



A mixed-methods study of police experiences of adults with autism spectrum disorder in Canada

Alisha C. Salerno*, Regina A. Schuller

York University, 4700 Keele St., Toronto, ON M3J 1P3, Canada

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ABSTRACT

The current study examined the experiences and perceptions of people with Autism Spectrum Disorder (ASD) in relation to their interactions with the police. Thirty-five adults with ASD living in Canada completed a detailed survey that probed their experiences with police in depth. Amongst respondents, police contact was common and frequent, occurring under a diverse range of circumstances. More than three-quarters of respondents reported at least one lifetime police interaction, with 53% of respondents reporting four or more. The majority of respondents viewed their police interactions unfavourably, and many reported experiencing adverse effects. Results suggest that this negativity toward their police encounters may be largely due to the fact that police are unaware they are interacting with someone with ASD, and perhaps also a lack of resources available to police officers for people with ASD. Findings provide insights into the nature of police encounters amongst individuals with ASD, emphasizing how interactions between people with ASD and the police may be improved in the future.

1. Introduction

People with developmental disabilities (DD) are at an increased risk of coming into contact with the criminal justice system (CJS) compared to non-developmentally disabled persons, either as suspects, perpetrators, or as victims (Bartley, 2006; Chown, 2010; Rava, Shattuck, Rast, & Roux, 2017; Tint, Palucka, Bradley, Weiss, & Lunsky, 2017). Within the CJS, those with DD are vulnerable to police contact as the system is ill equipped to support their needs (John Howard Society, 2013). Autism Spectrum Disorder (ASD), one of the most common DD, has received particular attention in this regard due to several highly publicized cases of problematic interactions between police officers and individuals with ASD. For instance, in one unfortunate incident a teenage boy with ASD was tackled and restrained after police mistook him for a drug user (CBS News, 2017). In another example, police were called to an elementary school in Ottawa for an autistic student suffering a meltdown. Rather than de-escalating the situation, which would have allowed the young boy to calm down, he was handcuffed. The circumstances around his restraining is unclear, as police would not comment on why exactly the boy was handcuffed (CTV Ottawa, 2015).

ASD affects an estimated 1 in 66 children in Canada (Public Health Agency of Canada, 2018) and 1 in 68 children in the US who are diagnosed by the age of 8 (Christensen et al., 2016). ASD is characterized by difficulties in two main areas: 1) social communication and

interaction, and 2) restricted, repetitive patterns of behaviors, interests, or activities (American Psychiatric Association, 2013). Characteristics associated with these difficulties can elevate people's risk for coming into contact with the CJS for a variety of reasons. For instance, an increased social naivety may leave people with ASD more susceptible to the influence and manipulation of others. A lack of social understanding can also lead to inappropriate or aggressive behavior, while disruption of habitual routines can lead to unpredictable and aggressive outbursts (Freckelton, 2013). Excessive or obsessive preoccupations may be pursued while ignoring the legal or social consequences of one's actions (Freckelton, 2013; King & Murphy, 2014). Impulsivity, propensity to panic, and unpredictability in new environments is also characteristic of ASD (Freckelton, 2013) and can lead to troubling and unpredictable behavior. Moreover, people with ASD are also at an increased risk of developing mental health conditions (Lunsky & Weiss, 2012), which independently is associated with a greater risk of criminal justice involvement (Gill & Murphy, 2017).

Research has shown conflicting results regarding the quality of interactions between the police and individuals with ASD. A recent study conducted in Ontario found that 16% of parents of children with ASD reported that their child had police involvement during the 18-month study period (Tint et al., 2017), a rate consistent with American-based research (Rava et al., 2017). A large proportion of these interactions were preceded by aggression or violence. Overall, the results showed

* Corresponding author at: Department of Psychology, York University, 4700 Keele Street, Toronto, ON M3J 1P3, Canada.
E-mail address: salerno0a@yorku.ca (A.C. Salerno).

that caregivers were satisfied with their dependent's interactions, and that police presence often had a calming effect. In contrast to these findings, a study surveying the ASD community and the police in England and Wales found conflicting views, finding that although police were generally satisfied with their interactions with individuals with ASD, the ASD community was largely dissatisfied with their interactions with the police (Crane, Maras, Hawken, Mulcahy, & Memon, 2016).

