0.21)
	A mix of positive and negative perceptions of prior police interaction	0.07 (0.23)	-0.03 (0.25)
	Somewhat positive perceptions of prior police interaction	0.18 (0.17)	0.19 (.19)
	Very positive perceptions of prior police interaction	0.52* (0.23)	0.41 (0.25)
Constant		3.57** (0.30)	3.63** (0.32)
Observations		121	121
R-squared		0.52	0.46
Note: **p<0.01, *p<0.05; standard errors in parentheses; ref. = reference category			

Discussion

The purpose of the current study was to assess perceptions of the police and police efforts to promote awareness and support for the autistic community. We identified variation in respondent perceptions across each domain, with some respondents reporting positive perceptions of the police and police-led efforts and others reporting more neutral or negative perceptions. Perceptions were influenced by both demographic characteristics and prior personal experience interacting with police officers. However, with the exception of respondent gender identification, these factors exerted variable influences on each outcome of interest, highlighting the complex relationships between these predictors and perceptions of the police. We also identified several results that conflict with research using general population samples. Future research should further explore these differences and work to incorporate more neurodivergent samples in studies examining procedural justice and police legitimacy.

Although prior research finds robust relationships between respondent demographic characteristics and perceptions of the police, largely indicating that young minority males who are more likely to experience police contacts have less favorable perceptions (Brunson, 2007; Carr et al., 2007), that pattern did not emerge here. Instead, our findings show that female and gender non-conforming autistic individuals held more negative perceptions of the police. Some prior researchers using

international adolescent samples have similarly found that females hold lower perceptions of procedural justice than males (Baz & Fernández-Molina; Trinkner et al. 2020). Our findings regarding transgender and gender non-conforming respondents are consistent with prior studies, which have identified more negative relationships and interactions between these communities and the police (Serpe & Nadal, 2017; Stotzer, 2014; Wolff & Cokely, 2007). Also, in line with past research, we found that level of education was related to individual's perceptions of the police, where more educated individuals in our sample viewed the police and their campaigns in a more skeptical light (Hinds & Murphy, 2007). Though beyond the scope of this study, future researchers should explore potential reasoning for the relatively limited relationships between demographic characteristics and perceptions identified here, especially in light of Tyler and colleague's (1996) work regarding the group-value model of procedural justice and legitimacy.

The majority of respondents reported experiencing a prior police contact. Although perceptions of these encounters varied from very negative to very positive, the negative experiences were more strongly related to respondent perceptions of the police and police-led awareness efforts than prior positive experiences. Specifically, negative experiences continued to significantly influence perceptions in multivariate models, even controlling for respondent demographic characteristics. Interestingly, those who reported positive prior experiences with the police did not maintain significantly different perceptions of procedural justice relative to individuals with no prior experience. Both of these findings are consistent with prior research indicating asymmetry in the impact of police encounters on perceptions, with negative interactions resulting in stronger effects than positive experiences (Skogan, 2006).

Tyler (2001) found that individuals in minority groups are more likely to be mistrustful of and have less overall confidence in the police, often based on histories of citizen harassment, mistreatment, and bias. Members of minority groups have also been shown to place a higher importance on quality of treatment by authorities than those representing the majority group. Autistic individuals, who are exposed to news stories and may have personal experiences where officers or other authority figures have misunderstood their behavior to perhaps negative outcomes, may also have reduced perceptions of police legitimacy and increased fear of the police. More focus on ensuring that officers treat civilians respectfully to foster improved perceptions of the police is especially important because of the significant impact of negative police encounters on autistic individuals' perceptions of the police, combined with the increased risk of police contact that autistic individuals face. Further work directly testing the applicability of procedural justice and legitimacy to autistic populations is needed to improve police interactions with members of these populations. Namely, a better understanding of how autistic individuals perceive and interact with the police can inform training efforts and enhance the safety of these encounters.

