Evaluation of Police Use of Force De-escalation Training:

Assessing the Impact of the *Integrating Communications, Assessment, and Tactics* (ICAT) Training Program for the University of Cincinnati, OH Police Division (UCPD)

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INTRODUCTION

In May 2018, the University of Cincinnati Police Division (UCPD) began delivering in-service de-escalation training to its officers. Specifically, the UCPD introduced the Police Executive Research Forum's (PERF) *Integrating Communications, Assessment, and Tactics* (ICAT) training program to instruct officers in de-escalation tactics and critical thinking skills for the management of potentially volatile police-citizen encounters. Although the implementation of use of force de-escalation training has been emphasized across the field of law enforcement, the effects of de-escalation training have not been systematically evaluated. Neither the agencies themselves, nor the larger law enforcement field fully understand the impact of this training. To address this gap in knowledge, researchers at *the IACP/UC Center for Police Research and Policy* have conducted the first known evaluation analyzing the impact of the ICAT training implemented within the UCPD on officers' beliefs, confidence, and attitudes as they relate to use of force and managing incidents involving persons in crisis. This evaluation includes analysis of a series of surveys administered to the UCPD between May 2018 and February 2019. This report provides an overview of the evaluation and summarizes the findings. Beginning with an introductory discussion on the fundamental elements of de-escalation training for law enforcement, along with a thorough description of the ICAT training program itself. Next, the methodology of the evaluation of the ICAT training program is discussed, followed by a discussion of the study sample and findings. This report closes with a summary of the findings, and the resulting policy implications.

DE-ESCALATION: A PRIMER

Recent developments in policing, and specifically the use of force, have primarily moved toward the adoption and implementation of de-escalation principles. Although there is no uniform definition of de-escalation in law enforcement, police de-escalation has been identified as "taking action or communicating verbally or non-verbally during a potential force encounter in an attempt to stabilize the situation and reduce the immediacy of the threat so that more time, options, and resources can be called upon to resolve the situation without the use of force or with a reduction in the force necessary" (*National Consensus Policy and Discussion Paper on Use of Force*, 2017, p. 2). Notably, police use of de-escalation has been embraced and promoted by the *President's 21st Century Task Force on Police, Final Report* (2015), that recommended de-escalation techniques should be embedded in use of force policies and police training.

In the United States, the adoption of de-escalation training within law enforcement agencies has been widespread. For example, in a national survey of police agencies (N = 150), a majority of medium to large police agencies in the United States report currently providing de-escalation training in some form to their officers (CBS News, 2019). It should be noted, however, that the exact approaches and tactics associated with de-escalation can vary substantially across training curricula (Engel, McManus, & Herold, forthcoming). Indeed, a variety of de-escalation training programs exist. Currently, officers may be trained in specific programs such as *ICAT, Verbal Judo,* or *T3 (Tact, Tactics, and Trust),* among dozens of others. It is also common for law

enforcement agencies to develop and implement their own de-escalation training in-house. Collectively, these training programs vary in some of their core messages, curriculum topics, operational skills, delivery methods, and dosage.

Yet despite the promotion and adoption of de-escalation, little is known about the effects of this training on officer behavior or the outcomes of police-citizen encounters. Additionally, it is unknown how these trainings impact officers' attitudes and perceptions, along with both officer and citizen safety. A recent multidisciplinary systematic review of de-escalation trainings found only 64 evaluation studies that had been conducted – with none in the field of policing (Engel et al., forthcoming). These studies were primarily conducted in the fields of nursing and psychiatrics, and the methodological rigor of these studies was quite low. The author(s) concluded that while de-escalation was a promising practice, it was not evidence-based, and a determination regarding the training impact on officer and citizen injuries could not be determined (Engel et al., forthcoming).

Proponents of de-escalation training argue it will reduce police use of force by providing officers with better skills to resolve conflict (Olivia et al., 2010). Alternatively, it is possible that the trainings have no effect or, even worse, make potential encounters between citizens and officers less safe (Fyfe, 2000). Considering that police and citizen encounters have the potential to escalate to the use of deadly force and loss of life, understanding what trainings can be used to increase safety is imperative to the policing profession. Further, given the extensive adoption and promotion of de-escalation, along with the significant costs of this form of police training, the lack of research on the effects of de-escalation training for police is troublesome. This evaluation is an important step to unpacking the impact of use of force de-escalation training for police.

INTEGRATING COMMUNICATIONS, ASSESSMENT, AND TACTICS (ICAT) TRAINING

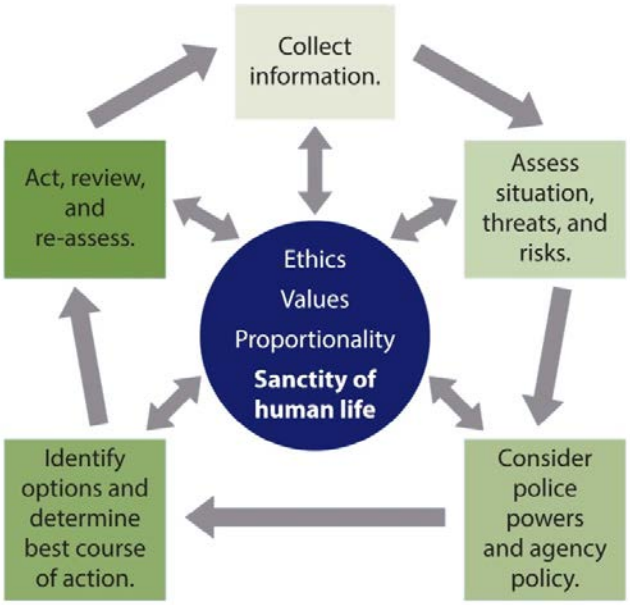
The *Integrating Communications, Assessment, and Tactics* (ICAT) training was developed in April 2016 by the Police Executive Research Forum (PERF). Designed to enhance both officer safety and the safety of the individuals they encounter, this training relies on tactics and skills to de-escalate potentially volatile officer-citizen interactions. Specifically, this training is designed for patrol officers responding to circumstances where a person is behaving erratically, and is either unarmed or armed with anything less than a firearm (PERF, 2016b). It is these types of encounters, PERF contends, that have received the most criticism on police training and use of force. By training officers in a wider array of options to handle and "slow down" these situations, officers may have better alternatives to the use of deadly force and potentially avoid the use of force altogether.

The ICAT curriculum is an integration of crisis recognition and intervention, communication skills, and operational tactics. While Crisis Intervention Team (CIT) training has become a model in dealing with persons in crisis, PERF contends that CIT is largely focused on communication and when situations are evolving, officers may forget or downplay their CIT

training and instead resort to defensive tactics such as the use of force. Specifically, ICAT is designed to help officers handling *persons in crisis*, which refers to an individual that may be behaving erratically due to things such as mental disorders, substance abuse, situational stress, and/or intellectual/developmental disabilities. An important component of the ICAT curriculum is providing officers with the skills to recognize these types of individuals and approach them in a safe and effective manner.

An integral component of the ICAT training program is the use of Critical Decision-Making Model (CDM). Developed in the United Kingdom and historically used by SWAT teams in the United States, the CDM focuses on a different style of thinking than the traditionally taught use of force continuum. The CDM (see Figure 1) is based on a circular thought process as opposed to the traditional linear process and is designed to help officers develop and think through their options in a situation. This five-step critical thinking process is centered on an agency's core values, ethics, and sanctity of human life. Every action that an officer takes should reflect a consideration of these central themes and should not go against those ideals. While the CDM is particularly useful in critical situations, its application is meant to be much broader and can be used in everyday situations as well.

Figure 1. The Critical Decision-Making Model (PERF, 2016)



Although not yet systematically evaluated, the ICAT training program is being implemented in numerous police agencies across the United States (Lovicott, 2018; PERF 2016b; Skoufalos, 2017). Likewise, this training was adopted by the UCPD. Multiple UCPD officers received train-the-trainer instruction. Thereafter, the curriculum was modified for use by campus law enforcement and administered by two UCPD trainers.

Specifically, this modified ICAT training was conducted over two eight-hour days at the UCPD. The first day, officers focused on learning the curriculum and skills. During the second day, the first-day curriculum was reviewed and officers practiced the skills they had learned with live action scenarios and firearm simulator training. The officers participated in a series of scenario-based, role-playing training exercises involving a person who is going through some form of crisis and who may or may not be armed. After each scenario, the trainers reviewed what occurred to describe what officers did well and where they could improve in the future.

