



## Brief Report: Descriptive Analysis of Law Enforcement Officers' Experiences with and Knowledge of Autism

Lauren Gardner<sup>1</sup> · Jonathan M. Campbell<sup>2</sup> · June Westdal<sup>3</sup>

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### Abstract

Individuals with Autism Spectrum Disorder (ASD) may interact with law enforcement officers (LEOs) as victims of crime, witnesses to crime, or suspects of crime. Interactions between LEOs and those with ASD may go awry which raises questions about levels of training, experiences, and knowledge acquired by LEOs. Seventy-two LEOs reported on their experiences and training related to ASD and completed a survey of autism knowledge. The majority (72.2%) of LEOs reported no formal training for interacting with individuals with ASD. For LEOs responding to calls involving ASD, officers with prior training reported better preparation. Officers' responses to the knowledge survey varied considerably. Results support the need for formalized training in ASD for LEOs.

**Keywords** Autism spectrum disorder · Law enforcement · Experiences · Training · Knowledge

The core symptoms of Autism Spectrum Disorder (ASD) include impairments in social communication and interaction, and restricted and repetitive patterns of behaviors. Restricted, repetitive behaviors may include stereotyped movements, insistence on sameness, fixated interests, and hyper- or hyporeactivity to sensory input (American Psychiatric Association 2013). These core symptoms are likely to affect the way persons with ASD interact with others, including law enforcement officers (LEOs). The increased reported prevalence of ASD, which is now estimated at 1 in 59 (Baio et al. 2018), results in an increased likelihood that LEOs will interact with persons who have been diagnosed with ASD.

Although public awareness campaigns and professional standards have targeted improving knowledge and practice of LEOs related to ASD, it is not clear how well information about ASD is disseminated and incorporated in LEOs' training. It is likely that LEOs would benefit from training specific to the social communication deficits and restricted

repetitive behaviors associated with ASD prior to responding to calls that involve individuals with ASD who may present as victims, witnesses, or suspects. Lack of knowledge of ASD may result in LEOs misinterpreting ASD specific behavior as noncompliant, threatening, disorderly, or suspicious.

Research on law enforcement training and disability awareness is limited; however, previous findings indicate that the majority of LEOs have little training or expertise regarding disabilities (Eadens et al. 2016). Of the limited studies available, few have examined LEO training specific to ASD. Laan, Ingram, and Glidden (2013) conducted interviews with LEO training coordinators in seven states, and compared LEO training materials related to recommendations for training on ASD and guidelines for training on other mental health disorders. Results indicated that most officers received between 400 and 770 h of total training at the basic recruit levels, of which only 3–12 h were focused on mental health disorders. Furthermore, authors highlighted that autism is not a mental disorder, and therefore warrants instruction tailored specifically to ASD. An analysis of training content determined that training specific to autism, with the exception of one state, was very limited. Although some states, such as Florida, have now mandated training for LEOs that requires recognition of symptoms and characteristics of ASD, and appropriate responses to a person exhibiting such symptoms, there are no guidelines

✉ Lauren Gardner  
lgardn18@jhmi.edu

<sup>1</sup> Johns Hopkins All Children's Hospital, 880 6th Street South, Suite 410, St. Petersburg, FL 33701, USA

<sup>2</sup> Department of Educational, School, and Counseling Psychology, University of Kentucky, Lexington, KY, USA

<sup>3</sup> Division of Clinical Behavioral Neuroscience, University of Minnesota, Minneapolis, MN, USA

regarding the content, format, or amount of time this specialized training entails. Teagardin et al. (2012) provided ASD-related training to police officers via video. Officers who participated in the training outperformed officers who did not receive training on a measure of ASD-related knowledge; however, neither group demonstrated mastery of training material. The authors concluded that video training is likely insufficient to train officers on how to assess and respond to individuals with ASD. Instead, authors recommended role-play, hands-on activities, and in-vivo training to supplement video training. As a vulnerable population within our society, a growing awareness of ASD by LEOs is warranted; however, LEOs' experiences with and knowledge of ASD remains an under-researched area.