As with all research, there are limitations to our findings. First, the study is cross-sectional, and cannot speak to any direct causality between prior police experience and perceptions of the police. Replicating this study's findings through more in-depth qualitative or longitudinal methods will better assess how perceptions of the police are formed and change over time. Additionally, there are limitations associated with online surveys and online sampling methodologies. First, online surveys can allow for inattentive respondents who click through answers without attending to each question in order to get to the end of the survey quickly (Oppenheimer et al. 2009). To combat this issue, instructional manipulation checks were included and used as a mitigation. Second, social media creates a unique potential for self-selection bias. For example, the survey was advertised on social media and individuals were encouraged to share the study with others, which may have caused oversampling of individuals who visit or follow certain people or pages. In addition, Twitter users are more likely to have a college degree than the general population (Wojcik, & Hughes, 2019), which means that the users who select into that platform, and thus into the sample, could differ from autistic individuals who do not use Twitter. While researchers should always consider potential sampling bias, the data collected for this study reflects a high degree in diversity of both demographics as well as respondent's perceptions among a hidden and hard to reach population, which minimizes this concern.

Prior researchers examining police interactions with autistic adults found largescale dissatisfaction amongst their samples (see Crane et al., 2016; Gibbs & Haas, 2020; Salerno & Schuller, 2019). That was not the case in our study, however, as we found both positive and negative opinions toward both the police and police-led autism awareness efforts. Our findings could differ because we asked questions about the police generally, rather than asking about specific encounters, when reporting on questions such as procedural justice. Our study, with 121 autistic adults, is also considerably larger than others.

Our key findings indicate that the autistic community is not monolithic in its views of the police or police-led autistic awareness campaigns. To our knowledge, most police-led awareness campaigns, consist of similar imagery and messaging (puzzle pieces, clashing colors, etc.) and while some autistic individuals embraced the messaging, there were others who had very visceral reactions to the symbols and methods of the campaigns. The qualitative data collected from this sample using responses to open-ended survey questions, though outside the scope of the analysis and findings presented here, is highly suggestive of continuing division within the autistic community regarding attitudes and perceptions of the police. For example, some respondents reported that these campaigns made them feel safe, while others reported that these efforts put autistic individuals at increased risk of a negative police encounter because these initiatives were perceived to indicate a level of police awareness that was not truly reflected in reality. The division over the imagery associated with autism and autistic causes in particular has long been a point of debate within the autistic community, with many seeing the use of the puzzle piece as particularly harmful and

problematic (see Gernsbacher et al., 2018). Respondents were similarly divided in this survey, with some having very positive perceptions of these symbols and messages and others having negative reactions to the use of the puzzle piece and clashing color combinations. Given these concerns, police departments should consider the diversity of experiences and perceptions before embarking on new awareness campaigns and should collaborate with the communities they are raising awareness of to incorporate their input before adopting strategies or messages, lest they risk alienating members of the very community they are trying to connect and build trust with. No matter the theory or policy examined, future work should continue to center the voices and experiences of autistic adults in criminological research.

References

- Aaron, R. (2021, April 29). "Why did they shoot me?" 14-year-old Linden Cameron continues his long road to recovery. ABC News.
<https://www.abc4.com/news/why-didthey-shoot-me-14-year-old-linden-cameron-continues-his-long-road-to-recovery/>
- Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social research update*, 33(1), 1-4.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington DC: American Psychiatric Association Publishing.
- Baio, J., Wiggins, L., Christensen, D. L., Maenner, M. J., Daniels, J., Warren, Z., ... & Dowling, N. F. (2018). Prevalence of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2014. *MMWR Surveillance Summaries*, 67(6), 1.
- Baz, O., & Fernández-Molina, E. (2018). Process-based model in adolescence. Analyzing police legitimacy and juvenile delinquency within a legal socialization framework. *European Journal on Criminal Policy and Research*, 24(3), 237–252.
<https://doi.org/10.1007/s10610-017-9357-y>
- Botha, M., Hanlon, J., & Williams, G. L. (2021). Does language matter? Identity-first versus person-first language use in autism research: A response to Vivanti. *Journal of Autism and Developmental Disorders*, 1-9.
- Brunson, R. K. (2007). "Police don't like Black people": African-American young men's accumulated police experiences. *Criminology & Public Policy*, 6, 71-101.
- Carr, P. J., Napolitano, L., & Keating, J. (2007). We never call the cops and here is why: A qualitative examination of legal cynicism in three Philadelphia neighborhoods. *Criminology*, 45(2), 445-480.

- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Pine Forge Press.
- Christiansen, A., Minich, N. M., & Clark, M. (2021). Pilot Survey: Police Understanding of Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 1-8.
- Chown, N. (2010). 'Do you have any difficulties that I may not be aware of?' A study of autism awareness and understanding in the UK police service. *International Journal of Police Science & Management*, 12(2), 256-273.
- Crane, L., Maras, K. L., Hawken, T., Mulcahy, S., & Memon, A. (2016). Experiences of autism spectrum disorder and policing in England and Wales: Surveying police and the autism community. *Journal of Autism and Developmental Disorders*, 46(6), 2028-2041.
- De Vries, A. L., Noens, I. L., Cohen-Kettenis, P. T., van Berckelaer-Onnes, I. A., & Doreleijers, T. A. (2010). Autism spectrum disorders in gender dysphoric children and adolescents. *Journal of autism and developmental disorders*, 40(8), 930-936.
- Dusek, G. A., Yurova, Y. V., & Ruppel, C. P. (2015). Using social media and targeted snowball sampling to survey a hard-to-reach population: A case study. *International Journal of doctoral studies*, 10(1), 279-299.
- Gardner, L., & Campbell, J. M. (2020). Law Enforcement Officers' Preparation for Calls Involving Autism: Prior Experiences and Response to Training. *Journal of autism and developmental disorders*, 50(12), 4221-4229.
- Gernsbacher, M. A., Raimond, A. R., Stevenson, J. L., Boston, J. S., & Harp, B. (2018). Do puzzle pieces and autism puzzle piece logos evoke negative associations?. *Autism*, 22(2), 118-125.
- Gibbs, V., & Haas, K. (2020). Interactions between the police and the autistic community in Australia: Experiences and perspectives of autistic adults and parents/carers. *Journal of autism and developmental disorders*, 50(12), 4513-4526.
- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research*. Transaction Publishers.
- Graziano, L. M., & Gauthier, J. F. (2018). Media consumption and perceptions of police legitimacy. *Policing: an international journal*.
- Haas, K., & Gibbs, V. (2021). Does a Person's Autism Play a Role in Their Interactions with Police: The Perceptions of Autistic Adults and Parent/Carers. *Journal of Autism and Developmental Disorders*, 51(5), 1628-1640.

- Hinds, L., & Murphy, K. (2007). Public satisfaction with police: Using procedural justice to improve police legitimacy. *Australian & New Zealand Journal of Criminology*, 40(1), 27-42.
- Hutchinson, B. (2021, February 25). Independent investigators in Elijah McClain's death issue scathing report. ABC News
<https://abcnews.go.com/US/independentinvestigators-elijah-mcclains-death-issue-scathing-report/story?id=76042087>
- Kahn, K. B., & Martin, K. D. (2016). Policing and race: Disparate treatment, perceptions, and policy responses. *Social Issues and Policy Review*, 10(1), 82-121.
- Lind, E. A., Huo, Y. J., & Tyler, T. R. (1994). ... And justice for all. *Law and Human Behavior*, 18(3), 269-290.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press
- Maenner, M. J., Shaw, K. A., & Baio, J. (2020). Prevalence of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2016. *MMWR Surveillance Summaries*, 69(4), 1.
- Mazerolle, L., Antrobus, E., Bennett, S., & Tyler, T. R. (2013). Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. *Criminology*, 51, 33-63.
- Mitchell, C. (2020, February 6). After Off-Duty Sergeant Shot Autistic Teen, Police Board Failed To Review Key Evidence. National Public Radio.
<https://www.npr.org/local/309/2020/02/06/803384198/after-off-duty-sergeant-shotautistic-teen-police-board-failed-to-review-key-evidence>
- Nix, J., Pickett, J. T., & Wolfe, S. E. (2020). Testing a Theoretical Model of Perceived Audience Legitimacy: The Neglected Linkage in the Dialogic Model of Police–community Relations. *Journal of Research in Crime and Delinquency*, 57(2), 217–259. <https://doi.org/10.1177/0022427819873957>
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of experimental social psychology*, 45(4), 867-872.
- Owen, S. S., Burke, T. W., Few-Demo, A. L., & Natwick, J. (2018). Perceptions of the police by LGBT communities. *American Journal of Criminal Justice*, 43(3), 668-693.
- Parry, M. M., Moule Jr, R. K., & Dario, L. M. (2019). Technology-mediated exposure to police–citizen encounters: A quasi-experimental assessment of consequences for citizen perceptions. *Justice Quarterly*, 36(3), 412-436.

