Experience Is Not Enough: Self-Identified Training Needs of Police Working with Adolescents

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Abstract Police receive extensive training due to the complexity and challenges of their work. Surprisingly, most police officers receive minimal training on how to understand and interact with adolescents. The current study included data from 1,030 law enforcement officers from 24 police departments evaluating perceived readiness to interact and work with adolescents in the community. We examined overall training needs, and then tested how experience in law enforcement and position or rank impacted self-identified training needs. Rank was associated with police officer perceptions of adolescents and related training needs. Compared with patrol officers, school resource officers indicated that they believed they had the skills needed to effectively work with adolescents [$P = 0.001$, odds ration (OR) $= 2.5$]. Beat or area patrol officers were significantly less likely than school resource officers to report feeling equipped to work with adolescents who have experienced trauma compared with new recruits ($P < 0.001$, OR $= 0.3$) and other non-patrol police officers ($P = 0.001$, OR $= 0.6$). School resource officers were significantly more likely to view adolescents as positive assets to the community ($P = 0.003$, OR $= 2.8$), and were significantly less likely to understand why Black adolescents or other adolescents of colour might mistrust police compared with both new recruits ($P < 0.001$, OR $= 0.2$) and patrol officers ($P < 0.001$, OR $= 0.5$). Overarching training needs are illuminated by these unique data.

Introduction

There is growing national recognition that law enforcement training should include content specific to working with adolescents, from addressing strategies to prevent trauma associated with family member arrest (International Association of Chiefs of Police, 2014a) to promoting effective and safe adolescent community member–police interactions (International Association of Chiefs of Police, 2014b). Despite the frequency and potentially iatrogenic impact of encounters between police and youth (del Toro *et al.*, 2019), very little training for police emphasizes evidence-based strategies for

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working with adolescents (Thurau et al., 2013). Training for law enforcement officers (LEOs) to understand and work effectively with adolescents is crucial, because of ease of misinterpreting behaviours of youth. Problems including misunderstanding adolescents, assuming intentionality in adolescents' conduct, racially biased responses to adolescents, biased responses to adolescents based on other social identifiers, and unnecessary escalation when interacting with adolescents are often magnified in interactions between LEOs and black, indigenous, and other young people of colour and Latinx youth (hereafter, referred to as BIPOC and Latinx). Persisting consequences of such interactions can include deepening justice system involvement resulting from avoidable arrests that are disproportionately an outcome for youth from BIPOC and Latinx communities. The current study uses data collected from LEOs in 24 US police departments to better understand training needs specific to working with adolescents.

Police or LEOs are a ubiquitous presence for adolescents (youth aged 12–17 years) in the USA. In 2018, approximately 730,000 children and adolescents were arrested (Office of Juvenile Justice and Delinquency Prevention, 2020), yet only approximately 1% of basic training in police academies is dedicated to juvenile justice issues (Thurau et al., 2013). When it occurs, training does not include any focus on some of the inadequacies of LEO responses to youth in the United States, including adolescent development, working with youth who have mental health problems, or response to adolescents using a developmentally and trauma-informed, much less addressing the federally mandated obligation of states to address disproportionate minority contact. Training information is typically offered without depth omitting scenario-based exercises by which LEOs could imagine or practice how assertions of authority are best communicated, or excludes follow-up evaluation (e.g. testing for understanding, seeing what strategies are actually applied in the field). The mismatch in community needs versus LEO training can be harmful to adolescents: LEOs are the gatekeepers of the juvenile justice system but are not trained to use developmentally appropriate, trauma-informed, evidence-based approaches in their interactions with youth (Thurau et al., 2013).

Advancing law enforcement training and support for LEOs may improve police officers' comfort and ability to interact with adolescents in an effective and safe manner, thereby reducing unnecessary escalation, use of force, and arrest (Blumberg et al., 2018). Police/community relations, also critically important, could be enhanced through improved relations with youth, resulting in increased perceptions of the legitimacy of police interactions (Tyler et al., 2015). Yet, we know very little about police perceptions about, attitudes towards, and readiness to work with those community members they are sworn to serve—especially adolescents. Such information is essential in developing engaging and effective trainings for LEOs on policing adolescents. Next, we discuss three core areas of exisiting trainings on policing adolescents and the importance of incorporating such content into trainings.

Police training specific to interacting with adolescents

Building off of previously developed works (Thurau et al., 2013), we highlight three core areas for training: 1) adolescent development, 2) trauma histories, and 3) mental health problems and disabilities among adolescents. Training in these core areas could have a particular impact on adolescents from BIPOC and Latinx communities. Potential benefits of improved training in these realms include greater improved LEO understanding of adolescents, increased safety during interactions, reduced need for arrest, reduced use of force, and increased positive interactions (Thurau, 2009; LaMotte et al., 2010; Skorek and Westley, 2016). Moreover, interactions between police and adolescents in BIPOC and Latinx communities need to—and could—improve (Solis et al., 2009; Vera Sanchez and Adams, 2011). Advances may

lead to increased individual- and community-level confidence and trust in LEOs and reduced disparities including in use of force (Thurau, 2009; Leiber and Fix, 2019). Training that helps LEOs understand adolescent development, the impact of trauma and mental health issues, the effects of racial (and other) bias on all behaviour including police, and cultural influences on youth behaviour when interacting with police might be expected to support those goals (Thurau *et al.*, 2013; Eberhardt, 2020).

