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## **When Law Enforcement and Individuals with Autism Spectrum Disorder Meet: ASD Knowledge and Confidence in Law Enforcement Officers in the Commonwealth of Kentucky**

Nicholas P. Hoffmann

*Eastern Kentucky University*, [Nicholas\\_hoffmann2@mymail.eku.edu](mailto:Nicholas_hoffmann2@mymail.eku.edu)

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When Law Enforcement and Individuals with Autism Spectrum Disorder Meet:  
ASD Knowledge and Confidence in Law Enforcement Officers in the Commonwealth of  
Kentucky

Nicholas P. Hoffmann

Eastern Kentucky University

Author Note

Nicholas P. Hoffmann, Department of Psychology, Honors, Eastern Kentucky University

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### Abstract

The purpose of this study is to examine the current training practices, as well as the knowledge and confidence that law enforcement officers possessed with regards to interacting with individuals with Autism Spectrum Disorder (ASD) as reported by the officers. It is expected that the level of training will be highly inadequate in the Commonwealth of Kentucky due to lack of available training and resources available to officers, as well as the lack of mental health training requirements. This project does not seek to criticize officers, but rather to assess the current overall status of their training as well as their perspectives of their training statuses.

*Keywords:* Police, Autism Spectrum Disorder, Confidence, Kentucky, Training, Developmental Disability

When Law Enforcement and Individuals with Autism Spectrum Disorder Meet:  
Knowledge and Confidence of Law Enforcement Officers in the Commonwealth of Kentucky

With the current cultural impetus towards normalizing differences in mental health status, as well as the integration of people with disabilities into communities, police have become the forefront when interacting with and managing populations who were once institutionalized. This shift in responsibility from the mental health field onto the police has not been paralleled by an increase in training on interacting with people who have disabilities (Compton, Bakeman, Broussard, Hankerson-Dyson, Husbands, Hrishan & Watson, 2014; Gillig, Dunmaine, Stammer, Hillard, & Grubb, 1990; McLean & Marshall, 2010; Patch & Arrigo, 1999; Price, 2005). Information is generally unknown about the broader attitudes and understanding that law enforcement officers (LEOs) hold and there are no investigations into this preceding 1986 (Yuker, 1986). Given this, there could be some major gaps in training provided to LEOs.

Now that LEOs are responsible for managing people who were once institutionalized, it is imperative that they are given the necessary tools and resources in order to further their understanding of mental health, intellectual disability, developmental disability, and all other related fields applied to the release of individuals from mental health facilities (Chown, 2010). Disparity between the high responsibility that LEOs have and the lack of knowledge base may lead to serious issues when LEOs interact with people who are not cognitively normative. LEOs feel that they are unfairly criticized for the outcomes of these interactions. Because they are now in charge of responsibilities that were not in their original job description, they blame the mental health field for changing what it means to be a LEO without supporting or supplementing resources to go along with these changes (Gillig et al., 1990). The goal of this study is to further the understanding of the mental health field about the current state of training that is provided to

officers in the Commonwealth of Kentucky, as well as their thoughts and feelings about it so that a productive dialogue can be created between the mental health field and LEO training personnel.

### **Literature Review**

When police interact with individuals with disabilities, they may be using the wrong information in their assessments of how to respond. For instance, some previous studies indicate that it is widely believed by LEOs that physical appearance is a key identifying factor for mental illness (Bailey, Barr, & Bunting, 2001; Gendle & Woodhams, 2005; Keilty & Connelly, 2001). While this is not entirely incorrect, it should not be primarily relied upon when making an assessment. Some disabilities can be identified by physical traits, however in many cases, it is important that one interact personally with the individual so that an assessment can be made by behavioral cues. The most useful factors in identifying disability and responding to it appropriately are communication based. Unfortunately, these are not always caught until well into the legal process, after it is already too late (Hayes, 2002; Mackie, 2002; Perske, 2008; Walters, 2003)

#### *Why Focus on Autism Spectrum Disorder?*

Prevalence of Autism Spectrum Disorder (ASD) in the United States has been increasing steadily over recent years (Durkin, Maenner, Baio, Christensen, Daniels, Fitzgerald, Imm, Lee, Schieve, Braun, Wingate & Yeargin-Allsopp, 2017; see Appendix A for more information). Current CDC data indicates that one in 59 children is diagnosed with ASD (CDC, 2018). Currently it is approximated that 20% of youth with ASD have been detained or stopped and questioned by police, and 4% have been arrested (Rava, Shattuck, Rast & Roux, 2017). It has been indicated that this number has been growing steadily as well (Cheely, Carpenter,

Letourneau, Nicholas, Charles & King, 2012). The data presented above should adequately indicate the need for a focus on ASD and LEO interaction. With increased prevalence and heightening rates of LEO involvement, focus needs to be made on these interactions to ensure that members of the community are being adequately protected, and that LEOs are adequately trained.

