

Interactions between Individuals on the Autism Spectrum and the Police: The Fears of Parents, Caregivers, and Professionals

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Abstract Using data from a survey of parents, guardians, caregivers, and professionals, we couple qualitative coding with descriptive statistics to show how common it is for respondents to fear future police contact for the individual with autism spectrum disorder (ASD) in the respondents' lives and what inspires that fear. Nearly, 60% of respondents were reported being fearful of future police contact. Respondents characterized their fear in the following ways: the potential for police officers to misunderstand behaviours common amongst individuals with ASD generally and see those behaviours as non-compliance, ineffective, or difficult communication with minimally individuals with ASD and the emergence of aggressive behaviours from individuals with ASD during police contact. Respondents also expressed concern about the potential for police misuse of force. We conclude by discussing the ramifications of fear of police contact for police training as well as parents, caregivers, and individuals with ASD.

Introduction

The prevalence of autism spectrum disorder (ASD) has dramatically increased, from 1 in 166 children in 2004 to 1 in 59 children in 2018 (Fombonne, 2003; Maenner *et al.*, 2020). This growing prevalence of autism makes police contact with individuals with ASD more likely. People of all ages with ASD can behave in unique ways that do not conform to expected social norms (Debbaudt and Rothman, 2001). Some behaviours

commonly displayed by individuals with ASD include aggression, self-injury, repetitive behaviours (i.e. hand flapping) and elopement (Baumeister *et al.*, 2016; Brereton *et al.*, 2006; Gray *et al.*, 2014; Matson and Cervantes, 2014). These behaviours have the potential to be interpreted as non-compliance or threatening behaviour by the police and may solicit unnecessarily extreme and dangerous reactions, especially if the police have not

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received training in recognizing and interacting with individuals with ASD.

Scholars have shown that at all ages, people on the autism spectrum experience high rates of police contact (Cheely *et al.*, 2012; Ellem and Richards, 2018; Rava *et al.*, 2017; Salerno and Schuller, 2019; Tint *et al.*, 2018; Woodbury-Smith and Dein, 2014). Turcotte *et al.* (2018) estimated that 7% of autistic children encountered the police in a variety of situations ranging from calls for service, participation in legal rulings, or time in juvenile detention. Police encounters are not isolated to the home or community settings, as K-12 schools also often have police officers on-site who can be engaged when youth with ASD exhibit aggression, self-harm, or severe mental health distress. Additionally, high rates of police contact are in part due to victimization rates: individuals with disabilities are victimized at a rate that is 2.5 times higher than their non-disabled counterparts, with individuals with cognitive disabilities—like ASD—having the highest rates of violent victimization amongst disabled individuals (Harrell, 2008). Thus, higher rates of victimization thrust individuals with ASD into increased contact with the police and the criminal justice system.

Negative and well-publicized encounters between individuals with ASD and the police show the need for police training surrounding autism. For example, the Buckeye Police Department, a suburb of Phoenix, Arizona, is being sued for failing to train their officers about disabilities after a young man with ASD was injured during an incident involving police use of force (Gomez, 2018). The young man's stimming behaviour (i.e. behaviours that help the individual self-regulate sensory stimulation) was mistaken for public drug use by the officer involved. The presence of a parent, guardian, or paraprofessional during the interaction does not remove the chance of harm during an encounter, as was the case with Arnaldo Soto whose caretaker was shot during an incident with the police (National Public Radio, 2016). Certainly, there are

many interactions between the police and the individuals with ASD that go unseen and are non-eventful or positive. Yet, these types of encounters are concerning given that cohorts of youth with higher ASD prevalence are beginning to transition to their teenage years and young adulthood (Baio *et al.*, 2018). As more individuals with ASD transition to self-sufficiency and independence, of particular concern is when they encounter the police alone, without social support from friends, parents, guardians, or paraprofessionals. Such police encounters have the potential to be highly stressful for both the individual with ASD and the police officer, increasing the likelihood of negative outcomes.

Despite the complexity of these encounters, the majority of police officers are not trained in interactions with individuals with ASD (Gardner *et al.*, 2019; Modell and Mak, 2008). Also, a number of scholars demonstrate that police officers, including police cadets, may overestimate their abilities to identify and interact with individuals with ASD (Chown, 2010; Copenhagen *et al.*, 2020). A recent qualitative study (Railey *et al.*, 2020) suggests that police officers desire training that encapsulates knowledge about ASD, empathy training, best practices for encounters with individuals with ASD, and the ASD community in general. While some police departments across the nation have training on ASD, whether the training captures the types of training police officers want, such as knowledge on the 'core characteristics of ASD', training the ability to distinguish 'ASD from other disabilities (e.g. intellectual disability) and mental health disorders', and information on 'misperceptions and misinterpretations of the behaviour of individuals with ASD' (Railey *et al.*, 2020, p. 110) is unknown.

Similarly, parents, guardians, and caregivers have little information about preparing themselves and their loved ones on the autism spectrum for contact¹ with the police. As such, parents and caregivers likely have significant concerns and fears

¹ There are a few resources available to parents such as the Organization for Autism Research's 'A Guide to Safety' (<https://researchautism.org/resources/a-guide-to-safety>) and films like 'Be Safe The Movie' (<https://besafethemovie.com/>). These

over police contact, heightened by media coverage of significant, negative interactions between the police and the individuals with disabilities in general. To date, two studies have detailed the experiences of parents and caregivers when their loved one with ASD had police contact (Gibbs and Haas, 2020; Railey *et al.*, 2020); neither study, however, details the fears that parents and caregivers may have surrounding their loved one on the spectrum having future contact with the police. Should individuals with ASD or their parents and caregivers fear police contact, they may be less likely to use the police when needed or disclose a diagnosis during contact, creating critical problems both before and during a police encounter. In this study, we give parents, guardians, caregivers, and the professionals who serve individuals with ASD the ability to voice their fears about police encounters. We employ data from an original survey, administered using convenience sampling at autism awareness walks and fairs in the state of Arizona. Recruitment efforts targeted parents, guardians, caregivers, and professionals who have connections to individuals with. Survey data report the frequency respondents reported fearing future police contact for individuals in their life on the autism spectrum and open response data allowed for qualitative analysis of which aspects of potential police contact inspire their fear.