Adolescent development

If police are not taught that adolescents are different, namely that adolescents process information about the world differently, then LEOs' default assumption about youth will be to liken them to mini adults. Such false assumptions place youth at risk and the LEO in the position of escalating situations out of their own ignorance. Developmental differences between adolescents and adults at the psychological and neurobiological level are consistently documented in research and recognized at the federal level in the US juvenile justice system (Cohen and Casey, 2014). Adolescence marks a critical period of development during which individuals begin to separate themselves from their families and become more autonomous. As a result, adolescents may present themselves—and perhaps be viewed by others—as more independent and competent than is often the case. Relative to adults, adolescents are less neurophysiologically developed and demonstrate normatively diminished decision-making capacity and increased susceptibility to external influence (Steinberg and Scott, 2003).

Developmental differences separating adolescents from preadolescent children and adults warrant a different policing and broader justice system approach for adolescents. Adolescents demonstrate generally comparable cognitive maturity to adults by approximately age 16 years, and are therefore more cognitively mature compared with preadolescent children, yet psychosocial differences between

adolescents and adults remain well after age 18 years (Icenogle *et al.*, 2019). This crucial difference in development of cognitive versus psychosocial maturity is termed the maturity gap and it warrants a different policing and broader justice system approach for adolescents. Alongside empirical support for the maturity gap, emerging evidence suggests that the dual systems theory holds across youth and must also be considered in justice system responses to youth. The unique neurodevelopmental status of adolescents renders them less able to effectively regulate their emotions, thus contributing to higher levels of irrational, risky, and aggressive behaviour (Steinberg and Scott, 2003; Shulman *et al.*, 2016). In brief, adolescents develop motivation and reward neural circuitry early in their striatum, which encourages risky behaviour and reward seeking behaviour, but development in the prefrontal cortex is a slower process, meaning inhibition and judgement are lower and thus adolescents are less able to mitigate risk until adulthood. Taken together, the maturity gap and dual systems theory largely answer the question of why adolescents may know the difference between right and wrong (e.g. what to do and not do in presence of LEOs), but have difficulty managing their behaviour, and has important implications for training and practice in policing adolescents.

Adolescents are more present-focused than adults, more impulsive, more driven by emotions and the prospect of immediate rewards, and more likely to be influenced by external factors (Steinberg, 2007, 2017). They show poorer judgement and planning, particularly when emotionally activated. These differences, observed in decades of observational and laboratory studies of behaviour and cognition, have received more attention as research on brain development has highlighted differences in brain structure and function between adolescents and adults (Steinberg, 2005). Difficulties in police interactions are magnified with adolescents from BIPOC and Latinx communities. In such interactions, both youth and police may bring preconceptions and expectations

about one another's motivations and conduct. Police officers present with their own biases and preconceptions about the people they serve. These include overestimating age and capacity, misinterpreting behaviour as defiant, and under-recognizing fear and anxiety (Goff *et al.*, 2014; Fridell, 2016; Eberhardt, 2020). As a result, LEOs may be more likely to interpret youth behaviour and intent, particularly when exhibited by non-White youth, in a manner that supports confirmation of negative biases (Voigt *et al.*, 2017). Adolescents—particularly adolescents in BIPOC and Latinx communities—are liable to distrust LEOs and present with perceptions of police as illegitimate (Desmond *et al.*, 2016; Peck and Jennings, 2016; Trinkner and Goff, 2016). Altogether, possible misperceptions from LEOs and mistrust from adolescents can increase the likelihood for negative adolescent–police encounters including avoidable arrest and use of force.

Adolescents often prioritize and respond to peer opinion and pressure over compliance with requests from LEOs (Weitzer and Brunson, 2009). They may behave impulsively and become emotional more quickly than adults when interacting with LEOs. In addition, racial dynamics between community members and police officers can impact how adolescents perceive—and are perceived by—LEOs. Accordingly, more comprehensive training of LEOs in culturally informed models of adolescent development and behaviour is warranted, as limited training or brief orientation constricts the tools and strategies available to LEOs (Thurau, 2009; Greenberg, 2017).

Trauma, mental health, and disabilities among adolescents

The above features of adolescence are very often intensified by repeated negative contact with LEOs, histories of trauma, mental health problems, and disabilities. Problems with impulsivity, misinterpretation of other's motivations and intent, comprehension, difficulty with self-expression, and elevated threat perception may all magnify adolescent impulsivity and reactivity. Prior trauma and mental health problems increase risk for justice system involvement, and while most youth with such experiences do not become involved in the justice system, system-involved youth typically present with histories of trauma and mental health disorders (Teplin *et al.*, 2002; Aarons *et al.*, 2004; Abram *et al.*, 2013; Baidawi and Piquero, 2020).

Given most youth in the justice system have histories of trauma (Abram *et al.*, 2013), many will have over-reactive threat response systems that may result in escalation and negative encounters with police. Studies consistently document high rates of mental health disorders in youth involved with the justice system, with over half meeting criteria for a mental disorder, even when excluding those whose behavioural problems led to their system involvement (Teplin *et al.*, 2002; Abram *et al.*, 2013). Additionally, adolescents with disabilities—particularly neurodisabilities and cognitive disabilities—are significantly overrepresented among those who interact with the child welfare and juvenile justice systems (e.g. Aarons *et al.*, 2004; Baidawi and Piquero, 2020).