There are various situations in which LEOs may interact with persons with ASD. First, persons with ASD may be crime victims. Previous research documents that persons with developmental delays, including those with ASD, are at increased risk for abuse and victimization (Petersilia 2001). In some instances, interactions between LEOs and individuals with ASD may be as a result of co-occurring psychiatric or medical concerns (Tint et al. 2017). Persons with ASD may also be witnesses or suspects of a crime. Additional instances that may result in LEOs interacting with persons with ASD include elopement, sensory over-stimulation, and behavioral difficulties, such as aggression, yelling, and self-injury. Using a nationally representative sample of adolescents and young adults with ASD, Rava et al. (2017) found that by age 21 approximately 20% had been stopped by the police for questioning, and almost 5% had been arrested. Rava et al. (2017) also found that individuals with ASD who display externalizing behaviors are more likely to be involved in the criminal justice system. Previous research offers conflicting findings as to whether children and young adults with ASD are at higher risk for involvement with the criminal justice system than the general population; however, it appears likely based on existing research that people with ASD are somewhat over-represented in the criminal justice system (King and Murphy 2014). Further investigation into the prevalence and types of offences committed by individuals with ASD is needed.

The present investigation occurred within the context of recently approved state legislation. The Florida senate passed a bill which took effect October 1, 2017 requiring the Florida Department of Law Enforcement to establish a continued employment training component for LEOs specific to ASD. The training component was required to include recognition of symptoms and characteristics of ASD, and appropriate responses to a person exhibiting such symptoms. In response to the senate bill, we designed a survey to document LEOs' knowledge about ASD to guide future training efforts. The purpose of the present study was to conduct an exploratory and descriptive survey of a sample of LEOs

from the police and sheriff departments in the Tampa Bay area of the state of Florida in order to describe LEOs' knowledge of ASD, prior training in the area of ASD, interactions with individuals with ASD while on duty, and circumstances and outcomes from professional calls.

## Methods

### Participants

The first author surveyed LEOs prior to an introductory training on ASD sponsored by the first author's agency. LEOs were informed about the purpose of the survey and asked if they wished to complete the survey prior to the training; informed consent was secured for all LEOs ( $N=72$ ). LEOs were 56.9% male with a mean age of 42.2 years ( $SD=9.5$ ) and 15.0 years of law enforcement experience ( $SD=9.2$ ; see Table 1). Study procedures were approved by the first author's Institutional Review Board.

### Measures

To evaluate LEOs' prior knowledge of, and experience with ASD, participants completed a questionnaire that included (a) a demographic survey, (b) a 15-item autism knowledge questionnaire, and (c) prior law enforcement experiences interacting with individuals with ASD. The 15-item autism knowledge questionnaire reflects an update of Stone's (1987) survey, which has been adapted by Heidgerken et al. (2005), and modified by Tipton and Blacher (2014). The questionnaire consists of 15 statements with a 5-point Likert-type response scale (see Table 3 for items). Seven of 15 items were recoded such that greater disagreement was associated with greater knowledge (e.g., Item 3, "There is a cure for autism"). Two items did not correlate with total scores and were omitted from the total score calculation resulting in Cronbach's  $\alpha = .66$  and *Mdn* item-total correlation = .43 for the 13-item total knowledge scale.

## Results

Most LEOs reported some type of prior relationship with an individual with ASD ( $n=44$ ; 61.1%) and approximately half ( $n=35$ ) reported responding to a call involving an individual with ASD in the past 12 months (see Table 2). However, roughly three-quarters (72.2%) of the sample had not completed training related to interacting with individuals with ASD. For LEOs responding to calls involving individuals with ASD, those with training were more likely to report feeling adequately prepared to respond to the call,  $\chi^2(1, N=34)=12.88, p<.01$ . Compared to LEOs

**Table 1** Participant characteristics and experiences with autism spectrum disorder (N = 72)

Variable	n	%	Min	Max	M	SD
Gender						
Male	41	56.9				
Female	30	41.7				
Missing	1	1.4				
Do you have a relationship with someone with autism? If “Yes,” what is relationship?						
No	28	38.9				
Friend	16	22.2				
Immediate family	11	15.3				
Other	8	11.1				
Extended family	7	9.7				
Missing	2	2.8				
Have you participated in training for interacting with individuals with autism?						
Yes	20	27.8				
No	52	72.2				
Number of years of law enforcement experience			1.00	37.00	15.02	9.22
Age (year)			23.00	61.00	42.17	9.53