ASD is a developmental disability which is characterized by impairment of social communication, understanding of social context, social reciprocity, and the presence of restricted and repetitive patterns of behavior (American Psychiatric Association, 2013), some problems may arise upon approach by police or other unfamiliar persons (Nadel, Croué, Mattlinger, Canet, Hudelot, Lécuyer, & Martini, 2000). The nature of law enforcement is such that much attention is placed on individuals who fall outside of normal social interaction, and it is their job to approach and investigate such people. Their primary goal is to govern social behavior and ensure that it conforms to the social constructs outlined by the people. Because of the symptomatic social impairment of ASD, individuals with ASD who lack understanding of social norms have a hard time following social constructs. Some individuals with the disorder may appear to be suspicious to the outside observer, leading to LEOs being called in response (Frantz & Zellis, 2014; Weiss & Westphal, 2015).

Weiss and Westphal (2015) use the term “counterfeit deviance” when describing behavior that is misattributed as aggression, but that is actually rooted in social naivete or misunderstanding. Two more factors that lead this misattribution are the appearance of untrustworthiness due to eye contact avoidance and an inhibited empathetic response that appears to be a lack of remorse (Weiss and Westphal, 2015). If LEOs were called to investigate and confront an individual with ASD who was displaying counterfeit deviance and acting

suspiciously, they may not be able to identify the behavioral indicators of the disorder and believe that a crime was being committed (Weiss & Westphal, 2015). The increased stress of novel communication resultant from being approached by an LEO would lead to the individual with ASD being easily flustered. If the situation were to escalate to physical intervention, the sensitivity to contact may lead to violent outbursts by a person who is not only not understanding of the given situation but also lacking the ability to understand that their behavior has been misattributed as malice or aggression (Nadel et al., 2000; Weiss and Westphal, 2015). This could not only jeopardize the safety of the LEO, but also increase the likelihood of a critical incident occurring, thus jeopardizing the safety of the person with ASD as well.

#### *Crime, Mental Health, and ASD: Prevalence and Correlates*

Given that people with ASD may behave in ways that attract attention from police, it follows that there would be an overrepresentation in offending populations. Sensationalism has overplayed the correlation between ASD and crime in news media (Frantz & Zellis; Weiss & Westphal, 2016). Notwithstanding, there is still an overrepresentation of ASD in offending populations and those who are victimized (Frantz & Zellis, 2014) As discussed above, counterfeit deviance may be a contributing factor to the increased offending populations; suspicious behavior leads to higher arrests, and thus an increase in offending populations. Also, those who have cognitive impairments are more easily taken advantage of, increasing the amount of victimization (Frantz & Zellis, 2014; Weiss & Westphal, 2015).

A recent study by Rava, Shattuck, Rasst, and Roux (2016), which sampled data that was collected by the National Longitudinal Transition Study – 2 (Cameto, Wagner, Newman, Blackorby, & Javitz, 2000), indicated that not only was this the case, but also that people with ASD had higher rates of being victims of crime as well. Its aim was to describe the types of



interaction that police were having with community members with ASD, as well as other compounding factors that may have contributed to them. Upon analysis of the parent study data, it was found that 20% of youth (those younger than 21) with ASD had been stopped and questioned by police, and 42.4% of them experienced high rates of victimization. There was also a general trend that indicated that the older the individuals with ASD were, the more contact they had with police. It is suggested that a transition to independent living is accountable for this finding (Rava et al., 2016). Further studies revealed that the reduced availability of structured day activity services and past instances of police involvement were indicators of further police involvement (Tint, Palucka, Bradley, Weiss, & Lunskey, 2017). These studies show that a rather significant portion of individuals with ASD encounter LEOs frequently.

#### *Current and Developing Training Methods*

The previous lack of training on ASD or any persons with different mental health statuses could be indicative of a current lack of training. It has been demonstrated that historically police agencies have not placed great importance on providing officers with education on disability (McAfee & Musso, 1995; McAfee & Musso 1992). If current department leadership consists of LEOs who received training during an era when low importance was placed on training of LEOs on mental health issues, it may be reasonable to assume that the current department leadership, relying on training they received, do not place emphasis on training newer officers on these issues.. This could be an explanation of why there has been a lack of resources today; however, evidence would be needed to back up this speculation. Regardless of the cause of this lack of resources, many officers feel abandoned by the mental health field. They want to be better prepared for protecting individuals with ASD and do not want to be criticized when they do not know how to do so. They want to be better prepared to protect individuals with ASD and do not

want to be scrutinized and criticized by the public and media for failing to do a job for which they were never trained. If officers have effective resources made available to them, not only will they be more prepared for these ASD interactions, but this preparation could lead to less criticism from the public. To LEOs, it is the responsibility of the mental health field to fix these issues (Gillig et al., 1990).

Not all departments are absent in providing resources to officers, however. Currently, a very select few departments are providing specific tools to help with different aspects of dealing with persons with different mental health statuses. (Compton et al., 2014). There are three different programs that are commonly used by departments. These programs all differ in the tactics employed, as well as their effectiveness. How favorably these programs are viewed by LEOs varies also.

The first model that is commonly and currently used by these few departments is known as a Crisis Intervention Team (CIT). CITs consist of officers trained in mental health, who act as a bridge between mental health response and LEOs. They begin their careers as LEOs and are selected to be trained in mental health, to provide a first response during mental health crisis situations. They are trained on past instances of mental health crisis, and de-escalation techniques (Price, 2005). In an analysis of the efficacy of CIT, it was found that LEOs trained in this method had significantly better scores on knowledge, de-escalation skills, and many other facets (Compton et al., 2016).

