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Evaluation of *Integrating Communications, Assessment, and Tactics* (ICAT) Training with the Indianapolis Metropolitan Police

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EXECUTIVE SUMMARY

Introduction

In recent years, de-escalation training has become a central strategy in policing, yet few training programs have been rigorously evaluated. This study replicates the original ICAT (Integrating Communications, Assessment, and Tactics) training evaluation conducted with the Louisville (KY) Metro Police Department (LMPD) in 2018-2020, using a stepped-wedge randomized controlled trial (RCT) design to assess the impact of ICAT de-escalation training within the Indianapolis Metropolitan Police Department (IMPD).

Conducted in a post-2020 environment marked by staffing shortages, increases in public scrutiny, and evolving expectations of law enforcement, this study examines whether ICAT de-escalation training remains effective under new operational realities, in addition to replicating prior findings. Due to resource constraints, the IMPD implemented a condensed 8-hour version of ICAT without scenario-based practice. The ICAT training was supplemented, however, with additional departmentwide emphasis on the use of de-escalation tactics and skills through other trainings, policies, and data collection.

This IMPD study replicates the first evaluation of ICAT training – conducted with the Louisville, KY Metro Police in 2018-2020.

Research Questions and Design

The current study uses a mixed-methods approach to assess both attitudinal and behavioral outcomes of the ICAT training. As with previous evaluations of ICAT training, the research team uses a series of convergent analytical approaches to consider the following research questions:

1. What is the impact of ICAT training on officers' self-reported knowledge about and attitudes toward the use of de-escalation tactics and skills?
2. What is the impact of ICAT training on officers' self-reported use of de-escalation tactics in the field?
3. How do first-line supervisors reinforce and/or supervise subordinates' use of ICAT de-escalation skills?
4. Does the impact of ICAT training on officers' attitudes and skills change over time?
5. What is the impact of ICAT training on the frequency and types of force used during encounters with subjects?
6. What is the impact of ICAT training on the frequency of injuries to subjects and officers during use of force encounters?

7. Does any observed impact from the training change over time, and what are the possible confounding factors (e.g., changes in the number of arrests)?

Evaluation A (Attitudes) focuses on the impact of the ICAT training on IMPD officers' attitudes and self-reported behavior and specifically examines research questions 1-4 above using a series of repeated measures surveys, cross-sectional surveys, and focus groups of officers and supervisors. Evaluation B (Behavior) focuses on the impact of ICAT training on officers' behavior in the field and specifically examines research questions 5 - 7 above using administrative data and a stepped-wedge randomized controlled trial (RCT) evaluation design.

Officer Attitudes and Self-Reported Behavior (Evaluation A)

The research team administered three waves of officer surveys (pre-training, post-training, follow-up), a cross-sectional supervisor survey, and focus groups with IMPD supervisors and officers.

1. The pre-training survey was administered electronically, May – Jul 2022: 57.3% response rate (895 surveys / 1,563 officers trained).
2. The post-survey was administered in-person via paper surveys, May 2022 – May 2023): 74.5% response rate (1,164 surveys / 1,563 officers trained)
3. The follow-up survey was administered electronically via email approximately four months after each training cluster (rolling basis): 34.0% response rate (326 surveys / 958 trained officers assigned to patrol divisions.
4. The first-line supervisor survey was administered in-person via paper to IMPD supervisors on Nov 10 - 11, 2023: 58.4% response rate (173 surveys / 296 supervisors).
5. The research team conducted four focus groups with a total of 20 IMPD officers and supervisors, approximately 18 months after all IMPD officers were trained (Dec 2024).

SURVEY RESPONSE RATES

Pre-training	57.3%
Post-training	74.5%
Follow-up	34.0%
Supervisor	58.4%

As shown, the two surveys administered electronically (pre-survey and follow-up) have lower response rates than the surveys administered in-person (post-survey and supervisor survey). The response rates for the IMPD surveys are generally consistent with previous research on police survey response rates that shows average response rates at 64%, with approximately 79% for in-person compared to 48% for surveys distributed by other means, (Nix et al., 2019). The evaluation of the impact of ICAT training on officers' attitudes, knowledge, and perceptions regarding de-escalation tactics includes descriptive, bivariate, and multivariate analyses, including factor analysis and additive index scores where appropriate. Immediate training

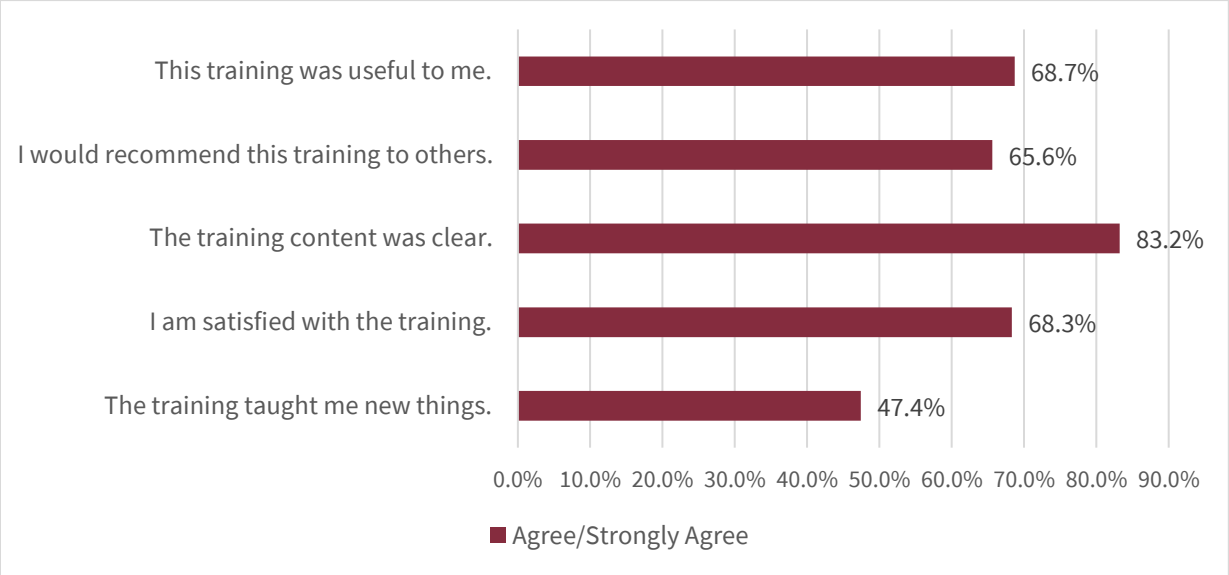
effects are assessed using paired t-tests and Wilcoxon signed-rank tests, while changes across three survey waves are analyzed using repeated measures ANOVA and paired t-tests, limited to officers who completed all waves. Multivariate regression identifies officer characteristics linked to significant attitude shifts and reported use of ICAT skills four months post-training. Similar analyses are used to examine the supervisor survey data; however, due to its cross-sectional nature, analyses exploring change over time are not appropriate. Finally, thematic analysis is employed to interpret and synthesize the focus group field notes into major themes, similarities, and differences.

FINDINGS

Training Receptivity and Perceptions of Training

- Immediately after ICAT training delivery, over 80% of officers found the training content clear; 69% found it useful, and 66% would recommend it to others (see Figure 1).
- Less than half of the respondents agreed that the ICAT training taught them new things, but focus group participants described de-escalation concepts as already embedded within the IMPD through other trainings, policies, data collection systems, and managerial expectations.

Figure 1. IMPD Officer Receptivity to ICAT Training – Post-Training Survey



- While initial officer perceptions were positive, follow-up responses indicated a decline in perceived usefulness of ICAT training
    - At 4-month follow-up, 54% perceived ICAT training as useful and 47% indicated they would recommend it to others.

- Officers also held less favorable views of the utility of an important component of the training, the Critical Decision-making Model (CDM), at the 4-month follow-up compared to immediately after training.

Attitudinal Changes and Sustainability

ICAT training led to immediate positive changes in officers' attitudes post-training, but some changes diminished by follow-up period.

- ICAT training led to immediate changes in officer attitudes from pre- to post-training surveys, consistent with ICAT principles across all areas, including interactions with the public, attitudes toward persons in crisis, and use of force attitudes.
- Many of these gains diminished by the follow-up period, with attitudes often returning to baseline (particularly those related to interactions with the public and use of force). Attitudes toward persons in crisis remained significantly improved at follow-up compared to baseline.
- These findings underscore the need for ongoing reinforcement and refresher training.

Self-Reported Field Application of ICAT Skills and Perceived Obstacles and Effectiveness

- While general use of ICAT skills in the field was moderate (e.g., 45% and 36% self-reported often or frequently using Reaction Gap strategy and ICAT Communication skills, respectively), usage was much higher when asked to recall activity during a recent encounter with a person in crisis (e.g., 82% reported often or frequently using ICAT Communication skills and 77% said the same about the Reaction Gap strategy).
- Officers who reported using ICAT skills in the past 60 days overwhelmingly rated them as effective, particularly the Reaction Gap and Tactical Pause strategies.
- IMPD personnel reported no perceived obstacles to using the CDM or other ICAT skills between one-third and half the time.

Use of ICAT skills is frequently self-reported by officers during recent encounters with persons in crisis and skills are reported as effective.

Influence of Supervisory Reinforcement and Peer Support

- Supervisors express high confidence in using ICAT skills with subjects and subordinate officers (87% and 84%, respectively).
- Similarly, approximately two-thirds of supervisors agree that they could effectively supervise and coach their team members in using ICAT skills.
- A majority of supervisors (68.8%) also agree that when officers apply ICAT de-escalation skills properly, encounters with individuals are often resolved positively.
- However, fewer than 25% of supervisors report frequently engaging in specific activities that reinforce ICAT skills with their subordinates.
- Similarly, fewer than 15% of officers report receiving weekly reinforcement of ICAT skills from their supervisors, although 52% agree that their immediate supervisor support the use of ICAT training.
- Peer and supervisor support are key predictors of officers' self-reported frequency of ICAT skill use in the field. Perceived peer support also mitigates the impact of attitudinal training decay. However, only about 32% of officers perceive that their peers supported ICAT skills.

Peer support and supervisory reinforcement of ICAT skills significantly predict whether officers report frequent use of ICAT skills with persons in crisis.

Contextual Insights from the Focus Groups

- **Agency Commitment to De-Escalation**: Focus group participants report that de-escalation is a fundamental expectation among the command staff and within the supervisory structure of the IMPD. Officers report that the term "de-escalation" is commonly used and strongly emphasized in the department's culture. Additionally, IMPD use of force reports now include prompts related to documenting de-escalation tactics used, reinforcing their importance.
- **Integration Across Trainings:** Participants note there is some overlap between ICAT and other trainings, such as CIT, ABLE, and use of force, suggesting that de-escalation principles are integrated throughout IMPD's training curriculum portfolio.
- **Officer Expectations and Practice:** Officers show confidence in applying de-escalation tactics and see ICAT as building on their current practices. They believe supervisors generally supported the use of ICAT skills, and supervisors indicate they reinforce de-escalation during debriefs and roll calls.

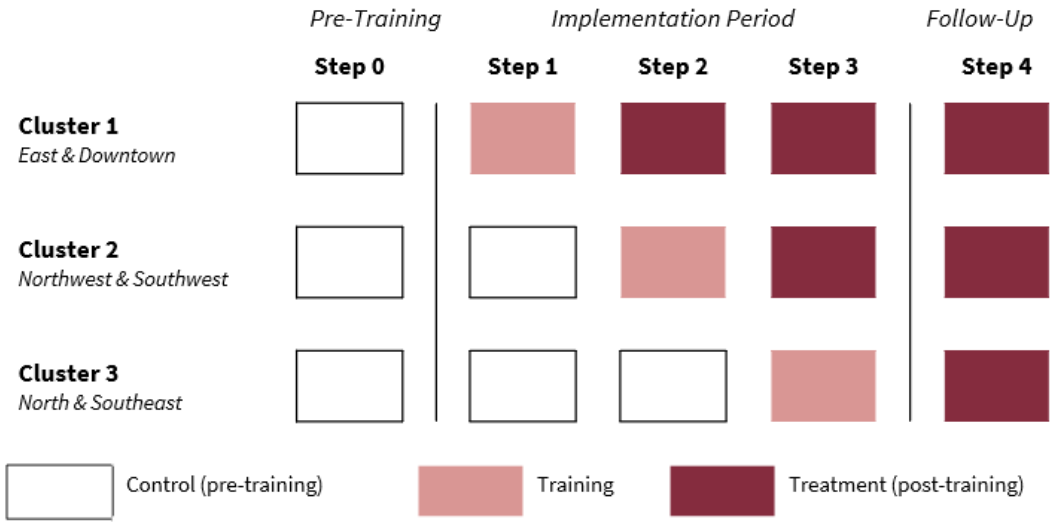
- **Recommendations:** Focus group participants emphasize the need for refresher training, supervisory coaching, and more scenario-based practice. The research team also supports these recommendations.

Officer Behavior (Evaluation B)

Evaluation B utilizes panel regression models within a stepped-wedge RCT design to estimate changes in officer behavior over time using multiple sources of police administrative data related to use of force and subject and officer injuries. The stepped-wedge RCT is a type of crossover design where different geographic clusters (e.g., IMPD patrol districts) begin as control groups and are then randomly selected at staggered intervals to receive the intervention (see Figure 2). Used in previous evaluations by members of the research team (Engel et al., 2022; Worden et al., 2024), it is a robust and innovative approach to assess the impact of training interventions in real-world settings.

- The ICAT training was delivered in three waves to 1,563 IMPD officers across six patrol districts using a stepped-wedge randomized controlled trial (RCT) design.
- The unit of analysis is district–month, leveraging variation in the timing of ICAT training across the IMPD districts to isolate treatment effects relative to untreated periods and districts.

Figure 2. ICAT Training Schedule for Stepped-Wedge Design



Step 1: May 30 – Jul 21, 2022 (n = 292 officers), Step 2: Oct 14 – Dec 22, 2022 (n = 333 officers), Step 3: Feb 20 – May 5, 2023 (n = 455 officers), Follow-up: May 6, 2023 – Dec 31, 2024

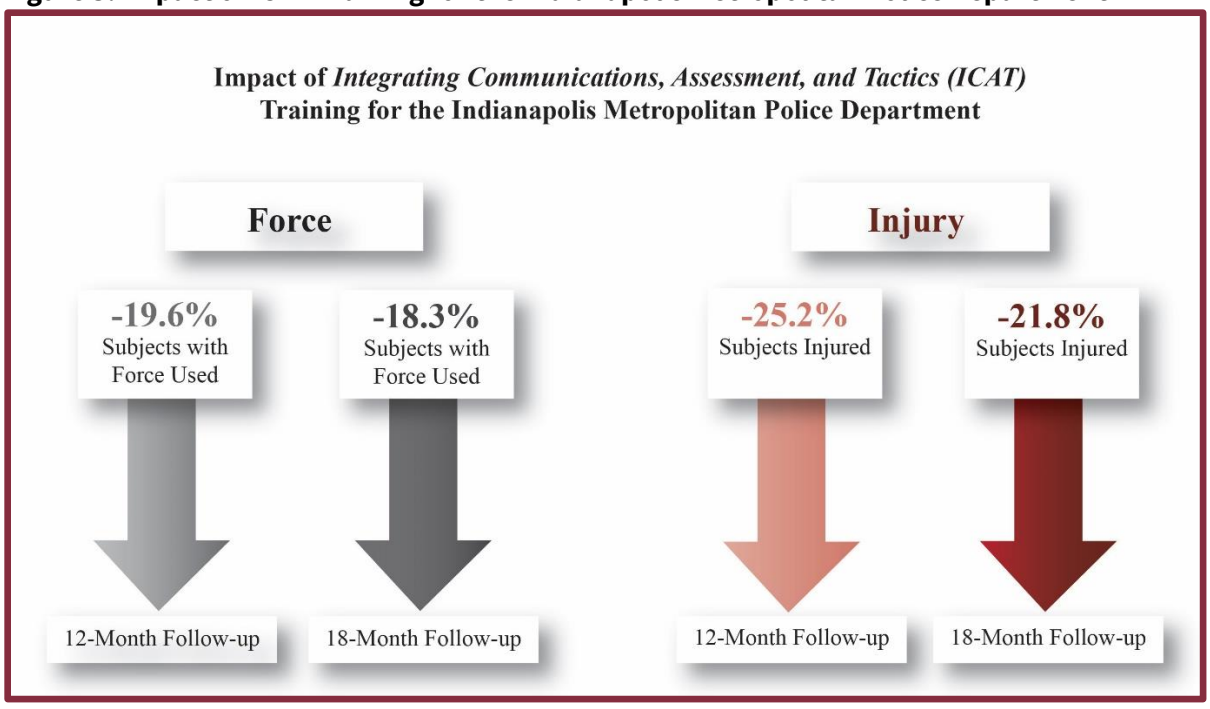
FINDINGS

The modified RCT design is used to measure the impact of ICAT training across three primary outcomes of interest: **(1) Use of force** – measured as the number of subjects who had force used against them; **(2) Subjects Injured** – measured as the number of subjects injured during use of force incidents; **(3) Officers Injured** – measured as the number of use of force incidents where any officer was injured. For each of the three outcomes, two statistical models are estimated, one measuring the impact of training across the various Indianapolis districts with an **initial follow-up period** (approximately one-year post-training) and the second, **sustained follow-up period** (approximately 18- months post-training).

The randomly assigned timing of the IMPD's modified ICAT training is associated with statistically significant reductions in the number of subjects who had force used against them and the number of subjects injured during force encounters (see Figure 3).

- **Use of Force:** 19.6% initial reduction in subjects who had force used against them (12-month follow-up), and 18.3% reduction sustained over an 18-month period.
- **Subjects Injured:** 25.2% initial reduction in the number of subjects injured (12-month follow-up), and a 21.8% reduction sustained over an 18-month period.
- **Officers Injured:** The timing of the ICAT training is ***not*** associated with any statistically significant changes in the number of use of force incidents where any officer was injured, in both the 12-month or 18-month follow-up periods.

Figure 3. Impact of ICAT Training for the Indianapolis Metropolitan Police Department



Sensitivity Analysis

The reported reductions in uses of force and subjects injured may be due to other contextual factors that also align with the timing of the training. For example, encounters between officers and subjects that involve an arrest place the subject at higher risk of use of force compared to other police interactions with the public. If arrests are decreasing at the same time and frequency as use of force, the observed training effect may not be as strong as reported.

Significant reductions in uses of force and subjects injured post-ICAT training occur above and beyond reductions in arrests.

To account for the possibility that the observed reductions in force and subjects injured are the result of reductions in arrests, sensitivity analyses are conducted, which reveal:

- The number of individuals arrested significantly declines post-training (-15.3%).
- Clogg Z coefficient difference tests show that reductions in the number of force subjects and subjects injured occur ***above and beyond*** the reductions in the number of arrests.
    - A lower-to-upper bound estimate of ICAT training's independent effect on use of force ranges from -5.0% to -19.6% in the post-ICAT training period.
    - A lower-to-upper bound estimated impact of ICAT training on subjects injured ranges from -11.5% to -25.2% following training.
- This means that while the reductions in arrests could be at least partially responsible for the reductions in use of force (by reducing exposure/risk to force), the reductions in force are not fully explained by reductions in arrest reduction; this suggests a unique, independent effect of ICAT training.

This study provides additional evidence that ICAT training can have a significant and lasting reduction on police use of force.

Taken together, these findings indicate the ICAT training has a measurable and lasting impact on officers' behavior in the field even though officers' attitudinal changes are not strongly sustained in follow-up periods and the frequency of self-reported ICAT skill use in the field varies. The reductions in use of force and subjects injured—measured through a modified RCT study—provide additional strong evidence supporting the ICAT training model's role in making police interactions with the public safer.

This study provides a comprehensive and methodologically robust replication study of the impact of de-escalation training. It confirms that ICAT training is associated with reducing the use of force and subjects injured. Despite reducing the ICAT training from 12 hours to 8 hours

by removing scenario-based exercises, the IMPD maintained strong fidelity to the rest of the curriculum. This shorter version of ICAT was combined with the integration and infusion of de-escalation principles across other training programs, policies, data collection, and agency culture. This indicates that even a condensed version of ICAT training can produce meaningful results when supported by other training reinforcement strategies. Further, despite the modification of the ICAT training from its intended 12 hours to eight hours, only 5% of respondents agree that the training should be longer (and over half believe it should be shorter). It is possible, however, that scenario-based training is essential for longer-term retention—beyond the 18-month post-training period studied here—and especially for agencies that do not have de-escalation deeply embedded in their organizational culture.

The study also highlights the importance of organizational culture, leadership, and support from peers and supervisors in sustaining training effects. Finally, the findings point to areas for IMPD improvement, such as stronger supervisory reinforcement of training principles and refresher courses; the work in IMPD can serve as a roadmap for agencies looking to implement or enhance de-escalation training.

To maximize impact, de-escalation training should be supported by strong policies, first-line supervisory reinforcement, and executive level support.

The findings underscore the importance of mixed-methods evaluations and the need to understand not just whether training is effective, but how, when, and under what conditions it leads to meaningful change. Future research should continue examining the interaction between training design, organizational support, and field-level implementation to help develop more effective and adaptable police training programs.

It is also important to study officer and subject injuries during use of force incidents more directly. While the findings from this study generally mirror findings from the initial Louisville study, the null findings associated with officers injured are the single anomaly. Therefore, a more thorough examination of the types of force used and associated severity of officer injuries is warranted. While beyond the scope of the current study, conducting analyses with additional data that examine injuries is the next step for a more comprehensive understanding of how to best keep both officers and members of the public safe during encounters.

In conclusion, police agencies nationwide should focus on following evidence-based models, maintaining supervisory involvement, and exploring booster training opportunities to sustain positive results. This study highlights the IMPD's strong dedication to innovation, transparency, and ongoing improvement. By integrating a thorough evaluation into the implementation of ICAT training, the IMPD provides valuable evidence to the policing field and demonstrates the leadership needed to test, learn, and adapt. Their efforts serve as a model for other agencies aiming to adopt and assess organizational innovations rooted in evidence and accountability.

1. INTRODUCTION

In recent years, de-escalation training has become a key approach in law enforcement to provide officers with tactics, skills, and tools to better manage interactions with the public. This focus reflects growing community and agency interest in resolving conflicts and effectively handling challenging encounters with individuals in crisis. Although these training programs are becoming more widely adopted, most have not been formally evaluated (Engel et al., 2020a). Consequently, the evidence base regarding the impact of de-escalation training on officers' attitudes and behaviors remains limited with mixed findings. Few studies have measured the impact on actual changes to officers' behavior (e.g., the frequency and severity of uses of force, and subject and officer injuries during encounters where force is used) (McLean et al., 2020; White et al., 2025).

Of the handful of studies that have measured changes in police behavior in the field, until 2020, none had specifically tested the *Integrating Communications, Assessment, and Tactics (ICAT)* police training developed by the Police Executive Research Forum (PERF). In 2020, Engel, Corsaro, and others released findings from a stepped-wedge randomized control trial (RCT) study evaluating the impact of the ICAT training implemented within the Louisville Metro Police Department (LMPD) (Engel et al., 2020b). This evaluation was later peer-reviewed and published, demonstrating that ICAT training was associated with a statistically significant 28% reduction in LMPD officers' uses of force, 26% reduction in subjects injured, and 36% officers injured (Engel et al., 2022a). The LMPD study is among the first independent, rigorous evaluations to demonstrate the impact of de-escalation training on officer behavior in the field.

Based in part on these and other findings from the LMPD study – including officers' self-reported use of de-escalation skills in the field, their attitudes and perceptions of the training, possible training decay, and supervisory influence (Engel et al., 2020b; 2022b) – the ICAT training was refined by the PERF staff, and its implementation has increased exponentially. ICAT training has proliferated across the country with free train-the-trainer courses offered at a new state-of-the-art scenario-based training facility in Decatur, IL through philanthropic investments from the Howard G. Buffett Foundation (PERF, 2023a). It has become one of the leading de-escalation trainings in the country, implemented by hundreds of agencies (PERF, n.d.). In short, the findings from this single study evaluating the impact of ICAT training had strong impact on the development and delivery of police de-escalation training that has reverberated throughout the law enforcement field. However, until now, the findings of this initial study have not been replicated. Given the significant influence of the seminal LMPD study in police training, replication studies are especially relevant. The importance and need for study replication in the field of criminal justice has been championed for decades (McNeely & Warner, 2015; Wilson et al., 1973). Therefore, the current study contributes to the evidence on training effectiveness by conducting a replication evaluation of ICAT training as it was administered to the Indianapolis Metropolitan Police Department (IMPD).

One notable difference between the previous LMPD evaluation and the current study is that the IMPD modified their delivery of the ICAT training based, in part, on resource constraints and officer shortages. Specifically, the standard ICAT training model includes eight hours devoted to classroom learning (including lecture, video case studies, and group discussion) and at least four hours dedicated to scenario-based exercises (PERF, 2023b). The IMPD adjusted this training to a single 8-hour training day that included the classroom coverage of ICAT's seven modules but eliminated the recommended four hours of scenario-based training. Note, however that the IMPD implemented ICAT training *after* key components of de-escalation had already been introduced in other IMPD use of force trainings, and *while* other complementary IMPD trainings regarding officer bystandership (e.g., Active Bystandership for Law Enforcement – ABLE) were also trained. As a result, there was a priori reason to believe the impact of ICAT training may not be as strong as observed in LMPD where no previous formal introduction or encouragement of de-escalation tactics and skills had been provided. Finally, the original ICAT training study in Louisville occurred prior to May 2020 – a time associated with significant societal upheaval (related to COVID and social justice responses to the police killing of George Floyd). The impact of ICAT training post-2020 has not been studied. It was unknown if or how the recent changes in policing might alter the potential receptivity and impact of de-escalation training.

To examine the impact of ICAT training, the current study with the IMPD employes a mixed-methods research design to assess both officer attitudinal and behavioral outcomes. Evaluation A (Attitudes) examines the impact of the ICAT training on IMPD officers' attitudes, perceptions, knowledge, and self-reported use of de-escalation tactics in the field. It includes three waves of survey data based on responses from IMPD sworn personnel, a first-line supervisor cross-sectional survey, and focus groups conducted with IMPD officers and first-line supervisors during the follow-up period. Evaluation B (Behavior) examines the impact of training on officer behavior (use of force, subject and officer injuries) in the field using a stepped-wedge randomized controlled trial (RCT) design and official police administrative data. Changes in arrest and reported crime trends are also considered to provide additional context for the study period.

EVALUATION A

Examines impact of ICAT on officer:

- Attitudes
- Perceptions
- Self-reported Behaviors

Overall, IMPD officers report positive views of the ICAT training content and delivery. More than 80% agree the content was clear, and over two-thirds agree the training was useful, they were satisfied with it, and they would recommend it to others. In terms of officers' attitudinal changes, initial responses are positive, with officers showing high receptivity and short-term improvements in attitudes toward public interactions, persons in crisis, and use of force. However, follow-up data reveal some training decay, with many attitudes regressing to pre-training levels. Peer and supervisory support are key factors in sustaining positive outcomes, and while many officers self-reported using ICAT skills —

especially in crisis situations — perceptions of the training's usefulness declined over time. These findings highlight the need for ongoing reinforcement and refresher training.

Findings also show that IMPD supervisors express confidence in using de-escalation skills, feel adequately trained and supported in using ICAT de-escalation methods, and believe their subordinates' use of these skills contributes to positive outcomes during encounters. Despite this confidence, less than 25% report often or frequently engaging in various supervision activities that reinforce de-escalation skills. These findings identify additional opportunities for the IMPD to bolster the use of de-escalation tactics and skills through their first-line supervisors. Focus group findings add valuable context, highlighting a strong cultural emphasis on de-escalation, the importance of supervisory reinforcement, and the need for ongoing support through coaching and refresher training.