Data

We employ data from the Survey of Parents and Caregivers of Individuals with ASD, a survey aimed at gaining a basic understanding of parents, caregivers, and professional's attitudes and concerns about interactions between individuals with ASD and the police as well as the characteristics of those interactions. The survey was collected in the resources are currently gaining traction across the USA, though are not nationally known among parents. Additionally, they have not yet been evaluated for effectiveness in reducing stress and negative outcomes during police contact.

² We conducted limited quantitative analyses to test whether there are relationships between the reasons behind fear of police contact across the characteristics of the individual with ASD that the respondent referred to in the survey. We conducted a series of Chi-squares to determine if there are relationships between the age, race/ethnicity, and gender of the individual with ASD and the reasons behind fear of police contact. Age of the individual with ASD is a categorical variable with the following six categories: preschool aged and under (under 5 years old), elementary school aged (5–12 years old),

spring of 2017 in Arizona cities of Phoenix and Tucson. In Phoenix, the survey was administered at the Autism Resource Fair, and in Tucson, the survey was administered at the Autism Walk event. At each event, the research team had a table with a sign asking event participants to 'Take 5 Minutes to Help Us Learn about Police Interactions with Individuals with Autism'. If individuals were interested and met participant criteria (i.e. they were adults and were a parent, caregiver, or family member of an individual with ASD or a professional working with individuals with ASD), they were eligible to take the brief, 5-minute survey. The survey was one page of paper, front and back, totalled 18 questions and was anonymous. Respondents were asked to think about the primary individual (or focus on one individual) on the autism spectrum in their life (some respondents—particularly professionals—had a number of individuals on the autism spectrum in their lives) when answering questions. If individuals did not want to take the survey immediately, they were offered a business card with the survey website so that they could take the survey at their convenience. In an effort to collect additional responses from individuals not attending the event, a number of autism support groups with a Facebook presence in the Phoenix metro area were asked if they were willing to post a link to the survey on their Facebook pages. Approximately, three groups replied and allowed posting. Overall, 147 (39.5%) responses were collected from the Phoenix event, 124 (33.3%) responses were collected from the Tucson event, and 101 responses were collected online (27.2%) for a total *N* of 372.

Analysis plan

Our study primarily employs the qualitative analysis² of responses to the following open-response

question prompt: 'Do you fear the individual on the autism spectrum in your life coming into contact with the police?' which was followed with an open response query, 'If yes, why?' Of the 372 respondents, 335 answered the fear of the police question (about 10.8%), with 225 respondents (60.3%) mentioned being fearful of police contact. Approximately, 203 respondents responded to the open-ended portion of the question (22 respondents did not).

To code the open responses to the fear of police contact question, we engaged in grounded theory (Saldana, 2015) to sort the participants' responses into themes present in the data. The coding began with the authors reading the responses and identifying common themes within the data. Once these themes were identified, responses were then labelled according to which themes the response contained. Descriptive statistics were used to characterize the frequency of each theme.

The first theme, 'misunderstanding', is centred on the idea that the individual with ASD, the police officer, or both could misunderstand verbal, social, and emotional cues emanating from either actor. The misunderstanding theme is signalled by the following words/phrases when applied to the officer: not understand or misinterpret the situation, do not understanding the cause (of behaviour), and mistake their behaviour (for something else like non-compliance). Misunderstanding can also come from the individual with ASD. This was signalled in responses by phrases indicating that the individual with ASD did not understand, misread, misunderstood, or misinterpreted the situation. For example, one respondent indicated concerns sounding the police misunderstanding common ASD behaviours: 'I worry that being unresponsive or [a] hand flap will led to a bad reaction by police in random interaction' (ID353).

The middle school aged (13–14 years old), high school aged (15–18 years old), young adult (19–25 years old), and finally adult (26 years old and older). Race and ethnicity of the individual with ASD is also a categorical variable with the categories of White, African American, Latinx, and Other. Sex of the individual with ASD is a two category variable with the values of male and female. Additionally, we examined whether there are relationships between the race/ethnicity and sex of the respondent (not the individual with ASD) and their reasons for fearing police contact. These two variables are coded identically to the corresponding variables for the race/ethnicity and sex of the individual with ASD. We find no relationships with any of the demographic variables we examined and the three themes reported for fearing police contact.

The second theme, 'communication', surrounds issues of verbal ability, (non)responses to questions and comments, and the ability to answer questions during a police encounter. Many respondents expressed concern that the individual with ASD could not communicate in a reciprocal and/or prosocial way when under stress. Words and phrases representing the communication theme included non-verbal, verbal ability, and nonresponse/unresponsive did not answer, confess, or talking too much. The following is an example of a communication theme response: 'He may not listen to directions and may run off... ' (ID41).

The third theme, 'aggression', is simple: many respondents expressed concern that the individual with ASD will respond to various aspects of the interaction with aggressive or defiant behaviours potentially leading to negative outcomes, such as police use of force. Phrases used to code this theme included: aggression/aggressive, angry, violent, and (de)escalate. The following is an example of a response in the aggression theme: '...[my] daughter becomes aggressive and will make verbal threats just to get attention. As she ages, this becomes criminal in many settings (such as school)' (ID83).