A second common existing program found is known as a LEO based specialized mental health approach. This consists of the hiring of mental health, non-officer specialists whose job is to aid either directly and on-site, or through communication systems employed by departments.

This allows for an unbiased consultation of the officers to provide them with the best plan of action when in stressful mental health interactions (Price, 2005).

A third existing response technique is the use of mobile crisis response units, comprised of mental health professionals who have developed a relationship with different departments. These programs would incorporate the already existing public mental health services with the police, to allow more contact with those with mental health difference to interact with mental health professionals in a more natural, street setting (Price, 2005).

Some departments have also begun to create new programs which can allow LEOs to approach situations involving people with mental health difference in new and unprecedented ways. These resources include the development of a screening tool, which could allow for the training on and use of guidelines and step by step instructions for officers to use when quick assessment is needed (Hayes, 2002). This would also allow for an increase in both awareness and the volume of training provided to LEOs and would be easily implemented in preexisting classroom settings (Douglas & Cuskelly, 2012).

A promising and extensive training module has also been developed by McGonigle and his colleagues to train those in emergency departments on the symptomology of ASD, as well as best practices during interactions. This material's efficacy is still being investigated, and its uses are being diversified with regards to what types of departments (i.e. fire departments, emergency medical services etc.) it is being used for. So far in the laboratory setting, these materials have been found to be effective at creating a more confident, knowledgeable first responder; however, more data is needed. The training module being created is set up in a pre-made slide show presentation, hand-outs, and post and pre- test questionnaires. These allow for training agencies to simply use the already created curriculum and implement it in normal training procedures

(McGonigle, Migyanka, Glor-Schleib, Cramer, Frantangeli, Hegde, Shang & Venkat, 2013; Wachob & Pesci, 2016).

Another training program being tested is one which utilizes video footage of people with ASD, as well as an overarching explanation of what an LEOs role is when confronted with ASD interactions. Groups of officers who underwent the training were compared with those who had not (as a control) in a between-groups comparison of knowledge and confidence, measured by the score of a post-test. Results indicated that the training provided in this study (Sahara Cares, 2008) was associated with higher score on knowledge and confidence. Even though these scores increased, there was still not an indication of a complete understanding of ASD (Teagardin, Dixon, Smith & Granpeesheh, 2012) This strengthens the findings that traditional style, lecture and video-based classes are not exceedingly effective (Wachob & Pesci, 2017).

Some policing agencies in the United Kingdom have begun to probe the criminal justice system for information that could lead to more specialized training, or adaptations to current training methods available to LEOs. Parsons and Sherwood (2015) developed a symbol-based communication method (See Appendix B), which was centered on allowing for more effective communication between officers and those with disabilities. This symbol-based communication, titled the “widget sheet” simplified common items that are communicated routinely between officers and those being questioned or detained. This sheet had easily identifiable pictures which could help people, even those who were nonverbal, indicate their needs to LEOs. Furthermore, the rights and regulations that to which citizens were entitled, as well as other information was presented in concise and simplified English that would allow those with ASD or cognitive impairments to more easily understand (Parsons & Sherwood, 2015).

Other studies of the United Kingdom police departments have indicated that the most effective way to ensure officers are prepared adequately is by creating instruction with regards to ASD which would apply to the officer's specific role. In the Commonwealth of Kentucky, ASD classes are broader and do not specifically prepare officers for how they would come into contact in their specific departmental role (i.e. Patrol Officer, Detective, etc.) (R. Williams, personal communication, May 1, 2018). Dividing the training into modules specific for departmental roles that explain how LEOs will be directly affected by these interactions with ASD in the field were found to be more effective for the officers in the United Kingdom (Crane, Maras, Hawken, Mulcahy & Memon, 2016).

#### *Law Enforcement Officers' Perceptions Toward Mental Health Care, and Their Role*

When discussing the attitudes that officers possess about the mental health field, and those who work in it, it is important to understand that said LEOs often believe that the increase in community integration of those with disabilities into communities has not been adequately overseen. They believe they are now unfairly targeted for criticism for their perceived failure in responding to deinstitutionalization, something they blame on the mental health field (Price, 2005). When joining the force, LEOs were not joining to be a rolling mental health care provider with a gun. Given that there is an increased prevalence of disability/LEO interaction, LEOs place the blame on the mental health care system for the increase in criticism. Many officers, regardless of their reported distrust presented above, have a desire to work more closely with mental health experts and professionals (McLean & Marshall, 2010; Stedman, Williams, Borum & Morrissey, 2000). A way to ensure the positivity of these outcomes is through training instruction done jointly by a LEO and a mental health professional in the field (Price, 2005). This

would reduce the propensity of mental health professionals to view officers negatively, and simultaneously increase the necessary cohesion between both professions.

Some LEOs' attitudes towards disabilities may also be affected by a lack of understanding of the heterogeneity of mental differences (Modell & Cropp, 2007), further indicative of the general lack of knowledge being provided to them. When LEOs' perceptions and attitudes were reviewed qualitatively, some officers indicated that they based their perceptions of those with mental differences off of previous experiences with violent, psychotic individuals (Modell & Cropp, 2007). This would indicate that these officers had been primed to believe that situations involving those with disabilities would be inherently negative. This increased the levels of fear and anxiety when responding to calls involving any persons with developmental disability or other cognitive impairments (Modell & Cropp, 2007).