**Table 2** Characteristics of police calls involving individuals with autism spectrum disorder (N = 72)

Variable	n	%	Min	Max	M	SD
How many calls have you had that involved someone with autism over the past 12 months?						
None	36	50.0				
One or more	35	48.6				
Missing	1	1.4				
For respondents reporting calls within the past 12 months (n = 35)						
Number of calls over the past 12 months			1.00	12.00	3.53	2.7
Approximate age of individual with autism			5.00	30.00	12.93	5.3
Was the individual able to use words to effectively communicate with you?						
Yes	24	68.6				
No	11	31.4				
Did you use physical force to subdue the person with autism?						
Yes	5	14.3				
No	30	85.7				
Was the person placed in handcuffs?						
Yes	8	22.9				
No	27	77.1				
Did the situation result in an involuntary hospitalization of the person?						
Yes	9	25.0				
No	27	75.0				
Did you feel that you were well trained or adequately prepared for this call?						
Yes	17	48.6				
No	18	51.4				

without training, however, those with prior training were equally likely to: (a) use physical force during the call,  $\chi^2(1, N = 34) = 1.57, p = .21$ , (b) use handcuffs,  $\chi^2(1, N = 34) = 0.02, p = .88$ , and (c) have the call end in evaluation

for involuntary hospitalization,  $\chi^2(1, N = 34) = 2.20, p = .14$ . There were also no relationships between LEO's feelings of preparedness and the likelihood of: (a) using physical force during the call,  $\chi^2(1, N = 34) = 0.23, p = .63$ , (b) using

**Table 3** Knowledge of autism item statistics (N=72)

Item	M	SD
1. Autism is an emotional disorder	2.61	1.2
2. Vaccines are causing an increase in autism	2.43	1.0
3. There is a cure for autism	2.03	0.8
4. Autism runs in families	2.94	0.8
5. All children with autism display poor eye contact	2.88	1.0
6. Autism is diagnosed more frequently in males than females		
7. Changing a child's diet will lessen the severity of autism symptoms	2.99	0.9
8. There is one intervention that works for all children with autism	1.76	0.8
9. Children with autism can grow up to live independently	4.03	0.7
10. Autism is a neurodevelopmental disorder	3.90	0.6
11. Autism can be diagnosed as young as 18 months	3.67	0.7
12. Children with autism are smarter than standardized tests demonstrate	3.68	0.7
13. It is important that all children with autism receive special education	3.76	1.0
14. With proper treatment, most children with autism will eventually outgrow it	2.24	0.8
15. Several disorders that commonly co-occur with autism are depression, anxiety, ADHD, intellectual disability, and language disorder	3.89	0.6
Total Score <sup>a</sup>	47.88	4.6

Item responses range from 1 = "Definitely Disagree," to 5 = "Definitely Agree"

<sup>a</sup>Total Score calculated from 13 items (Items 4 and 13 omitted); items 1, 2, 3, 5, 7, 8, and 14 reverse scored

handcuffs during the call,  $\chi^2(1, N=34)=0.65, p=.42$ , or (c) the call involving evaluation for involuntary hospitalization,  $\chi^2(1, N=34)=0.14, p=.68$ .

Descriptive information for all 15 ASD knowledge survey items are presented in Table 3 and several deserve mention. On average, LEOs *disagreed* that there is a "cure" for ASD, that most children will 'outgrow' ASD, and that a single intervention works for all children with ASD. On average, LEOs *agreed* that ASD is a neurodevelopmental disorder, that children with ASD can grow to live independently and that various disorders co-occur with ASD. LEOs with ( $n=17; M=49.18; SD=4.92$ ) and without training ( $n=50; M=47.44; SD=4.47$ ) did not differ on total knowledge scores,  $F_{Welch}(1, 26)=1.65, p=.21$ . Likewise, LEOs with ( $n=41; M=48.00; SD=4.69$ ) and without relationship with someone with ASD ( $n=26; M=47.69; SD=4.59$ ) did not differ on total knowledge scores,  $F_{Welch}(1, 54)=0.07, p=.79$ .

## Discussion

Given the need for LEOs to recognize of symptoms and characteristics of ASD and respond appropriately to individuals exhibiting such symptoms, improved knowledge of and training related to ASD by LEOs is necessary. However, the perceptions of LEOs regarding persons with ASD remains an under-researched area. We sought to contribute to the knowledge base regarding LEOs' experiences with individuals with ASD by analyzing survey responses of

knowledge of ASD, as well as gathering information about personal and professional experiences with individuals with ASD.