As with all training programs, the UCPD collected information regarding officers' receptivity and general satisfaction with the ICAT training program. These data were shared with the IACP/UC research team. Previous studies have demonstrated that when training participants have a positive view of that training, it is more likely to effectively impact changes in attitudes and behavior (Kirkpatrick, 1989). The data collected by the UCPD included responses from 74 individuals, including sworn officers, security officers, and dispatchers within the UCPD. The information was collected immediately following the training to gauge individuals' perceptions of training timing, content, and relevance. A few highlights from this internal assessment of training satisfaction include:

- 74.3% of respondents reported that they enjoyed the training
- 71.6% of respondents would recommend this course to others
- 63.5% of respondents were interested in a follow-up course
- Fewer than 10% of respondents reported any negative view of the training

Overall, this internal assessment of the training supports the proposition that individuals trained in ICAT held positive views of the training, which suggests the ICAT training could positively impact officers' attitudes and ultimately their behavior.

Research Questions

Beyond how the training was received by UCPD Officers, this research study was designed to address the following five research questions:

1) Does ICAT training impact officers' attitudes toward use of force?
2) Does ICAT training impact officers' attitudes toward citizens?
3) Does ICAT training change officers' knowledge and attitudes about persons in crisis specifically?
4) Does ICAT training improve officers' confidence in handling critical incidents?
5) Does any observed impact from the training change over time?

METHODOLOGY

To address these research questions, a series of officer surveys were developed and administered. These data were initially gathered as part of internal improvement study conducted by the University of Cincinnati's Office of Safety and Reform to document changes as part of a larger reform effort by the UCPD. The analyses of these data were performed by a research team from the *IACP/UC Center for Police Research and Policy*.

Study Population

The UCPD is a medium-sized, fully-sworn university police department, with a complement of over 70 sworn police officers and 25 security (non-sworn) officers. It is housed within the larger Department of Public Safety at the University of Cincinnati. The UCPD provides all public safety services for the UC community (over 70,000 students and employees) and has primary jurisdiction on all university owned and operated properties. Furthermore, for several years the UCPD has operated under a signed Memorandum of Understanding with the City of Cincinnati, allowing the UCPD to patrol and conduct police services in the approximate one-mile, off-campus radius surrounding the main, uptown campus. The activity of the UCPD is relatively low—they engage in very few uses of force and record fewer than five hundred Part I crimes[1] per year (Exiger, 2019; Isaza et al., 2017). Prior to the implementation of ICAT training the UCPD, the agency was in the midst of a three-year voluntary monitorship as a result of an officer-involved shooting from 2015. As part of this monitorship, the agency was required to update their use-of-force policies, procedures, and training, which ultimately lead to their adoption of de-escalation training and tactics in 2018 (Engel et al., 2019).

Sample

The study sample includes sworn line officers, sergeants, lieutenants, and captains. There were a total of 62 officers eligible for the training when the research began in May of 2018. All surveys were administered on paper and in-person. Our independent evaluation of the ICAT training program involved the collection and analyses of officer survey data from three distinct time periods: (1) prior to UCPD officers' participation in training (pre-training), (2) immediately following participation in training (post-training), and (3) four months after participation in training (follow-up).

The pre-training survey was administered in May 2018, and included a total of 60 officers (96.8% response rate – 2 officers were pulled into the training early, and therefore unable to respond to the pre-training survey). The ICAT training was taught during two sequential 8-hour days. Delivery of the ICAT training occurred across seven sessions, beginning in May 2018 and concluding in September 2018. The post-training survey, given on day two after the ICAT

[1] The Uniform Crime Report (UCR) produced by the FBI identifies Part I crime incidents to include eight types of offenses: criminal homicide, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson

training was completed, included responses by 59 officers (95.2% response rate) from May 2018 to September 2018. Finally, the follow-up survey was given to officers approximately four months after their training date. These surveys were collected between September 2018 and February 2019, resulting in 58 officers surveyed (93.5% response rate). Research examining response rates indicate that the average response rate in surveys distributed to a police officer population is 64%, though there is a great deal of variation (Nix, Pickett, Baek & Alpert, 2017). As such, the response rates in this sample are robust and commensurate with other samples in the field. All three waves of surveys were administered in paper format, and later entered into a database by research staff. While the total population for this research study is 62 officers, there is variance in how many individual survey items were answered by officers within each survey. However, there were no survey items with more than 10% missing data.

Table 1 below contains a breakdown of the demographics of the police agency sample. There were a total of 62 officers eligible for the training when the research began in May of 2018. The sample in this study is primarily White (90.3%), Male (87.1%) with a majority serving as a patrol officer (72.2%). Roughly half (51.6%) are below the age of 42 years. Approximately 48.4% of the sample hold a Bachelor's degree or higher educational attainment. There are approximately equivalent sizes of less-experienced officers (38.7% with four or fewer years at the UCPD) and more-experienced officers (38.8% with 15 or more years at the UCPD). In addition to these demographics, officers were asked about prior experience with critical incidents during their law enforcement career and trainings (use of force, handling the mentally ill, and officer discretion) they have received in the past three years.

Table 1. Sample Demographics (N = 62)	% (n)
Gender	
Male	87.1 (54)
Female	12.9 (8)
Age	
18 to 25 years old	1.6 (1)
26 to 33 years old	37.1 (23)
34 to 41 years old	12.9 (8)
42 to 49 years old	29.0 (18)
50 + years old	19.4 (12)
UCPD Tenure	
Less than 1 year	4.8 (3)
1 – 4 years	33.9 (21)
5 – 9 years	3.2 (2)
10 – 14 years	19.4 (12)
15 – 19 years	32.3 (20)
20 or more years	6.5 (4)
Race	
Caucasian/White	90.3 (56)
African American/Black	6.5 (4)
Latino/Hispanic	3.2 (2)
Rank	
Patrol Officer	74.2 (46)
Supervisor	21.0 (13)
Command Staff (Captain and above)	4.8 (3)
Law Enforcement Tenure	
1 – 4 years	29.0 (18)
5 – 9 years	11.3 (7)
10 – 14 years	12.9 (8)
15 – 19 years	16.1 (10)
20 or more years	25.8 (16)
NA/Refused	4.8 (3)
Educational Attainment	
High School	6.5 (4)
Less than two years of college	25.8 (16)
Associate's Degree	12.9 (8)
Bachelor's Degree	38.7 (24)
Graduate Degree	9.7 (6)
NA/Refused	6.5 (4)
Military Experience	
Yes	9.7 (6)
No	85.5 (53)
NA/Refused	4.8 (3)

Survey Items

Three survey instruments serve as the foundation for this research study, and are largely similar in content. As noted above, the surveys include (1) pre-training (2) post-training, and (3) four-month follow-up. These survey instruments were created by the *IACP/UC Center for Police Research and Policy* research team, but where possible, rely on items used in previous research to measure relevant self-reported attitudes and perceptions regarding citizen interactions, use of force, policing, training, and agency-specific perceptions. Additionally, the survey contains items developed specifically for the evaluation of ICAT training, including measures regarding persons in crisis and the Critical Decision-Making Model (CDM). Questions were phrased in way to generate variance on officers' responses. Different questions within the same section were often worded both positively and negatively, to encourage the officers to be alert to the content of the survey. Where appropriate, certain items were reverse coded and included with other items in additive scales.

There were seven sections of the survey which measured different attitudes and perceptions that may be impacted by a use of force training program. There were also three sections that served as "control" measures, which contain items measuring attitudes that should are not expected to change as a result of the ICAT training. The ten survey sections are as follows:

(1) *Priorities During Citizen Interactions*. This section contained 18 survey items related to a short scenario involving a police-citizen interaction. These items were designed to determine whether officers prioritize actions that align with the tenants of the ICAT training program (e.g., remaining calm, establishing rapport with subject). Specifically, officers were asked to place themselves in the following scenario:

> "While on patrol you receive a call regarding a suspicious person. You arrive at the scene and make contact with a male who fits the description you were given. Though it does not appear that he will be physically combative at this point, he is being loud and using profanity. The suspect continues to slowly walk backwards away from you despite your order to stop moving."

Using a five-point Likert scale (1 = Very Unimportant; 5 = Very Important), officers were asked to indicate how important they believed specific actions to be when applied to the interaction described in the scenario. After the appropriate reverse coding, higher scores on the 18 survey items presenting the actions indicate greater alignment of officers' priorities to the principles of the ICAT training program. The first 17 items were adopted from a previous survey evaluation of police training, with the final 18th item ("resolving incidents quickly") being added to supplement the other items. This item was added to underscore the importance of "slowing down" situations in accordance with the principles of de-escalation.

(2) *Views on Citizen Interactions.* Officers' views on citizen interactions were measured using seven survey items related to officers' general views of citizen encounters, including issues of officer safety and de-escalation. These items were adopted from a previous evaluation of

police training to assess the extent to which the ICAT training curriculum affects officers' perceptions of their ability to impact the outcomes of police-citizen encounters and their belief that training can be effective in improving those outcomes. Officers were asked to indicate their level of agreement to each of the seven survey items on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). After the appropriate reverse coding, higher scores indicate a greater agreement to the tenants taught during the ICAT training program.