These three themes are not mutually exclusive. Overlapping themes point to the idea that respondents often have multidimensional concerns regarding of any potential and future contact with the police that the individual with ASD in their lives may have. Many respondents feared that an individual with ASD with minimal verbal skills might not respond or respond inappropriately to the police during an encounter (communication theme), that response may include aggressive behaviour (aggression theme), and as a result, the

Table 1: Kappas and inter-rater reliability statistics by theme and rater

	Misunderstand		Aggression		Communication	
	Kappa	Agreement (%)	Kappa	Agreement (%)	Kappa	Agreement (%)
R1 versus R2	0.680	86	0.789	94	0.531	79
R1 versus R3	0.348	71	0.935	98	0.737	89
R2 versus R3	0.372	70	0.824	95	0.531	79
Average	0.467		0.849		0.600	

police would misunderstand their behaviour (misunderstanding theme). One such respondent expressed all three themes in their response:

Concerned that officers will not understand a tantrum, running away, aggressive behavior to self or other. Concerned if a nonverbal autistic person will not be helped properly by police officers. (ID205)

Inter-rater reliability was high amongst coders. Each coder³ coded the open-ended responses individually. Kappa statistics were evaluated for each theme by comparing coding pairs. The lowest percentage of responses the coding team agreed upon was 70% for the misunderstanding theme, and the highest percent agreement between coders (98%) was for the communication theme. When inter-rater reliability was low, the coding team re-evaluated the disagreed upon responses to form a consensus code. Table 1 contains pair-wise kappa statistics.

Results

Table 2 presents demographics of our respondents. Approximately, 60.3% of respondents conveyed that they were fearful of police contact for their loved one with ASD. Respondents who reported the individual with ASD had prior police contact were more fearful of future contact than their counterparts (see Figure 1). While respondents

³ Three out of the four authors participated in coding.

gave a number of reasons why they fear the individual with ASD in their life having police contact, three dominant themes emerged: misunderstanding, communication, and aggression. Below we discuss each theme and given that these themes are not mutually exclusive, we also examine places where they overlap.

Misunderstanding

Of the respondents reporting being fearful of police contact for the individual with ASD in their lives, nearly 30.1% suggested that the potential for the individual with ASD or the police to misunderstand each other's behaviour was behind that fear. Respondents expressed a general concern that the individual in their life with ASD would be misunderstood by the police. For instance, one respondent noted, 'My concern is that they will not understand her behaviours and misinterpret her actions'. (ID167). Other explanations for why they were fearful included detailed, situational contexts where misunderstanding was more likely to occur, such as being pulled over for a traffic violation or a car accident. Participants explained that these types of situations would likely stress the individual with ASD and lead to a display behaviours that a police officer may not understand or could easily misinterpret. For example, on respondent commented 'Driving if he gets pulled over won't behave like a[n] average person can seem combative or guilty' (ID223).

Table 2: Descriptive statistics of respondents and individuals on the autism spectrum

	Mean or %	Standard deviation	Minimum	Maximum
Respondent				
Age in years	40.249	11.632	17.000	77.000
Online	27.3%			
Tucson	39.4%			
Phoenix	33.2%			
Parent	53.6%			
Caregiver	3.8%			
Professional	30.3%			
Contact with the police?	36.3%			
Fear of contact with the police?	67.2%			
Attended any police safety events?	10.7%			
Female	59.5%			
White	61.3%			
Black	2.4%			
American Indian	3.0%			
Asian	1.2%			
Hispanic	24.7%			
Other	7.3%			
<i>Loved one on the autism spectrum</i>				
Female	19.6%			
White	55.4%			
Black	5.4%			
American Indian	3.0%			
Asian	2.4%			
Hispanic	22.3%			
Other	11.4%			
Preschool and under (under 5)	10.9%			
Elementary school (5–12)	32.3%			
Middle school (13–14)	19.3%			
High school (15–18)	16.1%			
Young adult (19–25)	12.4%			
Adult (26+)	9.0%			

A small proportion of respondents fearful of a misunderstanding occurring during police contact also commented on aggressive behaviours. Aggressive behaviours are relatively common amongst individuals on the autism spectrum (Farmer and Aman, 2011; Hill and Fombonne, 2014; Mazurek *et al.*, 2013). For instance, a respondent who was a service provider of individuals with ASD noted:

Some of the students that I have contact with on a regular basis often

display aggressive behaviors. It is my fear that police will mistake these as defiant behaviors rather than typical behaviors from individuals with autism. (ID17)

This respondent notes an important issue: aggressive behaviours may be misinterpreted as defiant by police officers. While it is possible that aggressive behaviours are an act of defiance, more often aggressive behaviours in people with ASD reflects stress, frustration, or fear of unknown