EVALUATION B

Examines impact of ICAT on officer behaviors:

- uses of force
- subjects injured
- officers injured

The Indianapolis ICAT evaluation also demonstrates important changes in officer behavior. The study finds statistically significant reductions in both the number of subjects who had force used against them (-19.6%) and the number of subjects injured (-25.2%) – and these reductions are sustained over an extended 18-month follow-up period (-18.3% and -21.8%, respectively). These reported reductions in force and subjects injured are above and beyond reported reductions in serious crime and arrests that also occurred during the study period. The ICAT training, however, is not associated with any significant change in the number of officers injured. In summary, there is strong evidence that the ICAT training (as delivered by the IMPD, post-2020) achieved most of its intended outcomes, with robust findings that support those reported from the initial ICAT evaluation in Louisville. Overall, the timing of the ICAT training delivery is associated with significant reductions in the number of subjects who have force used against them, and the number of subjects who are injured during use of force incidents.

This report begins with a brief description of the City of Indianapolis and the IMPD, followed by a summary of the delivery of the ICAT training. Thereafter, the research team's analytical plan for conducting two separate but related outcome evaluations is described. Evaluation A (Attitudes) assesses the impact of ICAT training on officers' attitudes, perceptions, knowledge, and self-reported use of de-escalation tactics in the field. Evaluation B (Behavior) assesses the impact of ICAT training on officer behavior (use of force, subject and officer injuries, and complaints) using multiple sources of police administrative data and a modified RCT research design. The study concludes with a synthesis of the findings from both evaluations and a discussion of the study's implications for police practitioners and future research on the impact of de-escalation training.

2. STUDY SITE, TRAINING IMPLEMENTATION, & STUDY PLAN

Table 1 provides descriptive information about the study site. Indianapolis is the capital and largest city in Indiana, and the 16th largest in the US, with nearly 900,000 residents as of 2023. According to 2023 Census figures, the residential population of Indianapolis comprises 53.6% non-Hispanic White, 28.1% Black, 13.3% Hispanic, 4.1% Asian, 0.5% American Indian or Alaska Native, and 8.0% who identified as two or more races. Indianapolis has a poverty rate of 15.7% and a median household income of $62,995. The average violent crime rate from 2020 – 2023 was 6.5 per 1,000 residents.[1] The IMPD currently has 1,535 sworn officers and 225 non-sworn personnel. The department is organized into six patrol districts that span approximately 365 square miles of jurisdiction. Since February 2024, the IMPD has been led by Chief Christopher Bailey.

Table 1. Study Site Characteristics of Indianapolis, IN and Indianapolis Metropolitan Police Department (IMPD)

Indianapolis, IN (2023)	
Total Population (2023)	879,293
White	53.6%
Black	28.1%
Hispanic or Latino	13.3%
Asian	4.1%
American Indian or Alaska Native	0.5%
Native Hawaiian & Other Pacific Islander	0.0%
Two or More Races	8.0%
Median Household Income	15.7%
Persons in Poverty	$62,995
Violent Criminal Offenses *(avg 2020-2023)*	6.5 per 1,000
Property Criminal Offenses *(avg 2020-2023)*	14.1 per 1,000

Indianapolis Metropolitan Police Department (IMPD) (2023)	
Total Sworn Personnel	1,535
Total Non-Sworn Personnel	225
Annual Operating Budget	$284,230,093
Annual Calls for Service	488,110 (2023)
Jurisdiction (sq miles)	~ 365
Organization	Six districts

References: U.S. Census Quickfacts (2023); IMPD (2023).

[1] Reported serious criminal offenses include the following NIBRS Group A crimes against persons (aggravated assaults, murder/intentional manslaughter, rape, robbery) and crimes against property (motor vehicle theft, burglary, larceny (inc. larceny from auto); these offenses are generally consistent with those that were traditionally measured as Part 1 UCR violent and property crimes.

ICAT training instructs police officers in de-escalation tactics and critical thinking skills to handle potentially volatile interactions with the public where individuals are either unarmed or armed with a weapon other than a firearm. It encourages officers to combine crisis recognition and intervention, effective communication, and operational tactics in their responses (PERF, 2023b).[2] PERF emphasizes the flexibility for customizing ICAT training to consider local context and conditions (e.g., relevant scenarios for the operating environment, less-lethal weapons available to officers). However, the essential components of the curriculum are not intended to be altered. ICAT is designed to include at least 12 hours of training, with eight hours devoted to classroom learning (including lecture, video case studies, and group discussion) and at least four hours dedicated to scenario-based exercises (PERF, 2023b).

ICAT MODULES

1. Introduction (ICAT Overview)
2. Critical-Decision-Making Model
3. Crisis Recognition & Response
4. Tactical Communications
5. Suicide by Cop
6. Operational Safety Tactics
7. Step Up & Step In

Importantly, based on resource constraints and officer shortages, the IMPD modified their delivery of the ICAT training to a single 8-hour training day that includes classroom coverage of Modules 1 through 7, but eliminates the recommended four hours of scenario-based training and skill practice. Two research team members observed the ICAT training delivery at IMPD in June 2022, noting strong fidelity to the content of the modules.[3]

The IMPD training schedule was specifically designed to support a stepped-wedge randomized controlled trial (RCT) to evaluate the impact of ICAT training on officer behavior on IMPD officers assigned to patrol; therefore, the training schedule was based on patrol district assignment. The ICAT training schedule occurred over an approximate one-year period (from May 30, 2022 – May 5, 2023) and resulted in the training of 1,563 officers. The five-step training schedule started with Step 0 as the baseline and Step 4 as the post-training follow-up period. Each training cluster ranged from roughly 8 to 10 weeks to complete the training of that cluster, while the period between training clusters was roughly 8 to 12 weeks.

- **Step 1** (May 30 – Jul 21, 2022): 531 total officers trained, 292 officers specifically from Cluster 1, East & Downtown Districts.

[2] The ICAT training implementation guide can be accessed here: https://www.policeforum.org/icat-training-guide
[3] Note that in the original Louisville Metro study, the LMPD officers were trained in ICAT for 16 hours, which included eight hours of classroom coverage of Modules 1-4 and 6 (prior to ICAT content modification), and an additional eight hours of scenario-based practice and discussion, hands-on experiential learning, and firearms simulation. The current (updated) ICAT training recommendation is for 8 hours of instruction (as conducted by IMPD) and 4 hours of hands-on scenario-based practice sessions (eliminated by IMPD).

- **Step 2** (Oct 14 – Dec 22, 2022), 577 total officers trained, 333 officers from Cluster 2, Northwest and Southwest Districts.
- **Step 3** (Feb 20 – May 5, 2023): 455 total officers trained, 333 officers from Cluster 3, North and Southeast Districts.
- **Step 4**: Rolling follow-up period from May 6, 2023 – Dec 31, 2024; initial 12-month follow-up period (through Jun 30, 2024) is extended for 6 additional months (through Dec 31, 2024) for use of force outcomes only.

This study of ICAT training is divided into two separate evaluations: (1) the impact of the training on officer attitudes toward and self-reported use of de-escalation tactics, and (2) the impact of the training on officers' behavior in the field. The research team used a series of convergent analytical approaches to consider the following research questions, similar to those addressed in the original LMPD evaluation of ICAT training:

1. What is the impact of ICAT training on officers' self-reported knowledge about and attitudes toward the use of de-escalation tactics and skills?
2. What is the impact of ICAT training on officers' self-reported use of de-escalation tactics in the field?
3. How do first-line supervisors reinforce and/or supervise subordinates' use of ICAT de-escalation skills?
4. Does the impact of ICAT training on officers' attitudes and skills change over time?
5. What is the impact of ICAT training on the frequency and types of force used during encounters with subjects?
6. What is the impact of ICAT training on the frequency of injuries to subjects and officers during use of force encounters?
7. Does any observed impact from the training change over time, and what are the possible confounding factors (e.g., changes in the number of arrests)?

Evaluation A focuses on the impact of ICAT training on IMPD officers' attitudes and self-reported behavior and specifically examines research questions 1 - 4 above. **Evaluation B** focuses on the impact of ICAT training on officers' behavior and specifically examines research questions 5 - 7 above. The specific research methods, data, and analyses from each evaluation are presented separately below, followed by a collective summary assessing the likely impact and effectiveness of the IMPD's ICAT training.

3. EVALUATION A: OFFICER ATTITUDES AND SELF-REPORTED BEHAVIOR

The first evaluation examines the impact of the ICAT training on officers' attitudes, perceptions, knowledge, and self-reported use of de-escalation tactics in the field. It includes three waves of survey data based on responses from IMPD sworn personnel, a first-line supervisor cross-sectional survey, and focus groups conducted with IMPD officers and first-line supervisors. All survey instruments and the focus group protocols were approved by the University of Cincinnati's Institutional Review Board (IRB) and the NIJ's Human Subjects Protection (HSP) process. Copies of each survey instrument are provided in Appendix A. Each component is described in further detail below.

SURVEY RESPONSE RATES

Pre-training	57.3%
Post-training	74.5%
Follow-up	34.0%
Supervisor	58.4%

OFFICER SURVEY DATA

Three waves of an officer training survey were administered to sworn IMPD personnel: (1) pre-training, (2) post-training, and (3) follow-up. The surveys took approximately 15 minutes to complete and were administered electronically to all IMPD officers. Officers were asked to provide their badge numbers on each survey wave to allow the research team to match survey responses over time to individual respondents.

- The **pre-survey** was administered from May 25 - July 31, 2022, using IMPD's PowerDMS system that provides a link to officers to access a survey generated by the research team through Qualtrics software. In total, 895 pre-surveys were completed by officers prior to receiving the ICAT training, representing a 57.3% response rate (895/1,563).
- The **post-survey** was administered via paper distributed by the IMPD instructors at the end of each training day during the year-long training delivery period (May 2022 - May 2023). Post-training surveys were completed by 1,164 IMPD officers, resulting in a response rate of 74.5% (1,164/1,563). Research team members entered responses from the paper surveys directly into a quantitative database.
- The **follow-up survey** was administered electronically via email approximately four months after each training cluster (three waves of administration corresponding with the initial training delivery). The four-month follow-up survey was only administered to the 958 trained officers assigned to patrol divisions, yielding 326 usable responses across all three clusters (34.0% response rate).

As shown, the two surveys administered electronically (pre-survey and follow-up) have lower response rates than the surveys administered in-person (post-survey and supervisor survey). The response rates for the IMPD surveys are generally consistent with previous research on police survey response rates that shows average response rates at 64%, with approximately 79% for in-person compared to 48% for surveys distributed by other means, (Nix et al., 2019).

SURVEY TOPICS

Survey questions are based on the original items used for the ICAT training evaluation within the Louisville Metro Police Department (see Engel et al., 2020b; 2022a; 2022b). The surveys administered to the IMPD officers gather information regarding the topics listed in Table 2 below. The IMPD officers were also asked to provide a four-digit code number, which allows the research team to link survey waves of individual officers.

Table 2. IMPD Survey Topics by Wave

	Pre-Training	Post-Training	Follow-Up
Baseline Measures			
Views on Policing	X		
Demographic Information	X		
Officers' Perceptions of Training			
Openness to Training	X		
Training Receptivity		X	
Views on ICAT Training overall			X
CDM Utility		X	X
Officers' Attitudes			
Views on Interactions with the Public	X	X	X
Attitudes Toward Persons in Crisis	X	X	X
Attitudes Toward Using Force	X	X	X
Officers' Self-Reported Behavior			
Officer Actions During Encounters with Persons in Crisis	X	X	X
ICAT Skill Use in the Field			X
Officers' Perceptions of Supervisory Reinforcement			
Frequency and Method of Supervisory Reinforcement of ICAT Training			X

SUPERVISOR SURVEY DATA

Two notable findings related to first-line supervision and de-escalation emerge from the evaluation of ICAT in Louisville (Engel et al., 2022b). First, despite LMPD field supervisors feeling confident in their ability to oversee their officers' use of de-escalation skills, they report infrequently taking part in supervisory activities that support these skills. Second, only supervisors' receptivity to de-escalation training is a key factor in whether they take part in activities that reinforce the training principles with their subordinate officers. These findings underscore the importance of field supervision in a comprehensive strategy to reduce police use of force.

One cross-sectional survey was administered via paper to IMPD first-line supervisors approximately six months after all ICAT training was completed (Nov 10 - 11, 2023, during a separate agency event). Of the 296 supervisors, 173 completed the survey (58.4% response rate). Research team members entered responses from the paper surveys directly into a quantitative database.

SURVEY TOPICS

Supervisor survey questions are also based on the original items used for the ICAT training evaluation within the LMPD (see Engel et al., 2020b; 2022a; 2022b). The IMPD supervisor survey gathered information on the following topics:

- Perceptions Related to Using ICAT De-escalation Skills
- Perceptions Related to Supervising ICAT De-escalation Skills
- Field Observations of Subordinates' ICAT De-escalation Skills
- Video Observations of Subordinates' ICAT De-escalation Skills
- Supervision Activities Related to ICAT De-escalation Skills
- Self-Reported Supervisor Activities
- Perceptions of Supervisor Functions
- Demographics

Qualitative (Contextual) Data

To provide additional context to interpret the findings from statistical analyses of survey data, the research team conducted four focus groups with IMPD supervisors and officers approximately 18 months after all IMPD officers were trained in ICAT. Focus groups are a form of group interview that follows a pre-established discussion protocol, while also emphasizing participant interaction to delve further into specific topics (Freeman, 2006; Krueger & Casey, 2015). Four in-person focus groups were conducted by research team members at the IMPD Training Academy on December 4 - 5, 2024. Each group lasted approximately 60 - 90 minutes

and followed a pre-established discussion protocol that included open-ended questions designed to elicit information related to perceptions and use of ICAT training over time. The IMPD identified potential participants based on availability and representation across shifts and districts. Sixteen participants (12 officers and four sergeants) met for these focus groups to provide valuable contextual information. As one research team member facilitated the discussions, a second researcher documented the sessions through detailed notetaking rather than recordings to encourage interviewees' candor.

FOCUS GROUP TOPICS

The facilitator engaged focus group participants on various topics related to the overall study, including their general impressions of the ICAT de-escalation training, de-escalation and use of force in the field, training in general, supervisory support both generally and specifically regarding the reinforcement of ICAT skills, officer safety and wellness, and the impact of staffing shortages. The facilitator concluded each group with the prompt, “You get to be Chief for a day. The goal is to make your officers safer by reducing officer and subject injuries during encounters. What would you do?” Their recommendations generally aligned with specific topics that had already been discussed and are included within these topics below.

Analytical Plan

Descriptive, bivariate, and multivariate analyses are employed to examine the impact of ICAT training on officers' attitudes, knowledge, and perceptions regarding the training tenets of de-escalation tactics and skills. Where appropriate, factor analysis is used to identify and describe underlying constructs from these data, and certain items are compiled into additive index scores (Costello & Osborne, 2005; see Engel et al., 2020b).

Throughout the officer survey and supervisor survey sections, descriptive findings are predominantly graphically displayed in charts rather than tables. Appendix B includes tables (with the same name as the figures) with the complete information for all survey items, including the percentage of responses in each category, the average response (mean), the standard deviation (SD), and the number of officers responding to each question (*N*). Similarly, when analyses across waves of survey data test for statistically significant differences, the average scores and *t*-test results are included in the Appendix B tables, while the graphs and text here summarize those findings. For display purposes, two or more of the original response categories from 5-point Likert scales are typically combined. For example, when participants were asked to rate their agreement on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), 1) the strongly agree and agree categories are combined, and 2) the strongly disagree and disagree categories are combined, while the neutral responses are excluded.

Multiple bivariate and multivariate approaches are used to explore the impact of the ICAT training on changes in officers’ attitudes, knowledge, and perceptions regarding the use of de-escalation skills. First, immediate training impacts are examined by comparing pre-training and post-training scores (Time 1 to Time 2). To measure this change, paired *t* test and Wilcoxon

signed-rank test comparisons (*W* statistic)[4] are used that show statistical differences in the mean scores of survey items across two data waves.

Second, changes in attitudes across all three survey waves (pre-training, post-training, and follow-up) are measured using matched samples cross-wave comparisons (i.e., repeated measures one-way ANOVA with paired samples *t* tests), which describe the levels and change in repeated survey responses over time. For inclusion in these analyses, officers had to respond to each of the three survey waves, resulting in a reduced number of respondents (approximately 131 officers or fewer).

Third, multivariate regression analyses are performed to assess the officer characteristics that are associated with the most significant changes in officer views and attitudes approximately four months after completion of the ICAT training (i.e., change in survey responses between post-training and follow-up surveys) and the self-reported frequent use of ICAT skills in the field. Similar analyses are used to analyze the supervisor survey data; however, because of its cross-sectional nature, analyses exploring change over time are not appropriate. Finally, Braun and Clarke's (2006) six phases of thematic analysis are employed to interpret and synthesize the focus group field notes into major themes, similarities, and differences.

Officer Survey Findings

RESPONDENT CHARACTERISTICS AND BASELINE MEASURES (PRE-TRAINING SURVEY)

Demographic information for the 892 IMPD officers who completed a pre-training survey is included in Table 1 in Appendix B. The descriptive statistics are provided for the full pre-training survey sample (*n*=892), as well as the individuals who completed the post-training survey (*n*=511) and follow-up survey (*n*=154) and could be matched to the pre-training survey (demographic questions were asked on the pre-survey only). Bivariate results based on chi-square and Mann-Whitney statistics indicate there are no concerns with selection bias due to differences in demographic characteristics (e.g., age, sex, race, patrol, education, or law enforcement experience) across the matched and unmatched samples.

IMPD sworn personnel who attended ICAT training and responded to the survey were predominantly male (81.5%), White (75.0%), and held the rank of officer (69.1%). The largest percentage of officers who completed the pre-survey was in the 50 or older age category

[4] The tables provided in Appendix B include the dependent (paired) *t* test and Wilcoxon signed-rank test comparisons (*W* statistic), which is the nonparametric equivalent of the dependent samples *t* test. Since the individual survey items are ordinal measures, they technically violate the *t* test assumptions of needing metric data and normally distributed data. While the *t* test is pretty robust (especially with larger samples sizes), *W* is also estimated to verify the robustness of the *t* test results. In other words, if the *t* is "significant" but the *W* is not, caution in interpreting the *t* test results is warranted.

(30.5%). Similarly, 44.4% had 20 years or more of experience. Over 47% had a bachelor's degree or higher. When asked about training they had received in the prior year, 84% reported receiving training on handling situations involving the mentally ill, 88% reported having de-escalation training, and 88% indicated they had been trained in use of force.

Before the training, IMPD officers reported high levels of agreement that their roles involved activities in line with community-oriented policing principles. Around 41% considered law enforcement as their most important responsibility. The baseline measures also revealed some notable findings: a majority (78.3%) of officers agreed or strongly agreed that the jurisdiction they work in is dangerous, and 90.5% agreed or strongly agreed that there is a good chance they would be assaulted on the job. This poses a challenge for trainers as they try to encourage officers to rethink their approach to use of force, promoting de-escalation tactics (see Table 2, Appendix B).

SURVEY RESPONDENT CHARACTERISTICS (PRE-TRAINING)

81.5%	Male
75.0%	White
69.1%	Officer Rank
44.0%	20+ Years Experience
47.0%	Bachelor's Degree or Higher

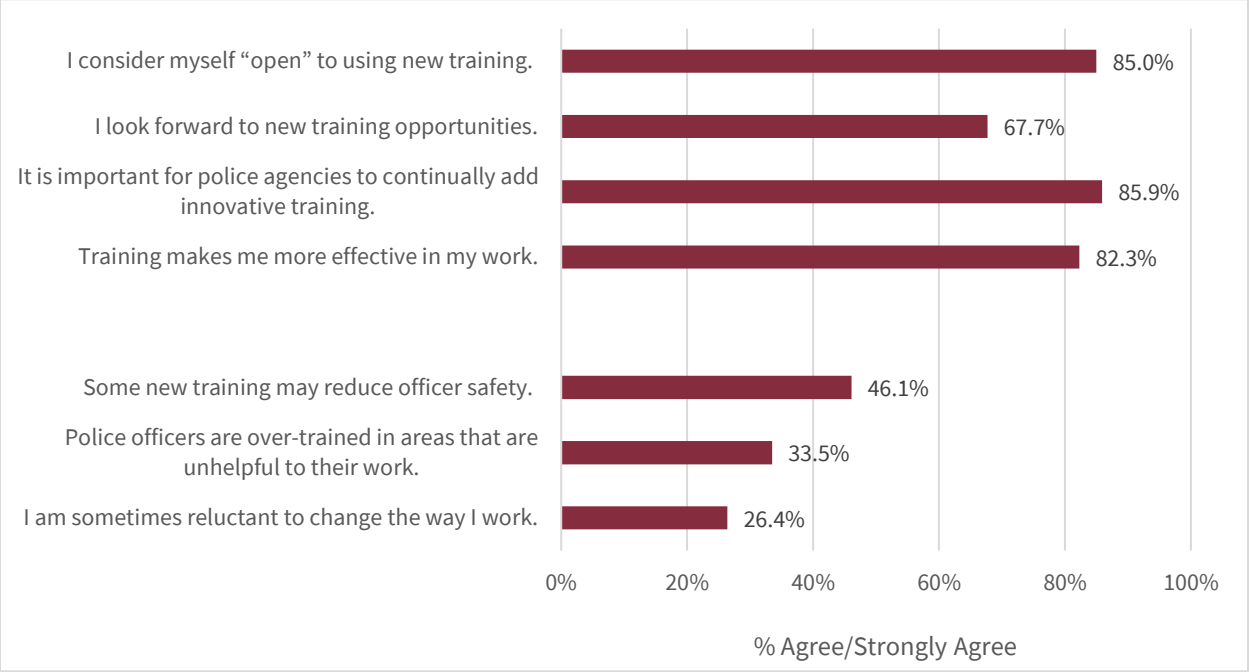
OFFICERS' PERCEPTIONS OF TRAINING

Literature on training suggests that receptivity is a critical first step to effectively utilizing skills taught during training (Kirkpatrick, 1998; Wolfe et al., 2019, 2020). Training receptivity is essential because it influences how individuals engage with the material and ultimately apply what they have learned in real-world scenarios. In the evaluation of LMPD's implementation of ICAT training, officers who were most receptive to ICAT had a 49.5% probability of self-reporting using skills compared to officers who were least receptive to ICAT training, who had a probability of only 4.5% (Engel et al., 2021). This stark contrast illustrates that individuals who are open to learning and implementation are more likely to enhance their performance by translating training into effective practice.

On the pre-training survey, IMPD personnel were asked seven questions designed to assess their general openness to training, which were rated on a 5-point Likert agreement scale. The full results of these questions are provided in Table 3 in Appendix B, but the percentages of agree/strongly agree responses are graphically displayed in Figure 1. The questions on the top half of the graph align with openness to training, while the questions on the bottom half are contrary to it. The results indicate that IMPD officers are overwhelmingly open to new training (85.0%), look forward to new training opportunities (67.7%), agree that it is important for

agencies to add innovative training (85.9%), and perceive training as making them more effective in their work (82.3%).

Figure 1. Officer General Perceptions of Training (Pre-Training) (n=843)



Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.

In the post-training survey, officers were asked to report how strongly they agree (five-point Likert scale) with seven items designed to assess the delivery and perceived value of the ICAT training curriculum. Table 4 in Appendix B presents the percentage of officers who agree or disagree with each statement, along with the average responses across all items, while just the combined agree/strongly agree categories are presented in Figure 2 below. As shown, officers' perceptions of the training are positive overall, with greater than 65% agreement with items 1-4. Notably, less than half of the respondents agree that the training taught them new things. Despite the modification of the ICAT training from its intended 12 hours to eight hours, only 5% of respondents agree that the training should be longer and over half believe it should be shorter.

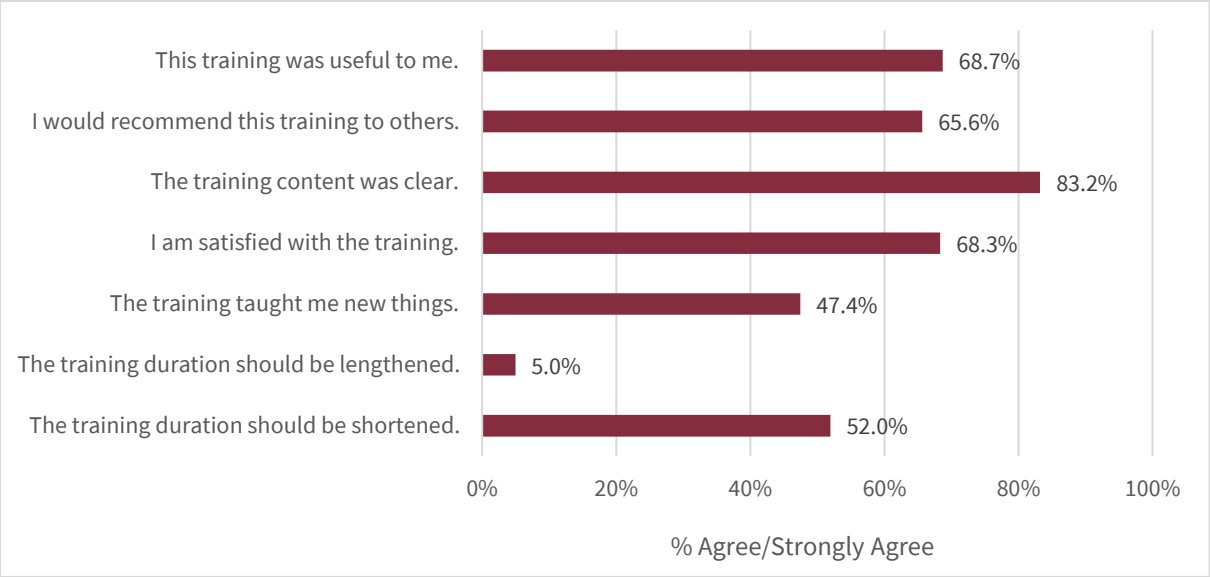
TRAINING FEEDBACK

80% of officers:
Training was clear

69% of officers:
Training was useful

66% of officers:
Would recommend to others

Figure 2. IMPD Officer Receptivity to ICAT Training – Post-Training Survey



Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.

Learning to use the Critical Decision-Making Model (CDM) is an integral component of the ICAT training program. Since officers' reactions to the CDM are crucial, 11 survey questions are included to gauge their views on the model's utility. These questions are asked on the post-training survey, after officers were introduced to the concepts, and again on the follow-up survey. Officers are asked to rate their agreement on a five-point Likert scale for the 11 items. Higher scores are indicative of greater agreement with the CDM's usefulness (except items 2, 3, and 8, which should decrease). The full results of this analysis are provided in Table 5 in Appendix B and displayed in Figure 3 below.[5] For ease, the items that align with the CDM are presented on the top half of Figure 3 (expected to increase), while the questions on the bottom half of the graph, separated by a space, are contrary to CDM utility (expected to decrease). The original survey item numbers are retained.