(3) *Attitudes Toward Use of Force.* This section contains 11 items on officers' general attitudes toward using force, including their preference for force, preference for using communication skills, and situations which require force. Respondents were asked to indicate their level of agreement to each item on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). These items were adopted from a previously developed police training survey evaluation. After the appropriate reverse coding, higher scores on these items indicate a greater preference for force.

(4) *Perspectives on Policing.* This section contains 12 items designed to assess officers' view of the role of police, including the different duties that officers undertake such as working with communities, fighting crime, solving problems, and enforcing the law. Respondents were asked to indicate their level of agreement to each item on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). These items were adopted from a previously developed police training survey evaluation, and serve as control measures and are not expected to change as a result of the ICAT training program.

(5) *Perceptions of Agency.* This section contains eight items related specifically to the officers' satisfaction with their agency, colleagues, and perceptions of agency culture. Respondents were asked to indicate their level of agreement to each item on a 5-point Likert scale which ranged from very uncertain to very certain (first four items) strongly disagree to strongly agree (last four items). These items were adopted from a previously developed police training survey evaluation, and serve as control measures and are not expected to change as a result of the ICAT training program.

(6) *Perceptions of Training.* This section contains seven items related to officers' openness to training and the general utility of police training. Respondents were asked to indicate their level of agreement to each item on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). These items were adapted from a previously developed police training evaluation as well as a study on employees' "openness toward change" study conducted by Miller, Johnson and Grau (1994). These items serve as control measures and are not expected to change as a result of the ICAT training program.

(7) *Interactions with Persons in Crisis.* Twelve survey items were used to measure officers' attitudes toward interactions with persons in crisis. As described in the literature review, a person in crisis refers to an individual that may be behaving erratically due to factors such as mental disorders, substance abuse, situational stress, and/or intellectual/developmental

disabilities. These items were developed by researchers from the IACP/UC Center for Police Research based on materials provided online by PERF for the ICAT training guide. For each survey item, officers were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate a greater agreement to the tenants taught during the ICAT course.

(8) *Attitudes Toward Persons in Crisis.* Ten survey items were used to measure officers' attitudes toward persons with mental illness or intellectual/developmental disabilities, persons who abuse substances, and/or persons experiencing situational stress (all identified as reasons why a person may experience crisis in the ICAT curriculum). Officers were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). These items were adapted from the *Community Attitudes Toward Mental Illness* (CAMI) scale (Taylor and Dear, 1981). Although only a handful of CAMI items were used in this survey, additional items were added that target the other contributing sources to crisis that are taught in the ICAT training program (such as substance abuse, situational stress, developmental disabilities, etc.). Higher scores indicate a lesser acceptance of persons in crisis along with lessened agreement to the tenants taught during the ICAT course.

(9) *Confidence in Handling Critical Incidents.* To better understand officers' confidence in handling critical incidents, a one-page dialogue scenario between a person going through a crisis and a police officer was used. The person, "David," is on private property (CIA: Carter Industrial Associates) and is rummaging through a trashcan while having delusions about the CIA. David is unarmed but acting and speaking aggressively to the officer. Officers were asked to indicate their level of confidence (1 = Not Confident at All; 4 = Very Confident) to a series of actions related to this one-page dialogue. This section of the survey contained 13 items related to a respondent's self-efficacy, or confidence, in handing the described scenario. This self-efficacy scale was developed by Broussard and colleagues (2011) and includes a response range of "confidence" scores, with a higher score indicating a higher level of officers' confidence in interacting with subjects in crisis. Self-efficacy, as defined by Bandura (1977) is a person's belief in their own ability to perform tasks related to a particular circumstance. These items were summed to create a "Total Self-Efficacy" scale for each wave of data, with a possible range of 13 to 52.

(10) *Critical Decision-Making Model (CDM).* This section contains 11 items that were used to measure the utility of the Critical Decision-Making Model (CDM). These items were developed by researchers from the IACP/UC Center for Police Research based on materials provided online by PERF for the ICAT training guide and presented to officers in the post- and follow-up waves of the training survey only[2]. Respondents were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate officers' greater agreement regarding the utility of the CDM.

[2] As officers would be unfamiliar with the Critical Decision-Making Model prior to the ICAT training, these items were not measured during the pre-training survey.

Data Analyses

Data were analyzed by the research team using SPSS, a social science statistical software program. Analyses were conducted during the summer and fall of 2019. The primary method of analysis used in this report includes Paired Samples T-Test comparisons. As officers were given a randomly assigned four-digit unique identifier, surveys were able to be matched across waves, allowing for paired sample comparisons while still maintaining officers' anonymity.

This type of analytic approach determines whether the mean (average) difference of two sets of observations is zero. If the resulting t-test statistic rejects the null hypotheses of zero mean difference, then there is a statistically meaningful difference between the two observations. In this report, we consider tests with p-values lower than .05 to be statistically meaningful, indicating that we are 95% confident that there is a difference in that item between the two observations, which is likely an impact from the ICAT training. These differences are denoted in all tables with an asterisk (*).

For items where a mean index was created, the Cronbach's alpha (α) is reported within the table for each wave of the data. Cronbach's alpha is a measure of internal consistency between survey items. Groups of items with a high Cronbach's alpha (above ~ 0.7 based on post-training scores) were grouped to create index values from individual survey items by assigning numerical scores to the responses and calculating the average response score across multiple items.

FINDINGS

This section describes the findings of the ICAT training evaluation for the UCPD. Statistical comparisons of the pre-training, post-training, and follow-up training survey responses of UCPD officers are discussed in detail to identify meaningful changes in officers' attitudes, perceptions, and beliefs as they relate to citizens, use of force, and responding to critical incidents. Most survey items are measured using a five-point Likert scale, ranging from strongly disagree to strongly agree in alignment with past survey research data, This type of scale captures both the nature – agreement or disagreement – and the intensity of each belief or attitude. Several indices and scales were created from individual survey items by assigning numerical scores to the responses and calculating the average response score across multiple items. Overall, these results add to the currently limited body of knowledge regarding the impact of de-escalation training for police.

Comparisons of Survey Results

This section of the report contains statistical comparisons of the results from different sub-sections of the pre-training, post-training, and follow-up training surveys provided to UCPD officers (N = 62). These survey sub-sections tap into specific attitudinal changes which are hypothesized to be impacted by ICAT training, including:

- Citizen Interactions
  - Priorities during citizen interactions
  - Views on citizen interactions
- Use of Force
- Persons in Crisis
  - Interactions with persons in crisis
  - Views on persons in crisis
- Officer Confidence in Handling Critical Incidents
- Utility of the Critical Decision-Making Model (CDM)

This section is designed to assess the effects of the ICAT training program. There are seven sub-sections of the survey results presented below, each with a varied number of survey items. Descriptions of the number of items and where the items were derived is described for each sub-section. Tables present the mean (average) score for all the officers who completed the survey in each wave. Items listed in bold are those that either had a post-training or follow-up score that was significantly different from the pre-training score. An asterisk (*) is shown in the table to demonstrate which wave (post-training or 4-month follow-up) is statistically significant in their difference to the pre-training survey scores.

a. Priorities During Citizen Interactions

To assess officers' priorities during citizen interactions, the training surveys (pre, post, and follow-up) contained 18 survey items related to rating the importance (1 = Very Unimportant to 5 = Very Important) of specific actions when applied to the interaction described in a specific scenario. Higher scores on the 18 survey items indicate greater alignment of officers' priorities to the principles of the ICAT training program.