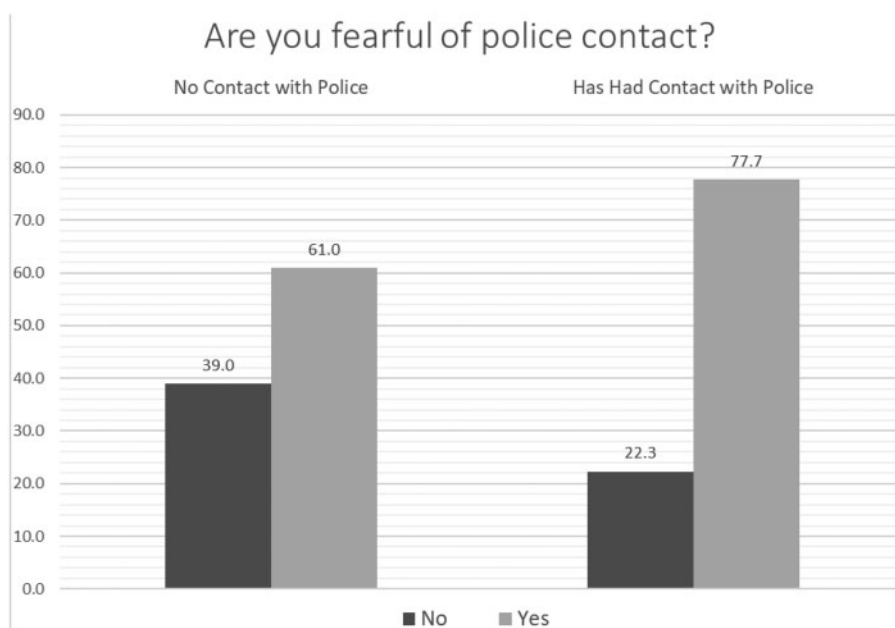


Figure 1: Fear of police contact for individuals on the autism spectrum by previous police contact

situations. For example, Respondent ID175 explained that anxiety and panic might interfere with communication for their loved one with ASD, and the police might misinterpret anxiety for aggression: 'She get[s] very flustered, stutters, can't answer very simple question. Anxiety level rises and panic sets in. I worry this could be interpreted as aggression towards the police officer'. Respondent ID356 highlighted the importance of 'knowing' the person with ASD to be able to interpret their intent during an interaction: 'When upset he can act very angry and say or do things that might cause concern in those who don't know him. His emotional response doesn't always match the event'. The overlap between the two themes misunderstanding and aggression suggests the need for police officers to understand that aggression or anger can be a typical, non-threatening response of an individual with ASD. Without this knowledge, aggressive or angry behaviour could be interpreted as a threat.

A small number of respondents discussed how misunderstandings could lead to police use of force

during contact with an individual with ASD. Some respondents, like Respondent ID287, expressed general concern: 'I am concerned that the police won't understand they have autism and will respond with force'. Other respondents noted issues surrounding slow response time or talking excessively as well as concern about the individual being minimally verbal, which could then lead to a more punitive or forceful response on the part of the police. Such as:

My son has speech delay. I am concerned they won't know to identify that he can understand but not speak out his fears he acts on them. I wonder if they will give him the proper help he would need. I also worry that the cop would be forceful when its not needed. He often reacts like he isn't listening. (ID145)

Not understanding that noncompliance isn't done purposefully and his inability to respond to commands may cause rash action. (ID246)

Here, the respondents bring attention to an important point: for individuals with ASD, nonresponse does not mean that the individual does not understand what is happening in the interaction nor does it mean that the individual is being non-compliant. Nonresponse, as the above respondents suggest, is likely related to communication challenges in stressful situations.

Communication

About 34% of respondents cited communication issues between police and individuals with ASD as a reason for why they were afraid of contact with police for their loved one with ASD. Respondents mentioned ‘communication challenges’, being ‘unable to communicate’, and ‘not being able to communicate properly’. Some respondents further detailed communication issues that might arise for individuals with ASD. Respondents broadly focussed on three issues when it came to non-verbal communication.

Firstly, respondents were concerned that being minimally verbal could make it difficult for individuals with ASD to get help from the police. Respondent ID205 wrote that they were ‘Concerned [that] a non-verbal autistic person [would] not be helped properly by police officers’ while Respondent ID133 noted the individual with ASD in their life ‘Is non-verbal, and I doubt he would understand what’s going on [during a police encounter]’. Both respondents focussed on the individual with ASD’s ability to comprehend the situation and/or secure help.

Secondly, several respondents also raised the issue of the individual with ASD being unable to communicate without assistance from others or a communication device. For instance, one respondent was worried about the individual with ASD ‘...being able to communicate effectively without a parent present’ (ID154). Another respondent stated that the individual with ASD ‘...can’t communicate at all without the use of an iPad and that is very limited’ (ID116). Finally, one respondent

noted the need for police officers to ‘... [have] access to such communication devices with multiple programs... if [my son] was without his device, he would not be able to speak and answer questions’ (ID371).

Thirdly, respondents cited concerns about how a police officer may respond to communication difficulties or differences. Respondents noted that individuals with ASD may have a slow response time or not respond at all to police questions or commands and potentially be perceived by the police as noncompliant or passively resisting. Take the following responses:

Police reacting too quickly(hasty) when my children don’t respond appropriately. (ID341)

My son has a speech delay... I also worry that the cop would be forceful when its not needed. [My son] often reacts like he isn’t listening. (ID145)

...[B]ecause my sons have a delay in verbal communication (both in receiving and giving) I am concerned that they won’t process commands fast enough and get seriously injured or have someone around them seriously injured. (ID24)

Many of the concerns respondents expressed about communication issues appear to be intertwined with their concerns surrounding misunderstanding during police encounters. Individuals with ASD who are minimally verbal or who require additional tools to communicate may struggle to comprehend police encounters. Respondents were fearful that police officers might not have the training necessary or communication tools available to facilitate communication with minimally verbal individuals with ASD or those with communication processing challenges. This presents a host of challenges during the encounter, including the concern overuse of force. Many police departments legally view refusal to respond as non-compliance or passive resistance, which

justifies a response by the officer that involves force (Terrill and Mastroski, 2002; Terrill and Paoline, 2012). An inability to respond to verbal commands increases the likelihood that individuals with ASD are subject to police use of force should the police officer not be able to distinguish between non-compliance, passive resistance, and behaviours associated with ASD.