Research indicates many LEOs are unprepared to respond to adolescents who have experienced trauma (Ko *et al.*, 2008), have limited knowledge about mental health needs of youth (Wells and Schafer, 2006; Thurau, 2009), and are unfamiliar with best practices in responding to adolescents with disabilities (Aarons *et al.*, 2004). In a review of policing training in the USA, of 42 states that offer training on working with adolescents, only 9 included information specific to mental health (Thurau *et al.*, 2013; Thurau and Or, 2019). Police officers interact on a regular basis with youth who have both trauma histories and mental health problems. Consequently, their understanding of how these circumstances impact youth responses—including to them—and of how to most effectively work with youth, is critical. Understanding the nexus of needs based on history of trauma, mental health problems, and disability among adolescents is necessary to advance positive outcomes when

officers respond to calls for service, intervene in crises, and interact with adolescents in varied situations (Merkwae, 2015). Little is known about the extent to which issues related to adolescence are included in broader mental health training courses for police officers, including crisis intervention team training (Kubiak *et al.*, 2019). Further, it remains unknown whether (and if so what type of) experience on the job impacts skills in policing adolescents.

Interactions between police and black, indigenous, and other adolescents of colour

Due to historical and systemic racism, BIPOC and Latinx communities have higher surveillance and contact with police (Fagan and Davies, 2000; Brunson and Miller, 2006). More specifically, from 2013 to 2018, Black-identified adolescents were 2.6 times more likely to be arrested than White-identified youth (Office of Juvenile Justice and Delinquency Prevention, 2020). Racial disparities are present even after accounting for differences in socioeconomic status (Engen *et al.*, 2002; Tapia, 2010). Members of BIPOC and Latinx communities (including adults) are subjected to approximately three times more threat of force by LEOs compared with members of White communities (Hyland *et al.*, 2015). Given elevated rates of witnessed and direct negative experiences, mistrust in LEOs is likely to be high among BIPOC and Latinx adolescents (Desmond *et al.*, 2016; Peck and Jennings, 2016).

Mistaken beliefs and perceptions that are generally present in American adults (e.g. a tendency to see Black children and adolescents as older than they are chronologically) (Goff *et al.*, 2014) will presumably also be present in police (Eberhardt, 2020). These biases may be mitigated by increasing understanding and ethnocultural empathy among LEOs (Fix, 2020). Through improved understanding of adolescent development and behaviours, LEOs may make more individualized appraisals of youth and begin to identify errors in their thinking

and responding to adolescents in BIPOC and Latinx communities. As LEOs refine their ability to decrease inherent biases or preconceptions about adolescents, they may be better equipped to recognize their other biases, like racial and gender biases—particularly those specific to Black boys and girls (Goff *et al.*, 2014; Eberhardt, 2020). Decreased influence of bias and consequently more accurate understanding of youths' experiences is an important first step toward reducing humiliation of and perceived and actual disrespect towards adolescents, use of force against adolescents in BIPOC and Latinx communities, and racially disproportionate arrests.

Current study

Adolescents present with unique developmental maturity in that they often seem more mature and capable of adult-like judgement and reasoning than they are. Thus, they require a specialized set of skills for professionals who work with them. LEOs—regardless of their position—are likely to directly or indirectly interact with adolescents. It remains unknown whether LEOs feel they are adequately prepared to effectively police adolescents, and whether experiences in policing (years on the job and type of position/duties) impact perceptions of policing adolescents. In the current study, we evaluated LEOs' assessment of their own training needs related to working with adolescents. Additionally, we tested whether and how years of experience and current position/rank in a law enforcement agency impacted training needs, readiness to work with adolescents, and perceptions of adolescents. The current study informs law enforcement training on working with adolescents through the following research questions.

Research Question 1

How do LEOs assess their own attitudes towards adolescents, ability to work with adolescents, and beliefs about building skills to work effectively

with adolescents, including with adolescents who have experienced trauma or who have mental health issues? This research question was exploratory, so we did not have related hypotheses.

Research Question 2

How does number of years in law enforcement influence LEOs' self-reported attitudes towards adolescents, ability to work with adolescents, and beliefs about building skills to effectively work with adolescents? This research question was also exploratory, so we did not have related hypotheses.

Research Question 3

How does a police officer's/LEO's assignment in her/his/their agency influence self-reported attitude towards, ability to work with, and beliefs about building skills to effectively work with adolescents? We hypothesized that LEOs who directly interacted with adolescents on a regular basis through their work (e.g. patrol officers, investigators, and other officers in specialized units) would demonstrate a greater understanding of skills needed to work with adolescents and have more supportive views about working with adolescents compared with officers in command positions with little to no regular interaction with adolescents.

Materials and methods

Participants

Participants were 1,030 LEOs recruited from 24 police departments across the USA. Over half of these jurisdictions had marked histories of poor interactions with community members, including youth. Those who participated in the study completed a baseline paper survey as a part of a training course entitled *Policing the Teen Brain* (Thurau, 2009) in 2017, 2018, or 2019. Surveys were completed immediately before the *Policing the Teen Brain* training. Law enforcement agencies

represented multiple geographic regions and included urban and rural areas. LEOs represented small, medium, and large agencies as well as town, county, and municipal police agencies. Descriptive characteristics of the participating LEOs and study measures are presented in Table 1, along with descriptive features of sites served by the 24 police departments (City Data, 2021).