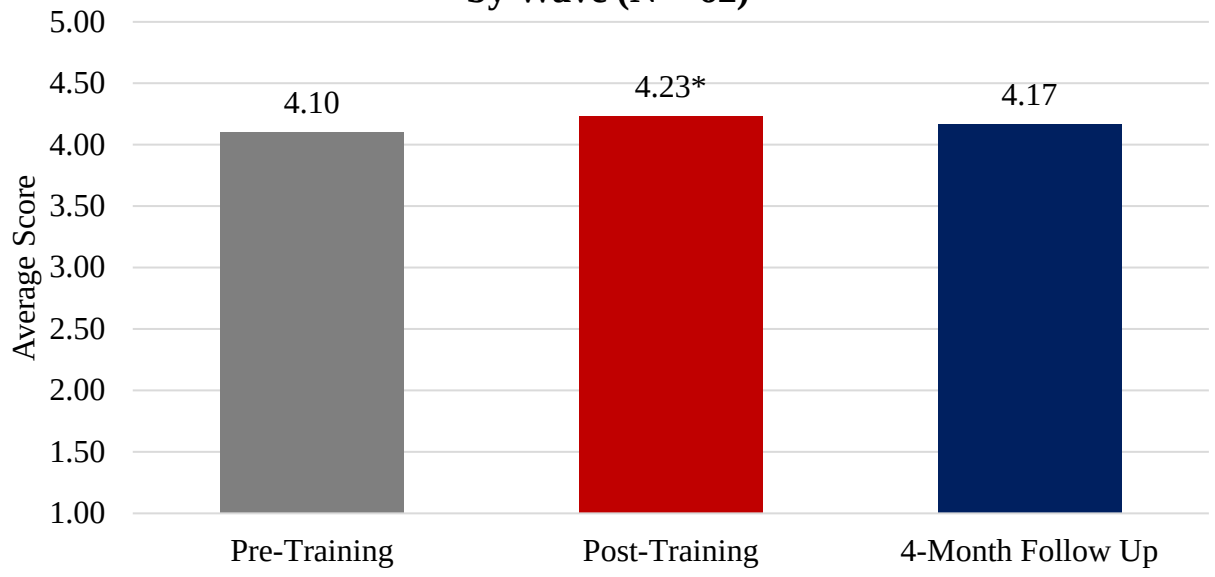
Table 2 displays the results of the pre-test, post-test, and follow-up average (mean) scores from the UCPD officers. Items listed in bold are those that experienced a statistically significant change from the pre-test to post-test scores, or pre-test to follow-up scores—the asterisk (*) indicates which score was statistically different. As shown in Table 2, only two survey items, (Q16 and Q18), were meaningfully different from the pre-training scores. Notably, both are significant in the expected direction, as a higher score indicates a greater agreement to the tenants taught during ICAT training.

Table 2. UCPD Officer Priorities During Citizen Interactions Survey Results (N = 62)

	Pre-Test Mean	**Post-Test Mean**	**Follow-Up Mean**
1. Being respectful toward the subject	4.32	4.49	4.40
2. Establishing rapport with the subject	4.38	4.49	4.41
3. Remaining calm	4.65	4.66	4.67
4. Explaining the reason you've made contact with the subject	4.49	4.41	4.55
5. Maintaining self-restraint	4.67	4.66	4.67
6. Being polite to the subject	4.02	4.32	4.33
7. Allowing the subject to explain his side of the story	4.22	4.46	4.40
8. Considering the subject's side of the story	4.10	4.24	4.33
9. Thinking about how my actions may impact people other than the subject	4.13	4.24	4.28
10. Getting the subject to cooperate without using force	4.63	4.56	4.55
11. Thinking through possible alternatives before I act	4.44	4.54	4.52
12. Not making a decision about what to do until you've gathered all necessary information	4.25	4.24	4.41
13. Explaining to the subject the reasons for your decisions	3.85	3.97	4.26
14. Going with your gut feeling when deciding how to act	3.38	3.41	3.31
15. Trying to talk the subject into complying	4.53	4.63	4.45
16. Earning the subject's trust	**4.07**	**4.51***	**4.22**
17. Establishing physical control over the subject [Reverse Coded]	2.43	2.59	2.53
18. Resolving the incident quickly [Reverse Coded]	**3.13**	**3.95***	**3.19**
Priorities in Citizen Interactions Index	**4.10**	**4.23***	**4.17**
Cronbach's α	0.911	0.920	0.908

In terms of comparisons for the *Priorities in Citizen Interactions Index* (shown in the bottom row of Table 2), Figure 2 displays these mean scores by each wave of the survey. There are statistically significant differences in the pre-training and post-training period in the expected direction. However, while the score for the 4-month follow-up (mean = 4.17) is higher than the post-training value (mean = 4.23), it is still lower than the initial pre-training score (mean = 4.10) but it does not reach statistical significance. This indicates a lessened but somewhat sustained training effect on officers' prioritization of actions during citizen interactions.

Figure 2. UCPD *Priorities During Citizen Interactions Index*, by Wave (N = 62)



b. Views on Citizen Interactions

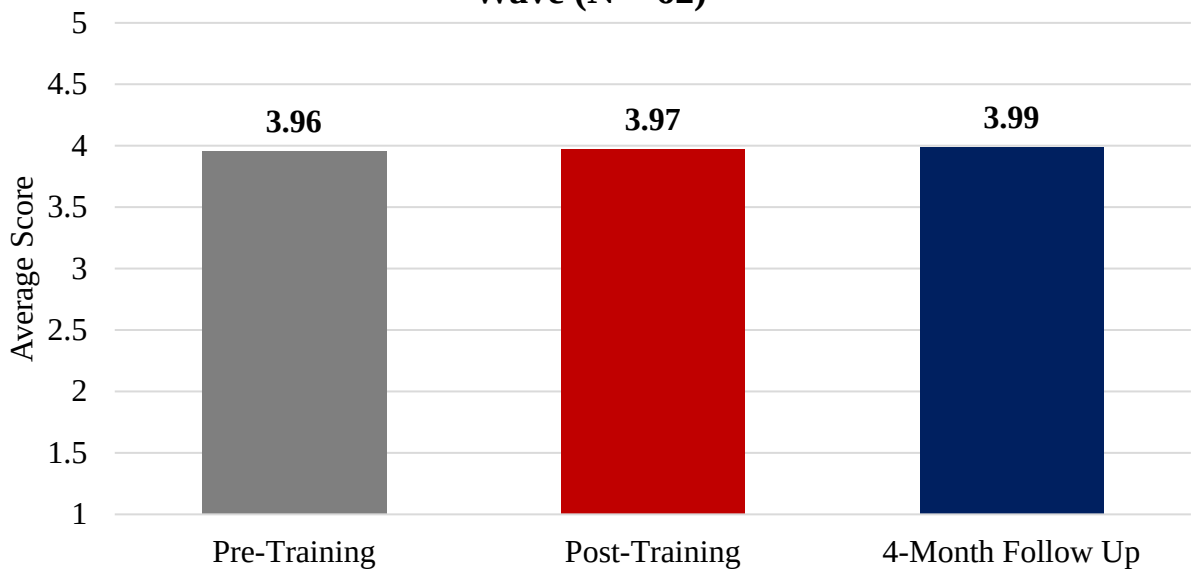
Officers' views on citizen interactions were measured using seven survey items related to officers' general views of citizen encounters, including issues of officer safety and de-escalation. Officers were asked to indicate their level of agreement to each of the seven survey items on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate a greater agreement to the tenants taught during the ICAT training program. Table 3 displays the results of the pre-test, post-test, and follow-up average (mean) scores from the UCPD officers. Items listed in bold are those which are statistically significantly different in the pre-test to post-test scores, or pre-test to follow-up scores—the asterisk indicates which score was statistically different. As shown in Table 3, only one of the seven survey items (Q4) was meaningfully different from the pre-training scores, and this difference is in the expected direction, as a higher score indicates a greater agreement to the tenants taught during ICAT training.

Table 3. UCPD Officer Views on Citizen Interactions Survey Results (N = 62)

	Pre-Test Mean	Post-Test Mean	Follow-Up Mean
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes.	3.95	4.15	4.09
2. I am good at identifying officer safety risks in citizen encounters.	4.27	4.20	4.42
3. I am good at de-escalating encounters with citizens.	4.27	4.29	4.32
4. In tense citizen encounters, the most important thing is that I get home safely. [Reverse Coded]	**1.73**	**2.10***	**1.89**
5. Officers can be trained to increase the likelihood of positive encounters with citizens.	4.43	4.34	4.33
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters.	4.55	4.37	4.40
7. Officers can be trained to improve their ability to de-escalate citizen encounters.	4.52	4.42	4.39
Citizen Interactions Index	3.96	3.97	3.99
Cronbach's α	0.523	0.759	0.695

In terms of comparisons of the *Citizen Interactions Index* (shown in the bottom row of Table 4), Figure 3 displays these mean scores by each wave of the survey. Notably, there were no statistical differences across the waves of the survey for this subsection, which is not surprising given there was only one statistical difference demonstrated in Table 3.

Figure 3. UCPD *Views on Citizen Interactions Index*, by Wave (N = 62)



c. Attitudes Toward Use of Force

Officers' attitudes toward use of force were measured using 11 survey items. Each of the items are shown in Table 4 below, along with the officers' average pre-training, post-training, and follow-up training score. Officers were asked to indicate their level of agreement to each item on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores on these items indicate a greater preference for force. Therefore, post-training and follow-up scores that are lower than pre-training scores indicate a training effect in the expected direction. As shown in Table 4, six of the 11 items show statistically significant differences in attitudes toward use of force in the expected direction between the pre-training and post-training periods. In addition, one of the 11 items (Q4) was statistically different between the pre-training and follow-up period. Unlike other sub-sections of the survey, these 11-items suffered from low reliability scores (Cronbach's alpha of 0.630 or below for each wave) when grouped together, indicating that these items may not be measuring the same concept within this sample. Due to the incongruent nature of these correlations, these items are left as stand-alone analysis.