Aggression

Respondents commonly mentioned themes of aggression—both by the individual and by the officer—in their responses as to why they fear of police contact for their loved one with ASD. Many respondents conveyed a general concern about aggressive actions or reactions from the individual with ASD but do not elaborate on potential outcomes from this behaviour. For example:

He gets easily overwhelmed by external stimuli. When overwhelmed he can become violent and scream. (ID275)

She has impulsive issues w/stealing that are escalating. Also can become violent w/others so with age may increase in severity. (ID122)

This child is highly competitive, continuously struggles with anger management and with filtering/monitoring changes in emotions. Once engaged with a negative feeling - it's an elongated and very involved process to deescalate and distract him back to a calm controlled place. (ID239)

Behaviours such as pacing, sweating, fidgeting, or erratic movements of arms or hands, yelling or inaudible statements are common physiological responses to stress, frustration, or crisis for individuals with ASD (Shattuck *et al.*, 2007). Police officers are trained to identify suspicious and aggressive behaviours as a means of crime prevention and officer safety; these behaviours include many of those noted above (e.g. of what suspicious and aggressive behaviours constitute to the police, see

King and Dunn, 2010). However, identifying these behaviours as a function of ASD, and in turn, potentially non-threatening, is likely difficult for officers, especially during high-stress encounters. Moreover, understanding if and how to de-escalate a situation can be a challenge for many officers (Todak and White, 2019), even without the need to differentiate the behaviours of an individual with ASD from true threats.

Next, respondents also mentioned they were fearful that a police officer's behaviour during an encounter (e.g. touching the individual and asking questions repeatedly) may trigger aggressive reactions from the individual with ASD. For instance:

He is nonverbal and will run and resist being touched so if for some reason he were to be detained or arrested he would definitely resist and become aggressive. He also is facina[ted] with their tool belts and I can 100% see him reaching for [t]heir gun and them misunderstanding because of aggression or what not and I'm horrified of him being shot/killed because of them misunderstanding him. He is a very calm sweet tender hearted person who wouldn't hit a fly but when put into a stressful foreign situation where he doesn't understand what is going on he may become aggressive if being restrained or grabbed. (ID87)

Respondents commonly tied misunderstanding themes/concerns with aggressive behaviour and how this could expose the individual with ASD to more negative encounters.

Discussion

Social and news media portrayals of police interactions with individuals on the autism spectrum paint a morose picture of how interactions go, often highlighting what appears to be police officers' unnecessary or excessive use of force, and

negative—and sometimes deadly—outcomes of the encounter (e.g. see Associated Press, 2017; Erbentraut, 2012; Musgrave, 2013; Spencer, 2016; Watkins, 2011). In turn, it is unsurprising that 60% of respondents reported being fearful of future police contact for their loved one with ASD. Our study shows that parents, guardians, and caregivers are fearful of the individual with ASD in their life having police contact due to issues surrounding misunderstanding, communication, and aggression on the part of the police or the individual with ASD during police contact. These fears, whether actualized or not, are informative for developing training—be it training for the police and other first responders, individuals with ASD, or those that care for them—on how to approach a dynamic, emergency situations, like police contact. Below we discuss the three themes—misunderstanding, communication, and aggression—and their ramifications for policies and training.

Parents and caregivers voiced concerns over both the individual with ASD and the police officer misunderstanding behaviours and social cues within police interactions, which in turn, may cause unintended or unnecessary harm to both the individual with ASD and the officer. Consequently, police training should acknowledge how stress-inducing an encounter may be for individuals with ASD given that they function best with knowable, well-rehearsed, and scheduled daily circumstances. As an example, Gardner and Campbell (2020) showed that when an officer responds to a call with an individual with ASD, 20% of the time, the call involves involuntary psychiatric hospitalization. Similarly, Copenhaver and Tewsbury (2019) show that in media reports of police interactions with individuals with ASD, around 29% of interactions involved victimization of the individual with ASD and 50% of those cases involved personal injuries. Consequently, police officers should be trained to understand that they will likely be interacting with someone on the autism spectrum during their ‘least ideal’ circumstances.

While police training for interactions with individuals with ASD is far from universal in departments across the USA, there is evidence that existing training is effective at increasing police officers’ knowledge of persons with ASD and their comfortability identifying and interacting with individuals with ASD (Teagardin *et al.*, 2012). The content of training materials, however, varies significantly from department to department (Laan *et al.*, 2013) and likely has not undergone assessments of effectiveness in reducing the use of force or mitigating negative interactions. Police departments should look to law enforcement departments with successful trainings that have been evaluated, including those internationally, as models for training content and delivery for police contact with individuals with ASD. Finally, all facets of the criminal justice system, such as judges, prosecutors, and parole officers, for example, not simply police officers, need to be informed of and educated about ASD; importantly parents, caregivers and other advocates should play an active role in this process (Brown *et al.*, 2016; Kelly and Hassett-Walker, 2016).

Another means of avoiding or reducing misunderstandings in encounters with the police is to obtain better information about the individual with ASD before arriving on scene. Several police departments around the nation are developing voluntary disability registries that link to the officer’s in car information system with details about the individual with ASD by address (Borchardt, 2017). Most registries are voluntary and not subject to public record requests, which protects the identity of registrants. Additionally, individuals with ASD can disclose their diagnosis and any communication or sensory needs in an encounter in a host of ways, including verbal disclosure or with communication tools. Examples of these tools include information cards that provide details about the individual’s diagnosis, what components of an encounter they may struggle with (i.e. anxiety with new experiences, not making eye contact), and suggestions for the officer to help

the individual (e.g. allowing for sufficient time to response; see [Debbaudt, 2006](#) for an example information card). Note that the efficacy of such information cards has yet to be studied ([Tint et al., 2017](#)). Finally, while these means may be useful sources of information for the police, many parents, caregivers, and individuals with ASD may be hesitant to disclose a disability to authorities (see [Debbaudt, 2006](#) for a discussion). Disclosing a diagnosis of ASD comes with fears of discrimination, differential treatment, and stigma ([Dickter et al., 2020](#); [Gillespie-Lynch et al., 2020](#); [Johnson and Joshi, 2016](#)). Widespread media reporting of negative interactions between the police and the individuals living with ASD do little to facilitate trust between parents, caregivers, individuals with ASD, and the police. Previous experiences with discrimination and differential treatment in other bureaucratic systems, such as educational settings or state-provided resources, may also impact decisions to disclose a diagnosis of ASD to the police. In short, while systems of providing information to the police seem to be a clear cut means of avoiding negative police contact, in reality, decisions to disclose, regardless of the means of that disclosure, are complex personal decisions.