## Review of Main Findings

Roughly 60% of LEOs reported having a relationship with an individual with ASD, such as an immediate or extended family member or friend/acquaintance. Almost three-quarters of LEOs reported no prior training for working with individuals with ASD, yet about half responded to a call involving an individual with ASD over the past 12 months. For individuals responding to calls, most had not received training for working with individuals with ASD; individuals who received prior training were more likely to report feeling adequately prepared to respond to the call. LEOs were equally likely to use physical force and handcuffs regardless of whether or not training was completed. Likewise, there were no relationships between LEOs' feelings of preparedness and use of force, use of handcuffs, or the call resulting in evaluation for involuntary hospitalization. Our findings correspond with prior work documenting LEOs' simultaneous reports of feeling prepared to respond to calls yet needing further training (Modell and Mak 2008). Knowledge of ASD did not differ whether or not LEOs had completed prior training about ASD, and knowledge of ASD did not differ whether or not LEOs reported having a relationship with an individual with ASD.

## Implications

Findings from the current study indicate that the majority of LEOs have not received training specific to autism, although almost half have responded to calls on duty involving individuals with autism within the last year. Of those who responded to calls, LEOs who had previously received autism specific training reported feeling better prepared. It should be noted that of LEOs who responded to calls, 25% reported the outcome involved the individual with ASD being taken to a receiving facility for involuntary psychiatric examination. Further research is warranted to determine if the findings from this initial small sample are representative of outcomes in a larger sample of LEOs. Additional research is needed to determine if involuntary hospitalization is the result of deficits in adequate training for LEOs related to ASD, or if this outcome is preferable to placing these individuals in police custody. Given the increase in reported prevalence of ASD, LEOs are likely to interact with individuals with ASD within their professional role. Some states are now requiring autism specific training for first responders to assure LEOs are better prepared to recognize the signs and symptoms of autism, and respond appropriately. The realities of LEO training requirements, such as tactical training, result in practical challenges regarding how best to deliver ASD-related training. For example, ASD-related training might be delivered and well-received through integration into other LEO training. The results of the present study support the need for formalized training in ASD for LEOs as awareness and knowledge of ASD was reported to result in officers feeling better equipped to respond to calls involving individuals with ASD.

## Limitations

The present study included an exploratory and descriptive survey regarding awareness of autism and professional interactions/incidents with individuals on the spectrum for a small number of LEOs seeking autism specific law enforcement training. Thus, participants were LEOs who voluntarily participated in this training. It may be that individuals who sought this training opportunity to learn more about ASD may not be representative of the broader LEO population regarding prior experience, personally and professionally, with individuals with ASD.

Participants in the present study included LEOs from the sheriff and police departments in the Tampa Bay area, however, information regarding the specific territory and time that the LEOs patrol was not collected from participants. Such information would be helpful for understanding the generalizability of the outcomes of the present study.

## Directions for Future Research

The perceptions of LEOs regarding persons with ASD remains understudied. Additional research is needed to determine what content is most pertinent when providing training for LEOs related to autism. Our survey focused largely on general knowledge of ASD to document targets for future training; however, extending surveys to include specific strategies in response to calls is needed. For instance, more information is needed regarding the types of calls LEOs receive regarding individuals with ASD (e.g., elopement) and LEOs responses to assure that training programs provide practical information for LEOs. In addition, it would be useful to determine if LEOs who have participated in entry level training on ASD benefit from more advanced trainings to facilitate higher mastery of content and if such training facilitates changes in outcomes from calls (e.g., use of force, handcuffs). In addition, another under-researched area is the perceptions of individuals with ASD regarding LEOs.

## Conclusions

Research on law enforcement training and disability awareness is limited; however, previous findings indicate that the majority of LEOs have little training or expertise regarding disabilities (Eadens et al. 2016). Findings from the current study support previous research findings and indicated that the majority of LEOs had not received training specific to autism. Knowledge of signs and symptoms of ASD, as well as how training related to managing calls for individuals with ASD is imperative as almost half of the participants in the present study had responded to calls on duty involving individuals with autism within the last year. Participants who had previously received autism specific training reported feeling better prepared. As the reported prevalence rate of ASD increases, LEOs are increasingly more likely to interact with individuals with ASD within their professional role. The results of the present study support the need for formalized training in ASD for law enforcement officers as awareness and knowledge of ASD was reported to result in officers feeling better equipped to respond to calls involving individuals with ASD. Further research into the determination of appropriate training content as well as the perceptions of individuals with ASD regarding interactions with LEOs is warranted.

**Author Contributions** LG conceived of the study, participated in its design and coordination and drafted the manuscript; JMC participated in the design and interpretation of the data; JW participated in the design and helped to draft the manuscript. All authors read and approved the final manuscript.

## Compliance with Ethical Standards

**Conflict of interest** All the author declares that they have no conflict of interest.

**Ethical Approval** All procedures performed in studies involving human participants 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.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

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