Table 4. UCPD Officer Attitudes Toward Use of Force Survey Results (N = 62)

	Pre-Test Mean	Post-Test Mean	Follow-Up Mean
1. Officers are *NOT* allowed to use as much force as is necessary to make suspects comply. [Reverse Coded]	3.83	4.07	3.70
2. It is sometimes necessary to use more force than is technically allowable.	**2.24**	**1.79***	**2.09**
3. Verbally disrespectful subjects sometimes deserve physical force.	**1.65**	**1.41***	**1.63**
4. Refraining from using force when you are legally able to puts yourself and other officers at risk.	**3.05**	**2.46***	**2.72***
5. It is important to have a reputation that you are an officer willing to use force.	**2.20**	**1.86***	**2.23**
6. Not using force when you could have makes suspects more likely to resist in future interactions.	**2.31**	**1.97***	**2.21**
7. It is important that my fellow officers trust me to handle myself in a fight.	4.08	3.92	3.89
8. Trying to talk my way out of a situation is always safer than using force. [Reverse Coded]	2.08	2.03	2.18
9. It is important that my fellow officers trust my communication skills. [Reverse Coded]	1.52	1.49	1.56
10. I respect officers' ability to talk suspects down rather than using force to make them comply. [Reverse Coded]	1.62	1.46	1.54
11. Generally speaking, if force has to be used, it is better to do so earlier in an interaction with a suspect, as opposed to later.	**2.38**	**2.00***	**2.39**
Cronbach's α	0.500	0.573	0.631

d. Interactions with Persons in Crisis

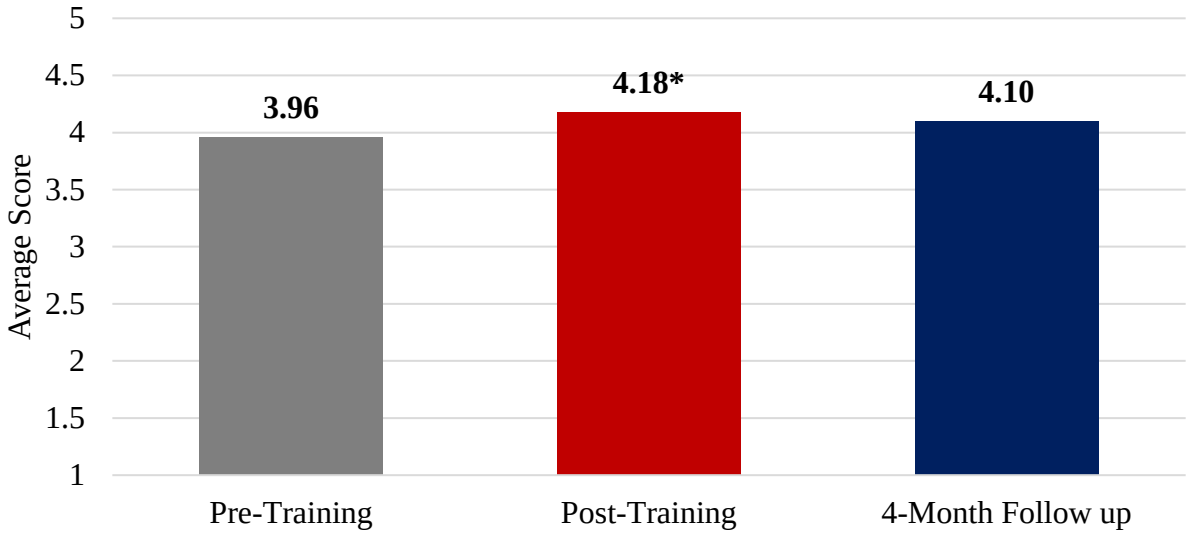
Twelve survey items were used to measure officers' attitudes toward interactions with persons in crisis. As described previously, a person in crisis refers to an individual that may be behaving erratically due to factors such as mental disorders, substance abuse, situational stress, and/or intellectual/developmental disabilities. For each survey item, officers were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate a greater agreement to the tenants taught during the ICAT course. Table 5 below demonstrates that six of the 12 items show statistically significant differences in reported attitudes in the expected direction between the pre-training and post-training periods. In addition, two of the 12 items show statistically significant differences in reported attitudes in the expected direction between the pre-training and follow-up periods.

Table 5. UCPD Attitudes During Interactions with Persons in Crisis Survey Results (N = 62)

	Pre-Test Mean	**Post-Test Mean**	**Follow-Up Mean**
1. Recognizing the signs that a person is in crisis can improve the outcome of an interaction with that individual.	4.52	4.53	4.51
2. There is no explaining why a person in crisis acts the way they do. [Reverse Coded]	3.50	3.46	3.44
3. Noncompliance should be viewed as a threat. [Reverse Coded]	**3.24**	**3.83***	**3.50***
4. Unnecessary risks should be avoided in encounters.	4.13	4.12	4.05
5. The most important role of an officer responding to a crisis is to stabilize the situation.	4.17	4.14	4.09
6. In crisis situations, it is beneficial to keep a subject talking.	3.92	4.08	3.88
7. In many cases, the use of force against a person in crisis can be avoided.	**3.57**	**3.80***	**3.73**
8. As a person's emotions rise, their rational thinking declines.	**4.23**	**4.54***	**4.33**
9. When responding as a team, it's important to designate roles in the crisis intervention.	**4.12**	**4.39***	**4.28**
10. The majority of time spent communicating with a subject should be spent listening.	**3.77**	**4.27***	**4.04***
11. An officer's nonverbal communication, such as body language, influences how a subject reacts.	4.25	4.39	4.33
12. I know how to slow down an encounter with a person in crisis.	**4.12**	**4.32***	**4.18**
Interactions with Persons in Crisis Index	**3.96**	**4.18***	**4.10**
Cronbach's α	0.626	0.727	0.801

Figure 4 displays the *Interactions with Persons in Crisis Index* scores by wave of each survey, which is also shown in the bottom row of Table 5. Using this average index score, there are statistically significant differences in the pre-training and post-training periods in the expected direction. Although the follow-up index score is not statistically significantly different from the pre-training value, it is still higher than the pre-training score, indicating a lessened but sustained training effect in the expected direction.

Figure 4. UCPD *Interactions with Persons in Crisis Index*, by Wave (N = 62)



e. Attitudes Toward Persons in Crisis

Ten survey items were used to measure officers' attitudes toward persons with mental illness or intellectual/developmental disabilities, persons who abuse substances, and/or persons experiencing situational stress (all identified as reasons why a person may experience crisis in the ICAT curriculum). Officers were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate a lesser acceptance of persons in crisis along with lessened agreement to the tenants taught during the ICAT course. Therefore, we would expect training effects to correspond with a lower score in the post-training and follow-up waves.

As demonstrated in Table 6, three of the 10 items show statistically significant differences in reported attitudes between pre-training and post-training periods. In addition, two of the 10 items show statistically significant differences in reported attitudes in the expected direction between pre-training and follow-up periods. Interestingly, the direction of these changes is not consistent across items, with some moving in the expected direction and some moving in the opposite direction. Of particular note is the meaningful increase for Q10, "Responding to a person in crisis should not be a role of the police," in both the post-training and follow-up

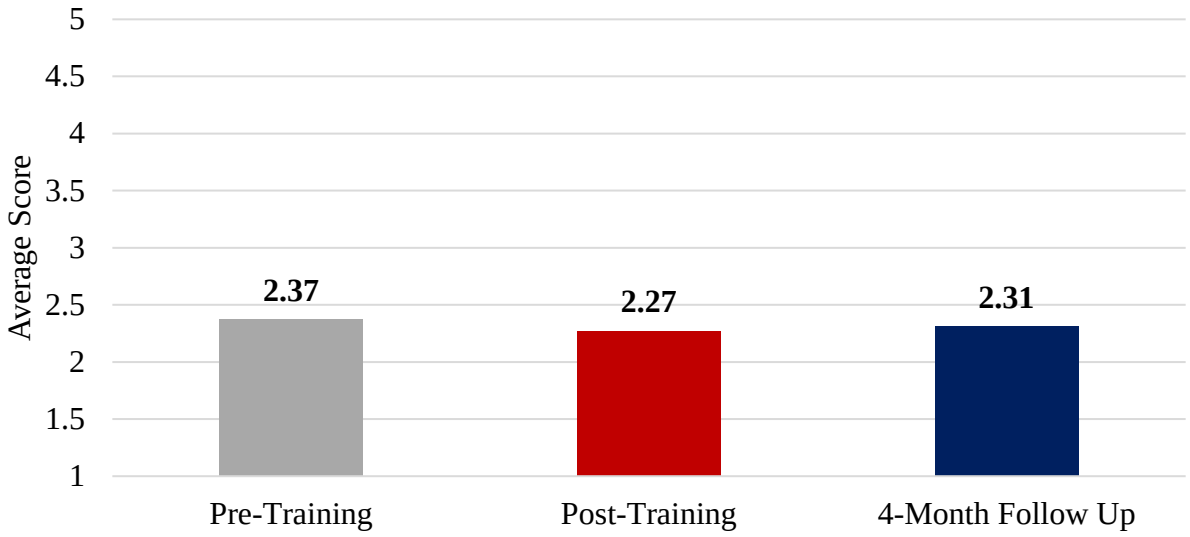
periods. Officers indicate greater agreement with this statement over time, contradicting the expected change in officer perceptions regarding their role in managing incidents involving persons in crisis following their participation in the ICAT training program.