Given the hesitancy to disclose an ASD diagnosis, police training to avoid or limit misunderstandings in police encounters is critical for individuals with ASD and parents, caregivers, and the professionals who serve them, not just police officers. Parents and caregivers may call the police for help with difficult behaviours associated with ASD, such as when the individual is aggressive, out of control, and is a risk to themselves or others. In these cases, it is important for families to have crisis plans so that they can access needed resources without introducing the complication of law enforcement interaction. Next, any training or therapy that helps to normalize or make automatic certain types of behavioural responses by individuals with ASD in emergency situations would be helpful to both parties ([Debbaudt, 2006](#)). Training individuals to respond, report their name and

other important details, like a parent's phone number, in a multitude of settings and circumstances, or understanding not to touch police officers and their equipment, can also be helpful in emergency situations and reduce the chance of negative interactions.

The theme of aggression highlights respondents' concerns that common behaviours from an individual with ASD may include combative or angry behaviours, which could be interpreted as a threat or non-compliance to an officer. Respondents also commented on aggression on behalf of the police stemming from misunderstanding non- or slow responses. Studies of police behaviour have shown that when a citizen is noncompliant, nonresponsive, or engaging in passive resistance, officers are more likely to use force ([Terrill, 2003, 2005](#)) or apply the law more harshly ([Terrill and Paoline, 2007](#); [Worden and Shepard, 1996](#)). Passive resistance or even resistance in general can be defined as: 'acts that thwart, obstruct, or impede officers' attempts to elicit information; failure to respond or responding negatively to an officers' commands or threats; and any physical act, proactive or reactive, against officers' attempts to control a suspect' ([Terrill, 2003](#), p. 57–58). Thus, when present in an interaction, this aspect of misunderstanding has a high potential to create negative outcomes—such as being subject to the use of force—for the individual with ASD. From a legal point of view, suspect resistance is a justification for an officer to use of force ([Terrill, 2003](#)); thus, even if an officer misunderstands the behaviour of the individual on the autism spectrum and subsequently uses force, police officers may be within their legal rights to do so. Here, training officers on the characteristics of ASD become critical for avoiding aggressive responses to individuals displaying common behaviours associated with ASD. The potential misinterpretation of these activities—aggression, slow or fast verbal response, and physical actions (e.g. pulling away and flapping of arms)—as non-compliance, suggests that law enforcement agencies could benefit from further training on the

identification of autism and communication difficulties and their corresponding de-escalation techniques. Verbal techniques (e.g. lower voice and keywords) and types of physical approaches towards the individual with ASD (e.g. keeping space and hands down) may assist in calming an individual with ASD and de-escalate the situation in general.

Finally, the respondents' concerns about communication offer some practical suggestions for policing. Law enforcement agencies may consider using communication tools to assist communication during interactions. Respondents were fearful that police officers might not have communication tools such as cards or audio tablets that enable minimally individuals with ASD to communicate with others readily. Behaviour cue cards demonstrate feelings and emotions would allow the individual with ASD to point to photos and words for communication. Tablets and smart phones use similar communication card applications that provide audio to stitch together sentences as items are selected. Both tools may be separated from the individual with ASD during an encounter as officers are frequently trained to move a person away from items for safety purposes.

Our study has both strengths and limitations. For strengths, this survey is the first to capture qualitative information linked to survey data about police contact with individuals on the autism spectrum with other studies in this area where conducted using interviews and have smaller samples. Railey *et al.* (2020) conducted semi-structured interviews with law enforcement officers, parents, and individuals with ASD and found similar themes in the interviews of five parents (where our samples overlap) regarding concerns over misunderstandings during police encounters. A major strength of our study is its structure of using a survey with open-ended questions. Over 300 respondents reported being fearful of police encounters for their loved one with ASD generally and over 200 respondents detailed why they fear police contact.

We replicate some of Railey and colleagues (2020) thematic findings from their parent interviews as well as uncover additional concerns about police contact. Another strength of our study is the characteristics of our participants. To date, information on police contact with individuals on the autism spectrum is generally limited to a few studies representing older, more adult, age groups (Railey *et al.*, 2020; Salerno and Schuller, 2019; Tint *et al.*, 2017, 2018). Our survey, conversely, gathers information about individuals with ASD of all ages and abilities. We gathered data at autism walks and fairs have given that there is no easily accessible list of parents/caregivers of individuals on the autism spectrum that could be used as a sampling frame. While our sampling strategy gains us access to a hard to quantify population, our sample is a convenience sample and lacks generalizability. Future studies should look towards generating samples and sampling frames that are more representative of the population of individuals with ASD in the USA. Finally, our study takes a general perspective regarding fear of police contact. However, fear of the police may be contingent by a number of contexts, such as race, age, or gender. Parents of individuals with ASD are likely framing their fear of police contact through the lens of disability as well as race and police relations, for example. Future researchers should work to understand the multitude of frames (race/ethnicity, gender, and sexuality for instance) through which fear of police contact is processed for individuals with ASD and their families.