Prior research has examined police knowledge of, and interactions with, persons with DD more broadly from the perspective of police officers, demonstrating that police officers lack knowledge on DD (Chown, 2010; Modell & Mak, 2008), commonly misidentify DD as mental illness or substance use (Bailey, Barr, & Bunting, 2001; Henshaw & Thomas, 2012), and hold generally negative attitudes toward those with DD (Eadens, Cranston-Gingras, Dupoux, & Eadens, 2016). Such findings evidence the need for specific, integrated training for police officers on DD. Without such training, their perceptions, and subsequent decision-making are likely to be based on misconceptions and misattributions. For example, officers may misattribute behaviors characteristic of DD, like social behavioral deficits, self-stimulatory behaviors, or communication impairments as indicative of resistance, aggression, or guilt. Moreover, typical techniques utilized by officers to handle suspects may be counterproductive when used with people with DD. For example, using physical touch or restraining techniques in an attempt to calm or subdue a suspect may have an adverse impact on someone with sensory issues, which is common for people with ASD. The fact that ASD is largely a “hidden” disability, meaning that it is often not immediately apparent through physical features, may be especially problematic from a forensic perspective, as police officers may be unable to recognize when an individual has ASD.

The Mental Health Commission of Canada recently released a report (Coleman & Cotton, 2014) targeted to improve interactions between police and people living with mental health issues, which broadly included people with DD. The report concluded that police academies, where police officers are trained, lack training in DD, noting that less than half of police services in Canada provide training on DD. A report published by the Ontario Human Rights Commission (2012) mirrored this sentiment, finding anecdotal evidence suggesting that police officers often do mistake disability as mental illness or substance intoxication. The report concluded by recommending that training on DD must be integrated into officers' use of force modules.

In order to create and provide such training, a necessary first step requires a better understanding of the nature of contact between police officers and individuals with DD. ASD has received particular attention from law enforcement services given its sheer prevalence, as well as several publicized cases of police interactions gone awry. Police services across Canada have responded by providing officers with Autism Awareness training, as well as establishing Autism Registries in certain services in an attempt to make officers aware of situations where they are interacting with a person with ASD. However, as aptly put by autism advocate Daniel Share-Strom (2016), awareness does not necessarily translate into understanding or acceptance.

The topic of ASD has also received substantial attention from researchers, but much of the research in this area has focused on the police or caregiver perspective. Although valuable, the focus on the caregiver perspective may unintentionally target individuals who are more impaired, and therefore more reliant on their caregiver. Furthermore, the caregiver perspective does not necessarily represent the views of the individual they are caring for. Relatively few studies have explored the unique lived experiences of individuals with ASD who have come into contact with the police. Examination of these interactions may be especially valuable as awareness regarding the situation can be used to inform police training and potentially translated into formal recommendations for police officers and other law enforcement professionals. For example, it could provide insight into whether, and what type of, training is needed, and where resources

(e.g., training time, money) should be allocated.

1.1. Overview of present study

Using a community-engaged research strategy and integrating both qualitative and quantitative research methods, the present study contributes to the growing body of literature on policing and disability through (1) examining and describing the nature of interactions between adults with ASD and the police and (2) exploring how individuals with ASD perceive these experiences.

2. Methods

A collaborative and community-engaged research strategy was employed, given the sensitive nature of the issue. The study was advertised as a survey seeking input from people with ASD about their experiences with the police, their views regarding police knowledge of ASD and what police officers should know about people with ASD. The survey was open to people with ASD, both those who had encountered the CJS, and those who had not. Respondents were recruited through various ASD agencies, organizations, and charities across Canada. Study inclusion criteria were: (a) have been diagnosed with Autism Spectrum Disorder, Pervasive Developmental Disorder, or Asperger Syndrome, and (b) were 18 years of age or older.

2.1. Respondents

Between February 2017 and October 2017, 35 respondents (21 women, 13 men, one respondent failed to provide this information) took part in the study. The overrepresentation of female respondents was unexpected as ASD is diagnosed four times more often in men than women. Other recently published studies have also seen a greater number of female than male respondents (e.g., Tint, Palucka, Bradley, Weiss, & Lunskey, 2018). Results of a recent meta-analysis examining prevalence rates of the male-to-female ratio in ASD (Loomes, Hull, & Mandy, 2017), may help to explain the atypical gender ratio we obtained in our sample. Across the 54 studies included in their meta-analysis, Loomes et al. (2017) found substantial variability, with the gender ratio actually ranging from 8:1 to 2:1. Studies that involved an active recruitment strategy (similar to the recruitment strategy adopted in the current study), regardless of whether a formal diagnosis had been obtained, were compared to studies that involved a more passive recruitment strategy that only sought cases that had been identified previously through other services. The researchers found that the male-to-female gender ratio was substantially lower in studies that actively sought ASD cases, compared to those utilizing more passive recruitment strategies.