#### *How Might the Commonwealth of Kentucky be Representative of These Trends?*

ASD prevalence is increasing in the United States, including the Commonwealth of Kentucky. As discussed above, some states are beginning to create legislation requiring officers to be trained on ASD. The Commonwealth of Kentucky has no such training requirement. To our knowledge, no previous research has been published on the levels of training that officers are provided. Likewise, there has been no published research related to the confidence that officers possess about their ability to create interactions with positive outcomes here.

Previous research would lead to a few predictions about the current state of LEOs' knowledge and confidence with ASD. First, due to the lack of legislation requiring ASD training, there will be a high variance in knowledge and confidence levels. Second, those who have a higher level of knowledge will also have a higher level of confidence in their ability to interact with ASD. Lastly, responses will indicate a general lack of knowledge about those with ASD. It

is also predicted that the higher education the officers report, the higher the correctness score they will achieve on the survey.

## **Methods**

### *Survey*

Due to the need for valid and peer reviewed instrumentation, the current study did not include the development and implementation of a new survey. Instead, the instrument used for collecting data was in the form of a digitized, modified version of the Western Regional ASERT Autism Spectrum Disorder Survey (McGonigle et al., 2014). The survey was copied into a Google Form, a free online survey tool provided and secured by Google. This allowed for secure, anonymous storage of encrypted data, requiring two-point authorization to gain access.

Demographic information questions were added to the survey, as well as questions assessing the level of closeness that officers had with people with ASD ranging from “I do not know anyone with ASD” to “I have a family member with ASD” (refer to Appendix C). Participants were asked what their highest level of education was, as well as how often they interact with those with ASD outside and inside of work. Frequency of interaction with people with any disability was also obtained through the survey. The survey was further modified by the addition of qualitative, free response questions, which were designed to allow officers to discuss their opinions about their training, as well as what changes they wanted to see (refer to Appendix C).

### *Participants*

A total of 46 officers participated in the survey. At the time of data analysis, a total of 40 useable participant responses were used (five respondents were removed due to their area of operation being located outside of the Commonwealth of Kentucky, and one response was

obtained after data analysis was completed). Upon IRB approval, scripted recruitment emails were distributed across the state, ensuring that it would reach Kentucky LEOs who were trained at all major training academies. Academies included the Department of Criminal Justice Training (DOCJT), Kentucky State Police Academy, Louisville Metro Police Training Academy, and Lexington Police Department Training Academy. These academies are the only academies in the Commonwealth of Kentucky which can certify patrol LEOs. This was done in order to gain a broad understanding of all academies' effectiveness at producing LEOs who were knowledgeable and confident when interacting with those with ASD.

In order to begin the questionnaire, the officers had to read and accept the informed consent. Responses were then automatically recorded by Google Forms, and then analyzed with IBM SPSS. Data was completely anonymous; no identifying data was obtained on these officers. Participants had to be sworn LEOs who operated currently in the Commonwealth of Kentucky. Participants were asked to refrain from participating if they did not meet the aforementioned criteria.

#### *Dependent Measure*

Scores for the knowledge base portion of the survey were assessed by correctness, where the most correct answer was given a score of five, and least correct answers were given a score of one. These answers were averaged for each individual participant, so that the highest total score a participant could receive would be a five, and the lowest possible total score would be a one. Scores were then divided out of the highest possible score to create a percentage score for each participant.

Scores for the confidence portion were assessed by how high the participants rated their comfort with the specific interactions presented. The highest possible participant score was five,



and all answers were averaged into one total confidence score. The highest possible total score was five, and the lowest was one. Scores were then divided out of the highest possible score to create a percentage score for each participant.

The qualitative portion of the study, which was added, contained open ended free response sections, in which LEOs were asked questions such as, “What changes would you like to see in autism interaction training?” This section was created to assess what it was that the participants wanted to see in their training, as well as what their previous training may have lacked. It also allowed for participants to include information about what processes and training techniques were most received. Qualitative themes’ accuracy was checked through respondent validation.

### **Results**

Participants covered a wide range of demographics (refer to Table 1). Most of the participants were male (75%). All of the participants had at least completed high school. Officers ranged from ages 26 to 56 and older. Most of the participants knew someone with ASD (58.5%). Equal numbers of participants either did not know anyone with ASD or had a family member with ASD (19.5% and 19.5%, respectively). Most participants had a college degree or higher (65.8%). The majority of officers reported that they had interacted with people with ASD at least a few times per year (70%). Outside of work, most had either occasionally or never interacted with someone with ASD (70.7%). Mean scores for the knowledge-based section were 78% (SD = .388). For the confidence section, mean scores were 58% (SD = .905). Variability was higher among confidence scores than the knowledge scores (SD = .905, SD = .388).