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References

- Baio, J., Wiggins, L., Christensen, D. L. et al. (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
- Baumeister, R. F., Ainsworth, S. E., & Vohs, K. D. (2016). Are groups more or less than the sum of their members? The moderating role of individual identification. 39(e137), 1–56.
- Borchardt, J. (2017, March 28). *Proposed Registry Would Protect Ohioans with Autism and Other Disabilities, Lawmaker Says*. <https://Cleveland.Com>. https://www.cleveland.com/metro/2017/03/proposed_registry_would_protect.html (accessed 5 March 2018).
- Brereton, A. V., Tonge, B. J., and Einfeld, S. L. (2006). 'Psychopathology in Children and Adolescents with Autism Compared to Young People with Intellectual Disability'. *Journal of Autism and Developmental Disorders* 36(7): 863–870.
- Brown, J., Hastings, B., Cooney-Koss, L. et al. (2016). 'Autism Spectrum Disorder in the Criminal Justice System: A Review for Caregivers and Professionals'. *Journal of Law Enforcement* 5(5): 1–13.
- Cheely, C. A., Carpenter, L. A., Letourneau, E. J. et al. (2012). 'The Prevalence of Youth with Autism Spectrum Disorders in the Criminal Justice System'. *Journal of Autism and Developmental Disorders* 42(9): 1856–1862.
- 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.
- Cop Convicted of Manslaughter in Shooting of 6-Year-Old Autistic Boy*. (2017, March 25). Associated Press. <https://nypost.com/2017/03/25/cop-convicted-of-manslaughter-in-shooting-of-6-year-old-autistic-boy/>.
- Copenhaver, A., Denney, A. S., and Rapp, V. (2020). 'Police Cadet General and Interactional Knowledge of Persons with Autism Spectrum Disorders (ASDs)'. *Policing* 43(2): 345–359.
- Copenhaver, A. and Tewksbury, R. (2019). 'Interactions between Autistic Individuals and Law Enforcement: A Mixed-Methods Exploratory Study'. *American Journal of Criminal Justice* 44(2): 309–333.
- Debbaudt, D. (2006). 'Disclosing to the Authorities'. In Murray, D. (ed.), *Coming out Asperger: Diagnosis, Disclosure and Self-Confidence* (pp. 258–267). Philadelphia: Jessica Kingly Publishers.
- Debbaudt, D. and Rothman, D. (2001). 'Contact with Individuals with Autism: Effective Resolutions'. *FBI Law Enforcement Bulletin* 21(April): 20–24.
- Dickter, C. L., Burk, J. A., Zeman, J. L., and Taylor, S. C. (2020). 'Implicit and Explicit Attitudes toward Autistic Adults'. *Autism in Adulthood* 2(2): 144–151.
- Ellem, K. and Richards, K. (2018). 'Police Contact with Young People with Cognitive Disabilities: Perceptions of Procedural (in)Justice'. *Youth Justice* 18(3): 230–247.
- Erbenraut, J. (2012, April 26). *Stephon Watts Lawsuit: Mother of Autistic Teen Fatally Shot by Calumet City Cops Sues*. Huffington Post. https://www.huffpost.com/entry/stephon-watts-lawsuit-mot_n_1455643.
- Farmer, C. and Aman, M. G. (2011). 'Aggressive Behavior in a Sample of Children with Autism Spectrum Disorders'. *Research in Autism Spectrum Disorders* 5(1): 317–323.
- Fombonne, E. (2003). 'Epidemiological Surveys of Autism and Other Pervasive Developmental Disorders: An Update'. *Journal of Autism and Developmental Disorders* 33(4): 365–382.
- Gardner, L. and Campbell, J. M. (2020). 'Law Enforcement Officers' Preparation for Calls Involving Autism: Prior Experiences and Response to Training'. *Journal of Autism and Developmental Disorders* (Petersilia 2001). <https://doi.org/10.1007/s10803-020-04485-5>
- Gardner, L., Campbell, J. M., and Westdal, J. (2019). 'Brief Report: Descriptive Analysis of Law Enforcement Officers' Experiences with and Knowledge of Autism'. *Journal of Autism and Developmental Disorders* 49(3): 1278–1283.
- Gibbs, V. and 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*. <https://doi.org/10.1007/s10803-020-04510-7>
- Gillespie-Lynch, K., Daou, N., Obeid, R. et al. (2020). 'What Contributes to Stigma towards Autistic University Students and Students with Other Diagnoses?'. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-020-04556-7>
- Gomez, L. (2018, January 24). *Family of Autistic Teen Police Mistook for Drug User Seeks \$5 Million from Buckeye*. The Arizona Republic. <https://www.azcentral.com/story/news/local/southwest-valley/2018/01/24/family-autistic-teen-police-mistook-drug-user-seeks-5-million-buckeye/1060156001/>.
- Gray, K. M., Keating, C. M., Taffe, J. R. et al. (2014). 'Adult Outcomes in Autism: Community Inclusion and Living Skills'. *Journal of Autism and Developmental Disorders* 44(12): 3006–3015.