FOLLOW-UP SURVEY FINDING

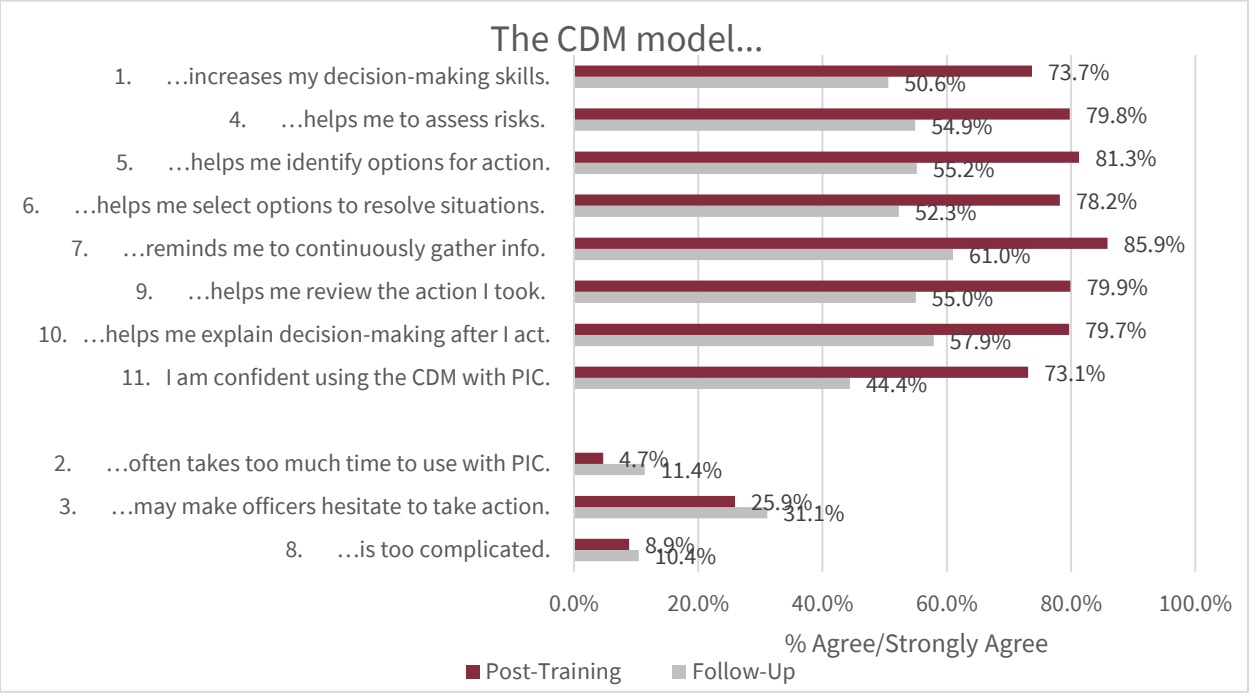
Significant decreases in perceived utility of the Critical Decision-Making (CDM) model.

The findings displayed in Figure 3 reflect statistically significant changes in average scores between the post-training and follow-up measurement periods for all 11 items (see Table 5 in Appendix B). However, these changes are in the opposite direction of what would be expected for all 11 items. Officers perceive the CDM to be *less* useful during the follow-up period than they did immediately

[5] Tables 6 and 7 in Appendix B provide the post-training (Table 6) and follow-up survey (Table 7) responses in each category for all respondents (not just the matched sample), as well as the average response (mean), standard deviation (SD), and the number of officers responding to each question (*N*).

after training. The additive CDM Utility Index, which is expected to increase in the follow-up period if the CDM is perceived as useful in practice, drops significantly by four points (see Table 5 in Appendix B). In other words, the data suggests that officers perceive a decrease in the CDM's utility in their work at the time of the follow-up survey.

Figure 3. Officer Views on the Critical Decision-Making (CDM) Model Utility – Post-Training to Follow-Up



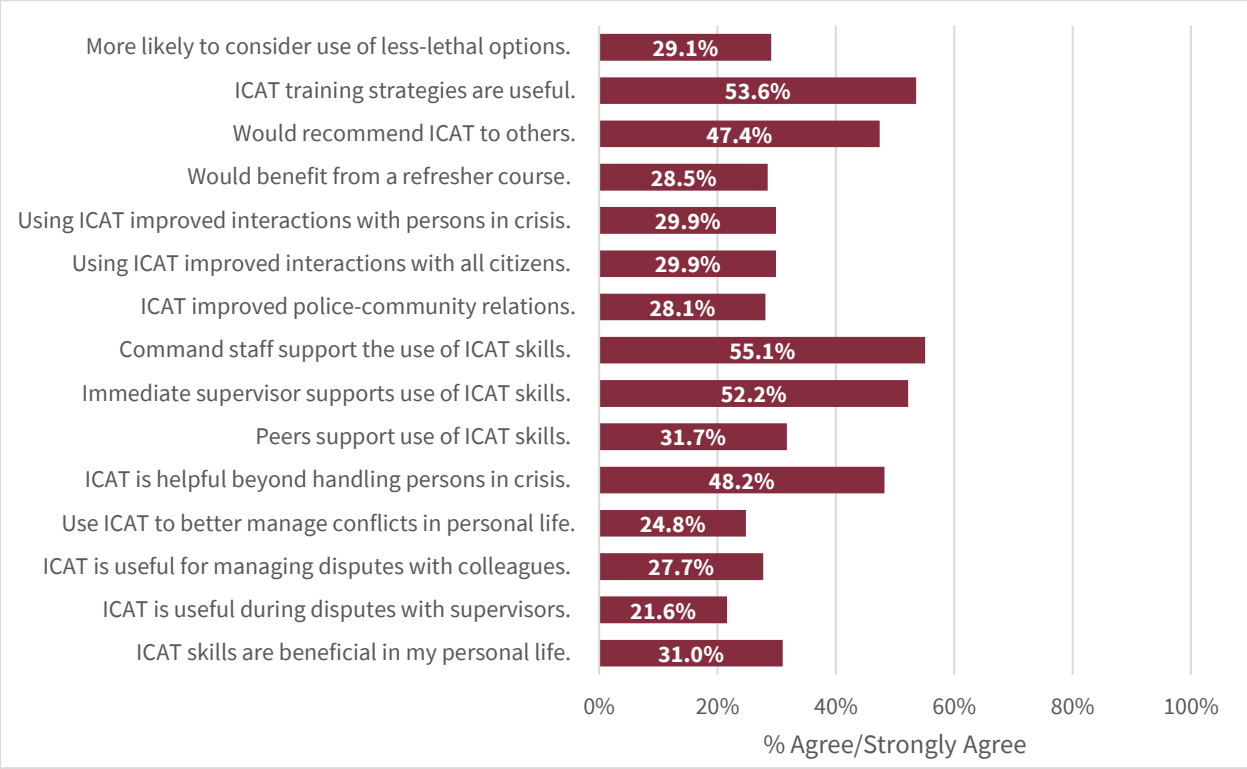
Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.
N = 194 for Q1; N = 193 for Qs 3, 4, 6, 11; N = 192 for Qs 2, 5, 7, 8, 10; N= 189 for Q9.

The follow-up survey also asks officers 15 questions about the perceived impact of ICAT training on their work. Figure 4 displays the percent of responses that indicated "agree" or "strongly agree" based on a five-point Likert scale for agreement. The full responses are provided in Table 8 in Appendix B. As shown, over half of the follow-up survey respondents (53.7%) agree or strongly agree that the ICAT training strategies were useful, while just under half (47.4%) report that they would recommend the ICAT training to others. Only 28.5% of respondents indicate they would benefit from an ICAT refresher training.

When asked if ICAT training improved interactions with the public, people in crisis, and police-community relations, half of the survey respondents were neutral. Over half of the respondents agree or strongly agree that command staff (55.1%) and their immediate supervisor (52.2%) supported ICAT skills, but less than one-third (31.8%) report feeling the same way about their peers. Finally, nearly half (48.2%) of the respondents perceive ICAT training strategies to be helpful beyond handling a person in crisis. Around one-quarter of respondents report using

ICAT strategies to better manage conflicts in their personal lives (24.8%), found the strategies useful for managing disputes with colleagues (27.7%) or supervisors (21.5%).

Figure 4. IMPD Officer Follow-Up Reactions to ICAT Training (*n* = 274)



Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.

Predicting Change in Views of the Utility of the CDM Model

As demonstrated in the analyses above, officers tend to hold less favorable views about the CDM model's utility over time (i.e., follow-up responses reported less utility than post-training responses). To better understand this pattern, the research team explores the characteristics associated with changes in the view of CDM utility after officers have applied the skills in the field. To assess change, officer scores on the utility of the CDM index from the post-training survey are subtracted from scores on the follow-up survey. This creates a continuous measure of officer changes in views of the CDM, where positive values indicate that views of the utility improved during the follow-up period. Negative values indicate that views decreased during the same time.

Table 3 presents the findings from a multivariate OLS linear regression analysis with changes in views of the utility of the CDM model from post-training to follow-up as the outcome.[6] On average, officers in the analysis experience nearly a 5-point decrease in their views regarding CDM utility from post-training to follow-up (see "Intercept"). Three factors are found to be significantly associated with changes in CDM utility views. First, on average, officers who are more receptive to the ICAT training immediately following its completion experience larger decreases in their views regarding the utility of the CDM compared to those who are less receptive to the training. Second, officers who hold more positive perceptions of peer support for the use of ICAT skills experience smaller reductions in their views of CDM utility compared to officers who perceive their peers as being unsupportive of ICAT training. Finally, the self-reported frequent use of ICAT skills is marginally significantly related to changes in views of CDM utility (p = 0.059). The results suggest that, on average, officers who report *less* frequent use of ICAT skills experience greater reductions in the CDM model's perceived utility from post-training to follow-up.

Table 3. OLS Regression Results Predicting Change in Views of the Utility of the CDM Model (W2→ W3)

	Changes in Views of CDM Utility (W2→W3)	
Variables	Coefficient	St. Error
Receptivity to ICAT Training	-0.428***	0.111
Command Staff Support	-0.402	0.622
Supervisor Support	0.648	0.741
Peer Support	2.019***	0.624
Supervisor Reinforcement	0.099	0.348
Frequent Use of ICAT Skills	1.480^	0.779
Intercept	-4.727	2.408
N^+	168	
R^2	0.162	

*Notes: W2=Wave 2, post-training, W3=Wave 3, follow-up; ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test);* $^+$ *Reduction in sample size is because of the use of listwise deletion.*

[6] Before estimating the multivariate regression analysis, the association between several officer demographics (i.e., age, sex, race, rank, law enforcement experience, and education) and changes in views of CDM utility were assessed through bivariate regression analyses. Results demonstrated that none of the demographics were associated with the outcome at a probability outcome that was less than .25. Given sample restrictions (due to a low response rate and an inability to match officer surveys across all waves), we decided to exclude officer demographic characteristics from the presented multivariate model.

OFFICER ATTITUDES AND PERCEPTIONS

This section examines how ICAT training affects the measured attitudes of officers, including *Views on Interactions with the Public*, *Attitudes toward Persons in Crisis*, and *Attitudes toward Use of Force*. The three analytic approaches described above are used: 1) paired *t* test and Wilcoxon signed-rank test comparisons (*W* statistic) to measure immediate training impacts by comparing pre-training and post-training scores (Time 1 to Time 2), 2) changes in attitudes are measured using matched samples cross-wave comparisons (i.e., repeated measures one-way ANOVA with paired samples *t* tests for post-hoc comparisons), and 3) multivariate regression analyses to assess the officer characteristics that are associated with the most significant changes in officer attitudes and perceptions approximately four months after completion of the ICAT training (change from post-training to follow-up). However, the findings for pre-post analyses are very similar to those of the repeated measures ANOVA analyses, despite the larger sample size that could be matched pre-post in comparison to those who matched across all three waves. For brevity, the pre-post analyses are presented in Appendix B, and this section focuses on the description of findings based on the repeated measures ANOVA analyses. Differences between the pre-post analyses and the repeated measures analyses are described in footnotes.

In the tables that follow, the first column includes:

- The test statistic *F* for the one-way ANOVA results.
- The test statistic *Q* for the nonparametric equivalent of the ANOVA analysis (Friedman's one-way repeated measures analysis of variance)
- A dagger (†) to indicate statistically significant results for both tests (also in bold in the summary column)

The rest of each table shows the post-hoc comparisons (using paired samples *t* test and Wilcoxon signed-rank test). For each survey item, the tables show the average score and standard deviation at each wave. A single asterisk (*) denotes the results that were statistically significant at $P < 0.05$, while a double asterisk (**) denotes the results that were statistically significant after introducing a Bonferroni correction for multiple testing ($P < 0.05$ is corrected to $P < 0.016$). The Bonferroni post-hoc tests allow for multiple comparisons (i.e., pre-training with post-training, post-training with follow-up, and pre-training with follow-up) to demonstrate which comparisons are statistically significant. Bolded summaries highlight the results that had a statistically significant one-way repeated-measures test statistic and had a post-hoc comparison that survived the Bonferroni correction.

Views on Interactions with the Public

Table 4 shows seven survey questions that measure officers' views on interacting with the public, including concerns about officer safety and de-escalation.[7] Officers are asked to rate their agreement with each statement on a five-point scale (1 = Strongly Disagree; 5 = Strongly Agree). This table compares mean scores based on responses to the pre-, post-, and follow-up surveys. If the ICAT training is effective, it is expected that some items will show higher average agreement (e.g., I have considerable ability to control the nature of citizen interactions to create positive outcomes), while other items written in a manner that does not align with ICAT training will show lower average agreement (e.g., In tense citizen encounters, the most important thing is that I get home safely).

After ICAT training, officers report:

Increased confidence in their ability to manage interactions with the public.

Four out of the seven survey items reveal statistically significant pre-post differences, and all changes correspond with the training curricula. For instance, after the training, officers report a significant increase in their agreement that they can control interactions with the public and create positive outcomes. They are also more likely to agree that officers can be trained to increase the likelihood of positive encounters with the public and that officers can be trained to improve their skills in de-escalating encounters. Additionally, they report significantly less agreement that during tense citizen encounters, the priority is for them (the officer) to get home safely.

To assess potential training decay, officer responses to the post-training survey are compared to those from the follow-up survey. An absence of training decay would be demonstrated by observing either a statistically significant difference in agreement where the follow-up responses are more aligned with the tenets of ICAT training than the post-training responses or a nonsignificant difference between the follow-up and post-training responses. Table 4 shows that five survey items did not significantly differ between the post- and follow-up responses. Two survey items achieved statistically significant post-training and follow-up differences, and both findings trend in the direction of training decay. More specifically, on average, officers report less agreement in the follow-up survey compared to the post-training survey to the statements that officers can be trained to increase the likelihood of positive encounters with citizens and that officers can be trained to improve their ability to de-escalate citizen encounters. While a significant decrease for both items is observed, it is important to recognize that the overall agreement to both statements continues to be quite high in the follow-up survey (mean scores of 4.02 and 4.11, respectively).

[7] See also Table 9 in Appendix B for the matched pre-post comparisons, and Tables 10-12 that include the responses and means for all respondents in the pre- (Table 10), post- (Table 11), and follow-up survey (Table 12).

Finally, when observing differences between pre-training and follow-up responses, no meaningful differences are observed. Suggestive evidence shows that officers report greater agreement in the follow-up survey compared to the pre-training survey for being good at de-escalating encounters with citizens. But this finding is only observed in the nonparametric model and did not maintain statistical significance with the Bonferroni correction. As such, no evidence is gathered to suggest that officers held differing views on interactions with the public four months following ICAT training compared to the views they held before participating in the training.

Table 4. ANOVA Results for IMPD Officer Views on Interactions with the Public

	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Q1: I can control interactions to create positive outcomes. (*F* = 3.11†) (*Q* = 8.31†)	Pre vs. Post	Pre: 3.76 (0.07)	Post: 3.96 (0.07)	-2.72**	-2.97**	More aligned @ Post than Pre
	Post vs. F/U	Post: 3.96 (0.07)	F/U: 3.82 (0.07)	1.73	1.58	N.S.
	Pre vs. F/U	Pre: 3.76 (0.07)	F/U: 3.82 (0.07)	-0.67	-0.94	N.S.
Q2: I am good at identifying officer safety risks in encounters. (*F* = 0.06) (*Q* = 1.90)	Pre vs. Post	Pre: 4.31 (0.05)	Post: 4.35 (0.04)	-0.90	-0.91	N.S.
	Post vs. F/U	Post: 4.35 (0.04)	F/U: 4.36 (0.04)	-0.15	-0.46	N.S.
	Pre vs. F/U	Pre: 4.31 (0.05)	F/U: 4.36 (0.04)	-1.04	-1.36	N.S.
Q3: I am good at de-escalating encounters. (*F* = 1.00) (*Q* = 4.69)	Pre vs. Post	Pre: 4.14 (0.05)	Post: 4.20 (0.05)	-1.18	-1.09	N.S.
	Post vs. F/U	Post: 4.20 (0.05)	F/U: 4.22 (0.06)	-0.37	-1.05	N.S.
	Pre vs. F/U	Pre: 4.14 (0.05)	F/U: 4.22 (0.06)	-1.22	-2.13*	More aligned @ F/U than Pre (not after Bonf. Corr.)
Q4: The most important thing is that I get home safely. (*F* = 2.61) (*Q* = 6.98†)	Pre vs. Post	Pre: 4.39 (0.08)	Post: 4.21 (0.08)	2.30*	2.54**	More aligned @ Post than Pre
	Post vs. F/U	Post: 4.21 (0.08)	F/U: 4.31 (0.08)	-1.28	-1.64	N.S.
	Pre vs. F/U	Pre: 4.39 (0.08)	F/U: 4.31 (0.08)	0.98	0.87	N.S.
Q5: Officers can be trained to increase likelihood of positive encounters. (*F* = 7.22†) (*Q* = 13.98†)	Pre vs. Post	Pre: 4.02 (0.07)	Post: 4.24 (0.05)	-3.54**	-3.22**	More aligned @ Post than Pre
	Post vs. F/U	Post: 4.24 (0.05)	F/U: 4.02 (0.07)	3.44**	3.41**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 4.02 (0.07)	F/U: 4.02 (0.07)	0.00	-0.16	N.S.
Q6: Officers can be trained to better identify officer safety risks in encounters. (*F* = 0.08) (*Q* = 0.01)	Pre vs. Post	Pre: 4.36 (0.05)	Post: 4.37 (0.05)	-0.29	-0.18	N.S.
	Post vs. F/U	Post: 4.37 (0.05)	F/U: 4.35 (0.05)	0.39	0.03	N.S.
	Pre vs. F/U	Pre: 4.36 (0.05)	F/U: 4.35 (0.05)	0.12	-0.03	N.S.
Q7: Officers can be trained to improve their ability to de-escalate encounters. (*F* = 4.38†) (*Q* = 8.91†)	Pre vs. Post	Pre: 4.14 (0.05)	Post: 4.28 (0.05)	-2.48**	-2.44**	More aligned @ Post than Pre
	Post vs. F/U	Post: 4.28 (0.05)	F/U: 4.11 (0.06)	2.80**	2.69**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 4.14 (0.05)	F/U: 4.11 (0.06)	0.33	0.23	N.S.

Note: F = One-way Repeated-measures ANOVA test statistics; Q = Nonparametric Friedman test (one-way repeated measures analysis of variance by ranks); † = p < 0.05
*t = Paired Samples (Dependent) t test statistic; W = Nonparametric Wilcoxon signed-rank test statistic; * = p < 0.05, ** = Statistically significant at p < 0.05 after Bonferroni Correction; N.S. = no significant difference*
N=131 for Qs 1, 2, 4, 6; N=130 for Qs 3, 5, 7

Attitudes Toward Interactions with Persons in Crisis

Table 5 shows the results from 14 survey questions measuring officers' attitudes toward interacting with a person in crisis.[8] Officers were asked to rate their agreement with each statement on a five-point scale (1 = Strongly Disagree; 5 = Strongly Agree). This table compares mean scores based on responses to the pre-, post-, and follow-up surveys. If the ICAT training is effective, some items will show higher average agreement (e.g., the majority of time spent communicating with a subject should be spent listening, I know how to slow down an encounter with a person in crisis), while other items written in a manner that does not align with ICAT training, will show a decrease in the level of agreement (e.g., noncompliance should be viewed as a threat, situational stress is no excuse for a person to act irrational).

Seven out of the 14 survey items reveal statistically significant pre-post differences, and two additional survey items reach statistically significant pre-post differences prior to the Bonferroni correction.[9] Importantly, all changes correspond with the training curricula. For instance, after the training, officers report a significant increase in their agreement that they know how to slow down an encounter with a person in crisis, it is beneficial to keep a subject talking, and the majority of time spent communicating with a subject should be spent listening. They also are more likely to agree that use of force against a person in crisis can be avoided in many cases, and it is important to designate roles in crisis intervention when responding as a team. Additionally, they report significantly less agreement that noncompliance should be viewed as a threat and that situational stress is no excuse for a person to act irrationally.

After ICAT training, officers report:

- **Increased alignment with ICAT content related to managing interactions with persons in crisis**

Some training decay:

- **Changes in officer attitudes about persons in crisis faded by follow-up period but did not revert to pre-training levels**

[8] See also Table 13 in Appendix B for the matched pre-post comparisons, and Tables 14-16 that include the responses and means for all respondents in the pre- (Table 14), post- (Table 15), and follow-up survey (Table 16).

[9] There is one difference between the matched pre-post analyses (Table 13 in Appendix B) and the repeated measures analyses presented here. Item #2 shows no significant difference between pre-post in the repeated measures analyses (n = 124), whereas a slight increase is noted in the matched pre-post analyses from an average of 2.40 to 2.49 (n = 502).

To assess potential training decay, officer responses to the post-training survey are compared to those from the follow-up survey. Seven survey items obtained statistically significant post-training and follow-up differences (three additional survey items did not maintain statistical significance after Bonferroni adjustment), and all results suggest training decay. For instance, officers tend to report less agreement in the follow-up survey compared to the post-training survey to the statements that the most important role of an officer responding to crisis is to stabilize the situation, that it is beneficial to keep subjects talking, that use of force against a person in crisis can be avoided, that it is important to assign roles, and that the majority of time spent communicating with a subject should be spend listening. Furthermore, officers, on average, reported significantly more agreement in the follow-up compared to the post-training survey for statements including that noncompliance should be viewed as a threat and that responding to persons in crisis should not be a role of the police.

Finally, when observing differences between pre-training and follow-up responses, three statements achieve consistent meaningful differences. The level of agreement for two items—majority of time spent communicating with a subject should be spent listening, and knowing how to slow down an encounter with a person in crisis—is more aligned with the teaching of ICAT in the follow-up compared to the pre-training survey. As such, while there is some potential for training decay, attitudes did not drop to pre-training levels. The perception that responding to persons in crisis should not be a role of the police, however, continued to experience more agreement at follow-up compared to the responses obtained in both the pre- and post-training surveys.

Table 5. ANOVA Results for IMPD Officer Attitudes Toward Persons in Crisis (PIC)

	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Q1: Recognizing a PIC can improve the outcome of the interaction with that person. (*F* = 3.02) (*Q* = 5.16)	Pre vs. Post	Pre: 4.22 (0.06)	Post: 4.34 (0.05)	-2.27*	-2.05*	More aligned @ Post than Pre (No Diff after Bonf. Corr.)
	Post vs. F/U	Post: 4.34 (0.05)	F/U: 4.22 (0.06)	2.13*	2.03*	Less aligned @ F/U than Post (No Diff after Bonf. Corr.)
	Pre vs. F/U	Pre: 4.22 (0.06)	F/U: 4.22 (0.06)	0.13	0.26	N.S.
Q2: There is no explaining why PIC act the way they do. (*F* = 1.14) (*Q* = 1.47)	Pre vs. Post	Pre: 2.48 (0.07)	Post: 2.44 (0.08)	0.51	0.52	N.S.
	Post vs. F/U	Post: 2.44 (0.08)	F/U: 2.56 (0.08)	-1.35	-1.12	N.S.
	Pre vs. F/U	Pre: 2.48 (0.07)	F/U: 2.56 (0.08)	-1.02	-0.98	N.S.
Q3: Noncompliance should be viewed as a threat. (*F* = 16.19†) (*Q* = 26.90†)	Pre vs. Post	Pre: 2.96 (0.08)	Post: 2.56 (0.07)	5.44**	4.93**	More aligned @Post than Pre
	Post vs. F/U	Post: 2.56 (0.07)	F/U: 2.85 (0.07)	-3.97**	-3.80**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.96 (0.08)	F/U: 2.85 (0.07)	1.47	1.28	N.S.
Q4: Unnecessary risks should be avoided in encounters. (*F* = 0.49) (*Q* = 0.79)	Pre vs. Post	Pre: 4.21 (0.06)	Post: 4.25 (0.06)	-0.53	-0.66	N.S.
	Post vs. F/U	Post: 4.25 (0.06)	F/U: 4.28 (0.06)	-0.46	-0.21	N.S.
	Pre vs. F/U	Pre: 4.21 (0.06)	F/U: 4.28 (0.06)	-0.98	-0.89	N.S.
Q5: The most important role of an officer responding to crisis is to stabilize the situation. (*F* = 3.66†) (*Q* = 5.93)	Pre vs. Post	Pre: 4.07 (0.07)	Post: 4.17 (0.08)	-1.61	-1.39	N.S.
	Post vs. F/U	Post: 4.17 (0.08)	F/U: 4.00 (0.06)	2.81**	2.61**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 4.07 (0.07)	F/U: 4.00 (0.06)	1.07	0.97	N.S.
Q6: In crisis situations, it is beneficial to keep a subject talking. (*F* = 8.26†) (*Q* = 18.56†)	Pre vs. Post	Pre: 3.73 (0.06)	Post: 3.99 (0.06)	-4.46**	-4.32**	More aligned @Post than Pre
	Post vs. F/U	Post: 3.99 (0.06)	F/U: 3.81 (0.07)	2.61**	2.56**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 3.73 (0.06)	F/U: 3.81 (0.07)	-1.15	-1.33	N.S.
Q7: The use of force against a PIC can sometimes be avoided. (*F* = 6.99†) (*Q* = 10.71†)	Pre vs. Post	Pre: 3.22 (0.07)	Post: 3.50 (0.06)	-3.61**	-3.18**	More aligned @Post than Pre
	Post vs. F/U	Post: 3.50 (0.06)	F/U: 3.31 (0.07)	2.62**	2.60**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 3.22 (0.07)	F/U: 3.31 (0.07)	-1.12	-0.94	N.S.
Q8: As a person's emotions rise, their rational thinking declines. (*F* = 0.96) (*Q* = 1.23)	Pre vs. Post	Pre: 4.31 (0.05)	Post: 4.40 (0.05)	-1.44	-1.13	N.S.
	Post vs. F/U	Post: 4.40 (0.05)	F/U: 4.36 (0.05)	0.64	0.75	N.S.
	Pre vs. F/U	Pre: 4.31 (0.05)	F/U: 4.36 (0.05)	-0.72	-0.61	N.S.