Measures

Demographic information. Limited demographic information was available to ensure anonymity for participating LEOs and police agencies. Participants self-reported their current law enforcement position and the number of years worked in that position. Number of years in law enforcement was coded into four categories: 0–5 years, 6–10 years, 11–15 years, and 16+ years. Law enforcement position was coded into four categories: new recruit, patrol officer, school resource officer, and other officer (i.e. juvenile detective, community relations, and juvenile probation officer), and command.

Police self-identified training needs specific to adolescents. Using the Law Enforcement Training Assessment survey items, we measured self-identified training needs including beliefs about and attitudes towards working with adolescents (Thurau, 2017). For the purposes of the current study, we focused on individual items to get a more nuanced and richer understanding of LEOs' readiness and attitudes towards working with adolescents, as well as their views on training specific to adolescents.

Data analysis

There were 42 cases with missing data on position within the agency, and 27 cases with missing data on number of years in the agency; data appeared to be missing at random as they represented cases from different training sites and years. Thus, these cases were not included in the current study. Descriptive statistics and bivariate correlations of

Table 1: Characteristics of participating LEOs and participating sites

	n (1,043)	%
Years in law enforcement		
0–5 years	355	34.0
6–10 years	205	19.7
11–15 years	207	19.8
16–20 years	131	12.6
21 years or longer	145	13.9
Current profession		
New recruit	74	7.1
Patrol officer	462	44.3
School resource officer	220	21.1
Command	62	5.9
Probation	66	6.3
Detective	52	5.0
Community relations	40	3.8
Other	67	6.4
Police dept site characteristics		
Population Size of Site Served		
1–50,000	70	7.4
50,001–100,000	67	7.1
100,001–400,000	165	17.4
400,001+	644	68.1
Predominantly urban site served	866	91.5
Poverty rate of site served		
5–10%	117	12.4
10.1–15%	422	44.6
15.1–20%	209	22.1
20.1%+	198	20.9
Proportion of site served Black race		
0–10%	223	23.6
10.1–20%	42	4.4
20.1–30%	190	20.1
30.1–50%	464	49.1

Continued

Table 1: Continued

	n (1,043)	%
50.1%+	27	2.9
Homicide rate of site served		
0/100,000 citizens	106	11.2
1–10/100,000 citizens	349	36.9
11–20/100,000 citizens	0	0.0
21–30/100,000 citizens	464	49.1
31+/100,000 citizens	27	2.9

Note: Most 'other' roles included working in correctional settings ($n = 12$), in recruiting ($n = 7$), in investigations ($n = 6$), or as plain clothes officers ($n = 4$). Predominantly urban = included 90% or greater proportion of the site population served residing in an urban community. Homicide rate of site served is based on a rate per 100,000 citizens.

measures used in this study are displayed in Table 1. To test whether number of years in law enforcement and LEO position within the agency influenced perceptions and confidence as reported on the LETA, we conducted a series of Chi-square tests (for individual LETA items).[1] Bonferroni correction was used to correct family-wise error ($0.050/15 = P = 0.0033$), so values less than 0.0033 were deemed significant. Follow-up Chi-square tests were conducted to evaluate for which groups (based on LEO rank) statistically significant differences were present; $P < 0.0033$ was again the criterion for significance.

Results

Law enforcement training assessment

Table 2 displays both the overall percentage of participating officers who indicated they agreed with

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[1] Given our finding that years of experience did not—but that rank or role did—significantly impact responses for LEOs as a whole, we also tested whether years of experience impacted how LEOs' viewed adolescents within rank. The only rank with sufficient power to conduct such analyses was the rank of patrol officer. Results indicated responses did not significantly differ by years of experience on any of the LETA items within the patrol officer group.

Table 2: Agreement with for police self-identified training needs specific to adolescents

Item number and content	% agree
1. I feel equipped to recognize and work with youth with mental health issues.	65.8
2. I feel equipped to recognize and work with youth who have experienced trauma.	60.8
3. I feel equipped to help youth regulate their behaviour.	62.7
4. I feel equipped to refer youth to resources in my community for support.	48.8
5. Learning how to conduct effective interactions with youth prevents officers from performing more important activities.	11.1
6. Learning how to conduct effective interactions with youth is a new fad in policing that will soon be replaced with another fad.	21.2
7. Learning how to conduct effective interactions with youth does not provide officers with enough guidance for responding to youth.	27.1
8. Learning how to conduct effective interactions with youth takes good police officers and turn them into ineffective social workers.	19.0
9. Young people are positive assets to my community.	85.7
10. It is important for police officers (or someone with my job description) to build relationships with youth.	97.1
11. As a police officer (or someone with my job description) I can help eliminate unequal treatment of youth.	83.6
12. I have the skills necessary for interacting effectively with youth.	77.6
13. I feel comfortable starting a conversation with youth that I don't know.	91.0
14. Police officers can have a positive impact on youth without taking time away from their law enforcement duties.	94.2
	79.1

Table 2: Continued

Item number and content	% agree
15. I understand why some racial minority teenagers might be suspicious of the police.	
16. I understand that adolescents' brains make them perceive and react differently than adult brains.	90.8
17. I understand that young people who have experienced trauma are more likely to perceive danger and overreact in tense situations.	92.5
18. Interactions between police officers (or someone with my job description) and youth have little impact on the lives of youth.	13.2

Note: Each item is rated as true or false.

a particular item. Results indicated that many LEOs do not feel equipped to effectively interact with youth. Over one-third of officers indicated they did not feel they had the skills necessary to work with youth who have mental health problems (34%) or trauma histories (39%), or more generally to help youth regulate their behaviours (37%). Over half (51%) were unclear about community resources for adolescents relevant to policing. Moreover, only 26% indicated they felt proficient in all four areas. Lastly, despite these acknowledgements, only 22% indicated explicitly that they did not believe they had the requisite skills to interact effectively with adolescents.