The age of the respondents ranged from 18 to 65 years, with a mean age of 36.9 ($SD = 11.96$). Most respondents were of White European descent (64.7%). Regarding their highest level of education, about 70% had attended or completed a post-secondary degree. Though this sample was well-educated, most respondents reported that they were currently unemployed (60%, $n = 21$). A number were currently enrolled in school (28.5%, $n = 10$). Most reported either living with family (58%, $n = 21$) or independently (27%, $n = 10$).

2.2. Materials and procedure

A detailed survey was developed in consultation with ASD community members, including people with ASD, parents of children with ASD, and ASD advocates. The surveys combined both open and close-ended questions regarding respondents' experiences with the police, as well as sought detailed demographic information.

2.2.1. Measures

Demographic and clinical variables: Respondents were asked their

age, ethnicity, gender, highest level of education attained, current school and employment status, and current place of residence. They were also asked to report which developmental disabilities and mental illnesses they have been diagnosed with.

General ability/severity of disability: Independence in activities of daily living was assessed using the Waisman Activities of Daily Living Scale (W-ADL, Maenner et al., 2013), a measure designed specifically for adolescents and adults with DD. A modified version of this measure was employed as a general measure of ability/severity of impairment for the current sample. Given their ability to complete an online survey independently, 4 items on the W-ADL (those relating to personal hygiene) were omitted. For each item, respondents indicated whether the activity could be performed independently, with some help, or not at all (scored 2, 1, 0, respectively). Modified cut-offs were calculated for interpretation.¹ The Cronbach alpha across the 13 items suggested good internal reliability on the measure ($\alpha = 0.84$). The average score on the W-ADL was 22 ($SD = 4.08$), which can be interpreted as a very mild impairment.

Experiences with police: Respondents were asked whether they had ever had an interaction with the police, and to estimate the number of lifetime interactions they have experienced. If they indicated that they had, a series of follow-up questions probing both qualitative and quantitative characteristics of their police interactions were presented. The questionnaire was twofold, and asked respondents to elaborate on one specific incident with the police, as well as to reflect more broadly on their lifetime experiences with the police. Responses were elicited through a combination of open and close-ended response options. Importantly, even when presented with close-ended response items, respondents were always provided with an open-ended response option where they could fill in their own response.

In the first part of the survey, respondents were asked to describe, in an open-ended response format, one police interaction of their choosing. Following the open-ended question, a series of closed-ended questions addressed more specific aspects of the interaction. These details included their role in the interaction, the initial circumstances surrounding the interaction, whether police were aware (or were made aware) of the individual's disability, the highest level of force used by the police, and the outcome of the interaction. In the second part of the survey, respondents were queried regarding their lifetime interactions for the police. For example, respondents were asked whether they have ever been the victim of a crime, stopped by the police, had a mental health interaction, and whether they have ever been handcuffed. For some of these items, respondents were prompted to provide details regarding their experience.

Perceptions of police experiences: The survey included items drawn from the Police Contact Experience Scale (PCES), a standardized scale used to assess various dimensions of police interaction (Watson, Angell, Vidalon, & Davis, 2010). The PCES has been successfully used in research investigating interactions between the police and people with mental illness (e.g., Livingston et al., 2014). Three² of the original four subscales were utilized for the present study: the perceived procedural

justice (PPJ) subscale, the satisfaction (S) subscale, and the outcome favorability (OF) subscale. The PPJ subscale assesses the extent to which the individual believes that police followed procedures in a just manner. The S subscale assesses respondents' satisfaction with the interaction, and the OF subscale evaluates respondents' perceptions of the favorability of the outcome. All items were rated on a 7-point scale ranging from (1) strongly disagree to (7) strongly agree. Higher scores generally indicate a more positive response regarding the interaction (i.e., procedurally just, satisfaction with interaction, satisfaction with outcome). Composite measures were constructed for each of the three subscales by summing and averaging the items within the subscale. The Cronbach alphas for the three subscales were excellent (α s = 0.96, 0.97, & 0.80, for the PPJ, S, & OF subscales, respectively). Respondents were also asked questions in addition to the PCES, including whether they felt afraid or scared during the interaction, and whether they felt the interaction was traumatic.

All respondents were then asked to reflect on their experiences with the police more broadly. Respondents were asked to report their emotional reactions, both positive and negative, when they see a police officer (e.g., safer, anxious, uncomfortable). They were also asked whether they would feel comfortable calling the police in an emergency situation. Finally, respondents were asked, in an open-response format, whether their experiences with the police have impacted their mental health.