	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Q9: When responding as a team, it is important to designate roles in the crisis intervention. (*F* = 11.94†) (*Q* = 22.40†)	Pre vs. Post	Pre: 4.14 (0.06)	Post: 4.44 (0.05)	-4.95**	-4.52**	More aligned @Post than Pre
	Post vs. F/U	Post: 4.44 (0.05)	F/U: 4.27 (0.06)	2.86**	2.84**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 4.14 (0.06)	F/U: 4.27 (0.06)	-2.04*	-1.81	More aligned @ F/U than Pre (parametric; no diff after Bonf. Corr.)
Q10: The majority of time spent communicating with a subject should be spent listening. (*F* = 21.41†) (*Q* = 38.69†)	Pre vs. Post	Pre: 3.65 (0.06)	Post: 4.06 (0.06)	-6.55**	-5.71**	More aligned @Post than Pre
	Post vs. F/U	Post: 4.06 (0.06)	F/U: 3.85 (0.06)	3.57**	3.51**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 3.65 (0.06)	F/U: 3.85 (0.06)	-3.02**	-3.07**	More aligned @ F/U than Pre
Q11: An officer's nonverbal communication influences how a subject reacts. (*F* = 2.75) (*Q* = 3.59)	Pre vs. Post	Pre: 4.07 (0.06)	Post: 4.22 (0.05)	-2.25*	-2.05*	More aligned @ Post compared to Pre (No Diff after Bonf. Corr.)
	Post vs. F/U	Post: 4.22 (0.05)	F/U: 4.16 (0.06)	0.96	0.92	N.S.
	Pre vs. F/U	Pre: 4.07 (0.06)	F/U: 4.16 (0.06)	-1.39	-0.90	N.S.
Q12: I know how to slow down an encounter with a PIC. (*F* = 12.21†) (*Q* = 27.65†)	Pre vs. Post	Pre: 3.81 (0.06)	Post: 4.13 (0.06)	-4.98**	-5.06**	More aligned @ Post than Pre
	Post vs. F/U	Post: 4.13 (0.06)	F/U: 4.00 (0.05)	2.02*	2.11*	Less aligned @ F/U than Post (No Diff after Bonf. Corr.)
	Pre vs. F/U	Pre: 3.81 (0.06)	F/U: 4.00 (0.05)	-2.85**	-2.88**	More aligned @ F/U than Pre
Q13: Situational stress is no excuse for a person to act irrational. (*F* = 4.19†) (*Q* = 7.85†)	Pre vs. Post	Pre: 2.92 (0.09)	Post: 2.66 (0.08)	2.68**	2.56**	More aligned @ Post than Pre
	Post vs. F/U	Post: 2.66 (0.08)	F/U: 2.86 (0.08)	-2.15*	-2.33*	Less aligned @ F/U than Post (No Diff after Bonf. Corr.)
	Pre vs. F/U	Pre: 2.92 (0.09)	F/U: 2.86 (0.08)	0.60	0.52	N.S.
Q14: Responding to PIC should not be a role of the police. (*F* = 14.61†) (*Q* = 22.29†)	Pre vs. Post	Pre: 2.94 (0.10)	Post: 2.85 (0.10)	0.99	0.91	N.S.
	Post vs. F/U	Post: 2.85 (0.10)	F/U: 3.30 (0.10)	-5.63**	-4.99**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.94 (0.10)	F/U: 3.30 (0.10)	-3.87**	-3.51**	Less aligned @ F/Up than Pre

*Note: F = One-way Repeated-measures ANOVA test statistics; Q = Nonparametric Friedman test (one-way repeated measures analysis of variance by ranks); † = p < 0.05. t = Paired Samples (Dependent) t test statistic; W = Nonparametric Wilcoxon signed-rank test statistic; * = p < 0.05, ** = Statistically significant at p < 0.05 after Bonferroni Correction; N.S. = no significant difference*

N=125 for Qs 1, 4-11, 13; N=124 for Qs 2, 3, 12, 14

Predicting Change in Attitudes Toward Interactions with Persons in Crisis

For many of the survey items above, officers tend to show levels of agreement in the follow-up survey that are less aligned with ICAT training than their post-training responses. To better understand this pattern, the characteristics associated with change in attitudes toward interactions with persons in crisis are examined after officers have used ICAT skills in the field. Officer scores on the attitudes toward interactions with persons in crisis index from the post-training survey are subtracted from scores on the follow-up survey. This creates a continuous measure of officer changes in attitudes towards interactions with persons in crisis, where positive values indicate that attitudes improved during the follow-up period and negative values indicate that attitudes declined during the follow-up period.

Perceived peer support for ICAT reduces training decay in attitudes toward persons in crisis.

Table 6 presents the findings from a multivariate OLS linear regression analysis with attitudes toward interactions with persons in crisis from post-training to follow-up as the outcome. On average, the officers included in the analysis experience nearly a 5-point decrease in their attitudes from post-training to follow-up (see "Intercept"). Only one characteristic is found to have a statistically significant association with changes in attitudes toward interactions with persons in crisis: perceived peer support of ICAT. Officers who hold greater perceptions of peer support of the use of ICAT skills experience smaller reductions in their attitudes toward persons in crisis compared to officers who perceive their peers as being unsupportive of ICAT.

Table 6. OLS Regression Results Predicting Change in Attitudes toward Persons in Crisis (W2→ W3)

	Changes in Attitudes toward Persons in Crisis (W2→W3)	
Variables	**Coefficient**	**St. Error**
Receptivity to ICAT Training	-0.048	0.075
Command Staff Support	0.191	0.439
Supervisor Support	-0.603	0.525
Peer Support	1.569***	0.440
Supervisor Reinforcement	0.018	0.249
Frequent Use of ICAT Skills	0.621	0.557
Intercept	-4.848	1.675
N^{+}	175	
R^2	0.109	

*Notes: W2=Wave 2, post-training, W3=Wave 3, follow-up; ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); $^{+}$ Reduction in sample size is because of the use of listwise deletion.*

Attitudes Toward Use of Force

Given ICAT training emphasis on resolving conflict with the minimal amount of force necessary and emphasizing the sanctity of human life, it is anticipated that the training will change officer attitudes and perceptions toward using force. Eleven survey items are used to measure and assess changes in officer attitudes toward use of force (see Table 7).[10] Officers are asked to rate their agreement with each statement on a five-point scale (1 = Strongly Disagree; 5 = Strongly Agree). Table 7 compares mean scores based on responses to the pre-, post-, and follow-up surveys. If the ICAT training is effective, some items are expected to show higher average agreement (e.g., trying to talk my way out of a situation is always safer than using force, I respect an officers' ability to talk suspects down rather than using force to make them comply), while other items are expected not to align with ICAT training (e.g., not using force when you could have makes suspects more likely to resist in future interactions, it is better to use force earlier in an interaction with a suspect opposed to later).

Six of the 11 survey items reveal statistically significant pre-post differences, and all changes occur in the direction that is expected after participation in ICAT training.[11] For example, after the training, officers report a significant increase in their agreement that trying to talk yourself out of a situation is always safer than using force. As for the statements that are phrased in a way that contradicts ICAT training, officers report significantly less agreement. For example, officers are less agreeable at post-training compared to pre-training to the statements that it is important to have a reputation that you are willing to use force, that it is important that fellow officers trust you can handle yourself in a fight, and officers are not allowed to use as much force as is necessary to make suspects comply. Decreases in agreement are also observed for believing that not using force when you could have makes suspects more likely to resist in future interactions and that it is better to use force earlier in an interaction with a suspect as opposed to later in the interaction.

To assess potential training decay, officer responses to the post-training survey are compared to those from the follow-up survey. Five survey items show statistically significant post-training and follow-up differences (two additional survey items did not maintain statistical significance after the Bonferroni adjustment), and all results suggest training decay. For instance, officers tend to report greater agreement in the follow-up survey compared to the post-training survey to statements that "it is sometimes necessary to use more force than is technically allowable," "it is important to have a reputation that you are an officer willing to use force," "it is important

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[10] See also Table 17 in Appendix B for the matched pre-post comparisons, and Tables 18-20 that include the responses and means for all respondents in the pre- (Table 18), post- (Table 19), and follow-up survey (Table 20).

[11] There are two differences between the matched pre-post analyses (Table 17 in Appendix B) and the repeated measures analyses presented here. Item #4 shows no significant difference between pre-post in the repeated measures analyses (n = 121), whereas a slight decrease was noted in the matched pre-post analyses from an average of 2.89 to 2.74 (n = 496). Item #8 shows a significant difference between pre-post in the repeated measures analyses (n = 121), but no significant different in the matched pre-post analyses presented in Appendix B (n = 497).

that your fellow officers trust that you can handle yourself in a fight," and "it is better to use force earlier in an interaction with a suspect as opposed to later in the interaction." Furthermore, officers report less agreement in the follow-up to the statement that "officers are not allowed to use as much force as is necessary to make suspects comply." For the two items that did not maintain statistical significance after Bonferroni correction, officers in the follow-up survey report less agreement in "respecting an officers ability to talk suspects down rather than using force to make them comply" and greater agreement that "not using force when you could have makes suspects more likely to resist in future interactions."

Some initial positive attitudinal changes regarding use of force observed after ICAT training are not sustained over time.

Finally, when observing differences between pre-training and follow-up responses, two statements achieved consistent meaningful differences (one item was statistically significant before Bonferroni correction). For example, the level of agreement in believing that it is sometimes necessary to use more force than is technically allowable was found to be more aligned with the teaching of ICAT in the follow-up compared to the pre-training survey. There was also suggestive evidence that the level of agreement was more aligned with ICAT at follow-up compared to pre-training for believing that not using force when you could have makes suspects more likely to resist in future interactions (officers were less agreeable with this statement at follow-up). As such, while there was some potential for training decay with these items from post-training to follow-up, the level of agreement was still greater than that observed before training participation. The level of agreement for respecting an officers' ability to talk suspects down rather than using force to make them comply, however, was found to be less aligned with tenets of ICAT training in the follow-up survey compared to the responses obtained in the pre-training survey. This suggests that officer attitudes toward this statement were less aligned with the teaching of ICAT after approximately four months of using the skills in the field compared to their attitudes before participating in the training.

Table 7. ANOVA Results for IMPD Officer Attitudes Toward Use of Force

	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Q1: Officers are not allowed to use as much force as necessary to make suspects comply. (*F* = 7.49†) (*Q* = 14.45†)	Pre vs. Post	Pre: 2.74 (0.10)	Post: 2.35 (0.09)	3.84**	3.72**	More aligned @Post than Pre
	Post vs. F/U	Post: 2.35 (0.09)	F/U: 2.60 (0.09)	-2.40*	-2.44**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.74 (0.10)	F/U: 2.60 (0.09)	1.38	1.28	N.S.
Q2: It is sometimes necessary to use more force than is technically allowable. (*F* = 3.71†) (*Q* = 6.13†)	Pre vs. Post	Pre: 2.48 (0.09)	Post: 2.41 (0.10)	0.94	1.00	N.S.
	Post vs. F/U	Post: 2.41 (0.10)	F/U: 2.27 (0.09)	1.72	1.19	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.48 (0.09)	F/U: 2.27 (0.09)	2.69**	2.66**	More aligned @ F/U than Pre
Q3: Verbally disrespectful suspects sometimes deserve physical force. (*F* = 6.43†) (*Q* = 11.71†)	Pre vs. Post	Pre: 1.84 (0.07)	Post: 1.75 (0.07)	1.52	1.45	N.S.
	Post vs. F/U	Post: 1.75 (0.07)	F/U: 1.97 (0.07)	-3.58**	-3.36**	N.S.
	Pre vs. F/U	Pre: 1.84 (0.07)	F/U: 1.97 (0.07)	-2.05*	-1.86	More aligned @ F/U than Pre (not after Bonf. Corr.)
Q4: Refraining from using force when you are legally able to puts yourself and other officers at risk. (*F* = 0.00) (*Q* = 0.64)	Pre vs. Post	Pre: 2.92 (0.09)	Post: 2.92 (0.09)	0.00	0.19	N.S.
	Post vs. F/U	Post: 2.92 (0.09)	F/U: 2.92 (0.08)	0.00	-0.67	N.S.
	Pre vs. F/U	Pre: 2.92 (0.09)	F/U: 2.92 (0.08)	0.00	0.03	N.S.
Q5: It is important to have a reputation that you are an officer who is willing to use force. (*F* = 8.95†) (*Q* = 16.73†)	Pre vs. Post	Pre: 2.50 (0.09)	Post: 2.25 (0.09)	3.25**	3.42**	More aligned @Post than Pre
	Post vs. F/U	Post: 2.25 (0.09)	F/U: 2.57 (0.09)	-3.91**	-3.65**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.50 (0.09)	F/U: 2.57 (0.09)	-0.92	-0.93	N.S.
Q6: Not using force when you could have makes suspects more likely to resist in future interactions. (*F* = 9.11†) (*Q* = 20.99†)	Pre vs. Post	Pre: 2.57 (0.08)	Post: 2.24 (0.08)	4.23**	4.52**	More aligned @Post than Pre
	Post vs. F/U	Post: 2.24 (0.08)	F/U: 2.39 (0.07)	-2.12*	-2.09*	Less aligned @ F/U than Post (not after Bonf. Corr.)
	Pre vs. F/U	Pre: 2.57 (0.08)	F/U: 2.39 (0.07)	2.17*	2.29*	More aligned @ F/U than Pre (not after Bonf. Corr.)

	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Q7: It is important my fellow officers trust me to handle myself in a fight. (*F* = 6.29†) (*Q* = 9.49†)	Pre vs. Post	Pre: 4.21 (0.07)	Post: 4.03 (0.08)	2.48**	2.38*	More aligned @Post than Pre (not after Bonf. Corr.)
	Post vs. F/U	Post: 4.03 (0.08)	F/U: 4.26 (0.06)	-3.24**	-2.94**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 4.21 (0.07)	F/U: 4.26 (0.06)	-0.85	-0.89	N.S.
Q8: Trying to talk my way out of a situation is always safer than using force. (*F* = 7.96†) (*Q* = 11.79†)	Pre vs. Post	Pre: 3.47 (0.10)	Post: 3.86 (0.10)	-3.81**	-3.45**	More aligned @Post than Pre
	Post vs. F/U	Post: 3.86 (0.10)	F/U: 3.69 (0.09)	1.77	1.77	N.S.
	Pre vs. F/U	Pre: 3.47 (0.10)	F/U: 3.69 (0.09)	-2.32*	-1.82	More aligned at F/U than Pre (not after Bonf. Corr.)
Q9: It is important fellow officers trust my communication skills. (*F* = 0.55) (*Q* = 1.72)	Pre vs. Post	Pre: 4.36 (0.05)	Post: 4.31 (0.05)	1.00	1.19	N.S.
	Post vs. F/U	Post: 4.31 (0.05)	F/U: 4.31 (0.06)	0.00	-0.43	N.S.
	Pre vs. F/U	Pre: 4.36 (0.05)	F/U: 4.31 (0.06)	0.88	0.90	N.S.
Q10: I respect officers' ability to talk suspects down rather than using force to make them comply. (*F* = 3.06†) (*Q* = 8.68†)	Pre vs. Post	Pre: 4.38 (0.05)	Post: 4.38 (0.05)	0.00	0.25	N.S.
	Post vs. F/U	Post: 4.38 (0.05)	F/U: 4.25 (0.06)	2.17*	2.41*	Less aligned @ F/U than Post (not after Bonf. Corr.)
	Pre vs. F/U	Pre: 4.38 (0.05)	F/U: 4.25 (0.06)	2.06*	2.41**	Less aligned @ F/U than Pre
Q11: If force has to be used, it is better to do earlier than later in an interaction. (*F* = 11.72†) (*Q* = 25.06†)	Pre vs. Post	Pre: 2.79 (0.08)	Post: 2.48 (0.09)	3.15**	3.15**	More aligned @Post than Pre
	Post vs. F/U	Post: 2.48 (0.09)	F/U: 2.89 (0.08)	-4.77**	-4.80**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 2.79 (0.08)	F/U: 2.89 (0.08)	-1.24	-1.65	N.S.

Note: *F* = One-way Repeated-measures ANOVA test statistics; *Q* = Nonparametric Friedman test (one-way repeated measures analysis of variance by ranks); † = $p < 0.05$

t = Paired Samples (Dependent) *t* test statistic; *W* = Nonparametric Wilcoxon signed-rank test statistic; * = $p < 0.05$, ** = Statistically significant at $p < 0.05$ after Bonferroni Correction; N.S. = no significant difference

N=121 for Qs 1, 3-10 n=120 for Qs 2, 11

Predicting Change in Attitudes Toward Use of Force

For many of the survey items above, officers tend to show levels of agreement in the follow-up survey that were less aligned with ICAT training than their post-training responses. To better understand this pattern, the characteristics associated with change in attitudes toward use of force are examined after officers have used ICAT skills in the field. Officer scores on the attitudes toward use of force index from the post-training survey are subtracted from scores on the follow-up survey. This creates a continuous measure of officer changes in attitudes toward use of force, where positive values indicate that attitudes improved during the follow-up period and negative values indicate that attitudes declined during the follow-up period.

Table 8 presents the findings from a multivariate OLS linear regression analysis with attitudes toward use of force from post-training to follow-up as the outcome. On average, the officers included in the analysis experience more than a 3-point decrease in their attitudes from post-training to follow-up (see "Intercept"). Only one characteristic is found to be significantly associated with changes in attitudes toward use of force at the conventional statistical significance threshold ($p < 0.05$): perceived peer support of ICAT. Specifically, officers who hold greater perceptions of peer support of the use of ICAT skills experience smaller reductions in their attitudes toward use of force from post-training to follow-up compared to officers who perceive their peers as being unsupportive of ICAT. Of note, there is suggestive evidence that receptivity to ICAT training immediately following completion of the training is related to changes in attitudes toward use of force from post-training to follow-up ($p = 0.08$). On average, officers who are more receptive to ICAT training immediately following the completion of the training experience larger decreases in their level of agreement regarding attitudes toward use of force compared to those who were less receptive to the training.

Perceived peer support for ICAT reduces training decay in officers' attitudes toward use of force.

Table 8. OLS Regression Results Predicting Change in Attitudes toward Use of Force (W2→ W3)

	Changes in Attitudes Toward Use of Force (W2→W3)	
Variables	**Coefficient**	**St. Error**
Receptivity to ICAT Training	-0.133^	0.074
Command Staff Support	0.579	0.423
Supervisor Support	-0.417	0.504
Peer Support	0.954*	0.425
Supervisor Reinforcement	0.025	0.241
Frequent Use of ICAT Skills	0.443	0.544
Intercept	-3.120	1.619
N^{+}	172	
R^2	0.070	

*Notes: W2=Wave 2, post-training, W3=Wave 3, follow-up; ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); + Reduction in sample size is because of the use of listwise deletion.*

Summary of Impact of ICAT Training on Officer Attitudes and Perceptions

Table 9 provides a summary of the ANOVA results for three additive indices based on the individual survey items in the previous three tables (with reverse-coded questions where appropriate). The additive index for *Views on Interactions with the Public* is comprised of six items from Table 4.[12] The additive index for *Attitudes toward Persons in Crisis* is comprised of ten items from Table 5.[13] Finally, the additive index for *Attitudes toward Use of Force* is comprised of nine items from Table 7.[14]

As shown, there is a statistically significant increase in officers' reported attitudes from pre-training to post-training on the *Views on Interactions with the Public* index that aligns with the expected impacts of the ICAT training curricula. However, follow-up scores are significantly less aligned with ICAT than post-training (although statistical significance is not maintained after Bonferroni correction is introduced) and there is no statistically significant difference between pre-training and follow-up responses.

The additive index for *Attitudes toward Interactions with Persons in Crisis* shows officers attitudes are statistically significantly more consistent with the tenets of ICAT training immediately following the completion of the training compared to pre-training. The significant increase, however, decays over time as the attitudes reported by officers in the follow-up survey are significantly less aligned than those reported in the immediately following training. While

[12] Index is comprised of all items except for Item 4 (Pre: α = .78; Post: α = .80; Follow-Up: α = .83).
[13] Index is comprised of all items except for Items 2, 3, 13, and 14 (Pre: α = .74; Post: α = .81; Follow-Up: α = .78).
[14] Index comprised of all items except for Items 1 and 7 (Pre: α = .70; Post: α = .69; Follow-Up: α = .71).

such training decay is observed, it is important to also recognize that officer attitudes toward interactions with persons in crisis are still more aligned with ICAT four months after the training than they were before training began (e.g., follow-up index scores are significantly more aligned than pre-training index scores). In this way, training decay is observed, however the amount of decay does not suggest that the benefits of the training are fully erased.

The conclusions drawn from the analysis on the index for officer attitudes toward use of force follow a similar pattern to that of the previous indices. Specifically, a statistically significant increase in officers' reported attitudes toward use of force from pre-training to post-training is observed, where officer attitudes are found to be more aligned with the expected impacts of the ICAT training curricula immediately following completion of the training. The observed improvement in attitudes, however, is found to decay within four months after completing ICAT training, as follow-up scores are significantly less aligned with ICAT than post-training and no statistically significant differences in reported attitudes are observed between pre-training and follow-up. In other words, while improvements in officer attitudes toward use of force occur immediately following training, they are not maintained and revert back to pre-training levels.

Overall, there is evidence that participation in ICAT training leads to immediate changes in attitudes and perceptions related to persons in crisis and use of force that specifically align with what is expected according to the ICAT teaching curricula. Yet, post-training responses are found to be more aligned with the tenets of ICAT than later follow-up—suggesting that the improvements in attitudes and perceptions gained throughout the training are not maintained over time. While these results could be interpreted as training decay, but they may also reflect the natural process of regression to the mean. It is important to recognize, however, that the change was fairly consistent across the three indices. While regression to the mean suggests that it is not uncommon for follow-up scores to decline somewhat from immediate post-training levels, concerns about decay arise when observed follow-up responses are found to be no different from their pre-training baselines. In the case of IMPD, this is the pattern that is mostly observed. Many individual survey items—particularly those related to officers' views on public interactions and attitudes toward use of force—returned to pre-training levels at follow-up. This regression suggests that the initial gains observed in post-training may not have been sustained over time, raising important questions about the durability of training impacts and the need for reinforcement strategies. Finally, it is important to acknowledge that the ability to draw firm conclusions from these analyses is hindered by the fact that the follow-up survey only had a response rate of 34% and the research team encountered difficulties in matching participants across waves consistently.

Table 9. ANOVA Results for IMPD Officer Views on Interactions with the Public, Attitudes toward Persons in Crisis (PIC), and Attitudes toward Use of Force (UOF), Index Measures

Index	Waves	Mean (SD)	Mean (SD)	t	W	Summary of Significant Findings
Views on Interactions with Public (*F* = 3.88†) (*Q* = 11.24†) (*n* = 128)	Pre vs. Post	Pre: 24.74 (0.22)	Post: 25.42 (0.27)	-3.19**	-3.24**	More aligned @ Post than Pre
	Post vs. F/U	Post: 25.42 (0.27)	FU: 24.87 (0.27)	2.01*	2.20*	Less aligned @ F/U than Post (No diff after Bonf corr.)
	Pre vs. F/U	Pre: 24.74 (0.22)	FU: 24.87 (0.27)	-0.58	-0.97	No Diff between Pre- and F/U
Attitudes toward PIC (*F* = 22.59†) (*Q* = 34.46†) (*n* = 124)	Pre vs. Post	Pre: 39.41 (0.32)	Post: 41.48 (0.36)	-7.44**	-6.48**	More aligned @ Post than Pre
	Post vs. F/U	Post: 41.48 (0.36)	FU: 40.27 (0.36)	3.90**	3.30**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 39.41 (0.32)	FU: 40.27 (0.36)	-2.56**	-2.79**	More aligned @ F/U than Pre
Attitudes toward UOF (*F* = 18.01†) (*Q* = 26.35†) (*n* = 119)	Pre vs. Post	Pre: 33.08 (4.17)	Post: 34.52 (0.39)	-5.70**	-5.31**	More aligned @ Post than Pre
	Post vs. F/U	Post: 34.52 (0.39)	FU: 33.18 (0.40)	4.89**	4.35**	Less aligned @ F/U than Post
	Pre vs. F/U	Pre: 33.08 (4.17)	FU: 33.18 (0.40)	-0.36	-0.22	No Diff between Pre- and F/U

Note: F = Repeated one-way ANOVA test statistics; Q = Nonparametric Friedman test (one-way repeated measures analysis of variance by ranks); † = p < 0.05
*t = Paired Samples (Dependent) t test statistic; W = Nonparametric Wilcoxon signed-rank test statistic; * = p < 0.05*
*** = Statistically significant at p < 0.05 after Bonferroni Correction*

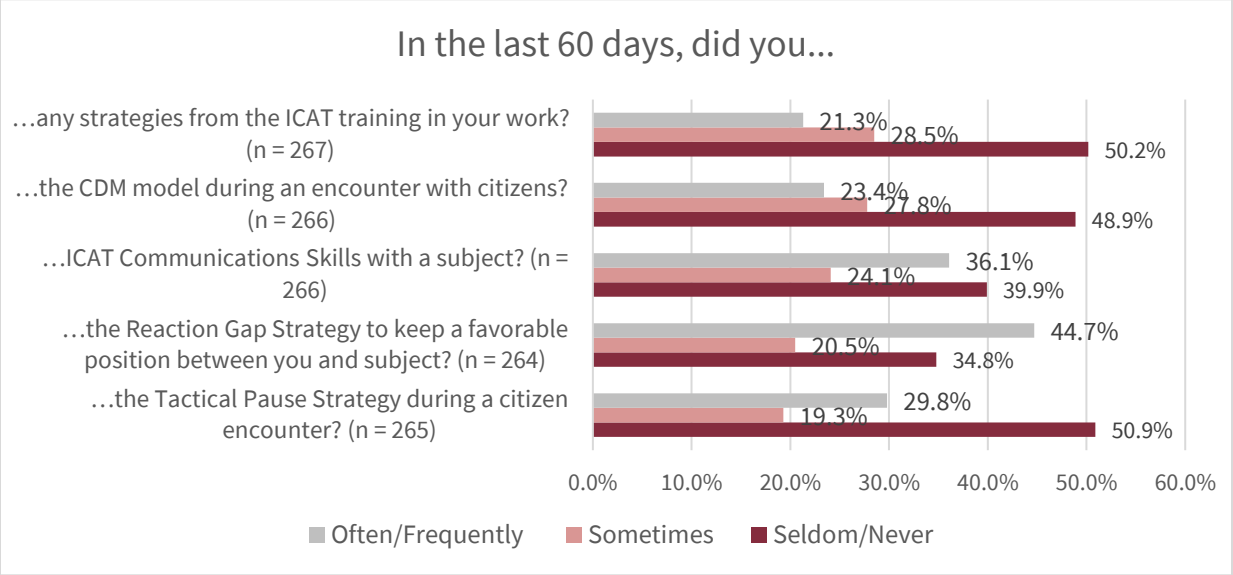
SELF-REPORTED BEHAVIOR

This section summarizes responses to questions on the follow-up survey and provides descriptive statistics on the frequency with which IMPD officers utilize ICAT training skills in the field. It includes questions about their self-reported use of ICAT skills, self-reported difficulty in using ICAT skills, perceived obstacles to using CDM and other trained skills, and whether they used ICAT skills during the most recent encounter. Tables in Appendix B provide each question's average response, standard deviation, the number of officers who responded to each question, and the percentage of officers who selected each response category.

Figure 5 illustrates the frequency with which officers report utilizing ICAT skills within the past 60 days (also see Table 21 in Appendix B). The frequency of these activities is rated on a five-point scale: 1 = Never (0 times), 2 = Seldom (1 per month), 3 = Sometimes (2-3 times per month), 4 = Often (1 per week), and 5 = Frequently (more than 2-3 times per week), which is collapsed into three categories for this display. Officers reported using the "Reaction Gap" strategy most

often (44.7% reported using it either often or frequently), but over half of the respondents said they never or seldom used any ICAT skills in the previous 60 days.

Figure 5. Self-Reported Use of ICAT Skills at Follow-Up



Additionally, a multivariate logistic regression model is estimated to examine the factors that predict the use of ICAT skills in the field. The original survey question "In the last 60 days, did you apply any strategies from the ICAT training in your work?" included five possible response options: never, seldom (1 per month), sometimes (2-3 times per month), often (once a week), and frequently (more than 2-3 times per week). For this analysis, responses are grouped into two categories: less frequent use of ICAT skills (never and seldom) and more frequent use of ICAT skills (sometimes, often, and frequently).