Further, a sizeable minority of LEOs indicated that they believed that understanding youth was not important or not useful, with 48% endorsing at least one of four related statements. For example, 21% described such training efforts as a fad and 19% said they thought such efforts were going to turn them into ineffective social workers.

Despite LEOs' lack of general perceived readiness, many also indicated that they felt equipped to work with adolescents in some capacity.

Ninety-two percent of the officers described feeling comfortable starting a conversation with an unknown adolescent and 95% of officers recognized that experiences of trauma can impact adolescent behaviour. Officers also described believing it is important for them to build relationships with adolescents (98%) and that they could contribute to eliminating unequal treatment of youth (84%). It is worth noting that 95% of respondents believed that LEOs can have a positive impact on youth without taking time away from or inhibiting other duties. Still, only 56% of officers endorsed all of these items.

Police self-identified training needs specific to adolescents by experience and rank

A series of Chi-square tests for independence were run to determine whether and how years of experience in law enforcement and law enforcement rank impacted item responses (see Table 3). Years of experience significantly impacted responding to two individual items on the LETA. These included feeling equipped to recognize and work with youth who have mental health problems ($\chi^2(4) = 20.79$, $P < 0.001$). There was also a significant association between years in law enforcement and why some adolescents in BIPOC and Latinx communities might mistrust LEOs ($\chi^2(4) = 27.63$, $P < 0.001$). For each of these items, LEOs with the least (0–5 years) or most (20+ years) experience agreed with these items the most, while those in the middle range of years of experience (6–10 years, 11–15 years and 16–20 years) agreed least with these items.

When data were examined by law enforcement rank, a more nuanced pattern of responding emerged (see Table 2 for more detail including percentages by LEO rank). School resource officers were significantly less likely to understand why BIPOC adolescents might mistrust LEOs compared with both new recruits [$P < 0.001$, OR = 0.2, CI = (0.1–0.5)] and patrol officers [$P < 0.001$, OR = 0.5, CI = (0.3–0.7)]. Similarly, other LEOs were significantly less likely to understand

such mistrust in LEOs among BIPOC adolescents in comparison to new recruits [$P = 0.002$, OR = 0.5, CI = (0.4–0.8)] and patrol officers [$P < 0.001$, OR = 0.2, CI = (0.1–0.6)]. Patrol officers described being significantly less equipped to work with adolescents who have mental health problems compared with new recruits [$P = 0.002$, OR = 0.4, CI = (0.2–0.7)] and school resource officers ($P < 0.001$, OR = 0.5, CI = (0.4–0.7)). School resource officers were significantly more likely than patrol officers—those working in neighbourhoods who are the uniformed frontline of law enforcement—to agree with statements about adolescents being positive assets to the community [$P = 0.003$, OR = 2.8, CI = (1.4–5.6)] and report having the skills to interact effectively with youth [$P = 0.001$, OR = 2.5, CI = (1.41–4.40)]. Additionally, patrol officers indicated they felt significantly less equipped to work with adolescents who have experienced trauma ($P = 0.002$) compared with new recruits [$P < 0.001$, OR = 3.1, CI = (1.7–5.5)] and other LEOs [$P = 0.001$, OR = 2.1, CI = (1.1.4–3.9)].

School resource officers felt significantly more equipped to help adolescents regulate their behaviour than did patrol officers [$P = 0.001$, OR = 2.4, CI = (1.7–3.5)]; also in comparison with school resource officers, commanders [$P = 0.001$, OR = 0.4, CI = (0.2–0.7)] felt significantly less equipped to help adolescents regulate their behaviour. New recruits were significantly more likely to endorse the statement, 'I feel equipped to refer youth to resources in my community for support' compared with both patrol officers [$P < 0.001$, OR = 2.6, CI = (1.6–4.5)] and school resource officers ($P = 0.001$, OR = 2.6, CI = (1.5–4.6)).

Patrol officers also were significantly more likely to endorse statements indicating negative views of trainings with adolescents. Patrol officers (28.5%) endorsed viewing training specific to policing adolescents as being 'just a fad' significantly more often than school resource officers [8.0%; $P < 0.001$, OR = 4.6, CI = (2.2–9.3)] and other LEOs [13.5%; $P < 0.001$, OR = 2.5, CI = (1.5–4.2)].