Table 6. UCPD Officer Attitudes Toward Persons in Crisis Survey Results (N = 62)

	Pre-Test Mean	Post-Test Mean	Follow-Up Mean
1. The mentally ill have been the subject of ridicule for too long. [Reverse Coded]	2.43	2.20	2.26
2. As soon as a person shows signs of mental disturbance, they should be hospitalized.	2.40	2.51	2.39
3. The mentally ill are far less a danger than most people think.[Reverse Coded]	**2.92**	**2.52***	**2.52***
4. The mentally ill are a burden on society.	1.93	1.92	1.89
5. Mental illness is an illness like any other. [Reverse Coded]	2.63	2.54	2.47
6. We need to adopt a more tolerant attitude to persons with developmental disabilities. [Reverse Coded]	2.05	1.92	1.95
7. Substance abuse is caused by a lack of self-discipline and will power.	2.78	2.58	2.66
8. Persons who "self-medicate" by abusing substances are a burden on society.	**2.72**	**2.44***	**2.66**
9. Situational stress is no excuse for a person to act irrational.	2.37	2.36	2.48
10. Responding to a person in crisis should not be a role of the police.	**1.68**	**1.86***	**1.95***
Attitudes Toward Persons in Crisis Index	2.37	2.27	2.31
Cronbach's α	0.603	0.710	0.788

Figure 5 displays the mean scores for *Attitude Toward Persons in Crisis Index* across survey waves, which are also shown in the bottom row of Table 6. There were no meaningful differences found across survey waves, but notably the overall scores in the post-training and follow-up period are slightly lower than the pre-training period, corresponding with the expected directional change.

Figure 5. UCPD *Attitudes Toward Persons in Crisis Index*, by Wave (N = 62)



f. Officer Confidence Scale

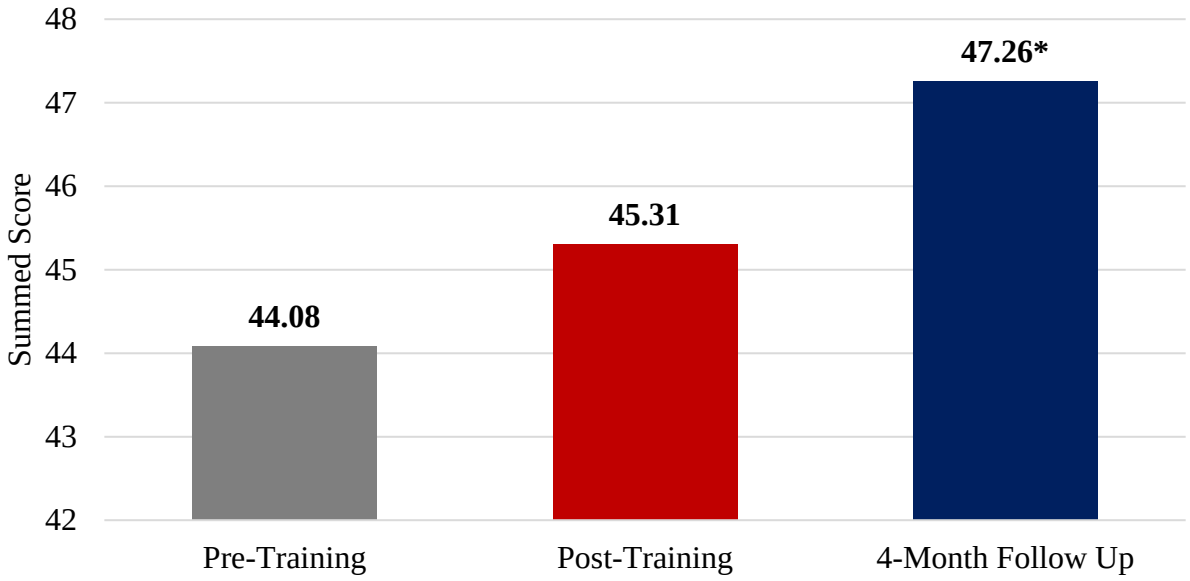
To better understand officers' confidence in handling critical incidents, a one-page dialogue scenario between a person going through a crisis and a police officer was used. Officers were asked to indicate their level of confidence (1 = Not at All Confident; 4 = Very Confident) to 13 actions related to this dialogue. Each of the actions are shown in Table 7, along with the officers' average score for pre-training, post-training, and the 4-month follow-up. These items were summed to create a "Total Self-Efficacy" scale for each wave of data, with a possible range of 13 to 52. As shown in Table 7, officers grow more confident in their perceived response to the scenario over each wave of the survey. While only one of the 13 items (Q2) is statistically significant comparing pre-training to post-training, 11 of the 13 items are statistically significant when comparing 4-month follow-up to pre-training scores. Overall, the majority of officers report being somewhat to very confident in dealing with the crisis situation presented.

Table 7. UCPD Officer Confidence Scale Survey Results (N = 62)

How <u>confident</u> would you feel…	Pre-Test Mean	Post-Test Mean	Follow-Up Mean
1. … interacting with someone like David?	**3.38**	**3.54**	**3.65***
2. … in your ability to effectively communicate with someone like David?	**3.32**	**3.53***	**3.56***
3. … taking someone like David to a social service agency?	3.38	3.53	3.60
4. … asking someone like David open-ended questions to gather information about what is going on?	**3.45**	**3.58**	**3.67***
5. … interacting with family members of someone like David?	3.55	3.54	3.72
6. … in your ability to summarize/paraphrase statements made by David in your own words?	**3.35**	**3.46**	**3.68***
7. … calming down someone like David?	**3.30**	**3.44**	**3.61***
8. … helping someone like David call a social services agency?	**3.33**	**3.44**	**3.60***
9. … de-escalating a crisis involving someone like David?	**3.37**	**3.51**	**3.65***
10. … talking to someone like David about his medications?	**3.33**	**3.37**	**3.58***
11. … expressing understanding toward someone like David?	**3.53**	**3.47**	**3.72***
12. … getting someone like David to talk to you rather than acting out?	**3.38**	**3.44**	**3.60***
13. … talking to someone like David about whether or not he uses alcohol or drugs?	**3.40**	**3.46**	**3.70***
Officer Confidence Scale	**44.08**	**45.31**	**47.26***
Cronbach's α	0.959	0.944	0.946

Figure 6 displays the summed *Officer Confidence Scale* scores across waves of the survey, which is also shown at the bottom of Table 7 above. The 4-month follow-up score is significantly higher than the pre-training score, indicating a meaningful change in confidence in the expected direction. In contrast to other sub-sections of the survey, there appears to be no training decay in this topic area. Scores indicative of officer self-confidence in handling critical incidents continue to rise 4-months after the ICAT training is received by officers.

Figure 6. UCPD *Officer Confidence Scale*, by Wave (N = 62)



g. Utility of the Critical Decision-Making Model (CDM)

Eleven survey items were used to assess officers' perceptions of the utility of the Critical Decision-Making Model (CDM). These items were presented to officers in the post-training and follow-up waves of the survey only. As described earlier in the report, the CDM is a critical component of the ICAT training program. For each item related to the CDM, officers were asked to indicate their level of agreement on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Higher scores indicate officers' greater agreement regarding the utility of the CDM.