Unfortunately, after considering the ability to match responses across all three survey waves, there are only 131 possible cases available for this analysis. The sample size further drops to 96 because of the use of listwise deletion. Due to the small sample size, a stepwise procedure was employed to determine which officer characteristics to include in each of the final multivariate models. With this procedure, the bivariate relationship between each officer characteristic and the outcome of interest is assessed. Characteristics that are statistically significant at p <.25 were included in the multivariate analysis.[15]

[15] The initial stepwise procedure observed the association between Frequent use of ICAT skills and age, sex, race, law enforcement experience, rank, education, enforcement orientation, community orientation, encounters with PIC (W1), receptivity to ICAT training (W2), and views on the utility of the CDM model (W2).

Officers who perceive more peer support and supervisor reinforcement of ICAT training report more frequent use of de-escalation skills.

Logistic regression analysis results presented in Table 10 show only two factors are marginally significant and associated with officer self-reported frequent use of ICAT skills in the field. First, officers who agree that their peers support the use of ICAT training are more likely to frequently use ICAT skills compared to officers who report their peers do not support ICAT. Specifically, with all other variables in the model held constant, officers whose peers support ICAT were 2.6 times more likely to frequently use ICAT skills than those without peer support for ICAT. Second, officers whose supervisors reinforce the tenets of ICAT training were 1.7 times more likely to frequently use ICAT skills than those who report not having supervisory reinforcement.

Table 10. Logistic Regression Results Predicting Frequent Use of ICAT Skills

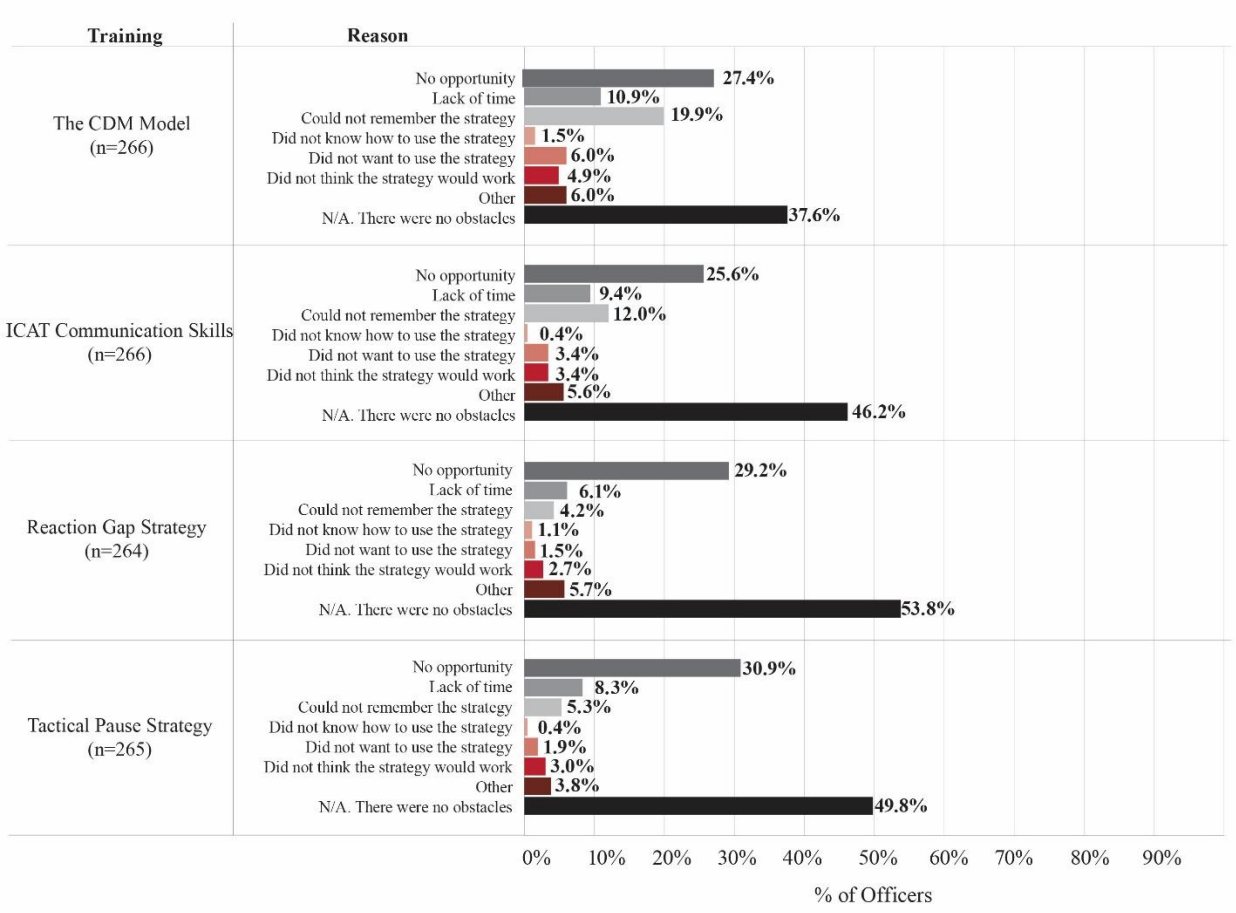
	Frequent Use of ICAT Skills = 1 (W3)	
Variables	**Odds Ratio**	**St. Error**
Male Officer	0.346	0.279
Law Enforcement Tenure	0.811	0.132
Receptivity to ICAT Training	1.093	0.110
Views of the CDM (W2)	1.094	0.073
Command Staff Support	0.731	0.332
Supervisor Support	0.673	0.377
Peer Support	2.549^	1.265
Supervisor Reinforcement	1.700^	0.463
Intercept	0.007	0.016
N^{+}	96	
Pseudo-R^2	0.227	

*Notes: Sample includes patrol officers and sergeants; W2=Wave 2, post-training; W3=Wave 3, follow-up; CDM = Critical Decision-Making Model; ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); + Reduction in sample size is because of the use of listwise deletion.*

Officers are asked to report any perceived obstacles to using ICAT skills in the previous 60 days. Table 22 in Appendix B presents officers' responses to these questions, while Figure 6 presents the information graphically. Note that officers could select multiple reasons. Overall, officers report no perceived obstacles to using the CDM or other ICAT skills between only 38% and 54% of the time. The most common obstacle identified by officers is the lack of opportunity, with approximately 26% to 31% of officers reporting this as an obstacle to implementing the CDM or other ICAT skills. Notably, 19.9% report not remembering the CDM model as an obstacle to its use. There are also perceived obstacles to using the other three types of ICAT skills, but to a

lesser degree. Finally, lack of time is also noted as a perceived barrier to ICAT skill use by 6 to 11%.

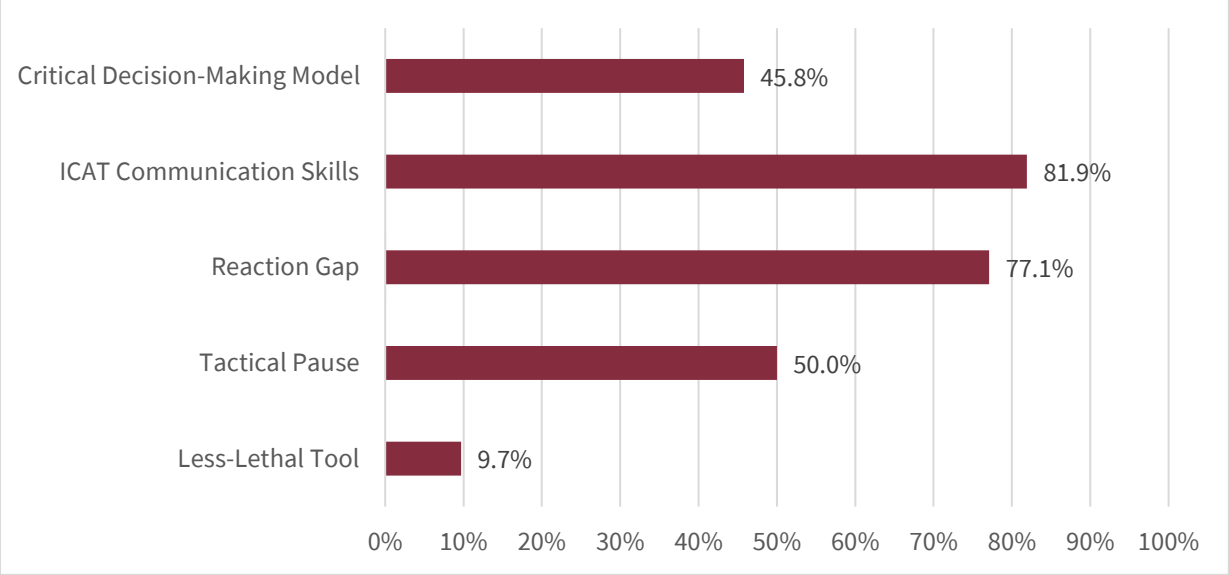
Figure 6. Perceived Obstacles Preventing Use of ICAT Skills



Finally, officers are asked to report whether they responded to an incident involving a person in crisis since their ICAT training. Most officers, 69.5% of those who responded to the follow-up survey, said they had, while 30.5% said they had not. More than 75% of the officers who had encountered a person in crisis report using ICAT strategies during their most recent encounter. Figure 7 illustrates the frequency with which officers employ various ICAT strategies (note that this is a "select all that apply" question). As shown, ICAT Communication Skills are used most often (81.9%), followed closely by the Reaction Gap strategy (77.1%).[16]

[16] ICAT Communication Skills include actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject. The Reaction Gap Strategy involves actively re-positioning to keep a favorable position between the officer and the subject. Finally, the Tactical Pause Strategy involves sharing information and developing a strategy with other responding officers during an encounter with a member of the public.

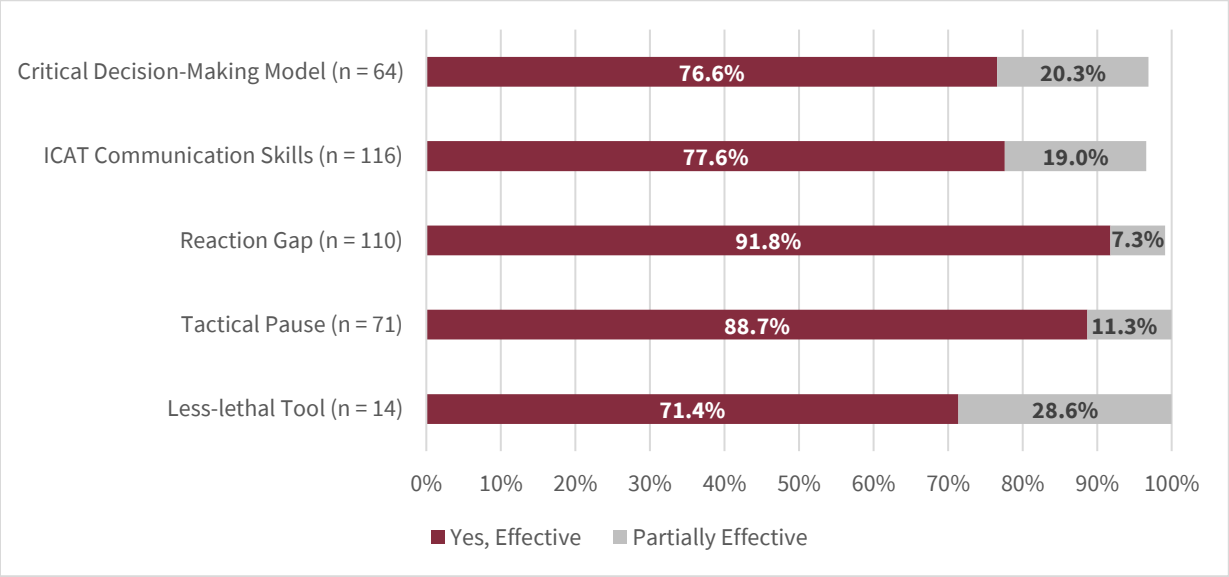
Figure 7. ICAT Strategy Use During Most Recent Incident Involving a Person in Crisis (*n*=144)



Note: Select all that apply (totals will not add up to 100%)

Furthermore, Figure 8 displays officer responses to the perceived effectiveness of ICAT strategies during their most recent incident involving a person in crisis. As shown, when ICAT skills are employed, they are generally perceived as effective and are rarely perceived as ineffective (ranging from 0% to 3.5%, not graphically shown). Of note, the Reaction Gap and Tactical Pause strategies are most frequently reported as effective.

Figure 8. Perceived Effectiveness of ICAT Strategies During Most Recent Incident Involving a Person in Crisis



SUPERVISORY REINFORCEMENT OF ICAT TRAINING

IMPD officers are asked about their experiences with ICAT training strategies over the past 60 days. In terms of the frequency with which immediate supervisors reinforced this training, nearly 60% of respondents indicate that such reinforcement occurred infrequently; specifically, 23.9% report it happening once a month, while 23.9% state that it did not occur at all. Less than 15% report that it occurred at least once a week. Officers are also asked about the ways their supervisors reinforced ICAT training, including direct conversations, roll call, monthly reviews, post-incident reviews, and other methods. As shown in Table 11, officers report their supervisor reinforced ICAT training most frequently during roll call (35.7%), followed by post-incident reviews (27.2%) and in conversations with them (20.1%). Note that officers could select all applicable answers for this question.

Table 11. ICAT Training Supervisor Reinforcement (n=224)

My ICAT training is reinforced by my immediate supervisor…	
	Percent
In conversation with me	20.1
During roll call	35.7
During my monthly review	4.0
During post-incident reviews	27.2
Other	8.9

Supervisor Survey Findings

IMPD SUPERVISOR RESPONDENT CHARACTERISTICS AND GENERAL SUPERVISORY ACTIVITIES

Demographic information for the 171 IMPD supervisors who responded to the survey is provided in Table 23 in Appendix B. The data reveals that most surveyed IMPD supervisors are male (74.3%), White (66.7%), and hold a bachelor's degree or higher (55.0%). About 40% of supervisors are 50 or older, and 62% have worked in law enforcement for 20 years or more. Additionally, nearly half of the respondents (48%) have less than ten years of supervisory experience.

Table 24 provided in Appendix B documents supervisors' self-reported activities related to interactions with their subordinate officers, including how often they visited, participated in, and reviewed incidents handled by their subordinates. Although the majority of supervisors (60.5%) report that they often or frequently went on their own initiative to incidents being handled by subordinates, they overwhelmingly report never (43.2%) or seldom (40.7%) taking over the incident and handling it themselves. Similarly, 64.4% of supervisors report that they never or seldom tell subordinate officers how to handle an incident when they are on the scene

with them. Nearly half (48.7%) of IMPD supervisors report they often or frequently discuss their officers' performance in observed incidents with them.

SUPERVISOR PERCEPTIONS OF USING AND SUPERVISING ICAT DE-ESCALATION TRAINING

To gain insight into the views of LMPD supervisors on the implementation and use of ICAT training in their work, supervisors are asked about their views and experiences with both using and supervising ICAT de-escalation skills. Nine survey items are related to their own use of ICAT and six items are related to supervising subordinates' ICAT skills. For all items, supervisors are asked to rate their level of agreement using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The tables for supervisors' use and supervision of ICAT training are in Appendix B (Tables 25-26); they include the percentage of responses in each category, the average response (mean), standard deviation (SD), and the number of supervisors responding to each question (*N*). Figure 9 displays the percentage of respondents who agreed or strongly agreed with each survey item.

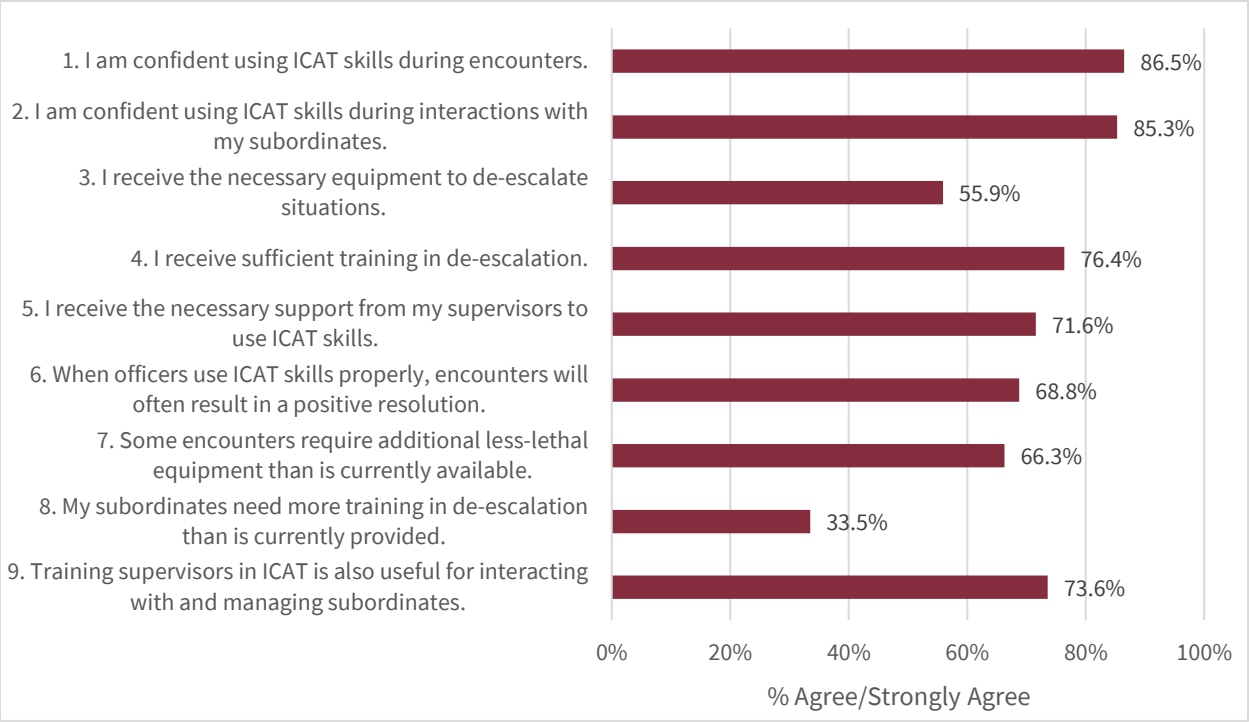
Supervisors report being sufficiently trained and have confidence using and supervising ICAT skills.

As graphically shown in Figure 9, IMPD supervisors overwhelmingly report feeling confident *using* de-escalation skills with both subjects and subordinate officers; 86.5% and 83.5%, respectively, of supervisors agreed or strongly agree with these statements. Nearly three-quarters of supervisors (73.5%) also agree or strongly agree that training supervisors in ICAT de-escalation skills is useful for interacting with and managing subordinates. There is slightly less agreement among IMPD supervisors that they receive the necessary support from their supervisors to use ICAT de-escalation skills, though 56.0% still agreed or strongly agreed with this statement.

Over 75% of supervisors report receiving sufficient training in de-escalation. Importantly, supervisors generally did not believe that their subordinates needed more de-escalation training than what was currently offered by the IMPD. A majority of supervisors (68.8%) also agree that when officers apply ICAT de-escalation skills properly, encounters with individuals are often resolved positively.

Notably, supervisors' responses are somewhat inconsistent regarding the availability of necessary less-lethal equipment to de-escalate encounters. As shown in Figure 9, 56% of supervisors agree or strongly agree that they receive the necessary equipment to de-escalate situations. Yet, 66.3% of supervisors also agree or strongly agree that some encounters with subjects require more equipment than what is currently available.

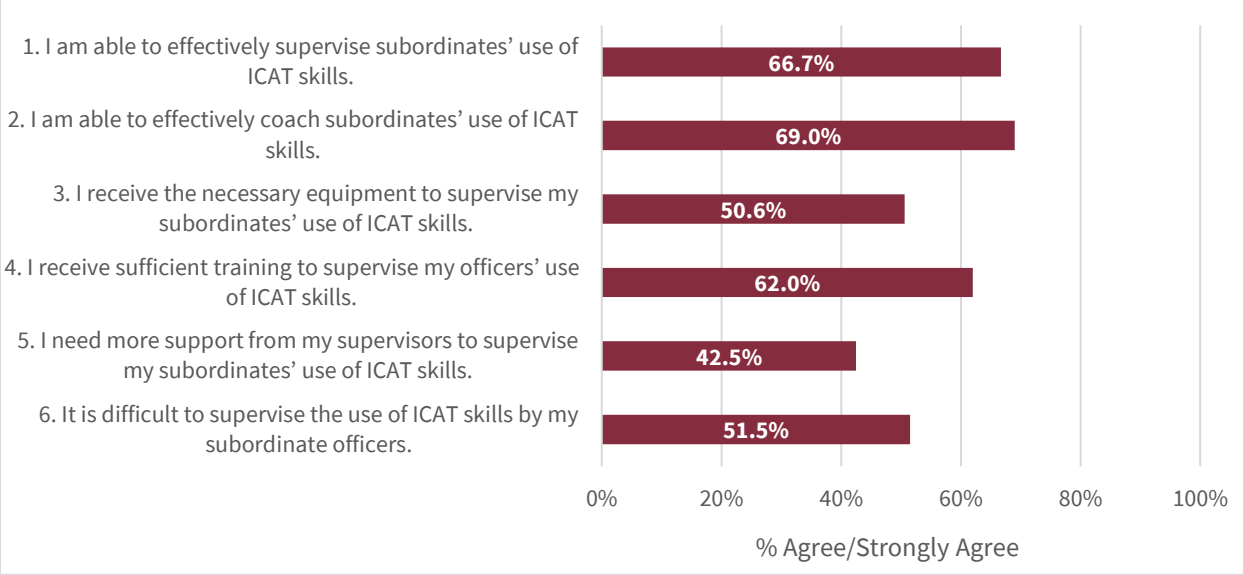
Figure 9. IMPD Supervisor Perceptions Related to *Using* ICAT De-Escalation Skills



Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.
N = 170 for Qs 1, 2, 6, 8, and 9; N = 169 for Qs 4, 5, 7; N = 168 for Q3

Supervisors are also asked about their views on how effectively they can *supervise* their subordinates' use of de-escalation and the support they receive from the department in carrying out these duties, including equipment, training, and leadership support. As shown in Figure 10, roughly two-thirds of supervisors agree or strongly agree that they could effectively supervise and coach their team members in using ICAT de-escalation skills. Supervisors also report feeling supported in this task, with over half agreeing or strongly agreeing they had the necessary equipment and sufficient training. However, 42.5% of IMPD supervisors report needing more support from their own supervisors to be able to supervise their subordinates' use of ICAT skills. Similarly, a slight majority (51.5%) agree or strongly agree that it is difficult to supervise their subordinates' de-escalation skills.

Figure 10. Supervisor Perceptions Related to *Supervising* ICAT De-escalation Skills



Note: The "neutral," "disagree," and "strongly disagree" categories are excluded from this graph.
N = 168 for Qs 1-4; N = 167 for Qs 5 & 6

Supervisors' Self-Reported Behaviors Reinforcing ICAT Training

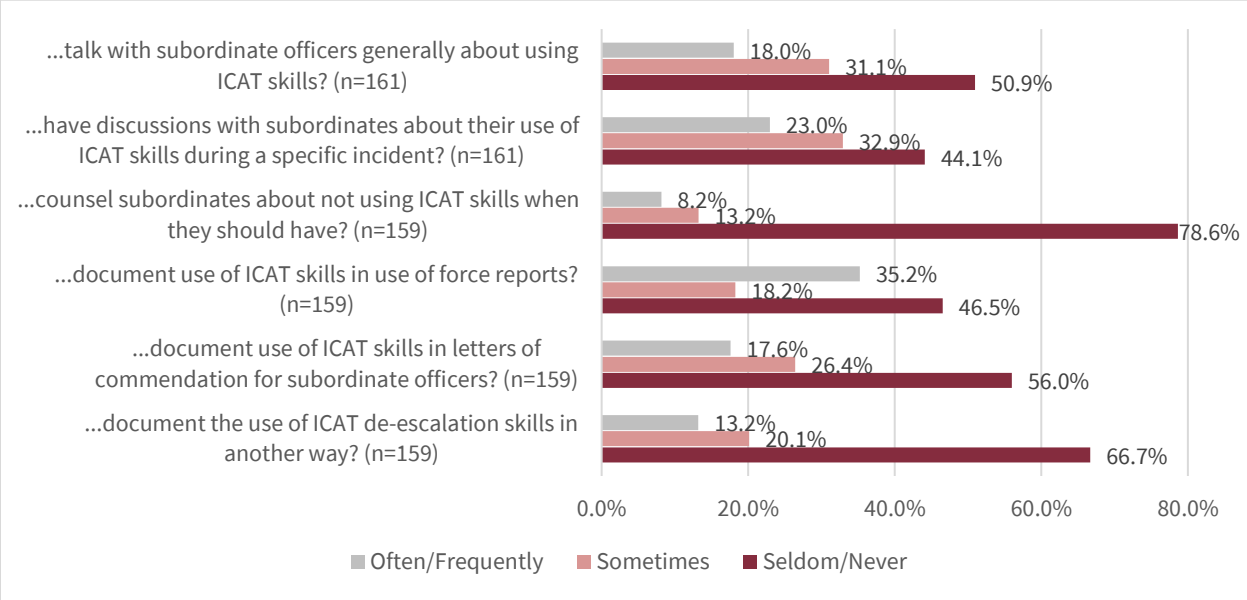
One key objective of the supervisor-specific survey with the IMPD is to gather insights into how often supervisors engage in activities that directly support or reinforce their officers' use of de-escalation skills from the ICAT training. To do this, IMPD supervisors are asked to rate on a five-point scale (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Frequently) how often they engage in six specific supervisory activities related to de-escalation skills. These activities include discussing de-escalation skills in general and in specific incidents, as well as documenting officers' use of these skills in various ways. Figure 11 summarizes the frequency of supervision activities related to ICAT de-escalation skills (see also Table 27 in Appendix B).

Most IMPD supervisors do not engage in activities that support or reinforce ICAT training with their officers.

As shown, only a small percentage of IMPD supervisors often or frequently engage in supervision activities reinforcing de-escalation skills. Specifically, 18.0% of supervisors report talking with their officers about the use of de-escalation skills generally, and 23% said the same about discussing de-escalation about a specific incident. Less than 10% of supervisors report they often or frequently counsel subordinates about not using ICAT skills when they should have. The most common type of supervision activity related to ICAT is the documentation of use of de-escalation skills in use of force reports; 35.2% of supervisors reported often or frequently doing so. Less than 20% of supervisors report often or

frequently documenting subordinates' use of ICAT de-escalation skills through other methods. Overall, between 44% and 79% of supervisors report *never or seldom* engaging in any of the supervision activities related to ICAT. These findings are largely consistent with officers' perceptions of the frequency of supervisory reinforcement reported on their follow-up survey.