Table 3: Chi-square tests for independence by type of position in law enforcement

Training need component	χ^2	Recruit % agree	Patrol % agree	SRO % agree	Other LEO % agree	Command % agree
It is important for police officers (or someone with my job description) to build relationships with youth.	6.9	100.0	95.9	97.6	98.3	100.0
Police officers can have a positive impact on youth without taking time away from their law enforcement duties.	2.7	95.7	93.0	95.2	96.0	93.8
I feel comfortable starting a conversation with youth that I don't know.	2.9	91.3	90.6	90.4	90.9	97.9
I understand why some racial minority teenagers might be suspicious of the police.^	24.3***	91.9[a,b]	83.0[c,d]	69.5[a,c]	77.8[b,d]	79.7
Young people are positive assets to my community.	18.6**	94.2	80.6[a]	92.1[a]	89.1	87.5
As a police officer (or someone with my job description) I can help eliminate unequal treatment of youth.	11.3*	86.8	79.9	83.2	89.1	72.9
I have the skills necessary for interacting effectively with youth.	12.7*	82.4	73.4[a]	87.3[a]	80.1	75.0
I feel equipped to recognize and work with youth with mental health issues.	20.9***	78.1[a]	59.3[a,b]	74.1[b]	68.2	67.7
I feel equipped to recognize and work with youth who have experienced trauma.	23.2***	78.1[a]	53.7[a,b]	62.7	66.2[b]	67.7
I feel equipped to help youth regulate their behaviour.	31.7***	71.6	54.8[a]	74.7[a,c]	66.1	52.5[c]
I feel equipped to refer youth to resources in my community for support.	17.1**	68.5[a,b]	45.3[a]	45.4[b]	54.1	50.8
Learning how to conduct effective interactions with youth does not provide officers with enough guidance for responding to youth.	12.8*	19.4	29.9	21.1	22.3	42.0
Learning how to conduct effective interactions with youth is a new fad in policing that will soon be replaced with another fad.	31.7***	14.3	28.5[a,b]	8.0[a,c]	13.5[b]	25.0[c]
Learning how to conduct effective interactions with youth takes good police officers and turn them into ineffective social workers.	20.5***	13.0	25.7[a,b]	11.6[a]	13.0[b]	14.0
Learning how to conduct effective interactions with youth prevents officers from performing more important activities.	20.6***	8.6	14.0[a]	0.9[a,c]	7.5	18.4[c]

Note. Questions are sorted by highest agreement to lowest statement agreement. *$P < 0.050$ (non-significant with Bonferroni correction); **$P < 0.0033$; ***$P < 0.001$. Significant two-way follow-up tests indicated through paired superscript letters a, b, c, and d. Chi-square and follow-up tests were considered significant if they met the criterion based on the Bonferroni correction ($P < 0.0033$).

^We included the item, 'I understand why some racial minority teenagers might be suspicious of the police' given its conceptual importance, despite it being removed from the LETA full scale.

School resource officers were significantly less likely to endorse viewing trainings on policing adolescents as being 'just a fad' compared with commanders [P = 0.003, OR = 0.3, CI = (0.1–0.7)]. In addition, patrol officers were significantly more likely than school resource officers [P = 0.002, OR = 2.6, CI = (1.4–4.9)] and other LEOs [P = 0.002, OR = 2.3, CI = (1.3–3.9)] to endorse a statement indicating that adolescent-specific training might turn LEOs into 'ineffective social workers'. Lastly, patrol officers (14.0%; P < 0.001, OR = 17.8, CI = (2.4–130.1)] and commanders (18.4%; P < 0.001, OR = 24.5, CI = (3.0–199.8)] were significantly more likely to view trainings on policing adolescents as keeping officers from accomplishing more important work in comparison with school resource officers (0.9%).

Discussion

There is a gap between the training that LEOs receive and the needs of adolescents in the communities they serve. Due to the impact of police/community relations on crime (Tyler et al., 2015), assessment of the utility of the strategies police officers use to strengthen these relationships and engage community members—particularly adolescents—is warranted. The current study examined LEO self-identified readiness to interact with adolescents in the community and confidence in effectively working with adolescents. Overall, findings identified gaps in LEOs' perceived readiness to interact effectively with adolescents. Results further suggested on-the-job experience was not an effective substitute for training, as officers with more experience reported no greater confidence in their abilities to effectively interact with adolescents. Training needs of LEOs extended across experience levels but were impacted by rank, with those in patrol and command positions reporting perceptions of less readiness to work with adolescents, but viewing training in less favourable ways.

Responses across role and experience

Over a third of LEOs surveyed reported that they were not confident in their ability to work effectively with adolescents in each of four critical areas (i.e. working with youth with mental health problems, working with youth with trauma histories, helping youth regulate their behaviour, and referring youth to community resources), and only about a quarter felt confident in all four. This is an especially concerning finding because adolescents are more prone to rapid emotional activation, have poor judgement when under stress, and are heavily influenced by here-and-now thinking simply as a function of their developmental status (Steinberg and Scott, 2003; Steinberg, 2005, 2007, 2017). Thus, during interactions with adolescents, police officers with less understanding of adolescents may be at risk of creating or escalating conflict with them, or not taking steps to effectively engage them or de-escalate tensions. Consequently, they may be over-reliant on arrest and/or use of force without considering and applying alternative solutions.

Additionally, the reactivity, impulsivity, and poor judgment under stress that are so often found among adolescents due to their unique neurodevelopmental status are often compounded by mental health disorders and trauma. Our findings indicate that many LEOs are unprepared to meet the needs of youth with mental health problems and trauma and suggest that in many situations police as first responders lack the skills to de-escalate distressed and traumatized youth. Rather, officer behaviour may increase the risk of immediate (arrest or use of force) and long-term (incarceration, criminal record inhibiting employment) harm. Inadequately trained LEOs will likely interact with youth in ways that increases avoidable trauma and other negative outcomes.