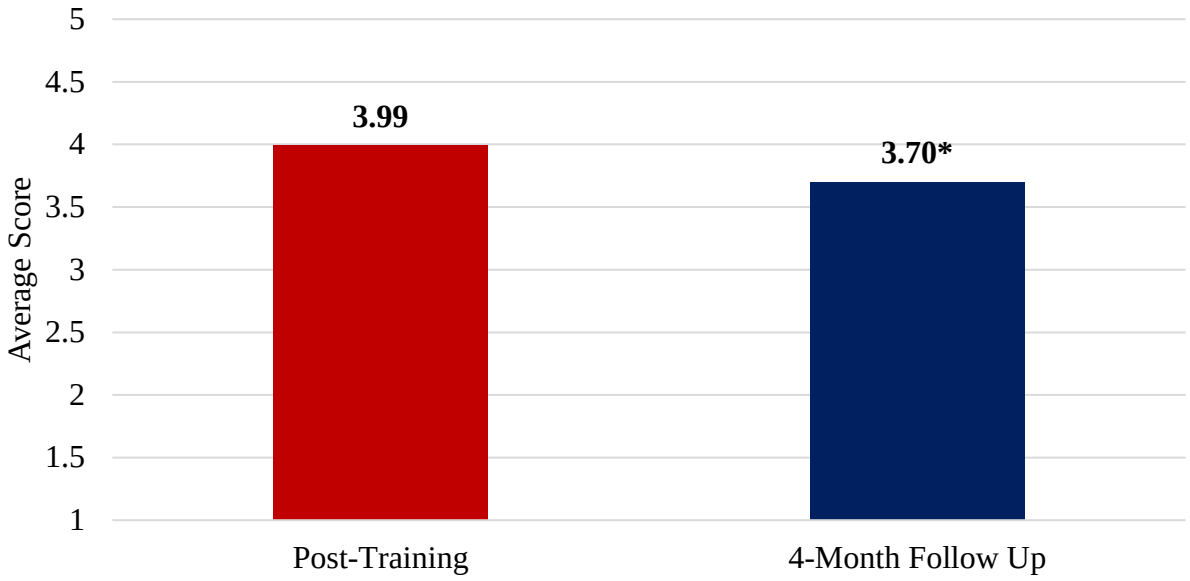
Results in Table 8 indicate a statistically significant change in the mean score for nine of 11 items from the post-training to the follow-up survey, in the *opposite direction*. Four months after participating in the ICAT training program, officers were less likely to indicate the utility of the CDM in their law enforcement work.

Table 8. UCPD Officer Perceptions of CDM Utility Survey Results (N = 62)

The CDM…	Post-Test Mean	Follow-Up Mean
1. … increases my decision-making skills during everyday situations.	**3.93**	**3.72***
2. … often takes too much time to use in encounters with a person in crisis. [Reverse Coded]	**4.10**	**3.62***
3. … may make officers hesitate to take action when needed. [Reverse Coded]	**3.41**	**3.00***
4. … helps me to assess the risks in a situation.	**4.12**	**3.78**
5. … helps me identify my options for action in a situation.	**4.07**	**3.83***
6. … helps me select an option to resolve a situation.	**4.00**	**3.76***
7. … reminds me to continuously gather information during a situation.	**4.15**	**3.89***
8. … is too complicated. [Reverse Coded]	**4.00**	**3.72***
9. … helps me review the action I took during a situation.	**3.97**	**3.79**
10. … helps me to explain my decision-making after I act in a situation.	**4.05**	**3.76***
11. I am confident using the CDM during an encounter with a person in crisis.	**4.05**	**3.74***
CDM Utility Scale	**3.99**	**3.70***
Cronbach's α	0.947	0.954

Figure 7 displays the mean scores for the *CDM Utility Index* for the post-training and follow-up surveys, which is also shown at the bottom of Table 8 above. There is a statistically significant difference between the post-training and 4-month follow-up scores in the *opposite direction*, similar to the individual survey items which make up this scale.

Figure 7. UCPD CDM *Utility Index*, by Wave (N = 62)



Impact of Officers' Characteristics

Additional analyses were conducted to consider attitudinal differences according to two demographic categories: (1) educational attainment (officers with Bachelor's Degree and higher compared to officers with less than a Bachelor's Degree) and (2) UCPD experience (officers with 9 or fewer years compared to officers with 10 or more years). For both the education and experience categories, the agency had a nearly equal sample within each group. However, T-test comparisons did not find any statistically significant differences between the two groups for both variables, and across each of the six indexes and scales identified in the findings above. In other words, both novice and experienced officers – as well as lesser-educated and higher-educated officers – held similar views of citizen interactions, use of force, persons in crisis, confidence in handling critical incidents and views of the utility of the CDM across survey waves. Note that statistical analyses examining the differences across other officer demographics (e.g., sex, race, rank, assignment, etc.) could not be conducted due to the homogenous nature of the UCPD officers, and the agency size.

CONCLUSION

Findings Summary

This report summarized the initial findings from the first, pilot-test evaluation of the Integrating Communications, Assessment, and Tactics (ICAT) training program. We analyzed survey responses from the pre-training, post-training, and 4-month follow-up surveys, which measured a number of attitudes, perceptions, and beliefs related to the training content. The UCPD also reported their officers' general satisfaction with the ICAT training. Overall, the findings from the internally (UCPD) administered survey demonstrate that officers trained in ICAT held a positive view of the training, indicating initial promising results that ICAT training could be an effective curriculum.

The additional findings from the externally administered surveys are largely consistent with the hypothesized impacts of the training on officers' attitudes and perceptions. Some comparisons of survey sub-section indexes and scales indicate statistically significant changes in the predicted direction when comparing pre-training scores to post-training scores. This was found for the *Priorities in Citizen Interactions Index* and the *Interactions with Persons in Crisis Index.* In summary, officers reported statistically significant positive changes in their perceptions regarding their priorities in interactions with citizens and more specifically, with persons in crisis. Three additional sub-sections scales (*Views on Citizen Interactions Index, Attitudes Toward Persons in Crisis Index, and Officer Confidence Scale*) demonstrated changes in officers' attitudes in the expected directions consistent with the training, however these differences were small in magnitude and did not reflect statistically significant changes. Importantly, officers reported statistically significant increases in the *Officer Confidence Scale* when comparing the pre-training scores to the 4-month follow-up scores. In other words, officers reported increased levels of confidence in handling situations with persons in crisis directly after the ICAT training, and their reported confidence continued to increase over time the next 4-month period.

It is also important to note that the majority of survey responses indicated a moderate level of training decay, given that most follow-up scores move closer to the pre-training scores over time and were not statistically different from the pre-training scores. Importantly as noted above, officers' reported confidence is the only area that did not exhibit indicators of training decay. Scores indicative of officer self-confidence in handling critical incidents continued to rise 4-months after the ICAT training is received by officers.

Examinations of the utility of the Critical Decision-Making Model (CDM) demonstrated findings that were inconsistent with the training. Nearly all survey items examining the CDM demonstrated a statistically significant change in the *opposite* direction than expected, indicating that officers found the CDM to be less useful at the 4-month follow-up period compared to the post-training period. While there may be various reasons as to this counter-intuitive finding, a potential explanation is that the CDM may need to be reinforced more frequently than other

components of the ICAT training. It is also possible that officers may not agree with or fully understand the CDM, or perhaps they find the model difficult to use in high stress situations. In short, the training curriculum that includes the CDM needs to be reconsidered for more effective impact.

Limitations

As with all research, there are several limitations that should be noted. First, one concern about using survey research to assess programmatic impact is the possibility that respondents may choose responses that they perceive as socially desirable, rather than responses that reflect their own personal beliefs. Although we cannot dismiss this possibility, the likelihood of a social desirability response is minimized by our use of an anonymous survey, where the identities of respondents remain unknown.

Randomized control trials (RCT) are considered the "gold standard" in research, due to their ability to maximize internal validity, which increases the confidence that findings did not occur by chance. During an RCT, study subjects are randomly assigned to either the treatment or control group. The "treatment group" receives the intervention being studied and the "control group" does not. The control group is often described as just "doing business as usual." This approach allows the researcher to control the delivery of the intervention and assume the only difference between the subjects in each group is whether or not they experienced the intervention. However, the research design used in this study was non-experimental, and did not include a randomized selection of officers to participate in the training. The lack of a rigorous design (including the lack of a control group for comparison) severely limits the internal validity of the study by the study's inability to rule out the influence of other confounding factors.

Examining changes in officers' attitudes pre/post training can still incorporate rigorous statistical analyses despite the limitations of the research design. Although the UCPD is considered a mid-size agency and therefore represents the majority of police agencies in this country, a sample size of 62 officers also places constraints on the statistical analyses that can be conducted. In addition, the use of force by UCPD officers is an infrequent event, and therefore the study is limited to assessing changes in officers' attitudes, knowledge, and reported confidence rather than actual behavioral changes. Nevertheless, this research provides an opportunity to develop and pilot-test survey items to measure officers' attitudes, perceptions, and confidence as a method to gauge the initial effects of de-escalation training.