2.3. Recruitment strategy

A range of recruitment strategies were used. Advertisements and notices were distributed through various organizations, e-mail listservs, social media and online newsletters across Canada. The recruitment notice invited respondents to participate in a survey concerning their police experiences, by either accessing the survey through a custom URL (www.prddproject.com) or by contacting the researcher directly. The survey took approximately 60 min to complete. All respondents were offered the opportunity to participate in a draw for an Amazon gift card in the amount of \$50 CAD. Respondents who completed the survey in person ($n = 4$) were additionally compensated for their travel time. Research ethics approval was obtained from the University's Human Participant Review Subcommittee. Informed consent was obtained from all respondents included in the study.

3. Results

3.1. Data analysis

Given the fact that the study utilized a complex community sample, a number of respondents did not answer every question. All data collected was included in analyses. Missing responses were not reconstructed and thus not all of the responses tally to the total number of respondents.

Open-ended responses regarding police interactions were analyzed using thematic analysis (Braun & Clark, 2006) to identify the nature of each discussed interaction and its immediate outcome. Braun and Clark's (2006) guidelines and recommendations for thematic analysis were followed to ensure rigour. An inductive/deductive approach was used to analyze each response. Several potential interaction types were established a priori through consulting prior research on similar topics, such as mental illness and police contact (e.g., Livingston et al., 2014). Many of the interactions described by respondents, however, did not fall into any of the pre-established categories, thus, necessitating an inductive approach. In accordance with thematic analysis guidelines (Braun & Clark, 2006), initial codes and themes were identified and recorded in the coding scheme through assigning each code a descriptive label. Themes and codes were assimilated, accommodated and transformed as they emerged through the process of moving back and forth between the original text, initial codes and themes as well as

¹ The standard cut-offs for the W-ADL were pre-established by Maenner et al. (2013). Given that the modified version had fewer items, the modified cut-offs were calculated by dividing the pre-established cut-off means by the total possible score (34), creating a percentage of the total. For example, the cut-off for a profound disability ($M = 5.7$) was 17% of the total possible achievable score. These percentages were then multiplied by the new possible achievable score (26) to established new cut-offs. To confirm the validity of the new cut-offs, a set of scores was also calculated where 8 points (2 points for each of the 4 items omitted) were added to each participant's score, based on assumption that the respondents were likely independent in these activities, which means they would have scored a 2 (does independently) if they had been presented with the item.

² In an attempt to minimize participants' attention to negative aspects of the interaction, the coercion subscale was not used in this study.

Table 1
Lifetime interactions with police.

Nature of interaction	N (%)
Stopped by police	17 (56.7%)
Victim of a crime	17 (58.6%)
Mental health crisis	11 (37.9%)
Suspected of a crime	8 (29.6%)
Placed in handcuffs	8 (28.6%)
Convicted of a crime	2 (6.9%)

analytical memos made by the coders. Outside of tradition of thematic analysis, frequency of themes and categories were tallied in order to identify any potential trends or patterns. Analyses were independently conducted by the first author, and two independent coders. Findings were then reviewed together, and discrepancies were resolved before the final themes and subthemes were established.

3.2. Frequency of interactions with the police

Just over 80% of the respondents ($n = 29$) reported that they had had at least one interaction with the police in their lifetime. Of those that indicated they had an interaction with the police, 46.4% ($n = 13$) reported between 1 and 3 interactions, 39.3% ($n = 11$) reported between 4 and 9 interactions, and 14.3% ($n = 4$) reported 10 or more interactions (one respondent did not provide information as to the frequency of their police interactions).

Table 1 summarizes the types of police encounters respondents recounted when reporting on their lifetime interactions with the police. Amongst respondents, the most common lifetime experiences included being victimized, stopped by the police, and experiencing an interaction in the context of a mental health crisis. Of the 17 respondents who reported a victimization experience, virtually all ($n = 16$) provided details regarding their victimization. Assault ($n = 8$) was the most commonly reported victimization experience, followed by sexual assault ($n = 4$), and theft or robbery ($n = 4$). Six respondents mentioned multiple victimization experiences, for example, as captured by the following respondent:

“Assault, theft, sexual assault, other things. I have been beaten for wearing a helmet. I have been sexually assaulted by a caregiver, I was robbed by a neighbour.”

A number of respondents indicated that they had interacted with the police in the context of a mental health crisis. Of these respondents, most ($n = 10$) provided details concerning their interaction. Four described a bout of extreme anxiety or panic that preceded the police interaction, for example:

“My anxiety was so high that I kept lashing out at people so I got put in a shelter. I was brought to the hospital for mental health treatment, but it didn't resolve anything”.

Table 2
Themes identified from open-ended response on police interaction.