Similarly, while a sizeable percentage of LEOs viewed training on adolescence as worthwhile, many others challenged its worth. Those who did so reported believing that such training is a fad, an

effort to turn police into social workers, or time poorly spent. Police culture often emphasizes certain responses that are about exerting control and enforcing rules rather than engaging with kids in a collaborative, problem-solving way. From such responses, broader issues emerge related to organizational or cultural attitudes towards adolescents and the rank of police officers in helping to resolve young people's concerns, solving problems in which they are involved, and improving the quality of their lives. That a significant number of LEOs do not recognize the need for training specific to interacting with adolescents indicates the need to review the current extent and quality of the training provided to officers. Enhanced curricula, in both quality and time, informed by prospective police participants and adolescents who have direct and indirect experience with police, could help ensure that trainings specific to adolescents meet the real-world challenges of serving youth.

The impact of experience

Of the LETA items addressing perceived readiness to interact effectively with youth, only one—feeling equipped to recognize and work with youth who have mental health problems—significantly increased with years of experience. It remains unclear why this item would stand out from all others. The overall finding is that experience alone does not substantially affect LEO perceptions of readiness to interact with youth or of the value of training in this area. Further, it appears that officers' lack of perceived readiness is not a function of inexperience that time on the job will ameliorate. Rather, findings from our study bolster the conclusion of the pressing need for LEO training irrespective of experience. Indeed, LEOs nationwide are increasingly receiving training in how to respond to mental health crises and some have been trained in working with crisis response teams (Shapiro *et al.*, 2015). Thus, leadership in police agencies recognizes that experience alone does not

make one an expert. That training would similarly be needed to help LEOs understand and respond effectively with youth is hardly surprising.

The impact of rank

An overall pattern clearly emerged in which the highest levels of perceived readiness to work with adolescents and most positive attitudes towards youth were observed among recruits and those in the 'other LEO' categories (primarily SROs). Lowest levels were observed among command staff and patrol officers. It is unsurprising that LEOs who work primarily with youth, such as SROs and school police officers, would report the highest levels of perceived readiness and place the greatest value on training. The combination of self-selection into these ranks, regular interaction with other youth-serving professionals, and daily interaction with youth in low-intensity situations foster more favourable perceptions of youth and skills to work with them effectively. There is limited but existing data that indicate self-selection into specialized policing roles like crisis intervention team membership or SRO positions is beneficial for LEO and citizen outcomes (Compton *et al.*, 2017). Altogether, there is a knowledge base and there are tangible skills that can be developed to promote these more positive adolescent community member–police interactions. Trainings for LEOs regardless of rank or position could prioritize development of knowledge, attitudes, and skills that appear critical to success of those who self-select to work with more vulnerable populations or adolescents more generally.

Our finding that recruits often self-reported more readiness and confidence in their ability to interact effectively with youth, and place greater value on training specific to interacting with youth was not expected. One possible explanation is that while new recruit officers lack experience, they tend to be passionate, optimistic, eager to serve, and believe they can meet any challenge or situation they may face including interacting with

adolescents. Another possible explanation would be that the new LEOs simply don't know what they don't know, and that those who have been on the streets have a clearer understanding of how challenging interacting with adolescents can be. Another explanation could be that street experience may create a perspective based on buy-in to a culture and belief system that views policing as more about compliance and control than engagement and collaboration (Dai *et al.*, 2011; Mastrofski *et al.*, 2016). Finally, the finding could reflect cohort differences, with current recruits as a group simply coming to the job with a different set of beliefs about youth.

It is also important to acknowledge the need for training specific to LEOs who serve in a supervisory capacity to support their capacity to guide the officers on their squads in best practices in interacting with adolescents. As first responders, police—especially those on patrol—are at risk of acute and chronic stress and require social support within the workplace (Bennet and Schmitt, 2002; Davis, 2018; Cohen *et al.*, 2019). Receipt of such support from supervisors is particularly helpful in promoting officer wellness and resilience (Cohen *et al.*, 2019). Curricula content for supervisors should coincide with and build on content delivered to new recruits and experienced officers.

Patrol officers and experience

Patrol officers tended to feel more inequipped to effectively police youth and had more negative view of training specific to policing adolescents. Further, the finding that patrol offers - along with LEOs in other ranks and roles - did not become more confident in their understanding of adolescents or in their ability to effectively interact with them (even with more years of experience) highlights the critical finding that experience is not an adequate teacher. It is not merely that patrol officers have important unmet training needs when compared with officers in other roles, but that those within-group needs are not ameliorated by

experience. While those in other roles (e.g. SROs) likely interact with adolescents more frequently than patrol officers or command staff, patrol officers may have more critical and higher volume of interactions with youth. Different experiences with youth occur for LEOs in patrol than in other assignments. These include higher rates of response to calls for service, contact during foot patrol, patrolling special events, and emergency response to mental health, domestic and intimate partner violence, and other neighbourhood interactions. Thus, the risk of negative outcomes from these interactions could be magnified for patrol officers and highlights that training for patrol officers is no less important than training for SROs or other LEOs.