Recommendations

Based on these research findings, the following recommendations are provided to the UCPD:

1) **Continue to assess training decay, and identify appropriate levels of training dosage.** Initial findings suggest that the positive attitudinal changes reported by officers after the ICAT training dissipated somewhat by the 4-month follow-up time period. The UCPD

may consider holding additional refresher trainings, either during roll call or during a separate occasion to reinforce different aspects of the ICAT curriculum. The UCPD should actively monitor the use of these skills through analysis of body-worn camera footage or contact cards (see Recommendation #4).

2) **Re-examine the CDM portion of the ICAT curriculum.**
Findings from this research suggest that officers did not respond favorably to the CMD in particular, compared to other training components. This may represent a misunderstanding of the model, an inability to apply it in the field, or perhaps a failure in the training curriculum. Given the importance of the CDM to both the ICAT training, and the changes in the UCPD's use of force policy, a better understanding and use of the CDM by officers is warranted. This may be done through the use of focus groups with officers to better understand their perceptions regarding the CDM.

3) **Analyze self-reported use of ICAT skills**.
After all UCPD Officers were trained in ICAT (October 2018), the UCPD added a new section to their Form 10A ("Contact Card") which are filled out by officers for all citizens that are non-consensually stopped. There is a list of six tactical skills and four communication skills which officers are instructed to check off on the cards, should officers use the skill during their interaction with the citizen. These data should be analyzed to determine any changes in the self-reported use of these skills over time. In addition, the contact cards should be analyzed to determine which skills are used most often, and under what types of situations or conditions. This information would be beneficial to guide both refresher trainings and understand any barriers that may hinder officers from effectively using ICAT skills.

4) **Review BWC footage to examine use of ICAT skills.**
During certain interactions with citizens (e.g., responding to a call for service or while detaining an individual), UCPD Officers are instructed to turn on their body-worn cameras (BWC) to record the encounter. Supervisors should review footage of these officer-citizen encounters to examine the use of tactical and verbal ICAT skills. This may be particularly beneficial as a method to review encounters that may have escalated to the use of force by an officer. This examination could provide specific examples where officers used skills successfully or where the officer missed an opportunity to use skills, and can be shown to UCPD Officers during their monthly supervisory reviews.

5) **Conduct focus groups with UCPD officers.**
This research study provides important quantitative information as to the attitudinal changes associated with the ICAT training program. However, qualitative research would provide an additional layer of understanding for training impacts. We recommend conducting focus groups with UCPD officers to understand the utility of the training, as well as the potential barriers to the training. This allows for the capturing of information

that was not included in the survey research, and may provide useful explanations and context for the current research findings.

6) **Continue to build the evidence-base for ICAT and other UCPD training.**
It is now widely recognized that strategies based on scientifically-grounded research, or evidence, are more likely to be effective in achieving the goal of reducing problems in a cost-effective manner. For a police agency to be evidence-based, it should use and generate research to guide strategic and tactical decision-making. Strategies that are found to be beneficial should be adopted, while strategies found to have minimum or adverse effects should be avoided. Much of the work in Evidence Based Policing (EBP) has been focused around the concepts of: (1) targeting, (2) testing, and (3) tracking (Sherman, 2013; Engel and Meisenholder, 2020). To implement Evidence Based Policing (EBP), agencies need to: (1) **target** resources on problems that are prioritized through a combination of data analysis and stakeholder feedback; (2) **test** the policing methods selected to determine their impact; and (3) **track** mechanisms internally to ensure accountability.

The UCPD has embraced EBP and has begun the use of targeting, testing, and tracking to enhance their policing efforts. It is recommended that the UCPD continue to use these principals to further develop and improve their ICAT training. In addition, it is recommended that similar targeting, testing, and tracking approaches be implemented across all UCPD trainings. It is widely recognized in the law enforcement field that the impact of police training is rarely evaluated.

Policy Implications

Previous literature reviews have demonstrated promising evidence to support the notion that if training creates significant changes in attitudes, there is a greater likelihood it will also result in measurable behavioral changes. Indeed, researchers who study how best to conduct training evaluations argue that in order to create behavioral change, learning must first occur—and learning includes measuring participants' changes in attitudes, knowledge, and skills as a consequence of training (Kirkpatrick, 1989). Therefore, despite the limitations noted above, this study significantly contributes to the very limited knowledge currently available regarding the impact of de-escalation training for police.

Although de-escalation training has been widely promoted in the policing field in the past several years, there is no systematic evidence regarding its effectiveness (Engel et al., forthcoming). Therefore, this initial pilot-test with the UCPD represents *the first reported findings regarding the impact of de-escalation training on police* of which we are aware. Further, this research represents an important first step to provide police executives from other jurisdictions with survey tools and examples to build their own evidence-base within their agencies. Results from

this research will be used to further refine and validate the survey instruments for use in future research studies with larger agencies where behavioral impacts can be assessed.

For the UCPD specifically, the findings demonstrate that the ICAT training significantly increased officers' reported confidence when handling situations involving individuals in crisis, and that officers' confidence continues to increase at the 4-month follow-up period. This, in conjunction with the other positive findings reported from this study signify early promising effects for the ICAT training program on changing attitudes and perceptions, making officers more amenable to the principles and practices of de-escalation. This is critical because the use of effective de-escalation techniques is designed to save the lives and reduce injuries of both citizens and police officers. Furthermore, the use of de-escalation skills as trained is believed to reduce the likelihood of officers using excessive force—thereby saving agencies and officers from the many negative consequences that result from excessive force, including community distrust, complaints, and even civil/criminal litigation. Currently, there is a growing recognition in the policing field that even if force *could* legally be used, that does not mean it *should* be used. Ultimately, police trainings which reduce the need and severity of police use of force are most necessary in policing today—the ICAT training program may be one such way to resolve police and citizen encounters in a safer way.

REFERENCES

Bandura A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychology Reviews*, *84*, 191–215.

Broussard, B., Krishan, S., Hankerson-Dyson, D., Husbands, L., Stewart-Hutto, T., & Compton, M. T. (2011). Development and initial reliability and validity of four self-report measures used in research on interactions between police officers and individuals with mental illnesses. *Psychiatry Research*, *189*, 458-462.

CBS News. (2019, August 7). We asked 155 police departments about their racial bias training. Here's what they told us. Retrieved from https://www.cbsnews.com/news/racial-bias-training-de-escalation-training-policing-in-america/.

Engel, R. S., McManus, H. D., & Herold, T. D. (forthcoming). Does de-escalation training work? A systematic review and call for evidence in police use-of-force reform. *Criminology & Public Policy.*

Engel, R. S. & Meisenholder (2020). *Police Chief Magazine*, January.

Exiger. (2019). *Final report of the independent monitor for the University of Cincinnati Police Division*. Submitted to University of Cincinnati Board of Trustees Audit Committee, Cincinnati, OH. Available from www.uc.edu.

Fyfe, J. J. (2000). Policing the emotionally disturbed. *Journal of the American Academy of Psychiatry and the Law*, 28, 345-347.

Isaza, G., T., Yildirim, M., Shafer, J. & Ozer, M. (2017). *2016 campus crime report*. Submitted to the University of Cincinnati Campus Crime Reduction Committee, Cincinnati, OH. Available from www.uc.edu.

Kirkpatrick, D. L. (1998). *Evaluating training programs: The four levels* (2nd ed.). San Francisco, CA: Berrett-Koehler.

Lovicott, M. (2018, June 4). *Training Transition: UWPD Reframing Use-of-Force Through Specialized De-escalation Training*. University of Wisconsin-Madison Police Department. Available from https://uwpd.wisc.edu/news/training-transition-uwpd-reframing-use-of-force-through-specialized-de-escalation-training/.

Nix, J., Campbell, B. A., Byers, E. H., & Alpert, G. P. (2017). A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias. *Criminology & Public Policy*, *16*(1), 309-340.

Oliva, J. R., Morgan, R., & Compton, M. T. (2010). A practical overview of de-escalation skills in law enforcement: Helping individuals in crisis while reducing police liability and injury. *Journal of Police Crisis Negotiations*, *10*(1-2), 15-29.

Police Executive Research Forum (2016a). PERF's 30 Guiding Principles on Use of Force. Washington, DC: PERF.

Police Executive Research Forum (2016b). Integrating Communications, Assessment, and Tactics: A Training Guide for Defusing Critical Incidents. *Critical Issues in Policing Series.* Washington, DC: PERF.

President's Task Force on 21st Century Policing (2015). Final Report of the President's Task Force on 21st Century Policing. United States: Executive Office of the President.

Sherman, L. W. 2013. The rise of evidence-based policing: Targeting, testing, and tracking. Crime and Justice 42 (1): 377–451.

Skoufalos, M. (2017, July 13). "De-escalation training helps set higher policing standards in Camden County". *NJ Pen*. Available from https://www.njpen.com/de-escalation-training-helps-set-higher-policing-standards-in-camden-county/.

Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, *7*(2), pp. 225-240.