Theme	Example quote	N (%)
1. Aggression and/or violence	“I had terrible meltdowns (crying, wordless screaming or screaming ‘NO’ or some similar thing over and over... would beat myself and put holes in walls, throw and break things.”	5 (20%)
2. Accused of committing crime	“When I was 20, the police believed that I made a false statement. In the end, it was proven that I had not done so.”	4 (16%)
3. Witness (to crime/accident)	“I witnessed accidents and had to remain on scene to be interviewed by investigating officer.”	3 (12%)
4. Stopped by police	“I was stopped by police when I driven. Because I was under some anti psychotic medication I fell asleep...”	3 (12%)
5. Missing persons	“I went missing last Spring, and police were called by my family.”	2 (8%)
6. In-distress (non-violent)	“Another occasion was when we have crisis at home and they came I was in distress and could not speak.”	2 (8%)
7. Victim of crime	“Rape I believe Sept 2007 treated like a liar was told I'd be charged with public mischief if I didn't say I was lying.”	2 (8%)
8. Domestic dispute	“I called the mental health crisis team because I was afraid the way my (now ex) husband was threatening.”	2 (8%)
9. Engaging in an illegal activity (non-violent)	“I put a light to the sprinklers in a courtroom to see if they would go off.”	1 (4%)

Three described feeling “out of control” or at risk of becoming out of control, similar to this situation described by the following respondent: “Out-of-control behaviour, and I was taken to the hospital under the mental health act.” Similarly, two respondents mentioned meltdowns as the cause of their mental health interactions, for example:

“Meltdowns. Sometimes they just left one [sic] they were sure everyone was safe (this was most of the times, actually). Twice they took me to the hospital for a mental health assessment”

Two respondents mentioned suicide as the cause of their mental health crisis-related interaction:

“I was suicidal. They took me to the psych ward and the psych ward sent me home.”

3.3. Nature and outcome of interactions with police

Of the respondents ($n = 29$) who reported at least one police interaction, 25 respondents provided details about one specific police interaction of their choosing. The thematic analysis of these open-ended responses revealed a total of 9 unique categories that captured the expressed nature of the police interaction. Table 2 provides these categories, along with illustrative responses from respondents recounting their experience. Table 2 also presents the frequency of occurrence of each category. As summarized in Table 2, respondents encountered the police under a variety of different circumstances. The most frequently described interactions seemed to originate from the police being called because of the respondent's actions, for example, in situations involving aggression/violence or being accused of a crime.

The thematic analyses of the open-ended interactions revealed 10 unique outcomes, with 9 of these categories representing forms of resolution: resolved on-scene, released to caregiver(s), transported to hospital, police report filed, officer issued warning, detained (e.g., handcuffed, held in cruiser), resolved without officer intervention, arrested and charged, and offered other assistance. Interactions were coded as unresolved when the police took no action and thus there appeared to be no resolution.

Of the 25 interactions described by respondents, many were left unresolved ($n = 8$, 32%). Two respondents (8%) were arrested and charged. Respondents also reported being transported to the hospital ($n = 3$, 12%), being issued a warning ($n = 2$, 8%), and filing a police report ($n = 2$, 8%). Four respondents (16%) indicated that their situation was resolved on-scene, and one indicated that they were released to their caregiver.

3.4. Use of force used by police officers

Regarding police use of force, 42.3% ($n = 11$) of the respondents reported that the police had used force during the described interaction. When asked about the highest level of physical contact police officers had utilized during the interaction, the most frequent responses

involved restraining (36.4%, $n = 4$) and being handcuffed (36.4%, $n = 4$). Three respondents indicated that the police had used force other than the options presented in the question format. These included use of force equivalent to physical assault (e.g., forcefully shaken, strangled, and dragged across a desk, hit with a phonebook in the interrogation room), but it is important to note that the veracity of these incidents cannot be confirmed.

3.5. Disability & police awareness

Regarding recognition and disclosure of their disability, none of the respondents indicated that the officer(s) were able to identify that they had a disability on their own. Approximately a third of respondents (33.3%, $n = 9$) indicated that they tried to tell the officer they had a disability at some point during the interaction. A quarter (25.9%, $n = 7$) indicated that the officer(s) was aware that they had a disability, most often because someone else made them aware ($n = 6$), and in one instance, they told the officer themselves.

When asked whether the police had ever been helpful when finding out they had ASD, encouragingly, five respondents indicated they had been, and provided details as to how they were helpful. Most respondents mentioned that disclosing their disability led to the police officer better understanding their behavior and as a result, the situation: for example:

“One time a man called the police when I was having a meltdown in my boyfriends car even though I tried explaining we had just pulled over so I could get air and breathe, but the police called and we explained that we left because I needed time to calm down and he was really nice about it and when I explained I was just having a meltdown because I have autism not a dispute he was really nice and non judgemental and understanding.”