- Salerno, A. C., & Schuller, R. A. (2019). A mixed-methods study of police experiences of adults with autism spectrum disorder in Canada. *International journal of law and psychiatry*, 64, 18-25.
- Salerno-Ferraro, A. C., & Schuller, R. A. (2020). Perspectives from the ASD community on police interactions: Challenges & recommendations. *Research in Developmental Disabilities*, 105, 103732.
- Serpe, C. R., & Nadal, K. L. (2017). Perceptions of police: Experiences in the trans* community. *Journal of Gay & Lesbian Social Services*, 29(3), 280-299.
- Skogan, W. G. (2005). Citizen satisfaction with police encounters. *Police quarterly*, 8(3), 298-321.
- Skogan, W. G. (2006). Asymmetry in the impact of encounters with police. *Policing & society*, 16(02), 99-126.
- Stotzer, R. L. (2014). Law enforcement and criminal justice personnel interactions with transgender people in the United States: A literature review. *Aggression and violent behavior*, 19(3), 263-277.
- Sunshine, J., & Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. *Law & Society Review* 37: 513-548.
- Rava, J., Shattuck, P., Rast, J., & Roux, A. (2017). The prevalence and correlates of involvement in the criminal justice system among youth on the autism spectrum. *Journal of Autism and Developmental Disorders*, 47(2), 340-346.
- Reisig, M. D., Bratton, J., & Gertz, M. G. (2007). The construct validity and refinement of process-based policing measures. *Criminal justice and behavior*, 34(8), 1005-1028.
- Tankebe, J. (2009). Public cooperation with the police in Ghana: Does procedural fairness matter?. *Criminology*, 47(4), 1265-1293.
- Thompson, M., & Kahn, K. B. (2016). Mental health, race, and police contact: intersections of risk and trust in the police. *Policing: An International Journal of Police Strategies & Management*.
- Tompkins, L. (2021 September 1). "Here's What You Need to Know About Elijah McClain's Death" *The New York Times*. <https://www.nytimes.com/article/who-waselijah-mcclain.html>
- Thornycroft, R., & Asquith, N. L. (2021). Crippling criminology. *Theoretical Criminology*, 25(2), 187-208.
- Trinkner, R., Rodrigues, H., Piccirillo, D., Gifford, F. E., & Gomes, A. M. M. (2020). Legal socialisation in Brazil: examining the generalisability of the procedural

- justice model. *International Journal of Comparative and Applied Criminal Justice*, 44(1–2), 7–27. <https://doi.org/10.1080/01924036.2019.1587710>
- Tyler, T., DeGoey, P., & Smith, H. (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. *Journal of personality and social psychology*, 70(5), 913.
- Wallace, D., Herbert, J., Tyler, D., & McGee-Hassrick, E. (2021). Interactions between Individuals on the Autism Spectrum and the Police: The Fears of Parents, Caregivers, and Professionals. *Policing: A Journal of Policy and Practice*, 15(2), 950-964.
- Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M. C., ... & Baron-Cohen, S. (2020). Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature communications*, 11(1), 1-12.
- Weitzer, R., & Tuch, S. A. (2004). Race and perceptions of police misconduct. *Social problems*, 51(3), 305-325.
- Weitzer, R., & Tuch, S. A. (2005). Determinants of public satisfaction with the police. *Police quarterly*, 8(3), 279-297.
- Wojcik, S. & Hughes, A. (2019, April 24) Sizing Up Twitter Users. Pew Research Center, Washington, D.C. <https://www.pewresearch.org/internet/2019/04/24/sizing-uptwitter-users/>
- Wolff, K. B., & Cokely, C. L. (2007). “To protect and to serve?”: An exploration of police conduct in relation to the gay, lesbian, bisexual, and transgender community. *Sexuality and culture*, 11(2), 1-23.