The fact that most arrests of youth occur outside of school settings (Office of Juvenile Justice and Delinquency Prevention, 2020) highlights the importance of patrol officers' readiness to interact effectively with youth. Police–youth interactions in the community can be highly influential in the lives of youth (Slocum and Wiley, 2018; Del Toro *et al.*, 2019; Gottlieb and Wilson, 2019; McFarland *et al.*, 2019). Interactions with patrol officers can lead to justice system involvement, psychological and physical trauma, and possible arrest. When LEOs are inadequately trained, the risk that such outcomes will occur increases without prior thought to or implementation of alternatives.

Broader implications for identified training needs

There is value in officers at every level having skills to engage effectively with youth. Training is essential to officers gaining skills necessary to provide meaningful support, guidance, and mentoring to adolescents and mitigate adolescents' negative preconceptions about police and advance police/community relations. It is essential, too, to prevent and de-escalate negative encounters and unnecessary and avoidable arrests. These benefits are especially important for adolescents from BIPOC and Latinx communities who are at greater risk of

disproportionately more contact and harsher treatment (e.g. arrest, use of force, referral to juvenile and adult court) within the justice system (Hyland et al., 2015; Desmond et al., 2016; OJJDP, 2020).

It is notable that about 80% of officers indicated understanding reasons that some BIPOC youth would be suspicious of police. At the same time, only about 50–60% described being equipped to deal with youth regardless of race or ethnicity on all four issues we measured (i.e. mental health issues, experienced trauma, behaviour regulation and referrals to community resources). This disconnect may be one of many contributing factors to the overrepresentation of BIPOC and Latinx youth among those who are killed or harmed during interactions with LEOs (Hyland et al., 2015; Office of Juvenile Justice and Delinquency Prevention, 2020). Other contributing factors to disproportionate levels of harmful LEO–BIPOC youth encounters include individual racial bias (Goff et al., 2014; Eberhardt, 2020), high levels of trauma and stress among LEOs (Chae and Boyle, 2013; McCarty et al., 2019; Baker et al., 2020), and structurally racist policies (Williams et al., 2019). In addition, in our study, one-fifth of LEOs did not recognize the reality of race dynamics in policing in their survey responses. Trainings on youth and community policing more broadly must highlight how BIPOC and Latinx youth are at greater risk for negative, traumatic, and deadly encounters with LEOs (Geller, 2021; Tate et al., 2021), and that such encounters can have wide-ranging impacts on their health and well-being (Jackson et al., 2019; Geller, 2021). They must also provide skills, strategies, and lists of local community resources through which LEOs can expand their toolkit to respond to youth.

There are additional benefits to improving adolescent–police interactions beyond potential negative consequences. First, positive interactions with police include modeling, providing guidance in dealing with crises and other situations, and long-term mentoring to adolescents that supports healthy development. Officers who understand adolescents are much more likely to be involved in these types of positive interactions. Second, adolescents who interact with police as witnesses or victims of crime may be affected in either positive or negative ways by such contacts, which may be experienced as aversive (unpleasant or even traumatic) or supportive (Slocum and Wiley, 2018). Officers who are trained to understand the impact of trauma on adolescents are more likely to interact in supportive ways, benefitting not only the adolescent but likely the investigation (Blumberg et al., 2018, 2020). Training should take and foster a developmentally appropriate, trauma-informed, and culturally and socially (e.g. race, gender, and disability) competent approach to interacting with adolescents (Branson et al., 2017).

Limitations and future directions

The findings from this study reflect training gaps for LEOs. It is essential to evaluate training beyond the typical end-of-course evaluation. Data needs to be collected on changes resulting from the training which can include the characteristics of youth arrests including charges, demographics, incident leading to arrest, application of alternatives to arrest, officer engagement in positive interaction with young people, and more. Behavioural data might be obtained from body worn cameras video on officer interaction with adolescents and internal complaints involving youth encounters. Community and officer surveys may be of value, respecting confidentiality of individuals.

Our study was limited by unexamined information. For example, we did not have information about how training on adolescent development and behaviour is developed. Police academy curricula were not studied to determine if and how training on adolescents may be incorporated in courses such as patrol techniques, juvenile law, interview techniques, and school safety and security. In future work, teams are encouraged to use

and/or develop standardized measures about knowledge of adolescent development and constructs measured using the items in the current study. We also did not have information on participating LEOs' race, ethnicity, gender, or other potentially meaningful social identifiers. Such data could better inform future training content.

Data obtained reflect most of the geographic regions of the USA, but not the Southwest or Rocky Mountain regions. Additionally, sites with participating officers were self-selected in that they either had a need to do the PTB training, the resources to do the PTB training, or both. While the participating LEOs represent a unique national sample, examination of whether and how geographic site characteristics impacted self-identified training needs fell outside of the scope of the present study. Follow-up research should be conducted to better elucidate whether and how LEO trainings needs differ across sites.

Future research and work are needed to elucidate best practices and missing elements in trainings on policing adolescents. We encourage collection of mixed-methods data from adolescents, their caregivers, and LEO to inform such trainings. While further refinement will be important to deepen understanding of specific training needs and of what approaches are most effective, it is critical to recognize that sufficient information already exists to conclude that (a) current training is not adequate, (b) improved training can reasonably be expected to support better outcomes and reduce disparities, and (c) models for such training exist and are already being implemented. The Strategies for Youth—*Policing the Teen Brain* training, from which the data for this study were obtained, is both a source of such data and an example of a successfully implemented training model.

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