Two other respondents noted that they felt that the police officer treated them better when finding out about their disability, for example:

“They didn't treat me like a criminal, just someone who needed to calm down and be safe.”

3.6. Perceptions of their experiences with the police

Respondents provided ratings across the three subscales of the PCES pertaining to the police encounter that they described in the open-ended response.³ Ratings concerning perceived procedural justice ($M = 3.35$, $SD = 1.95$), satisfaction ($M = 2.76$, $SD = 1.87$), and outcome favorability ($M = 2.95$, $SD = 1.74$) were low (i.e., all below the midpoint on the 7-point scale), suggesting that, overall, respondents perceived that they had not been treated in a procedurally fair manner, were not satisfied with their interaction, and found the outcome unfavorable.

Independent from the PCES, respondents were asked additional questions regarding their perceptions of the described interactions. Almost three-quarters of respondents ($n = 18$) felt that the officer did not treat them with respect during the described interaction, and more than half ($n = 16$) reported they were either moderately or extremely dissatisfied with how the officer handled their situation. Most respondents (77.8%, $n = 21$) indicated that they felt afraid or scared during the interaction. More than 60% ($n = 15$) indicated that they would describe the interaction as traumatic.

The most commonly reported emotions respondents reported

³Two respondents did not provide any details regarding their police interaction in the open-response format question but responded to the closed-ended questions regarding their interaction and their perceptions of their experience. This data was included in analyses.

experiencing in the presence of police included *uncomfortable* ($n = 17$), *cautious* ($n = 17$), *anxious* ($n = 13$) and *afraid* ($n = 11$). Only four respondents indicated the police made them feel *safer*. When asked whether they would feel comfortable calling the police (911) in an emergency situation where they required help, less than half (42.9%, $n = 15$) indicated that they would.

3.7. Impact of police experiences on mental health

Qualitative data regarding respondents' perceptions of the impact of police experiences on their mental health were analyzed by the authors using a qualitative description approach (Bradshaw, Atkinson, & Doody, 2017). This approach is particularly useful with very specific research questions, where the goal is to provide a description of the phenomenon rather than perform an in-depth analysis. Livingston et al. (2014) applied this approach in their exploration of police experiences amongst people with mental health issues. Following this strategy, the data was coded, analyzed, and then organized based on similar patterns and themes that emerged. Three main themes emerged in respondents' open-ended responses regarding the impact of police experiences on respondents' mental health: distrust, fear of police officers and law enforcement, and trauma. We describe these themes below, with exemplary quotes from respondents.

All three themes were equally represented, and many responses encapsulated more than one theme, for example, the following touched upon all three:

“Terror, trauma, lack of trust, knowing I can be arrested for something I didn't actually do but that when I've reported crimes they get ignored entirely.”

Many respondents discussed that their interactions with the police have resulted in a sense of distrust toward police officers:

“I am not trusting of officers like I once was. I tend to let stress pile on me.”

Sometimes, this distrust generalized to other authority figures or people more broadly:

“Heavy mistrust in cops and in people more generally.”

Most respondents talked about experiencing fear or terror as a result of their interactions:

“It made me afraid of police and afraid of authority”.

Respondents discussed being fearful not only of police officers, but also being afraid to call them in emergency situations:

“I am afraid to call them. They have exasperated traumatic events. They have belittled me for my appearance, so I stopped wearing my helmet. They are no better than kids.”

Finally, many respondents discussed that their experiences with the police caused them to suffer trauma:

“In some interactions with the police it caused me more stress and trauma because they couldn't do anything to stop the perpetrator or police charges which left me in fear of seeing [sic] the person again another time.”

One participant mentioned that their multiple police experiences contributed to the development of post-traumatic stress disorder:

“My interactions with the police influenced by [sic] mental health being assaulted by the police several times contributed to my development of my Complex-PTSD.”

4. Discussion

Few studies have explored the forensic implications of DD and, to

our knowledge, this is one of the first studies in Canada to gather in-depth, qualitative information regarding police interactions from the perspective of individuals with ASD. This study is unique in that it builds upon a growing body of research on police interaction with the ASD community (e.g., Crane et al., 2016; Rava et al., 2017; Tint et al., 2017) by engaging the affected community and using a collaborate, community-engaged research strategy to explore their police interactions in detail.