---

Frequency

Percent

Overall	40	100%
Gender		
Male	30	75%
Female	10	25%
Age		
18 – 25	0	0%
26 – 35	15	36.6%
36 – 45	9	22%
46 – 55	13	31.7%
56 +	2	4.9%
Highest completed education		
Some high school	0	0%
High school	2	4.9%
Some college	10	24.4%
College	15	36.6%
Some graduate or professional school	5	12.2%
Graduate or professional school	7	17.1%
Knowing someone with ASD		
I do not know anyone with ASD	8	19.5%
I know someone with ASD	24	58.5%
I have a family member with ASD	8	19.5%
Out of work interaction with ASD		
Never	12	29.2%
Occasionally (a few times a year)	17	41.5%
Somewhat routinely (once every month or so)	5	12.1%
Routinely (a few times a month)	1	2.4%
Daily	5	12.2%
Work interaction with ASD		
Never	0	0%

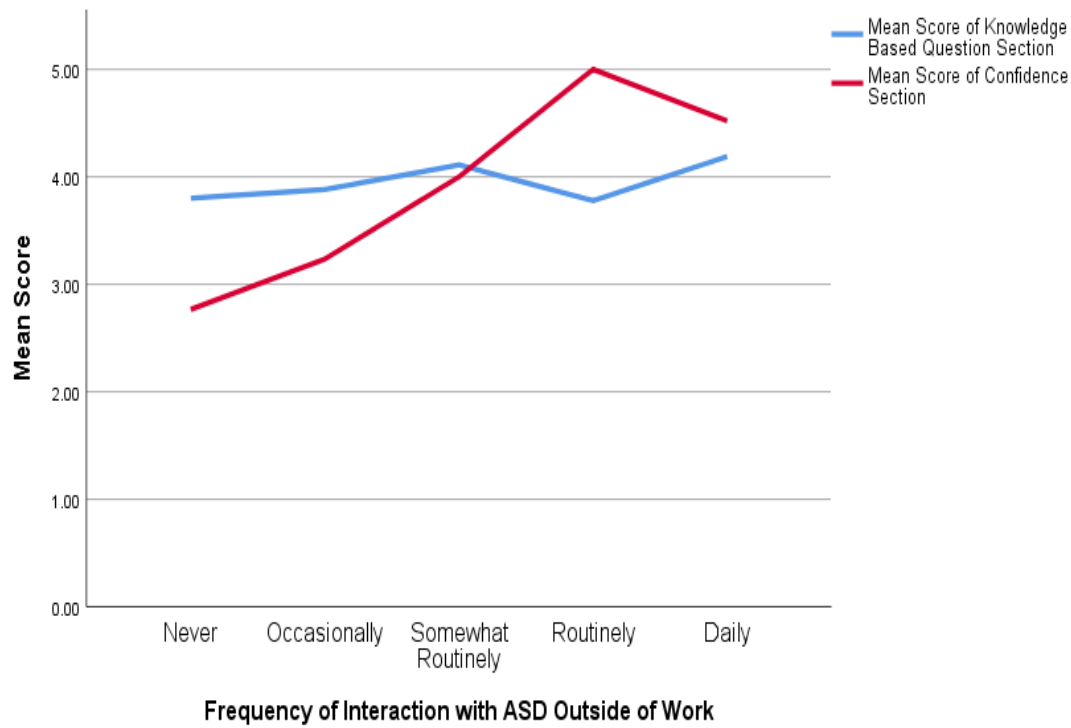
Rarely (less than once a year)	7	17.1%
Occasionally (a few times a year)	21	51.2%
Somewhat routinely (once every month or so)	5	12.2%
Routinely (a few times a month)	6	14.6%
Weekly (once or more a week)	0	0%
Daily	1	2.4%

*Table 1.* Frequency and percentage of participant demographics.

### *Bivariate Correlations*

Some statistically significant trends were found among different demographic variables and the scores on the questionnaire as shown in Fig. 1. The more experience with individuals with ASD outside of the work setting that an officer reported, the higher their scores on both mean correctness ( $r = .316, p = <.05$ ) and reported levels of confidence ( $r = .680, p = <.001$ ).

As seen in Fig. 2, the closeness of officers to people with ASD correlated to confidence in ability to interact positively with people with ASD as well ( $r = .557, p = <.001$ ). The closer ties an officer reported, the more likely it was for them to present responses indicating higher confidence. Closeness to people with ASD did not have a significant effect on knowledge scores. Interestingly, the level of education that officers had no statistically significant correlation with knowledge scores ( $r = -.054, p = .745$ ), nor confidence scores ( $r = -.264, p = .104$ ).



*Figure 1.* Effect of Frequency of Outside of Work Interaction with ASD on Knowledge About and Confidence with ASD Interactions. Officers mean scores on the confidence section were positively associated with more frequent interactions with people with ASD outside of work settings ( $r=.680, p = <.001$ ). The same was true for the knowledge section as well ( $r = .316, p = <.05$ ).