Appendix

Appendix A. Scale items		
Scale	Item	Factor loading
Perceptions of patches (Eigenvalue = 6.89; α =0.96)		
	Officers wearing these types of patches make me feel safe	0.87
	I can trust officers where these type of patches	0.83
	Officers wearing these types of patches have extra training on the autistic community	0.80
	Officers wearing these types patches will handle	0.85

	encounters with autistic individuals well	
	Patches like these help raise awareness about autism	0.80
	Officers wearing these types of patches care about the autistic community	0.88
	I support officers wearing these types of patches	0.83
	I would fee more comfortable interacting with officers wearing these types of patches than others not wearing an awareness patch	0.67
	Officers wearing these types of patches would be good interacting with autistic children	0.85
	Officers wearing these types of patches would be good at interacting with autistic adults	0.90
Perceptions of vehicles (Eigenvalue – 5.65; $\alpha=0.95$)		
	Seeing these cars makes me feel a part of the community	0.86
	Seeing these cars makes me feel safe	0.87
	These cars help promote safety for autistic individuals	0.85
	Police departments with these cars have extra training for their officers about autism	0.76
	Cars like these help raise awareness in the community	0.82
	These departments care about the autistic community	0.80

	I support departments have at least one car like these	0.89
	I would feel more comfortable approaching an officer if they had a car like one of these	0.86
Procedural justice (Eigenvalue = 6.04; α = 0.96)		
	Police officers respect citizen's rights	0.88
	I trust police officers	0.88
	The police can be trusted to make decisions that are best for my community	0.85
	Police treat people with respect	0.88
	Police take time to listen to people	0.86
	Police provide the same quality of service to all citizens	0.89
	Police treat people fairly	0.89
	Police are courteous to citizens they come into contact with	0.83
Police treatment of autistic individuals (Eigenvalue = 2.36; α = 0.93)		
	Police treat autistic people with respect	0.86
	Police are well trained to interact with autistic individuals	0.92
	Police treat people like me with respect	0.88
Fear of interacting with police (Eigenvalue = 3.30; α = 0.88)		
	I am afraid of interacting with police	0.71
	I worry that a police officer might not understand how to talk to me	0.71
	I worry that a police officer may misinterpret what or how I say things	0.77
	I worry that a police officer may misinterpret my actions or behaviors	0.77

	I worry that a police officer may accuse me of being drunk or on drugs when I am not	0.70
	I worry that a police officer may treat me differently because I am autistic	0.79
Note: factor loadings based on exploratory factor analysis with oblique promax rotation		

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Footnotes

1. While we acknowledge that language around autism is an on-going debate. we use identity-first language throughout this paper. See Botha et al. (2021) for a review of this debate and its importance.
2. Often patches are also sold to members of the public as well to the benefit of various charities.
3. Some researchers, like Crane et al., (2016) and Haas & Gibbs, (2021) have included autistic and non-autistic individuals in their samples.
4. See: <https://www.theiacp.org/projects/academic-training-to-inform-police-responses>
5. Gibbs & Haas (2020) queried respondents regarding specific incidents.
6. #askingautistics, #autismresearch, and #autism
7. The missing data appeared to be missing at random, limiting concerns that excluded individuals differed in substantial ways from those included in the analysis. Given the exploratory nature our study and the retained sample of 100+ individuals from a hard to reach population, we are not overly concerned that the removal of 18 participants substantially biased our results. We invite future researchers to replicate and extend our study using larger samples.
8. Research finds higher numbers of gender non-conformity (transgender and non-binary identifying individuals) among autistic individuals compared to their neurotypical counterparts (See: De Vries et al., 2010; Warrier, 2020).

9. While not in line with the general population, recent work by Wojcik & Hughes (2019) found US adult Twitter users tended to be more educated.

10. We acknowledge that structural equation modelling or another approach could have been used, however, given the nature of our research questions which was not to examine underlying structural relationships but rather to explore various factors that influence perceptions of the police among an autistic sample we felt OLS was more appropriate.