The first objective of this study was to gather information regarding the nature of interactions that individuals with ASD have with the police. Consistent with prior research, people with ASD have a significant number of interactions with the police in their lifetime. In fact, in the present sample, more than half of respondents reported having four or more interactions with the police in their lifetime. The nature of these police interactions varied, but there were some commonalities amongst the experiences. For example, more than half of the respondents reported that they had been stopped by the police, and more than a third had a police experience related to a mental health crisis. Furthermore, a large proportion of the interactions discussed in-depth in the present study were preceded by aggression or violence, which is consistent with prior research (e.g., Tint et al., 2017).

More than half of the respondents indicated they had been victimized at least once in their lifetime. Although this number seems high, research has repeatedly found that individuals with disabilities are at a much higher risk of criminal victimization than people without disabilities (Cotter, 2018). However, the gravity of this cannot be understated. Future research should focus on understanding why people with disabilities experience criminal victimization at such high rates, and importantly, explore potential methods or interventions to lower these victimization rates.

In the present sample, most respondents reported a co-existing psychiatric diagnosis. As mentioned earlier, although ASD is not a mental health condition, people with ASD are at an increased risk of developing mental health problems. This is known as having a “dual-diagnosis,” whereby an individual living with a DD is diagnosed with a co-occurring mental health problem. Research demonstrates that individuals with ASD are at an increased risk of developing mental health problems throughout their lives (Lunsky & Weiss, 2012). A considerable body of research has found that people with mental illness are at a greater risk of criminal justice involvement (e.g., Livingston et al., 2014; Theriot & Segal, 2005; Watson, Corrigan, & Ottati, 2004). When combined with a pre-existing disability, as in the case of dual-diagnosis, this likely increases the risk of criminal justice interaction. This may help to explain the high number of lifetime police interactions seen in the present sample, as well as the fact that a third of respondents indicated that they had a police interaction related to a mental health crisis.

One finding of particular concern in the present research is the high number of unresolved police interactions that were reported. This could evidence the fact that police officers may not know how to handle these situations, which may suggest a lack of training or possibly a shortage of appropriate resources for officers. It is unclear whether appropriate resources currently exist in communities in situations where an adult with ASD becomes acutely aggressive or violent toward themselves or others. Interestingly, only one participant mentioned that a mobile-crisis team responded, a resource that was supposedly developed for this very reason. For example, in the following excerpt, the respondent describes an incident where she was in distress and felt that she was a danger to herself and her daughter. Rather than referring her to mental health services, officers removed her husband and son from her home, leaving her and her daughter at risk:

“On one occasion was when we have crisis at home and they came I was in distress and could not speak and they removed my husband and son away leaving me home alone with my 5 years old daughter, my husband was trying to tell them that I can't stay alone but

nobody cares. That night I was put in danger and my daughter was in danger.”

More research is needed to determine whether these resources are being utilized to their full potential.

In the present sample, respondents frequently reported experiencing police use-of-force in their interactions. In fact, more than a third indicated that they had been placed in handcuffs at least once in their lifetime. One particular area of concern was that three respondents reported use-of-force tantamount to assault, which is particularly alarming given the small sample size. This finding, however, should be interpreted with caution, as these interactions are not necessarily representative of police officer interactions more broadly, as respondents self-selected the experiences they wanted to talk about.

The second goal this study was to explore how adults with ASD perceive their interactions with the police, mainly, whether they perceive them in a favorable or unfavorable manner. Respondents were generally unsatisfied with their interactions, perceived them to be procedurally unjust, and were not satisfied with the outcome. Though we would expect this dissatisfaction from people who have interacted with the police under negative circumstances, like being caught committing a crime, only a small proportion of participants actually discussed interactions of this nature. Respondents were fairly negative not only of their police interactions, but also toward the police more broadly. Many respondents expressed feelings of anxiousness, fearfulness, and distrust toward the police, often as a consequence of a prior negative interaction. Perhaps most unfortunate, in many cases, these perceptions affected an individual's willingness to call the police in an emergency situation. Given the fact that people with ASD interact with the police more often than their neurotypical peers (Rava et al., 2017), it is of great importance that they feel comfortable doing so, and trust in the police to protect them in situations where they may need assistance.