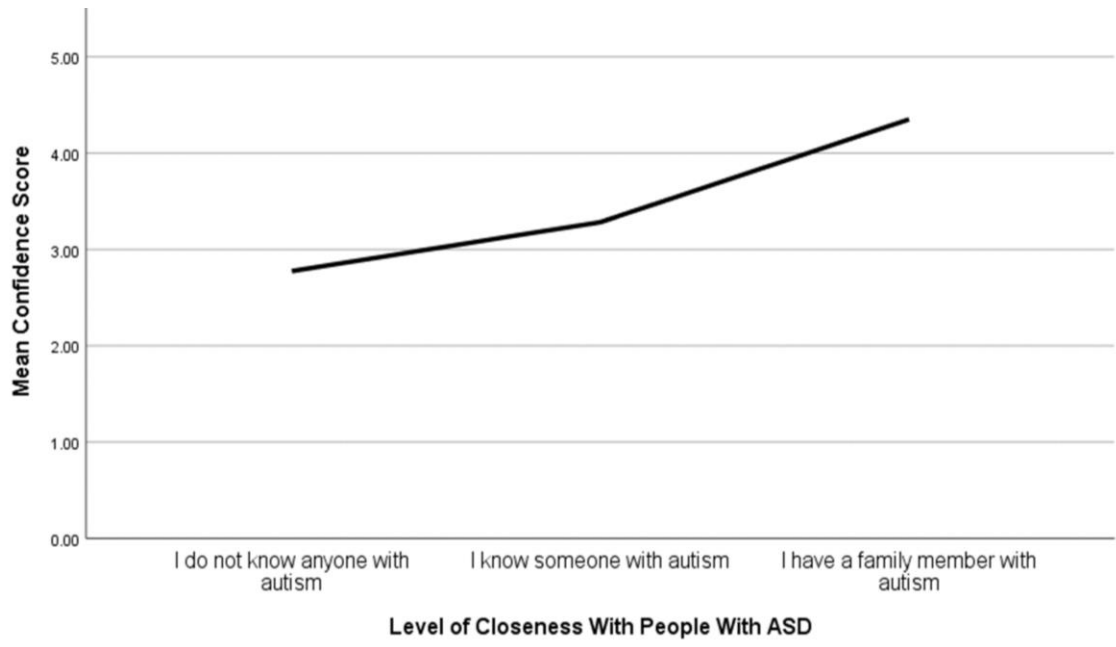


Figure 2. Effect of Reported Level of Closeness with People with ASD on mean Confidence Scores out of 5 ( $r = .557, p = <.001$ ).

### *Qualitative Themes*

On the qualitative, open ended, short answer response section of the survey, participants provided useful information with regard to their experiences with their own training, as well as their own opinions about how they should be involved in the mental health process. They also included information about some of the aspects they did not believe were effective during the training process.

Some participants understood the importance of training and were glad that they had received such. Those who were trained explained that:

“I enjoyed the overall learning process. I feel much more confident now because I’m able to recognize behavioral cues.”

Other participants indicated that they had received some education and training on ASD, however they requested more. In some cases, they had specific concerns that could easily be addressed by training with an ASD expert.

[With regard to ASD training, there needs to be] “more of it, because I am seeing more of it on a daily basis.”

“Information brings awareness, awareness can bring understanding.”

And,

[I would like] “to understand there’s different types of spectrums of autism and how to deal with it.”

Some participants’ comments portrayed a more insightful understanding of training needs, and a beginning understanding of the complexities of ASD. A multitude of these responses were confirming of some of the resources discussed above, and also proposed specific resources which they believed would increase the likelihood of positive interactions with people with ASD.

“New Jersey has a required class for all Police Officers to attend regarding AUTISM and EDP’s (emotionally disturbed persons).”

“How [can we] create databases for our autistic children within our community with access to keys on the best way to communicate with them when we are responding to a situation where the child is in crisis.”

And,

[We need] “more crisis response teams.”

Some participants had specific praise and critiques for the overall training process, as well as specific training for ASD. They generally indicated that there was a lack of training on ASD, and even pointed to a need for more training in general.

“I have not had specific autism training during my career as law enforcement. I think it’s training that all emergency personnel should attend to recognize [the need for].”

“Most officers receive very little training.”

And,

“Officers deal with mental health issues routinely but have to figure it out on their own. There needs to be more training.”

A few LEOs used the questionnaire to vent about serious frustrations they had about the training process. Some responses indicated a generally negative attitude towards their fellow officers with regards to having a true intrinsic drive towards bettering their understanding of mental health difference. Some participants indicated that this was their least preferred area of training and didn’t believe that they should have to deal with these individuals repeatedly. When asked what their least favorite part of training, they indicated:

“[Getting] officers to actually care.”

“It gets you out of your comfort zone.”

[We should] “commit those that are constantly [a] harm to themselves and others.”

One final trend in the qualitative responses was a call for face-to-face and hands-on approach to training. These LEOs either remarked that they had had direct contact with people with ASD or had requested such to learn the characteristics of ASD in a more tangible way.

“Training at DOCJT was very basic. I learned more from an autism event by parents of autistic children.”

[I want] “more classes where adults with autism participate with instruction.”

And,

“My son had autism and I have first-hand experience/training through this.”

### **Discussion**

This study yielded some important findings about LEOs’ understanding and confidence when interacting with individuals with ASD. Most importantly, the current results found that there were significant relationships between the officers’ reported levels of interaction outside of work with people with ASD, and their knowledge and confidence scores on the measuring instrument. It also revealed some of the frustrations that officers had with the mental health field, as well as those who were appointed to instruct them.

The scores of the survey instrument indicated scores that were higher than expected for knowledge base, but lower for confidence. Low knowledge and a blind confidence in ability were expected; however, results indicated that this was not the case. The knowledge score of 78% indicated that the participants were somewhat knowledgeable; however, there is still room to improve. When human health and safety are concerned, especially within a population that may need increased support and that is increasingly becoming integrated into the community, it is imperative that those sworn to protect the community are adequately trained in the symptomology of ASD and are comfortable in their abilities.