Figure 11. Supervision Activities Related to ICAT De-escalation Skills

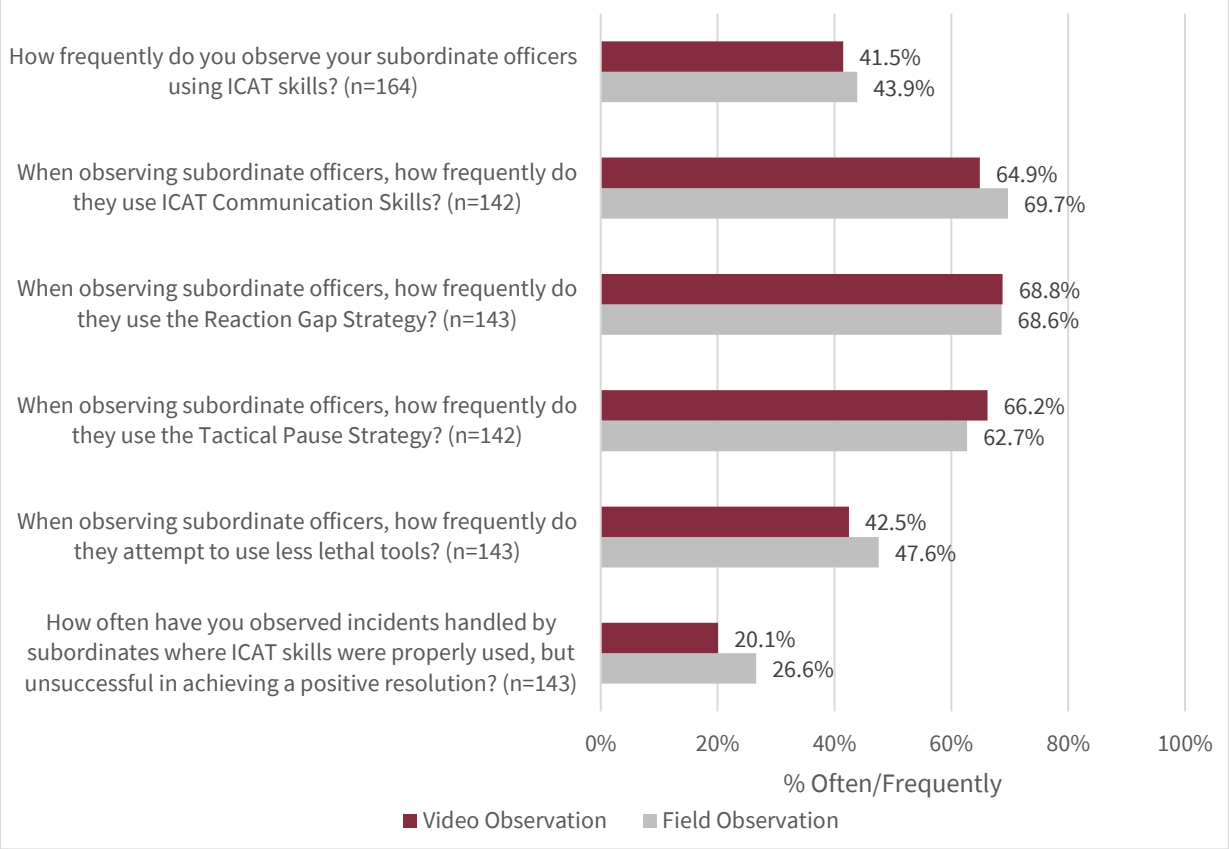


Observations of Subordinates' Use of De-escalation Skills

IMPD supervisors are asked questions about how frequently they observe their subordinate officers using de-escalation skills, either through direct observation in the field or video review. These questions use a five-point response scale: 1 = Never (0 times), 2 = Seldom (1 per month), 3 = Sometimes (2-3 times per month), 4 = Often (1 per week), and 5 = Frequently (more than 2-3 times per week). Two tables in Appendix B provide the percentage of responses in each category, the average response (mean), standard deviation (SD), and the number of supervisors responding to each question (*N*) (Table 28 for in field, Table 29 for video). Figure 12 shows the percentage of supervisors who indicated often or frequently in response to these questions.

As shown, just over 40% of supervisors report observing their officers using de-escalation skills, both in the field and through video review. The Reaction Gap Strategy, ICAT Communication Skills, and Tactical Pause Strategy are all reported to be observed by supervisors with similar frequency, with about 60-70% of supervisors reporting that they often or frequently observed these specific skills. As shown, supervisors report often or frequently observing subordinate officers utilizing different ICAT skills at similar percentages, regardless of whether based on field or video observation methods.

Figure 12. IMPD Supervisor Observations of Subordinates' Use of ICAT Skills (Field & Video)



Supervisors are asked to report the frequency with which de-escalation tactics utilized by their subordinates failed to achieve a positive resolution in observed incidents. Specifically, supervisors provide their perception of how often encounters managed by their subordinates using de-escalation skills did not result in successful outcomes. As indicated in Figure 12, during video review, only 20% of supervisors state that they often or frequently observed incidents where de-escalation skills were used but did not yield a positive resolution. During field observation, approximately 27% of supervisors report the same. As noted in Tables 28 and 29 in Appendix B, over 56% of supervisors state that they never or seldom observed incidents where de-escalation skills were used but did not yield a positive resolution. During field observation, approximately 44% of supervisors report the same.

Multivariate Regression Analyses

The results of multivariate analyses that examine how supervisor characteristics relate to reported attitudes and behaviors are described below. Specifically, the following outcomes are examined: (1) supervisors' receptivity to ICAT training, (2) supervisors' perceptions of their own ICAT skill use, (3) supervisors' perceptions of their ability to supervise subordinates' ICAT skill use, and (4) the frequency with which supervisors engage in activities that reinforce ICAT. Due to the small sample size, a stepwise procedure is employed to determine which officer characteristics to include in each of the final multivariate models. With this procedure, the

bivariate relationship between each supervisor characteristic and the outcome of interest was assessed. Characteristics that are statistically significant at p <.25 are included in the multivariate analysis.

Table 12 presents the results of an OLS regression model predicting supervisory receptivity to ICAT training. As shown, only one supervisor characteristic—general openness to training—is significantly associated with supervisor receptivity to ICAT training (p = .057). As expected, supervisors who are more open to training in general before receiving ICAT training are more receptive to the program. Other measured individual supervisor characteristics (e.g., age, role orientation, and years of supervisory experience) do not predict the level of receptivity to ICAT training.

Table 12. Multivariate OLS Regression Results Predicting Receptivity to ICAT Training

	Receptivity to ICAT Training (W2)	
Variables	**Coefficient**	**St. Error**
Supervisor Age	0.371	0.613
Years Supervisor Experience	0.344	0.384
Enforcement Orientation	-0.150	0.201
Community Orientation	0.175	0.198
Openness to Training	0.395^	0.203
Intercept	0.800	6.317
N^{+}	62	
R^2	0.250	

*Notes: W2=Wave 2, post-training; ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); + Reduction in sample size is because of the use of listwise deletion.*

Table 13 presents the results of an OLS regression model predicting supervisors' perceptions of using ICAT skills (i.e., self-reported confidence with using ICAT skills).[17] Again, only one supervisor characteristic is significantly associated with the outcome of interest. Supervisors with greater receptivity to ICAT training have more favorable perceptions of using ICAT skills *(p* = 0.064).

[17] The individual items that comprise the *Perceptions of Using ICAT Skills Index* are survey questions 1-6 in Table 25 of Appendix B and Figure 9 above.

Table 13. Multivariate OLS Regression Results Predicting Supervisor Perceptions of *Using* ICAT Skills

	Perceptions of Using ICAT Skills	
Variables	**Coefficient**	**St. Error**
Male Officer	-1.215	0.777
White Officer	-0.922	0.736
Receptivity to ICAT Training	0.135^	0.072
Intercept	22.603	1.646
N^{+}	93	
R^2	0.076	

*Notes: ^ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); + Reduction in sample size is because of the use of listwise deletion.*

Supervisors' initial receptivity to training predicts their use of ICAT skills and subsequently their confidence in supervising ICAT skills.

The predictors of supervisors' self-reported ability to supervise ICAT de-escalation skills of their subordinate officers is also assessed.[18] As shown in Table 14, the results of the multivariate OLS regression model demonstrate that only supervisors' self-reported confidence with *using* ICAT skills themselves is significantly associated with supervisor perceptions of *supervising* ICAT skills. Interestingly, in contrast to the LMPD study that found receptivity to ICAT training was significantly associated with supervisors' perceptions of their ability to supervise subordinate officers' de-escalation skills (Engel et al., 2022b), the bivariate relationship between these two variables is too weak to justify including in the multivariate model (b = -0.024, p = 0.703).

Table 14. Multivariate OLS Regression Results Predicting Perceptions of *Supervising* ICAT Skills

	Perceptions of Supervising ICAT Skills	
Variables	**Coefficient**	**St. Error**
Bachelor's Degree or Higher	-0.527	0.374
Perceptions of Using ICAT Skills	0.478***	0.067
Intercept	3.598	1.599
N^{+}	107	
R^2	0.341	

*Note: * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test); + Reduction in sample size is because of the use of listwise deletion.*

[18] The individual items that comprise the *Perceptions of Supervising ICAT Skills Index* are survey questions 1-4 in Table 26 of Appendix B and Figure 10 above.

Finally, in a multivariate model not shown (but available in Table 30 in Appendix B), none of the supervisor characteristics (age, sex, race/ethnicity, education, or role orientation) significantly predict the frequency of ICAT supervisory activities. Again, in contrast to the LMPD evaluation that found receptivity to ICAT training was significantly associated with frequency of ICAT supervision activities (Engel et al., 2022b), the bivariate relationship between these two variables is too weak to justify including in the multivariate model (b = -0.010, p = 0.843).

Focus Group Findings

To provide additional context to the quantitative evaluation of the ICAT training, focus groups were conducted by the research team with IMPD officers The facilitator engaged focus group participants on various topics related to the overall study, including their general impressions of the ICAT de-escalation training, de-escalation and use of force in the field, training in general, supervisory support both generally and specifically regarding the reinforcement of ICAT skills, officer safety and wellness, and the impact of staffing shortages. The facilitator concluded each group with the prompt, "You get to be Chief for a day. Your goal is to make your officers safer and reduce officer and subject injuries. What would you do?" Their recommendations generally aligned with specific topics that had already been discussed and are included within those topics below.

IMPRESSIONS OF THE ICAT DE-ESCALATION TRAINING

The ICAT training took place from May 2022 to May 2023. Consequently, the focus group participants were 18-30 months removed from their original training dates. When the moderator asked participants what they remembered from the training, some acknowledged they remembered the general concepts but could not recall the specific components of the CDM or distinguish particular de-escalation strategies from one another. Several participants, both officers and supervisors, reported they found the training somewhat repetitive with other IMPD trainings they had received—including Crisis Intervention Training (CIT), Active Bystandership for Law Enforcement (ABLE), and Use of force/range training—and that it was difficult to recall which training content came from which source. This demonstrated an integration of the core components supporting the use of de-escalation training across IMPD training content.

Participants reported confidence in their ability to utilize de-escalation tactics and respond appropriately during calls for service. Many participants indicated that they believed they were already applying many of the tactics and strategies taught in ICAT and therefore saw it as more of a reinforcement training rather than something new and groundbreaking. A few participants specifically noted that de-escalation training helped them communicate better overall, indicating it had taught them skills they use with family members, peers, and other colleagues, in addition to in the field.

DE-ESCALATION CULTURE AT IMPD

Focus group participants unanimously agreed that using de-escalation whenever feasible is *expected* within the IMPD, that the term is frequently mentioned, and that their culture emphasizes its importance. One officer noted that the IMPD's use of force report in BlueTeam now explicitly asks about the de-escalation tactics employed. They viewed this as highlighting the significance of using de-escalation and appreciated that this type of documentation offers a comprehensive record of all attempts to de-escalate the situation.

Supervisory Expectations and Reinforcement Activities

Officers indicated that *most supervisors expect* them to use de-escalation tactics and *frequently* discuss de-escalation strategies (e.g., time distance, cover) during debriefs following use of force situations or other critical incidents. They also occasionally address de-escalation training skills during roll call training. Notably, younger supervisors are particularly more likely to praise officers' use of de-escalation. Supervisors reported that roll calls could be utilized more effectively for this purpose. They found weekly video debriefs of critical incidents serve as a useful method for prompting officers to consider situations from different perspectives. Additionally, they perceived that most officers are open to this approach since they are interested in continuous improvement. One supervisor expressed a preference for using video debriefs to highlight what is being done well, rather than solely addressing liability issues. "We always look at what we do wrong, we don't look enough at what we do well. We focus on the liability, we don't focus on what keeps us from that." This positive reinforcement was seen as underutilized but important for growth and morale.

Focus group participants describe:

- Strong organizational culture emphasizing de-escalation
- Importance of supervisory reinforcement for de-escalation use
- Need for ongoing support for de-escalation through coaching and refresher trainings

Focus group participants described debriefs following use of force incidents as routine, but often more procedural than instructional. While supervisors conduct interviews to complete required documentation, opportunities for coaching do arise, especially when BWC footage prompts follow-up conversations. Informal, on-scene debriefs were regarded as valuable teaching moments, particularly when supervisors create an environment for self-reflection. One participant noted the following open-ended question that is useful for self-evaluation: "How would you handle this if you had the same run tomorrow?" Encouraging everyone to speak freely and acknowledging what could have been improved as a supervisor was viewed

as an effective way to make officers feel comfortable participating. Though not mandated, conducting these debriefs was seen by participants as a best practice for effective supervisors. All acknowledged that time constraints can make it challenging to conduct debriefs consistently.

In the supervisory focus groups, participants shared various strategies they use to reduce the likelihood of critical incidents escalating. Many supervisors adopt a proactive approach by responding to high-risk calls when they are available—even if they are not explicitly requested or mandated by policy. Dispatch was noted as generally helpful in notifying supervisors of potentially volatile calls, although experiences varied among participants. Some reported consistent notifications, while others had not encountered the same level of communication. Supervisors mentioned they often rely on experienced FTOs and more seasoned officers to help manage risk. With a typical span of control of one supervisor for about 15 officers, supervisors described thoughtfully balancing beat assignments and scheduling to create a good mix of veteran and newer officers. Although this practice is not formally taught, participants viewed it as a common practice throughout the agency.

Finally, while supervisors agreed that de-escalation is the expected approach, they felt it might lead some officers to attempt de-escalation for too long in certain situations. Several supervisors noted that officers are concerned about using force and may be over-de-escalating situations instead of opting for a lower level of force (e.g., hands-on). This could increase the risk of a situation requiring a more severe use of force. They viewed this hesitation as a bigger concern than officers not de-escalating at all. One supervisor said, “De-escalation is great and it needs to be the first step, but not to the point where it becomes more of a risk. Officers don’t know where to draw the line for when they need to step in and use lower-level force.” All participants agreed that the goal is to use the least amount of force possible to de-escalate the situation, but acknowledged that sometimes using low levels of force is de-escalation.

REFRESHER TRAINING FOR ICAT SKILLS

There was broad agreement that some officers would benefit from refresher training in de-escalation, though resistance to such training is common. There was skepticism about the effectiveness of additional training during roll call or other informal settings, with some officers likely to dismiss it as unnecessary. Participants described certain officers as entering the job with a “tough guy” mentality or struggling with basic communication, traits that are perceived as difficult to train out. This culture can make it difficult to work with peers who are known to be volatile or have poor interpersonal skills. While some believed that these individuals might eventually be weeded out, others emphasized the importance of coaching and consequences in shaping behavior. The distinction between training and coaching was a recurring theme. That is, while the department’s training was generally praised, participants perceived some officers as needing more hands-on guidance and support to internalize and apply the training concepts. Participants viewed the effectiveness of training being influenced by the experience and maturity of the officers. Many newer officers are in their early to mid-20s and have limited

life experience. While they may be well-trained, their ability to apply that training in complex, real-world situations is sometimes lacking.

Although in-service training opportunities exist (including two range days per year that are scenario-based), participants felt that consistent refreshers and boosters are lacking once officers leave the academy. Ultimately, while the training itself is seen as solid, its impact depends heavily on the individual officer's mindset, maturity, and willingness to grow.

TRAINING IN GENERAL

Focus group participants expressed very positive attitudes about the department's training overall. They were particularly complimentary of the academy training and its emphasis on scenario-based training. However, participants offered several recommendations to further enhance IMPD training and made specific comments regarding the Field Training Officer program and peer intervention training.

Participants highlighted the importance of well-rounded training but expressed concern that recent in-service sessions have become repetitive due to state-mandated topic requirements. They advocated for incorporating more scenario-based training during in-service training, allowing officers to refresh and practice their skills, particularly those related to communication. Debriefing after this type of training encourages conversations among participants and instructors to identify areas for continuous improvement. Communication was repeatedly cited as a critical skill—arguably the most important aspect of the job—yet participants generally perceived younger officers to be less comfortable with face-to-face interaction because of their reliance on digital communications. The focus group participants emphasized the need to better tailor training to suit the learning styles of younger generations. Another recommendation for improvement was to align training more closely with operational realities by having officers train with the people they regularly work with (rather than those from other districts), similar to how SWAT trains as a group. Finally, concerns were raised about training staff who have been off the streets for extended periods and may not be teaching material that is still relevant in the field. They recommended making academy roles temporary assignments instead of long-term positions to allow for a continual influx of fresh perspectives.

Field Training Officer (FTO) Program

Focus group participants shared a variety of insights regarding the role and effectiveness of FTOs, emphasizing both their critical importance

More focus group topics include:

- Perceptions of Training in General (including FTO & Peer Intervention)
- Officer Well-being and Safety
- Supervisor Support
- Staffing Shortages

Contributing to better understanding of IMPD culture

and areas for improvement. They expressed broad confidence in the FTO program, which trains recent academy graduates through practical, on-the-street experience. Recruits gain valuable exposure to diverse calls and are assigned to three different FTOs across shifts and districts throughout the four-month training period. FTOs are viewed as essential to shaping new officers' habits, decision-making, and confidence, particularly in high-pressure environments where time and staffing are often limited.

The majority of FTOs were characterized as competent and effective. Focus group participants also believed that FTOs effectively identify individuals needing extra training support through extended FTO time. However, they raised concerns about the demanding and draining nature of the FTO role. Those who have held the position for an extended period often face burnout, and participants noted that a small percentage of FTOs had remained in the role too long and might no longer be well-suited for it. They also pointed out that others who could be well-suited for the position are discouraged by the workload and lack of incentives.

Conversely, some newer FTOs were seen as too inexperienced to train others. Currently, officers can become FTOs just three years after hire, which includes time spent in the academy and initial training. This means many are stepping into training roles with only about two years of street experience. Previously, participants indicated that the FTO requirements included a minimum of five years of experience. Consequently, newer officers are now being assigned the task of training new academy graduates, raising questions about their readiness and effectiveness. Some sergeants mentioned they find themselves stepping in more often to support or supplement the responsibilities that would traditionally belong to FTOs.

Peer Intervention

Focus group participants often mentioned the ABLE training program and its reinforcement with ICAT training. They generally recognized the importance of peer intervention and felt the department's culture encourages officers to speak up when necessary. There was a shared understanding that accountability is collective—if one officer acts inappropriately, everyone involved could face consequences. This expectation to intervene was seen as a norm within the IMPD. As one participant stated, "If you feel like something is going to happen, you are *expected* to say something." However, participants highlighted the challenges of putting this principle into practice. While many felt empowered by their supervisors, acting on it in real-time often depends on the dynamics between individuals (rank, tenure, personality, etc.). Body-worn cameras were viewed as having a positive impact on accountability and professionalism.

OFFICER WELL-BEING AND SAFETY

Focus group participants emphasized that officer safety and well-being are critical concerns requiring more structured support. As one participant put it, "As an agency, we are worn out. We are tired." Several advocated for the implementation of wellness programs and mandatory physical fitness and health tests, including ideas like Jiu Jitsu training and centrally located health and wellness facilities. These initiatives were viewed as essential for both physical

readiness and mental resilience. Participants noted that fatigue and poor physical health contribute to preventable injuries and diminished job performance. However, concerns were also raised that enforcing fitness standards might alienate some officers who struggle to meet them.

The mental toll of the job was a recurring theme, especially in the context of staffing shortages. Officers described the current environment as more emotionally taxing than in previous decades, with fewer personnel leading to increased workloads and heightened stress. This pressure often results in officers feeling rushed, unable to fully focus on each call, and mentally drained by the end of their shifts. Participants noted that many calls (e.g., incomplete 911s, animal complaints, alarm activations) do not require a police response and can be handled through alternative means, such as phone calls or online reporting. Reducing these non-critical runs could free up time for officers to take a quick mental break and better manage high-priority incidents.

Time pressure was largely described as self-imposed, driven by a sense of ownership over one's beat and a desire not to burden peers or supervisors. While supervisors generally encourage officers to slow down and handle calls thoroughly, newer officers often feel compelled to move quickly to avoid appearing inefficient. This urgency can sometimes lead to mistakes or the use of force because officers feel the need to "just get the call over with." Participants agreed that while most officers understand the importance of doing things right the first time, the cumulative stress of constant calls can erode that discipline. Supervisor participants noted they try to reinforce the idea that doing things correctly matters more than speed, as it results in more work for supervisors if things are done improperly.

SUPERVISOR SUPPORT

Overall, officers believed first-line supervisors would support them as long as they did the right thing. However, officers reported support from first-line supervisors varied by individual, with some perceived as supportive and trustworthy, while others were not. Similarly, regarding wellness support, officers viewed some supervisors as approachable and encouraging, while others appeared less receptive. Participants highlighted the need to cultivate a culture where officers feel comfortable seeking help and addressing personal or job-related stress. Supervisors echoed these thoughts, stating they believe they have built credibility with their officers and gained their trust, though they also observed some individual supervisors who may not be as respected and trusted as their peers. Regarding wellness specifically, supervisor participants expressed a desire to learn from previous mistakes and adapt the system to better support officers' long-term health and performance.

Another emerging trend, as described by focus group supervisors, was the increased frequency of officers calling them directly for guidance. One supervisory participant noted receiving 19 calls during a recent shift, while others estimated between five and 15 calls per shift. This cultural shift of "ask a supervisor" was perceived to stem from a combination of generational differences, policy expectations, and fear of liability. Younger officers tend to seek reassurance

before acting. Despite this, supervisors did not view it as a training issue, noting they felt their officers were well-prepared. Instead, they perceived it as a lack of confidence among the officers and their need for support and reassurance in decision-making. Some supervisors expressed frustration with this, suggesting these are decisions that professional police officers should be able to make independently without their sergeant's support.

STAFFING SHORTAGES

Focus group participants emphasized that increased staffing is clearly needed, but it is not a quick fix due to the limited hiring pool. Many felt the balance between urgently filling vacancies and maintaining high standards had tilted too far toward expediency. Anecdotal observations suggested that background checks have become more lenient, with some hires reportedly having prior misconduct issues. Participants voiced significant concerns about the perceived lowering of hiring standards (e.g., no longer conducting interview boards to expedite the hiring process) and its impact on officer performance, particularly in critical incidents requiring de-escalation. This shift was seen as contributing to an increase in the use of force, as some new officers may lack the judgment, communication skills, or temperament necessary for the role. Participants described the consequences of these changes as both operational and personal. Officers reported feeling mentally exhausted from having to monitor not only the individuals involved in the call but also their fellow officers, fearing that a colleague might escalate a situation.

Still, they emphasized the community expects a reliable police response, particularly when calling 911. Participants suggested a consistent officer presence in high-priority areas could reduce long-term workload by building trust, enhancing communication, and decreasing incidents involving the use of force. Familiarity with the community and repeated interactions would also assist officers in making better-informed decisions and identifying individuals who are more likely to escalate situations. They also advocated for a transition from reactive to proactive policing. By identifying and addressing problems early on, officers could prevent some situations from escalating in the first place.

Evaluation A: Summary

The Indianapolis Metropolitan Police Department (IMPD) implemented a modified version of the ICAT training curriculum, delivering it in a condensed 8-hour format. The research team's evaluation includes three waves of officer surveys (pre-training, post-training, and follow-up), a cross-sectional supervisor survey, and four focus groups with officers and supervisors to assess officer attitudes, perceptions, and self-reported behaviors related to de-escalation. A summary of the main findings from these data sources and analyses is provided below.

TRAINING RECEPTIVITY

1. Before the ICAT training, survey respondents reported high openness to training, with 85% indicating they were open to new training and 82% agreeing it made them more effective in their work.
2. Immediately after the ICAT training, over 65% of officers agreed the training was useful, clear, and indicated they would recommend it to others.
3. Fewer than half of the post-training survey respondents believe the ICAT training taught them new things. Similar sentiments were raised by focus group participants, who noted that they view ICAT as reinforcing existing training (e.g., CIT, ABLE) rather than introducing new concepts.
4. Nevertheless, focus group participants emphasized the need for ICAT refresher training and more scenario-based practice.

ATTITUDINAL CHANGES

The pre-, post-, and follow-up surveys include questions to assess changes in attitudes toward interactions with the public, persons in crisis, and use of force over time. Across each of these areas, ICAT training led to immediate changes in officer attitudes between pre- and post-training surveys that are aligned with ICAT training principles. By the follow-up period, however, training decay is observed across many of the measures.

Interactions with the Public

- Four out of the seven survey items related to interactions with the public reveal statistically significant pre-post differences, and all changes correspond with the training curricula.
    - Officers are significantly more likely to believe they can be trained to improve de-escalation and interactions with the public and they can control interactions and create positive outcomes.
- Between the post- and follow-up responses, five survey items did not significantly differ. Two survey items show significantly lower responses in the follow-up than in the post-training period; that is, there is evidence of training decay.
- Similarly, when examining the additive index of *Interactions with the Public,* a statistically significant increase in officers' attitudes from pre-training to post-training is observed that aligns with the expected impacts of the ICAT training.
    - However, no meaningful differences are observed between pre-training and follow-up responses, suggesting that officers did not hold significantly differing views on interactions with the public four months following ICAT training compared to the views they held before participating in the training.

- It is important to note, however, that even the baseline (pre-training) agreement levels are quite high (i.e., aligned with ICAT principles).

Attitudes Toward Persons in Crisis

- Post-training, officers report significantly more alignment with ICAT principles, including listening, slowing down encounters, and avoiding force (7 of 14 items related to attitudes toward persons in crisis showed significant pre-post improvements).
- Follow-up responses show training decay for seven items when comparing post- and follow-up survey responses. However, three of the seven items remain significantly more aligned with ICAT training than pre-training levels.
- Similarly, when examining the additive index *Interactions with Persons in Crisis,* there is significant pre-post training improvement in officers' attitudes. While there is some decay between post-training and follow-up, attitudes toward persons in crisis remain significantly improved at follow-up compared to baseline.
- Perceived peer support of ICAT is the only significant factor mitigating attitude decline between post- and follow-up survey responses.

Attitudes Toward Use of Force

- Six of the 11 survey items related to attitudes toward use of force show significant pre-post improvements that aligned with ICAT training, including increases in agreement that talking is safer than force and limits exist on force use, and decreases in agreement with items related to early use of force and having a reputation for force.
- Training decay is observed in five items between post-training and follow-up.
- Comparing follow-up and pre-training attitudes, most officers' attitudes toward the use of force regressed to pre-training levels. However, two items show improvement from pre-training to follow-up:
    - Less agreement with excessive force and belief that not using force leads to resistance.
    - However, belief in talking suspects down declined below pre-training levels.
- Similarly, when examining the additive index *Attitudes Toward Use of Force,* significant post-training improvement in alignment with ICAT is observed, followed by regression to baseline levels in the follow-up survey.
- Again, perceived peer support of ICAT is the only significant factor mitigating attitude decline between post- and follow-up survey responses.

SELF-REPORTED BEHAVIOR

IMPD officers were asked multiple questions on the follow-up survey about self-reported behavior related to the ICAT training in the past 60 days. Respondents indicate the following:

- When asked generally about ICAT skill use in the field in the 60 days prior to the follow-up survey, 45% of officers report using the Reaction Gap strategy often or frequently, and 36.1% said the same for ICAT Communication Skills. However, about half report seldom or never using the Tactical Pause Strategy or CDM model in the past 60 days.
- There is, however, a higher percentage of reported ICAT skill use when follow-up survey respondents are asked about their use during their most recent encounter with a person in crisis, particularly for ICAT Communication Skills (81.9%) and the Reaction GAP strategy (77.1%).