These findings corroborate those of Crane et al. (2016), where almost three-quarters of the ASD community they sampled expressed dissatisfaction with their police interactions. Interestingly, these results seem to be out of harmony with the recent findings of Tint et al. (2017), where caregivers sampled were generally favorable toward their dependent's interactions. This discrepancy could be due to, or be exacerbated by, the fact that caregivers necessarily have less insight into their dependent's interactions with the police than would an individual reporting on their experience directly. There were several important differences between the present study and similar studies that have been conducted in the past. Respondents in the present sample were adults, while in earlier studies (e.g., Tint et al., 2017) the dependents that caregivers reported on were typically younger. Furthermore, past studies have typically relied on caregivers to report on behalf of their dependents, which may have resulted in targeting caregivers whose dependents had a greater level of impairment than seen in the present study. The results of the present study may be more representative of a mildly impaired⁴ adult ASD population than of ASD more broadly. Ideally, a study that obtains data from both individuals with ASD, and their caregivers, would provide better insight into whether those differences are a result of two different perspectives, or a result of different experiences for individuals at different levels of the ability spectrum. Moving forward, future research should explore how we can improve this community's perception of the police, repair damaged relationships, and encourage trust rather than fear and apprehension.

Disclosure of an individual's disability and police recognition of an individual's disability is another important issue that arose in the present study. Most of the respondents indicated that the police officer was not made aware of their disability during the interaction, and in none of

⁴ We acknowledge that this term may be problematic. However, in this context it is being used to describe level of intellectual impairment and acknowledge that many people with ASD do not have any type of intellectual impairment.

the interactions described was the officer able to recognize the individual's disability on their own, corroborating prior work (Henshaw & Thomas, 2012; Modell & Mak, 2008), which has demonstrated that officers may be unable to recognize when an individual has a developmental disability such as ASD. These findings also suggest that individuals may be unable, or perhaps unwilling, to disclose their disability to the police. Given that many respondents expressed feeling uncomfortable, anxious, or afraid around the police, this is not surprising. This lack of awareness may also explain why most respondents reported unfavorable interactions with the police. If an officer is unaware that the person they are interacting with has ASD, they may not be able to communicate effectively, or make appropriate decisions regarding how to proceed. The fact that a select few respondents indicated that their interaction improved upon disclosing their disability evidences potential benefit in disclosing a disability. To break down potential barriers, future research is needed to explore why people with ASD are hesitant or perhaps unwilling to disclose their disability to law enforcement (e.g., fear of being stigmatized or misunderstood). Another potential avenue would be the development and evaluation of standardized, empirically-validated training for law enforcement on ASD, with the goal of increasing their general knowledge about ASD, their ability to recognize when an individual has ASD, and teaching appropriate techniques to respond appropriately to people with ASD.

4.1. Limitations

Notwithstanding the strengths of this research, the findings of the current study should be interpreted with several limitations in mind. First and foremost, given that the study was advertised as a study on police experiences, this could have unintentionally biased survey responses to those who have had either good or bad police experiences. Thus, although the numbers reported here are high, this could be due, at least partially, to self-selection bias (although the survey was open to both those who have had police experiences and those who had not).

Moreover, while respondents were mainly recruited directly through ASD agencies, support groups, and not-for-profit organizations, there was no verification of diagnoses for inclusion. As previously noted, women were overrepresented in the present study. Given the fact that the study was delivered online may have unintentionally excluded those who are not computer literate, those without internet access, and those who have a more severe degree of impairment. As previously discussed, the respondents from the present study were very mildly impaired, and highly independent. Thus, the present sample is not necessarily representative of all ages and ability levels in the broader ASD population.

5. Conclusion

The findings of the present study begin to paint a detailed picture of police encounters amongst individuals with ASD, contributing to a growing body of literature on the intersection between the law and DD. One of the overarching goals of the present study was to identify some of the key issues or problems that arise in adverse interactions between the police and the ASD community. Indeed, we identified several issues including a lack of police recognition, as well as a potential lack of appropriate resources for police officers to refer to (evidenced by a high number of unresolved interactions). The presence of mental health conditions and having a dual-diagnosis were identified as significant contributing factor in the dynamics and outcomes of interactions with the police. For people with ASD, having a dual-diagnosis may significantly increase their risk of criminal justice interaction. Future research in this area is needed to investigate and better understand how having a co-morbid mental health condition may impact police interaction, to understand how the needs of people with a dual-diagnosis might differ from those without. Furthermore, the high number of mental health interactions reported in the present sample suggests that

even when there is not a pre-existing mental health issue, people with ASD may benefit from accessing acute mental health services and resources.

Further research is needed to explore what factors place individuals with ASD at risk of encountering the CJS, and more specifically, what increases their risk of an adverse encounter. Future research should also strive to integrate the viewpoints and experiences of law enforcement as a valuable source of knowledge. The inclusion of multiple key stakeholder groups creates a more thorough and comprehensive understanding of the forensic implications of ASD, which can then be used to inform policy, training protocols, and advocacy efforts.

Ethical approval

All procedures performed in this study involving human respondents were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Declarations of interest

None.

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