- Harrell, E. (2008). Crime against Persons with Disabilities Persons with Disabilities Persons without Disabilities. In *American Community Survey*. Washington, DC: Bureau of Justice Statistics.
- Hill, A. P., and Fombonne, E. (2014). Aggressive behavior problems in children with autism spectrum disorders: Prevalence and correlates in a large clinical sample. *Research in Autism Spectrum Disorders*, **8**(9), 1121–1133.
- Johnson, T. D. and Joshi, A. (2016). ‘Dark Clouds or Silver Linings? a Stigma Threat Perspective on the Implications of an Autism Diagnosis for Workplace Well-Being’. *Journal of Applied Psychology* **101**(3): 430–449.
- Kelly, E. and Hassett-Walker, C. (2016). ‘The Training of New Jersey Emergency Service First Responders in Autism Awareness’. *Police Practice and Research* **17**(6): 543–554.
- King, W. R. and Dunn, T. M. (2010). ‘Detecting Deception in Field Settings’. *Policing: An International Journal of Police Strategies & Management* **33**(2): 305–320.
- Laan, J. M., Ingram, R. V., and Glidden, M. D. (2013). ‘Law Enforcement Training on Mental Disorders and Autism Spectrum Disorders in the Southeastern United States’. *Journal Of Global Intelligence & Policy* **6**(10): 51–67.
- Maenner, M. J., Shaw, K. A., Baio, J., et al., (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): 1–12.
- Matson, J. L. and Cervantes, P. E. (2014). ‘Assessing Aggression in Persons with Autism Spectrum Disorders: An Overview’. *Research in Developmental Disabilities* **35**(12): 3269–3275.
- Mazurek, M. O., Kanne, S. M., and Wodka, E. L. (2013). ‘Physical Aggression in Children and Adolescents with Autism Spectrum Disorders’. *Research in Autism Spectrum Disorders* **7**(3): 455–465.
- Modell, S. J. and Mak, S. (2008). ‘A Preliminary Assessment of Police Officers’ Knowledge and Perceptions of Persons with Disabilities’. *Intellectual and Developmental Disabilities* **46**(3): 183–189.
- Musgrave, J. (2013, August 1). *Parents Sue Palm Beach County Sheriff over Son’s Fatal Shooting*. Palm Beach Post. <https://www.palmbeachpost.com/article/20130801/NEWS/812032590>.
- North Miami Officer Was Aiming at Man with Autism, Union Chief Says*. (2016, July 22). National Public Radio.
- Railey, K. S., Bowers-Campbell, J., Love, A. M. A., and Campbell, J. M. (2020). ‘An Exploration of Law Enforcement Officers’ Training Needs and Interactions with Individuals with Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders* **50**(1): 101–117.
- Rava, J., Shattuck, P., Rast, J., and 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.
- Saldana, J. (2015). *The Coding Manual for Qualitative Research*. Thousand Oaks, CA: Sage.
- Salerno, A. C. and Schuller, R. A. (2019). *A Mixed-Methods Study of Police Experiences of Adults with Autism Spectrum Disorder in Canada*. <https://doi.org/10.1016/j.ijlp.2019.01.002>
- Shattuck, P. T., Seltzer, M. M., Greenberg, J. S. et al. (2007). ‘Change in Autism Symptoms and Maladaptive Behaviors in Adolescents and Adults with an Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders* **37**(9): 1735–1747.
- Spencer, T. (2016, July 22). *Shooting Highlights Police Trouble Spotting Autism Traits*. The Seattle Times. <https://www.wkrn.com/news/shooting-highlights-police-trouble-spotting-autism-traits/>.
- Teagardin, J., Dixon, D. R., Smith, M. N., and Granpeesheh, D. (2012). ‘Randomized Trial of Law Enforcement Training on Autism Spectrum Disorders’. *Research in Autism Spectrum Disorders* **6**(3): 1113–1118.
- Terrill, W. (2003). ‘Police Use of Force and Suspect Resistance: The Micro Process of the Police-Suspect Encounter’. *Police Quarterly* **6**(1): 51–83.
- Terrill, W. (2005). ‘Police Use of Force: A Transactional Approach’. *Justice Quarterly* **22**(1): 107–138.
- Terrill, W. and Mastrofski, S. D. (2002). ‘Situational and Officer-Based Determinants of Police Coercion’. *Justice Quarterly* **19**(2): 215–248.
- Terrill, W. and Paoline, E. A. III, (2007). ‘Nonarrest Decision Making in Police-Citizen Encounters’. *Police Quarterly* **10**(3): 308–331.
- Terrill, W. and Paoline III, E. A. (2012). ‘Conducted Energy Devices (CEDs) and Citizen Injuries: The Shocking Empirical Reality’. *Justice Quarterly* **29**(2): 153–182.
- Tint, A., Palucka, A. M., Bradley, E., Weiss, J. A., and Lunsky, Y. (2017). ‘Correlates of Police Involvement among Adolescents and Adults with Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders* **47**(9): 2639–2647.
- Tint, A., Palucka, A. M., Bradley, E., Weiss, J. A., and Lunsky, Y. (2018). ‘Emergency Service Experiences of Adults with Autism Spectrum Disorder without Intellectual Disability’. *Autism* **22**(8): 928–937.
- Today, N. and White, M. D. (2019). ‘Expert Officer Perceptions of de-Escalation in Policing’. *Policing: An International Journal* **42**(5): 832–846.
- Turcotte, P., Shea, L. L., and Mandell, D. (2018). ‘School Discipline, Hospitalization, and Police Contact Overlap among Individuals with Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders* **48**(3): 883–891.

- Watkins, T. (2011, January 22). *Family of Autistic Man Sues Ex-Cop over His Death*. NBC News. <http://www.nbcnews.com/id/41208405/ns/health/t/family-autistic-man-sues-ex-cop-over-his-death/#.X011tshKjIU>.
- Woodbury-Smith, M. and Dein, K. (2014). 'Autism Spectrum Disorder (ASD) and Unlawful Behaviour: Where Do we Go from Here?'. *Journal of Autism and Developmental Disorders* **44**(11): 2734–2741.
- Worden, R. E. and Shepard, R. L. (1996). 'Demeanor, Crime, and Police Behavior: A Reexamination of the Police Services Study Data*'. *Criminology* **34**(1): 83–105.