PERCEPTIONS OF USEFULNESS AND EFFECTIVENESS OF ICAT SKILLS & TACTICS

Usefulness

- While initial perceptions are positive, follow-up responses indicate a decline in perceived usefulness of ICAT training. While 68.7% of respondents on the post-training survey perceive ICAT strategies as useful and 65.6% indicate they would recommend the training to others, only 54% and 47% of follow-up survey respondents agree.
- Officers also report less favorable views of the CDM model's utility over time (i.e., follow-up responses for all 11 items in the *CDM Utility* index report less utility than post-training responses).
    - A multivariate model predicting attitudinal change between post-training and the follow-up period reveals three characteristics that are significantly associated with changes in CDM utility views:
        - Officers who ae more receptive to ICAT training immediately after completing it show larger drops in their views of the CDM's utility than less receptive officers.
        - Officers who perceive greater peer support for using ICAT skills experienced smaller decreases in their views of CDM utility compared to those who perceived peers as unsupportive.
        - On average, officers who report *less* frequent use of ICAT skills experience greater reductions in the perceived utility of the CDM model from post-training to follow-up.

- Notably, focus group participants largely feel confident in their de-escalation abilities and report ICAT strategies to be useful in both professional and personal contexts.

Effectiveness

- Officers who report using ICAT skills in the past 60 days overwhelmingly rate them as effective, particularly the Reaction Gap and Tactical Pause strategies.
- When asked if ICAT training improves interactions with the public, people in crisis, and police-community relations, half of the survey respondents are neutral. However, nearly half (48.2%) of the respondents perceive ICAT training strategies to be helpful beyond handling persons in crisis, 24.8% of respondents report using ICAT strategies to better manage conflicts in their personal lives, and about one-quarter find the strategies useful for managing disputes with colleagues (27.7%) or supervisors (21.5%).
- Moreover, officers report no perceived obstacles to using the CDM or other ICAT skills between 38% and 54% of the time. The most common obstacle identified by officers across skills is the lack of opportunity (approximately 26% to 31%). Notably, 19.9% report not remembering the CDM model. This is also an obstacle to using the other three types of ICAT skills, but to a lesser degree.

PERCEIVED SUPPORT AND SUPERVISORY REINFORCEMENT

- Only 15% of officers report weekly reinforcement of ICAT principles by supervisors, though over half of the respondents agree that their immediate supervisor support ICAT skills.
- Roll call is the most common reinforcement method (36%), followed by post-incident reviews (27%).
- Officers perceive support from command staff and peers is moderate (55% and 32%, respectively).
- Multivariate analyses find that peer support is the strongest predictor of sustained positive attitudes aligned with ICAT training principles and frequent use of ICAT skills. Only about 32% of officers agree that their peers supported ICAT skills.
- Similarly, supervisor reinforcement is significantly associated with more frequent use of ICAT strategies in the field.
- Focus group participants describe de-escalation as an expected norm within IMPD, reinforced by documentation requirements and supervisor expectations.
- The supervisor survey showed similar findings:
    - Although IMPD supervisors express confidence in using de-escalation skills, feel adequately trained and supported in using ICAT de-escalation methods, and believe their subordinates' use of these skills contributes to positive outcomes

during encounters, less than 25% report often or frequently engaging in various supervision activities that reinforce de-escalation skills.

- Supervisors with greater receptivity to ICAT training have more favorable perceptions of using de-escalation skills; while supervisors' confidence with using ICAT skills is associated with their perceptions of their ability to supervise subordinate officers' de-escalation.

The Indianapolis ICAT evaluation reveals a pattern of high initial receptivity, short-term gains in attitudes, and training decay over time, as some attitudes regress to pre-training averages. Focus group findings add valuable context, highlighting a strong cultural emphasis on de-escalation, the importance of supervisory reinforcement, and the need for ongoing support through coaching and refresher training.

4. EVALUATION B: ICAT TRAINING IMPACT ON OFFICER BEHAVIOR

Following the initial training evaluation in Louisville, this replication study of ICAT training administered to the IMPD uses a stepped-wedge RCT design. To explore the impact of ICAT training on IMPD officer behavior, this evaluation assesses the frequency of IMPD uses of force, subject injuries, and officer injuries that corresponded with the timing of ICAT training.

Stepped-Wedge Randomized Controlled Trial (RCT) Research Design

A stepped-wedge RCT is a type of crossover design that allows for geographic "clusters" (in this study, police districts) to begin as no-intervention control groups after which individual clusters are randomly selected at pre-planned time points to cross over permanently from the control group to the intervention (i.e., trained) group (Hussey & Hughes, 2007; Engel et al., 2022; Worden et al., 2024). By the end of the study period, all clusters have transitioned to the intervention group (i.e., received ICAT training). This design allows for an experimental comparison between the IMPD district clusters receiving the intervention and districts clusters receiving "treatment as usual" while awaiting crossover to the treatment group. This approach is useful because no divisions are permanently assigned to the control group for the duration of the study, and an experimental design can be used in circumstances that would not have been feasible in other research designs. The use of an RCT research design within an agency of approximately 1,700 sworn officers provides the statistical power needed to detect the effects of the training on officer use of force.

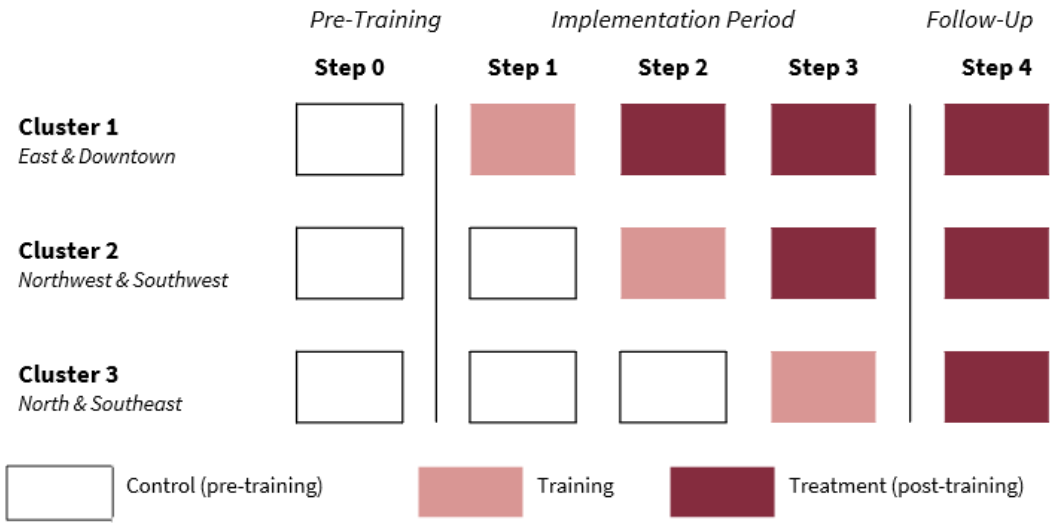
Police districts were paired by the research team into three equivalent groups (or district clusters) so that each cluster included a similar mix of districts based on: size, urban/suburban representation, use of force, and citizen/internal complaints. Each cluster was then randomly selected by the research team to be trained in ICAT in the first, second, or third block within the training schedule.

As displayed in Figure 13 below, the ICAT training schedule occurred over an approximate one-year period (from May 30, 2022 – May 5, 2023) and resulted in the training of 1,563 officers. The five-step training schedule started with Step 0 as the baseline and Step 4 as the post-training follow-up period. Each training cluster ranged from roughly 8 to 10 weeks to complete the training of that cluster, while the period in-between training clusters was roughly 8 to 12 weeks.

- During Step 1 (May 30 – Jul 21, 2022), 531 total officers are trained, with 292 officers specifically from Cluster 1, East & Downtown Districts.

- During Step 2 (Oct 14 – Dec 22, 2022), 577 total officers are trained, with 333 officers from Cluster 2, Northwest and Southwest Districts.
- During Step 3 (Feb 20 – May 5, 2023), 455 total officers are trained, with 333 officers from the Cluster 3, North and Southeast Districts.
- Finally, Step 4 includes the rolling follow-up period that began May 6, 2023 and ended Dec 31, 2024. The initial follow-up period extends through Jun 30, 2024 (roughly one year follow-up period), while an additional extended follow-up period specifically for use of force outcomes concluded Dec 31, 2024.

Figure 13. ICAT Training Schedule for Stepped-Wedge Design



Step 1: May 30 – Jul 21, 2022 (n = 292 officers), Step 2: Oct 14 – Dec 22, 2022 (n = 333 officers), Step 3: Feb 20 – May 5, 2023 (n = 455 officers), Follow-up: May 6, 2023 – Dec 31, 2024

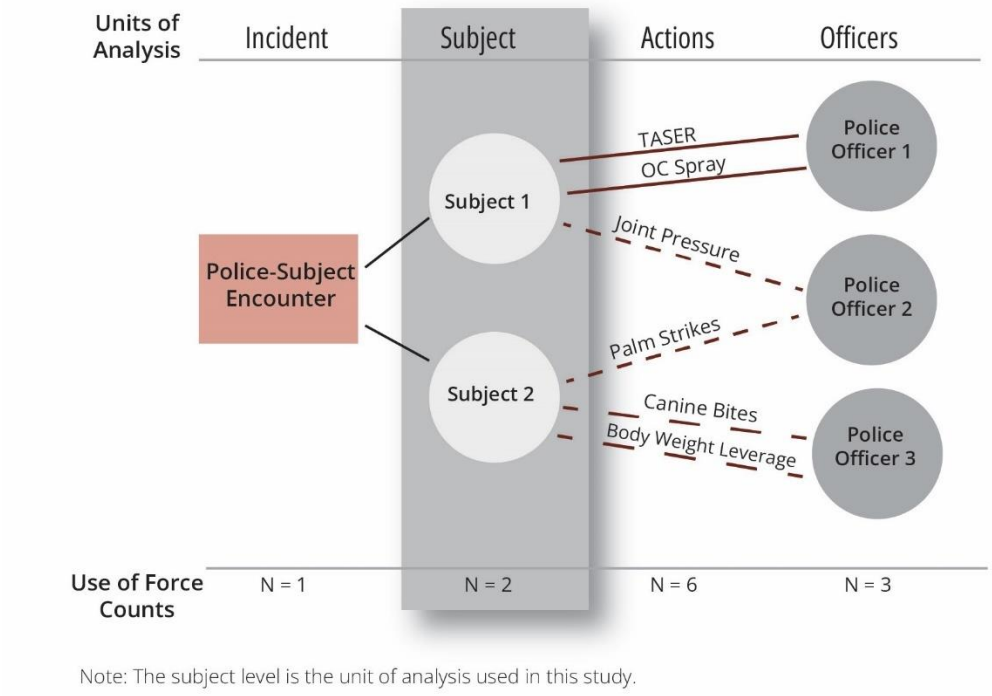
Behavioral Outcome Data

Several sources of police administrative data are used to assess the ICAT training impact on officer behavior in the field. These data include IMPD official reports for arrests, use of force, and injuries (subject and officer), which are the behavioral outcomes most expected to be impacted by the ICAT training, and also follow previous evaluations of police de-escalation training (Engel et al., 2020b; 2022a; 2022b). Below, the operationalization and measurement of each of the outcome measures are described. While all analyses utilizing the stepped-wedge RCT design focus on district-month counts (given the divergent pre/post training periods each district had in the randomized controlled trial) the summative, citywide descriptive statistics are initially presented to demonstrate the total average impact observed across various outcomes across the city. More detailed analyses (presented later) focus specifically on the outcomes experienced within the six IMPD study districts and the officers specifically assigned to those districts.

USE OF FORCE

As previously described by Engel and her colleagues (2020, 2022a), use of force counts can vary dramatically based on the unit of analysis at which force is measured. For example, as depicted in Figure 14 below, a single police-subject *incident* or *encounter* may involve one or more police *actions* from one or more *officers* toward one or more *individuals / subjects*. Since a single use of force incident may involve multiple types of force used against multiple subjects by multiple officers, there are various ways to count the use of force. For example, force could be counted as: (1) the number of incidents involving any use of force (specified by a unique case number); (2) the number of individuals/subjects who had force used against them in a single encounter; (3) the number of different types of force (or officer *actions*) used; and/or (4) the number of officers using force during the incident / encounter. The information gathered at each of these focal points would result in different counts of force.[19]

Figure 14. Hypothetical Example of Use of Force Measures by Unit of Analysis



Note: The subject level is the unit of analysis used in this study.

[19] For example, a single incident (*n* = 1) could have had three officers (*n* = 3) using force against two individuals / subjects (*n* = 2). In this scenario, each officer (*n* = 3) would fill out their own use of force reports that included the number of specific force actions (*n* = 6). In summary, the count of force in this hypothetical situation could range from one to six. For the IMPD study, force counts are measured as the number of individuals / subjects who had force used against them during a single incident (i.e., *n* = 2 using this example).

According to the IMPD data provided for the study period (Sep 1, 2019 to Dec 31, 2024), within the six police districts in Indianapolis, there were 8,742 use of force incidents involving 9,289 subjects.[20] For the majority of analyses conducted for this evaluation, ***use of force is measured as the number of individuals / subjects who had force used against them during a single use of force encounter***.[21] Measured in this way, the individual use of force count (*number of individuals having force used against them*) can include multiple police actions given the escalating nature of force (i.e., an officer may initiate with a low level of force and increase in severity if resistance increases), and multiple officers that could use force against a single individual. However, each event in this analysis has a single individual/subect who experienced force actions.[22]

To assess the impact of ICAT training on officer behavior, the primary outcome of interest is *use of force,* measured as the monthly count of individuals who had force used against them during a use of force encounter (i.e., regardless of the number of officers who used force, the count is based upon the number of subjects who experienced at least one force-action by at least one IMPD officer). Use of force data is collected in the IMPD by officers and entered into IMPD's data collection system (BlueTeam). These data were extracted by an agency crime analyst and shared with the research team in accordance with the process and procedures outlined in an executed Data Use Agreement (DUA) between the City of Indianapolis and the University of Cincinnati.

Use of force in the IMPD is governed by General Order 1.30 *Use of Force – Principles* and General Order 1.31 *Use of Force Investigation, Reporting, and Review,* and includes the collection of the following types of force: baton, bean bag, body weight leverage, canine bites, fogger, less-lethal devices (OC spray, gas, TASERs), physical force (strikes, joint/pressure, kicking, knee strikes, leg sweeps, palm strikes, push), and firearms (display/pointing, and use)[23]. The most common

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[20] This does not necessarily reflect 9,289 unique individuals. If an individual had force used against him/her during more than one encounter with police during the study period, multiple uses of force are included in the data analyses.

[21] Where an alternate unit of analysis is used, it is specifically noted.

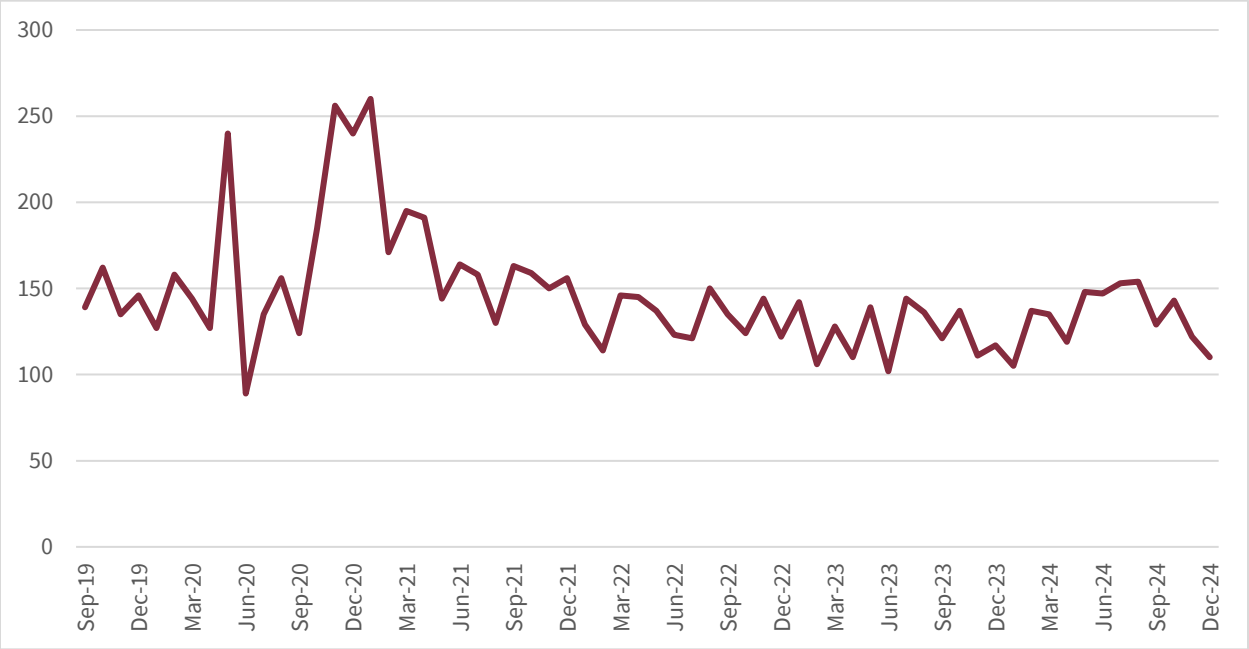
[22] As an illustration, where two people had force used on them (both) with the same unique ID number via IMPD data reporting, each person-event is their own unique line in the data (i.e., two separate force events). This way single and multi-subject use of force events (via IMPD reporting numbers) are not treated the same, but rather as two separate force events because two subjects had force used against them. Approximately 94% of the 8,742 use of force incidents involved a single subject.

[23] Although pointing of a firearm was added to use of force data collected by the IMPD in 2019, the collection of data during the first two years were inconsistent, resulting in unstable measures. Further, the data capture of display/pointing of a firearm is complex and entered multiple ways into the Blue Team data collection system, resulting in different measures, at different units of analysis, across different time periods. Despite multiple attempts, the research team was unable to produce a reliable dataset that captured pointing of a firearm prior to Jun 2021, and even then, the measures were inconsistent. As noted by an IMPD data analyst, "there is inconsistency in the documentation in events/incidents where an involved officer 'pointed a firearm' and the general category/type of force report that was used to document the event/incident" and further, that the inconsistencies are likely "reflective of many small changes in policy over the study period and having to

force actions used by IMPD officers involve physical force actions (e.g., elbow strike, fist strike, pressure application, kick, knee strike, palm strike, and/or take down) and less-lethal force (i.e., TASER and OC spray).

Using an aggregate measure of force (i.e., the subjects that had any force used against them), the average number of subjects per month across the city of Indianapolis is reported in Figure 15 below for the full study period (Sep 2019 – Dec 2024). On average, 145 subjects per month experience police force, ranging from as low as 89 subjects per month to as high as 260 per month.

Figure 15. IMPD Monthly Avg Number of Use of Force Subjects, Sep 2019 – Dec 2024 (*n*= 9,289)



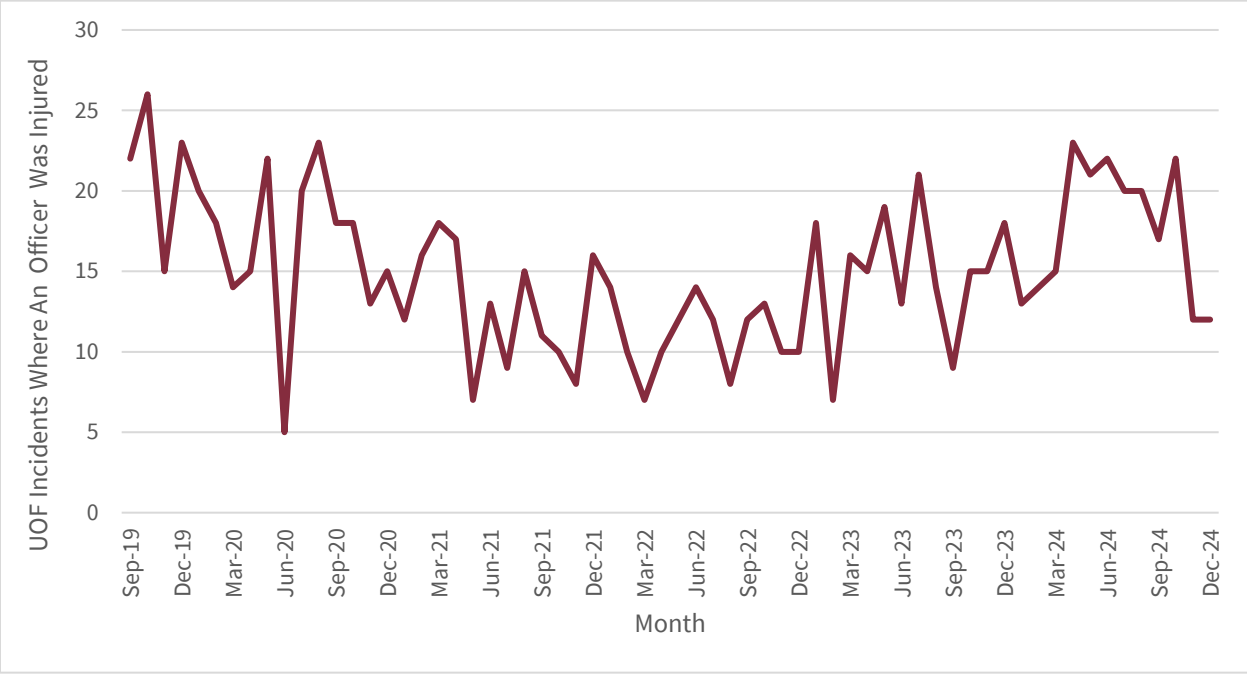
OFFICERS INJURED DURING USE OF FORCE INCIDENTS

Given the structure of the data provided to the research team, officer injury is measured as *any* officer injured during a single use of force incident. Therefore, the analyses for officer injury are

document these events/incidents infrequently." (Rouch, Jul 2, 2025, personal communication). As a result, only subjects who had some other type of force used against them are included in the full analyses evaluating the impact of ICAT training. A more restricted and balanced pre/post training time period of Jun 2021 – Jun 2023 was examined, which included the use of a firearm within the use of force measure. The pre-training period was shortened to include only stable measures of pointing of a firearm, and the post-training period was shortened to have balanced pre/post-periods as required for strong stepped-wedge RCT studies (Stufken, 1996). The findings from analyses using the truncated study period (that included pointing of a firearm) were similar to the findings (reported below) using the entire study period (that excluded pointing of a firearm). Additional details and findings are available from the authors upon request.

conducted at the incident level rather than individual officer level (n=8.742).[24] At least one police officer was injured in 962 of the 8,742 use of force incidents (11.0%). On average, 15 use of force incidents per month resulted in a minimum of one officer injured, with as few as five incidents per month and as many as 26 incidents per month (see Figure 17 below).

Figure 16. Monthly Averages of Use of Force Incidents with Officer Injury (Within Six Study IMPD Districts, Sep 2019 – Dec 2024, *n* = 962)



SUBJECT INJURED DURING USE OF FORCE INCIDENTS

The frequency of subjects injured during use of force incidents pre-and post-ICAT training is also examined. The IMPD captures subject injury information in their use of force incident data, which includes details such as:

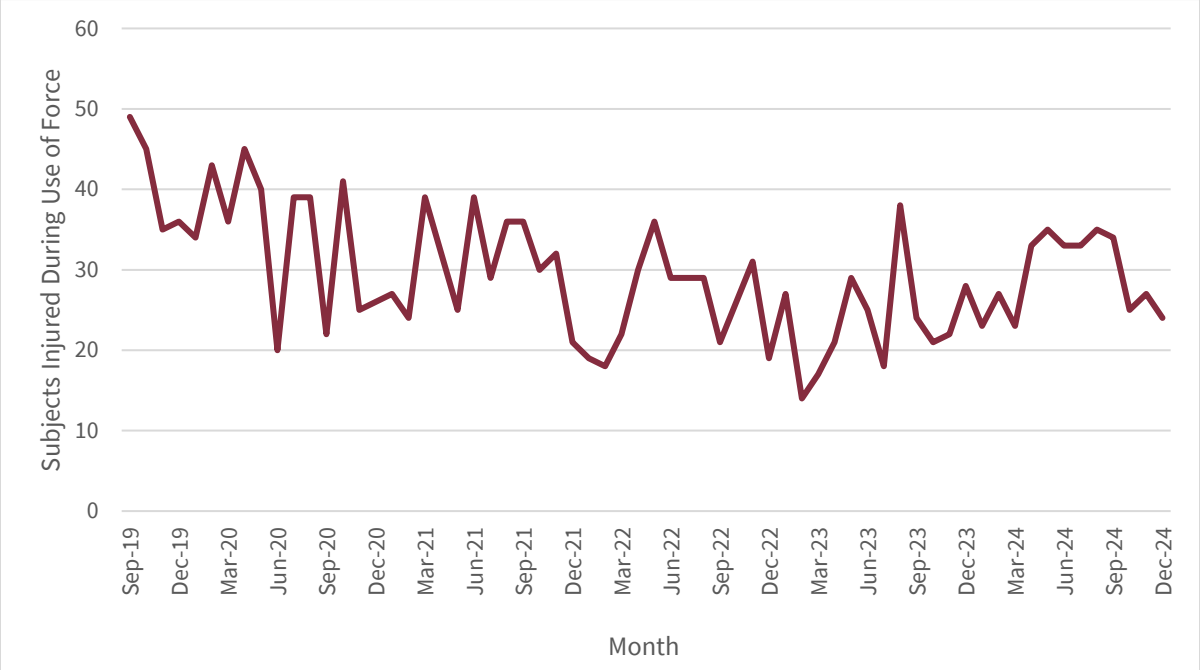
- The number of officers who used force in the incident,
- The number of subjects who had force used against them,
- Whether the subject was injured (yes/no),[25]
- Whether the subject received medical attention at a hospital (yes/no)

[24] While additional analyses – examining the number of officers injured, the severity of those injuries, the types of events and use of force types where officers are more likely to be injured, along with the characteristics of officers who are injured – are all beyond the scope of the current ICAT evaluation and data available to the research team, these are important questions to examine. Therefore, the research team is planning to conduct additional studies that better explore the patterns and trends associated with officer injuries during use of force incidents for the IMPD and other agency partners.

[25] The data provided to the research team did not include specific information regarding the type or severity of subject or officer injuries.

For the analyses that follow, *counts of subjects injured include those reported regardless of whether medical attention was received;* that is, the analysis measures whether the subject experienced *any* injury. Figure 16 below shows the average number of subjects injured during use of force incidents per month across the city of Indianapolis. From Sep 2019 – Dec 2024, an average of 29.5 subjects per month were injured during use of force incidents in the city. This ranged from as low as 14 subjects per month to as high as 49 per month.

Figure 17. IMPD Monthly Average of Subjects Injured during Use of Force
Sep 2019 – Dec 2024 (*n*= 1,890)



CONTROLS – REPORTED CRIMES AND ARRESTS

While the above outcomes (force and injuries) are the focal points of Evaluation B, it is important to consider potential confounders of these outcomes, which include changes in arrests. Specifically, the evaluation considers the potential overlapping influence of *arrests by IMPD officers* on the frequency of police use of force and associated outcomes (i.e., injuries). Research has demonstrated a strong correlation between use of force and arrests (Garner et al., 2018; Hickman et al., 2008). On average, for the entire study period, 10.3% of individuals arrested by IMPD officers also experienced use of force. This frequency of arrests is also likely highly calibrated with changes in reported crimes.