For the confidence section, scores were much lower than expected. Police are generally considered confident when it comes to public interaction, however when it comes to policing



those with ASD, the data shows that this is not the case. There are many different possible explanations for this occurrence. One may be that LEOs who did not know much about ASD were not confident, but the ones who were more competent in the area realized that there were more complex symptomologies and behaviors to keep in mind, and because training was not tied to a direct, concrete way to their duties, they would infer that they would not be entirely sure how to handle a situation of crisis with an individual with ASD.

For both confidence and knowledge, findings indicated that the reported frequency at which LEOs interacted with those with ASD outside of work, the higher their scores were (Fig. 1). It was also shown that the familiarity or closeness that officers had with individuals with ASD, the higher their confidence in handling a situation with an individual with ASD in crisis (Fig. 2). In both findings, the more personal or face-to-face interaction that the LEOs had with individuals with ASD, the higher they scored on the survey instrument.

Qualitative responses indicated that the participants wanted to see more personalized, face-to-face training with individuals with ASD. This not only supports the idea that these officers want to know about ASD, but that they understood that the best way for them to learn about and begin to understand ASD was to have personal interaction. If training was provided in such a way that allowed for this type of personal interaction, it is believed that training would become more effective.

#### *Trajectory of Future Training Methods for Kentucky LEOs*

The findings of this study may indicate a future trajectory for training officers on correct responses when those with ASD are involved and could also be used to create a better crisis intervention training and de-escalation for LEOs. When examining both the questionnaire, as well as the opinions that officers had about their training, and what they needed, clear trends can

be found. These trends call the following changes to be made to training: (1) Training should be focused more on providing opportunity for viewing the behavior and symptomology of those with ASD, following what was found by Teagardin et al. (2012), but not in a traditional classroom type environment. (2) A quick assessment screening tool should be created to allow officers to briefly assess whether the individual they are interacting with is displaying behavior that would indicate communication issues typical of individuals with ASD (Hayes, 2002). (3) The creation of a picture-based communication tool that officers could use to help communicate with those who display issues with communication (Parsons & Sherwood, 2015). (4) An adaptation to training that would allow for officers to be trained on important symptomologies and behaviors of those with ASD that could be applied to their specific role in their department (i.e. patrol officer, detective, CIT, etc.) (Crane et al., 2016). (5) The use of face-to-face interaction training, where officers become immersed and connected with individuals in the community with ASD (Price, 2005; Wachob & Pesci, 2017)

Future direction for this research should examine how this should be implemented, and what form of face-to-face interaction would be most effective for not only helping officer understand and recognize the intricacy of ASD, but at the same time allow for those in the community with ASD to understand and become comfortable with LEOs. This research could also be furthered through the inclusion of other types of departments, such as fire departments and emergency medical services. This would ensure positive outcomes for all crisis interactions between public safety and those with ASD.

### *Limitations*

There are a few limitations to the presented study. First, this study relied on self-report, and participants elected to take the survey themselves. Officers may not have relied on their own

intuition when participating in this survey. Also, because recruitment relied on participants to actively take the survey, those who took it may have been more interested in or knowledge on ASD. This could have skewed the answers negatively.

### **Conclusion**

Law Enforcement Officers have, of necessity, become an increased presence in the mental health field due to the increase in prevalence in the community of those who were once institutionalized. Historically, resources have not been made available to them to allow them to better serve this new community. Findings from this study indicate that officers in the Commonwealth of Kentucky are not entirely prepared, due to a lack of understanding, and a lack of confidence of ability to interact with those with ASD in a way which would provide a positive outcome. Knowledge scores were high; however, still left more to desire. The findings of this study suggest a future trajectory for LEO training that could lead to a more positive outcome for not only LEOs, but also those with ASD when both populations come into contact in crisis situations.

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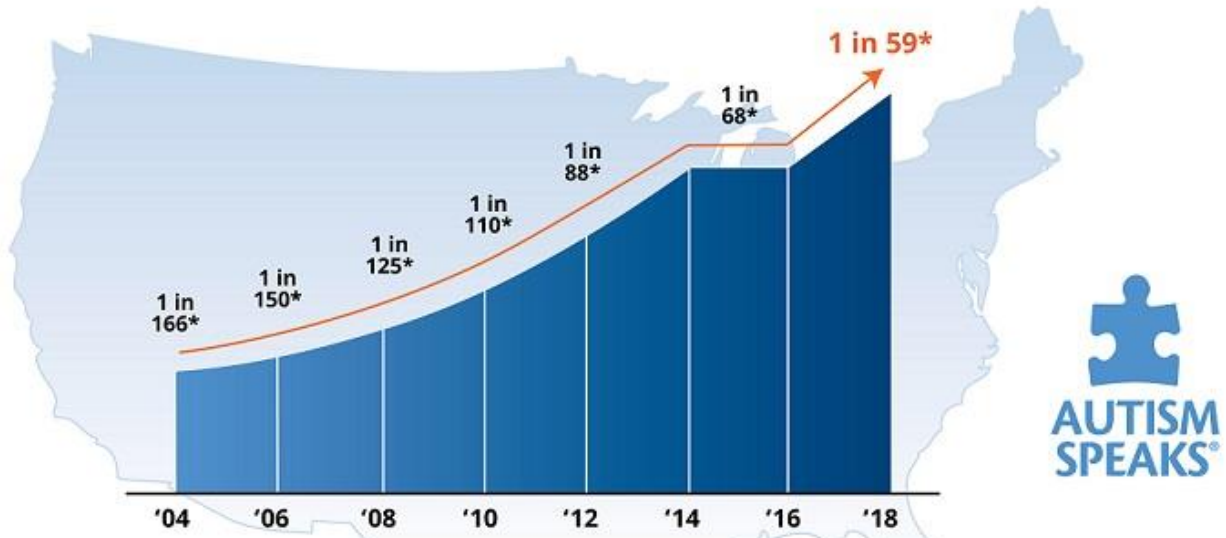
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Appendix A

Centers for Disease Control ASD Prevalence Graphic

### Estimated Autism Prevalence 2018



\* Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2018 figures are from 2014)

Appendix B

Widget Symbol Rights and Entitlements Leaflet:

New (top) vs Old (bottom)



## Appendix C

Edited Version of the Western Region ASERT Emergency Service Personnel Autism Spectrum

Disorder Survey Used in the Study

**Information about You****Gender:**        \_\_\_\_\_ Male \_\_\_\_\_ Female**Age:**            \_\_\_\_\_ 18-25

\_\_\_\_\_ 26-35

\_\_\_\_\_ 36-45

\_\_\_\_\_ 46-55

\_\_\_\_\_ 56+

**Familiarity with Autism:**

\_\_\_\_\_ Do not know anyone with autism

\_\_\_\_\_ Know someone with autism

\_\_\_\_\_ Have a family member with autism

\_\_\_\_\_ I have an Autism Spectrum Disorder

**Highest Level of Education:**

\_\_\_\_\_ Some High School

\_\_\_\_\_ High School

\_\_\_\_\_ Some College

\_\_\_\_\_ College

\_\_\_\_\_ Some Graduate or Professional School

\_\_\_\_\_ Graduate or Professional School

**How long have you worked as a law enforcement officer in year?**

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**What class city do you work in/ what is the approximate population of your area of jurisdiction?**

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**Have you ever interacted with a person with autism?**

- Yes
- No
- Maybe/I don't know

**How often do you interact with a person with autism outside of work?**

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Daily

**How often do you interact with a person with mental disability while working?**

- Never
- Rarely (less than once a year)
- Occasionally (a few times a year)
- Somewhat Routinely (once every month or so)
- Routinely (a few times a month)
- Weekly (once or more a week)
- Daily

**How often do you interact with a person with autism while working?**

- Never
- Rarely (less than once a year)
- Occasionally (a few times a year)
- Somewhat Routinely (once every month or so)
- Routinely (a few times a month)
- Weekly (once or more a week)
- Daily

**1. A person with autism can be identified by his/her physical characteristics.**

- Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**2. People with Autism are a heterogeneous group, and the characteristics of Autism**

**look**

**different in each person.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**3. Autism causes mental illness.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**4. A person with autism is easily identified by his/her behavioral characteristics.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**5. All persons with autism respond to the same strategies and techniques to**

**communicate.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree



6. **Characteristics of autism include difficulty with social interactions, communicating with others, repetitive behaviors and sensory processing difficulties.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

7. **For a person with Autism hand flapping can be a form of communication.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

8. **Restraining a person with Autism who is yelling, screaming and/or biting themselves should be the first line intervention to gain control of the situation.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

9. **Most people with Autism are non-verbal and have limited ability to talk.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**10. During periods of severe stress, people with autism may become aggressive towards others or injure themselves.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**11. A person with autism has little interest in their environment and limited awareness of sensory stimuli such as sights, sound, smells, touch and taste.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**12. I am comfortable interacting with a person with autism.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**13. I would know how to respond to a person with autism in a medical crisis.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**14. I would know how to respond to a person with autism in a mental health crisis situation.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**15. I am familiar with other medical conditions that are often associated with autism.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**16. I am confident in my ability to approach and communicate with a person with autism.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**17. I am confident that I could recognize the characteristics and behaviors of a person with autism.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**18. In most cases, people with autism have an understanding of cause and effect, and comprehend the consequences of their actions.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**19. A person with autism that is anxious responds best when using distractions and when there are multiple speakers giving directions on ways to relax.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**20. A person with autism may purposefully be rude by mimicking what you say or repeat lines from TV or videos.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**21. . Autism is a disorder that is most common in the Caucasian community.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**22. Regardless of the communication and language ability of a person with autism, best approaches usually require detailed explanation, visuals and gestures and involve multi-step directions.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**23. Using a hands on approach (grabbing or restraining) a person with Autism during a crisis situation may create fear, anxiety and resistance.**

Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**24. A person with Autism has the ability to handle increased anxiety and does not appear to affect their mood or interactions with others.**

- Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

**Comments about training practices in the Commonwealth of Kentucky**

If you were trained on how to interact with people with autism, what did you like most about your training?

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What did you like least about this training?

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What changes would you like to see in mental health training?

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What changes would you like to see in autism interaction training?

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If you have any additional comments, please provide them below.

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