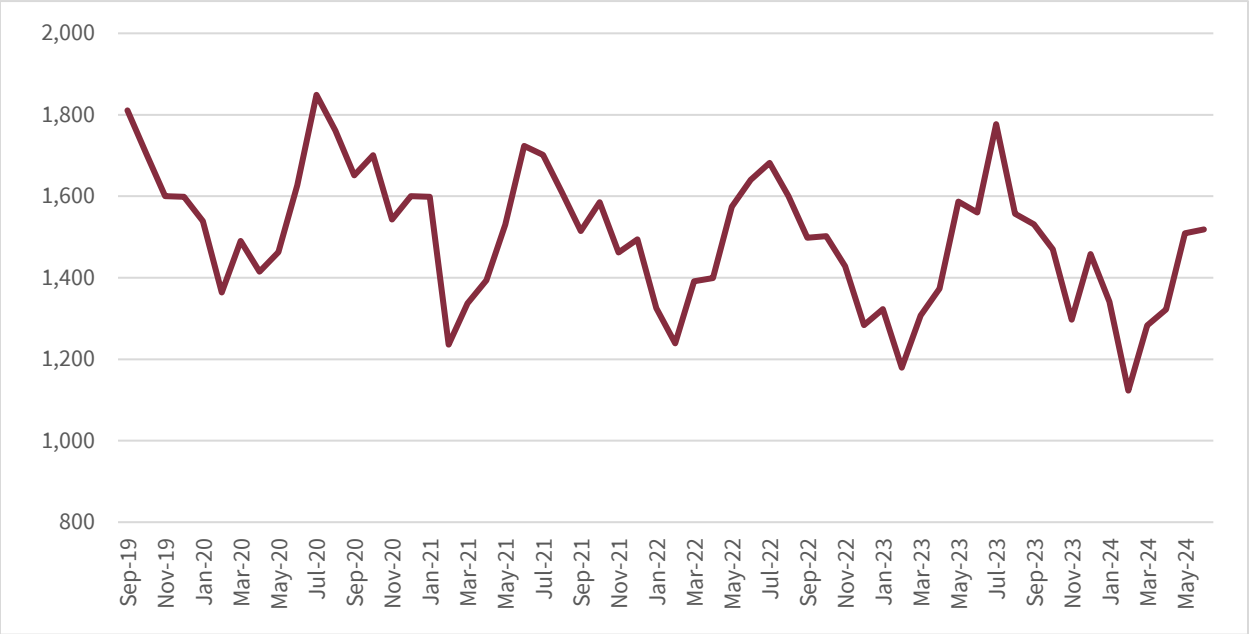
In circumstances where either crime and/or arrests shift during the study period, it is important to compare use of force outcomes with broader trends to account for changes in exposure to higher-risk police-citizen contacts. Thus, monthly counts of both reported crime and arrests are explored as potential facilitators of police action, and to control for differential risk of force, the analyses include criminal arrests in the multivariate regression models at the

subject level (i.e., regardless of the number of charges brought against an individual, where the arrest event is the focal point in this analysis) over time and across different IMPD districts.

Crime

The average number of serious criminal offenses per month reported to the IMPD is displayed in Figure 18 below.[26] On average, there were 1,120 serious criminal offenses per month across the study period (with as few as 1,123 per month and as many as 1,829 per month). This included an average of 161 violent crimes and 959 property crimes per month.

Figure 18. IMPD Monthly Average of Serious Criminal Offenses, Sep 2019 – Jun 2024 (*n*= 86,984)



Given the downward trend observed in criminal offenses, it is likely that police enforcement activity (i.e., arrests) may have also fluctuated during the study period. This possibility is examined below.

Arrests

The monthly average number of individuals arrested citywide is reported in Figure 19 below. The average monthly number of arrestees is 1,064 per month for this study period (ranging as low as 1,064 per month and as high as 2,214 per month).

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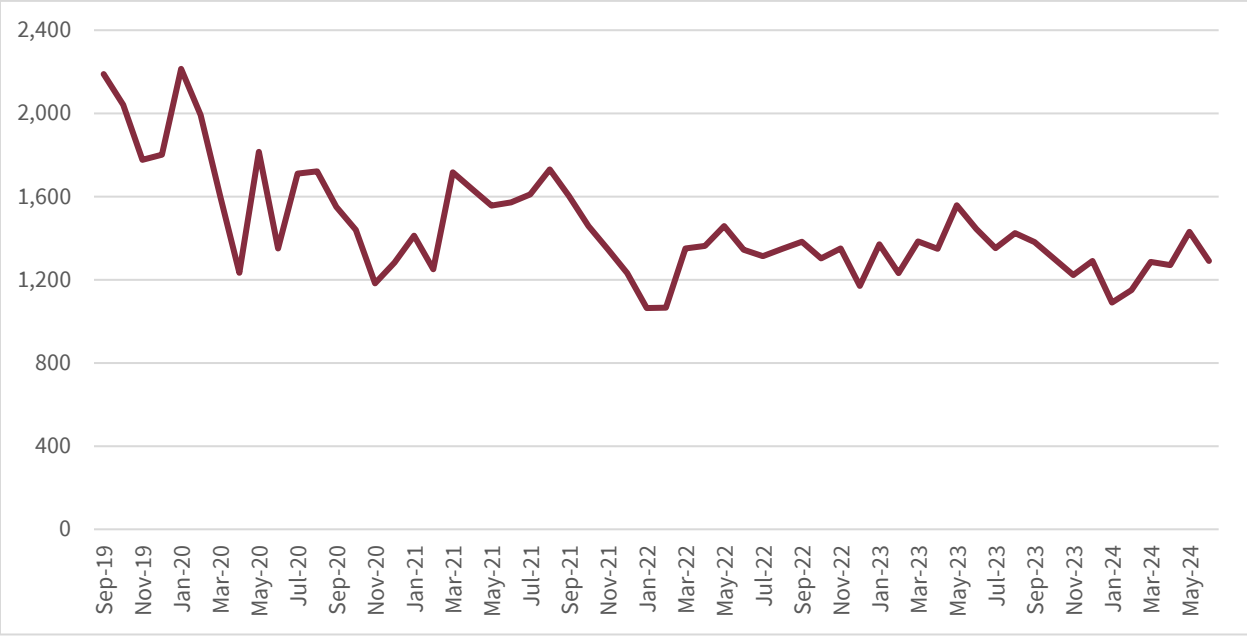
[26] As previously noted, reported serious criminal offenses include the following NIBRS Group A crimes against persons (aggravated assaults, murder/intentional manslaughter, rape, robbery) and crimes against property (motor vehicle theft, burglary, larceny (inc. larceny from auto); these offenses are generally consistent with those that were traditionally measured as Part 1 UCR violent and property crimes.

Figure 19. IMPD Monthly Average of Individuals Arrested, Sep 2019 – Jun 2024 (*n*= 84,372)



Findings for ICAT Training Impact on Officer Behavior

In this section, the potential impact of ICAT training on officer behavior is evaluated. Given that the training occurred in district-specific periods consistent with the research methodology, a series of bivariate statistics are first created to demonstrate potential changes in the number of subjects who had force used against them by officers assigned to the following IMPD districts: Downtown, North, Northeast, Northwest, Southeast, and Southwest from Sep 2019 – Dec 2024 (total *n* = 9,289).[27] As a first step, the research team graphed and analyzed the number of subjects who had force used against them that occur during this period by drawing upon a series of three-month moving average estimates. The univariate moving average graphs reveal a consistent pattern in the data, characterized by relatively long-term stability in event counts and clear structural breaks in the time series (with an expected deviation that corresponded with the COVID-19 pandemic between April 2020 and March 2021, which saw the overall average of subjects with force used increase considerably during this period only, to regress to pre-COVID normal levels in mid-2021). This analysis demonstrates that the trends in the

[27] Subjects who had force used against them in the City of Indianapolis but did not involve IMPD officers or occur outside of these six IMPD districts were excluded from the analyses (e.g., individuals who had force used against them in unincorporated townships such as Beech Grove, Cumberland, Lawrence, Speedway, IUPUI campus, Butler Campus, and the Indianapolis Metropolitan Airport). The focal point for this study was the impact of ICAT training on the IMPD patrol officers assigned to the six IMPD districts that were included in the stepped-wedge RCT design.

number of subjects who had force used against them in Indianapolis are relatively and consistently stable for the study period related to the ICAT training that is examined.[28]

BIVARIATE ANALYSES

Table 15 below shows the average monthly number of individuals who experienced force before and after ICAT training, which was randomized in terms of timing within each of the six IMPD districts. Two primary sets of findings emerge:

1. The average number of subjects who had force used against them decline in each district after ICAT training
2. The largest decline in the number of subjects who had force used against them is observed in IMPD Northeast District (-31.3%), which has almost double the number of force subjects as some of the other districts in the pre-ICAT training period, but more closely mirrors other districts in monthly counts after training.

Table 15. IMPD Districts Pre- and Post-ICAT Training, Monthly Average of Use of Force Subjects

District	Pre-Training UOF Average	Post-Intervention UOF Average	% Difference
Downtown	20.0	16.9	-15.5%
North	27.1	24.9	-8.1%
Northeast	41.2	28.3	-31.3%
Northwest	23.8	20.2	-15.1%
Southeast	24.2	19.3	-20.2%
Southwest	21.3	19.5	-8.4%

Note: Each district had a different number of pre/post training months over the study period depending on their training strata/block

PANEL REGRESSION MODELS BASED ON STEPPED-WEDGE RCT RESEARCH DESIGN

Next, the research team presents the results from a series of panel regressions stemming from the stepped-wedge randomized controlled trial (RCT) design used to assess the changes in officer behavior that corresponded with the randomized timing of the training. Each behavioral outcome (i.e., number of subjects who had force used against them, number of subjects injured, number of use of force incidents where officers were injured, and number of arrestees) is estimated by relying upon the following regression equation:

$$Y^{J}_{it} = \beta 0 + \beta 1 T_{it} + \theta_i + \rho_t + \varepsilon_{it}$$

[28] An Augmented Dickey-Fuller Unit Root test indicates statistically significant mean instability in the time series ($p < 0.01$) prior to Sep 2019.

In each equation, Y^{J}_{it} represents the number of behavioral outcomes of type J generated by police in each cluster i in time period t, which represents the contemporaneous timing of the permanent movement into the treatment group (i.e., ICAT training) for districts assigned to cluster i in time period t, and where θ_i and ρ_t represent individual and time period (i.e., monthly and annual) fixed effects, respectively, that account for time- and individual-invariant unobserved heterogeneity, and ε is based on Huber-White Robust sandwich estimators to ensure the coefficient variances were robust to violations of homoscedastic error distributions.

Model A = Initial (12-month follow-up period)
Model B = Sustained (18-month follow-up period)

The Poisson regression models, that rely upon Maximum Likelihood estimation, indicate that the number of force subjects experienced statistically significant reductions in the post-training period, relative to the pre-training counts, and relative to other police districts that had not crossed into treatment (prior to their eventual and permanent crossover). Each *N* size per regression is the number of district-month observations (six IMPD districts x # of monthly observations). Two models are displayed for each outcome measure (force, subject injury, officer injury). Model A estimates the impact of training across the various IMPD districts with a one-year (i.e., initial) follow-up period. However, a longer-term impact analysis is conducted to gauge whether any potential shifts in behavioral outcomes extend further. Thus, Model B estimates the impact across all relevant outcomes at roughly 1.5 years post-training. Including estimates from both models allows us to understand whether impact was *initial* and/or *sustained*.

Use of Force

Changes in use of force are examined in Table 16. For **Model 1A**, the total number of individuals who had force used against them declined in the post-training period by approximately **-19.6%** (*b* = -0.218, SE = 0.038, *p* < 0.05, IRR = 0.804) at treatment sites in the initial one-year follow-up period. **Model 1B** estimates the change in the extended follow-up period for an additional six months (through Dec 2024). The total number of individuals who had force used against them declined in the extended post-training period by roughly **-18.3%** (*b* = -0.203, SE = 0.036, *p* < 0.05, IRR = 0.816). *These analyses demonstrate that the initial reductions in force associated with the ICAT training were consistently sustained across an 18-month follow-up period.*

Table 16. Poisson Regressions for Subjects with Force Used

	Subjects with Force Used			
	Model 1A Sep 2019 – Jun 2024		Model 1B Sep 2019 – Dec 2024	
Parameter	*b*	SE	*b*	SE
Post-Training	-0.218*	0.038	-0.203*	0.036
Intercept	3.00*	0.099	3.01*	0.092
Model Statistics				
Log-Likelihood	-1368.5		-1485.4	
Pseudo-R^2	0.154		0.149	
N	348		384	

- $p < 0.05$

Subjects Injured

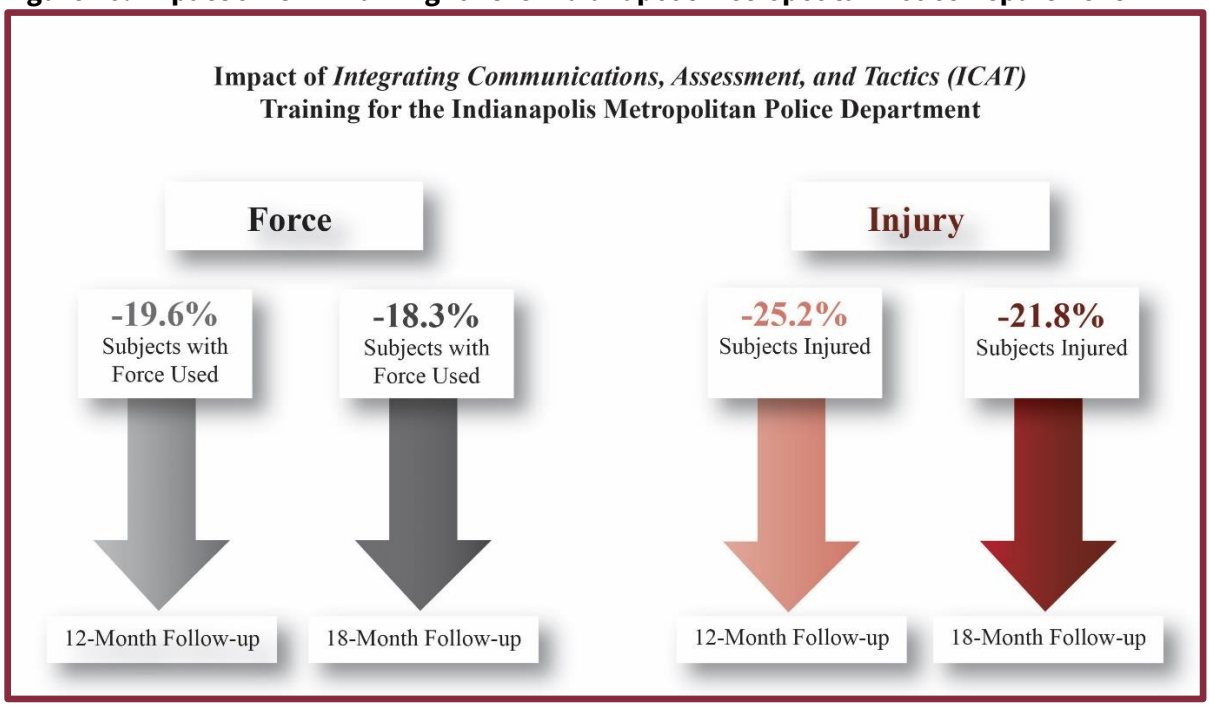
Changes in the number of subjects injured are examined in Table 17. **Model 2A** provides the estimated change in counts of injured subjects. The results show that the number of subjects injured during use of force incidents experienced a statistically significant decline of **-25.2%** (*b* = -0.291, SE = 0.063, $p < 0.05$, IRR = 0.747) in the initial follow-up period. **Model 2B** shows the change in the number of subjects injured declined by **–21.8%** (*b* = -0.246, SE = 0.057, $p < 0.05$, IRR = 0.782) when the additional extended follow-up period is considered. These analyses demonstrate that the initial reductions in the number of injured subjects associated with the ICAT training were slightly reduced but still sustained across an 18-month follow-up period. These findings are also graphically displayed in Figure 20 below.

Table 17. Poisson Regressions for Injured Subject Counts

	Injured Subjects			
	Model 2A Sep 2019 – Jun 2024		Model 2B Sep 2019 – Dec 2024	
Parameter	*b*	SE	*b*	SE
Post-Training	-0.291*	0.063	-0.246*	0.057
Intercept	1.11*	0.115	1.13*	0.107
Model Statistics				
Log-Likelihood	-818.0		-902.7	
Pseudo-R^2	0.102		0.095	
N	348		384	

- $p < 0.05$

Figure 20. Impact of ICAT Training for the Indianapolis Metropolitan Police Department



Officers Injured

Changes in use of force incidents with at least one officer injured are examined in Table 18. **Model 3A** shows that the number of use of force incidents where at least one officer was injured did not experience any statistically significant changes in the initial training follow-up period. **Model 3B** shows the same null effect for the extended follow-up period. That is, the ICAT training did not correspond with changes in the number of incidents where at least one officer was injured, in any discernable way at both the 12-month and 18-month follow-up period.

Table 18. Poisson Regressions for Counts of Use of Force Incidents with Officer Injury

	UOF Incidents with Officer Injuries			
	Model 3A Sep 2019 – Jun 2024		Model 3B Sep 2019 – Dec 2024	
Parameter	*b*	SE	*b*	SE
Post-Training	0.029	0.074	0.057	0.068
Intercept	0.663	0.115	0.681	0.105
Model Statistics				
Log-Likelihood	-647.4		-715.8	
Pseudo-R^2	0.029		0.029	
N	348		384	

Sensitivity Analyses

Officer assignments in high-crime areas often accompany larger volumes of calls for service, including high-risk calls, and a greater frequency of encounters with potentially resistant subjects. These organizational and contextual factors could heighten the risk for police use of force. Further, studies consistently show that changes in the frequency of arrests are also highly correlated with the use of force. To better isolate the potential unique effects that ICAT training had on use of force, a series of sensitivity count and comparative analyses were conducted to account for an increased exposure to the risk of force—including arrests. Specifically, the research team employs Clogg z coefficient difference tests to compare regression coefficients from different models to determine if the estimated coefficients are different from one another (Clogg et al., 1995). Essentially, coefficient difference tests allow researchers to compare estimates *between* regression models (i.e., comparing the point estimates for arrest and use of force). These are displayed in Table 19.

Model 4 in Table 19 below shows that, like the previous analyses, the number of individuals arrested significantly declines in the follow-up period by roughly **-15.3%** (b = -0.167, SE = 0.020, p < 0.05, IRR = 0.846). The point estimates for the significant reductions in the number of individuals who had force used against them are compared with the number of subjects with injuries relative to the reduction in the number of arrests via Clogg Z coefficient difference tests. As shown in **Model 5**, relative to the change in the number of arrests, the number of individuals who had force used against them experienced a marginally significant decline by roughly **-5%** beyond the decline in arrests (b = -0.050, SE = 0.043, p < 0.10). Likewise, **Model 6** shows that relative to the reduction in the number of individuals arrested, the number of persons injured during uses of force statistically significantly declines by roughly **-11.5%** more (b = -0.123, SE = 0.066, p < 0.05).

Reductions in uses of force and subjects injured are above and beyond reductions in arrests.

In summary, declines in the number of subjects who had force used against them approached marginal statistical significance (p = 0.10) relative to arrest changes during the same period; and, the number of subjects injured during force incidents documented post-ICAT training occurs above and beyond the observed declines in arrests (p = 0.03) during the same period. This means that while the reductions in arrests are at least partially responsible for the reductions in use of force (by reducing exposure/risk to force), the reductions in force are not simply tethered to the reductions in arrests. The declines in use of force, and in particular, subjects injured reduce at a greater rate than the declines in arrests, suggesting a unique reduction for force and subjects injured. When estimating the *independent effect* of ICAT training on the number of subjects who had force used against them, interpretations can vary from declines of -5.0% (min) to -19.6% (max). Likewise, the estimated *independent effect* of ICAT

training on reductions in subjects injured during use of force incidents ranges from -11.5% to -25.2%.

Table 19. Poisson Regressions for Arrest Counts and Clogg Z Coefficient Difference Tests

Model 4 Arrest Counts Sep 2019 – Jun 2024				Model 5 UOF Subjects Clogg Z Diff Test Sep 2019 – Jun 2024	Model 6 Subjects Injured Clogg Z Diff Test Sep 2019 – Jun 2024
Parameter	*b*	SE	Parameter		
Post-Training	-0.167*	0.020	Difference Score	-0.050	-0.123
Intercept	5.10*	0.043			
Model Statistics			Standard Error	0.043	0.066
Log-Likelihood	-2815.1		Z-Value	-1.24	-1.87
Pseudo-R^2	0.415				
N	348		N	348	

- $p < 0.10$

Supplemental/Contextual Analyses

As established by the stepped-wedge RCT design, the patterns in reductions in force and subjects injured are consistent with the randomized timing of the ICAT training (corresponding with the district-by-district training delivery). In addition, the IMPD began regularly collecting information about de-escalation tactics used during force incidents beginning on Jul 1, 2023 (in the post-training period). Officers are required by policy to report their use of any de-escalation tactics during use of force incidents – this information is captured as part of the use of force data collection process, reaffirming the IMPD's commitment to the use of de-escalation tactics in practice.

IMPD began systematically documenting de-escalation tactics used during force incidents on July 1, 2023.

From Jul 1, 2023 – Dec 31, 2024, IMPD officers recorded information about the use of 5,174 de-escalation tactics during 2,239 use of force incidents. Table 20 below provides descriptive statistics that summarize the specific actions consistent with the ICAT training that IMPD officers reported engaging in during incidents involving uses of force. As shown, verbal approaches are the most common de-escalation tactic reported by IMPD officers (95.5%). For less than half of the subjects involved in use of force incidents (45.1%), officers report creating distance to extend safety space in encounters. Similarly, with approximately one-third

of individuals who experienced force, officers use barriers (34.2%) and allow additional time before acting (33.8%). The remaining actions (compassion/empathy, CIT training, non-verbal, and drone applications) are applied less frequently.

The importance of capturing this type of information is three-fold. First, it provides quantitative information about the types of de-escalation tactics that are most frequently used. This information could later be used to measure the effectiveness of specific tactics and their impact on the severity of the types of force used during encounters. Second, the collection of this information in use of force reports and inclusion in IMPD policies provides a constant reminder to officers about the specific types of de-escalation tactics and skills they have been trained to use. Finally, the collection of this information sends a strong message to officers that IMPD executives and supervisors *expect* de-escalation tactics to be used (when feasible) during encounters that do not result in the use of force, as well as those that do.

Table 20. De-Escalation Actions Reported in Use of Force (N=5,174)

Actions	N	%
Verbal Commands - Options	4,943	95.5%
Distance Created	2,333	45.1%
Barrier Used	1,768	34.2%
Additional Time	1,749	33.8%
Verbal – Compassion/Empathy	744	14.4%
Verbal – CIT Training	412	7.9%
Other	173	3.3%
Non-Verbal	208	4.0%
Drone	79	1.5%
None	429	8.3%

These descriptive analyses further illustrate that ICAT skills continue to be used and documented during use of force incidents in the post-training period. What remains unknown, however, is the number of incidents where officers applied de-escalation tactics and no force is used against the subject.

Evaluation B Summary

The (stepped-wedge) RCT evaluation of the impact of ICAT training and the subsequent difference-in-difference panel regression estimates show three primary findings, net of controls and prior trends in the data. Specifically, across IMPD's six patrol districts, the randomized timing of the ICAT training delivery corresponds with:

1. Significant reductions (**-19.6%**) in the number of subjects who had force used against them during 12-month follow-up period, and **-18.3%** in extended 18-month period.
2. Significant reductions (**-25.2%**) in the number of subjects injured during use of force incidents during 12-month follow-up period, and **-21.8%** in extended 18-month period.

3. No significant difference in the number of force incidents resulting in injured officers during either follow-up period.

Although arrests also decreased (-15.3%) during the post-ICAT training period, the Clogg Z coefficient difference tests show that reductions in the number of force subjects and subjects injured occur above and beyond the reductions in the number of arrests. Specifically, a lower-to-upper bound estimate of ICAT training's independent effect on uses of force ranges from -5.0% to -19.6% in the post-ICAT training period. Similarly, a lower-to-upper bound estimated impact of ICAT training on subjects injured ranges from -11.5% to -25.2% following training. This means that while the reductions in arrests could be at least partially responsible for the reductions in use of force (by reducing exposure/risk to force), the reductions in force were not simply tethered to the reductions in arrests.

5. CONCLUSION

This study examines the implementation and outcomes of the Indianapolis Metropolitan Police Department's (IMPD) ICAT training program, a nationally recognized de-escalation curriculum designed to improve officers' decision-making and reduce the use of force. The ICAT training was delivered in three clusters across six patrol districts between May 2022 and May 2023. Using a mixed-methods approach, this study includes two complementary evaluations. Evaluation A examines the impact of ICAT training on officer attitudes and self-reported behavior using three waves of surveys (pre-training, post-training, and follow-up), a cross-sectional supervisor survey, and focus groups with IMPD officers and supervisors. Evaluation B examines the impact of training on officer behavior in the field using a stepped-wedge randomized controlled trial (RCT) design and official police administrative data. This experimental approach allows the research team to examine whether observable behavioral outcomes shift in relation to the timing of ICAT training. The key findings of this study are synthesized below.

Training Receptivity and Perceived Utility of ICAT Training

- Officers are highly receptive to the ICAT training, with strong initial agreement that the training is useful and clear, and the CDM model is helpful for decision-making (e.g., gathering information, assessing risks, identifying options, etc.).
- However, these positive perceptions decline over time. By the follow-up period, smaller percentages of survey respondents report that the training or the CDM are useful or that they would recommend the ICAT training to others.

Attitudinal Changes and Sustainability

- ICAT training led to immediate changes in officer attitudes between pre- and post-training surveys that are aligned with ICAT training principles across all domains (e.g., attitudes toward interactions with the public, attitudes toward persons in crisis, and attitudes toward use of force).
- However, these shifts in attitudes are not sustained. By the follow-up period, training decay is observed across many of the measures, especially those related to interactions with the public and use of force. Attitudes toward persons in crisis, however, remain significantly improved at follow-up compared to baseline.

Self-Reported Field Application of ICAT Skills and Perceived Obstacles and Effectiveness

- When asked generally about ICAT skill use in the field in the 60 days prior to the follow-up survey, a moderate percentage of IMPD respondents report often or frequently using ICAT Communication Skills (36%) and the Reaction Gap strategy (45%), but about half report seldom or never using the Tactical Pause Strategy or CDM model.
- IMPD personnel report no perceived obstacles to using the CDM or other ICAT skills between one-third and half the time.
- Officers who did use ICAT strategies in the past 60 days overwhelmingly rate them as effective.
- When asked more specifically about ICAT skill use in the field during their most recent encounter with a person in crisis, a considerably higher percentage of officers report using ICAT skills and tactics, particularly ICAT Communication Skills (82%) and the Reaction Gap strategy (77%).

Influence of Peer and Supervisor Support

- Peer support is the strongest predictor of sustained positive attitudes aligned with ICAT training principles and frequent use of ICAT skills, but only about one-third of officers perceive their peers supported ICAT skills.
- Supervisor reinforcement is also significantly associated with more frequent use of ICAT strategies in the field, but officers' reports of supervisory reinforcement are somewhat mixed. Fewer than 15% of officers report receiving weekly reinforcement of ICAT skills from their supervisors, although over half of the respondents agree that their immediate supervisor supports the use of ICAT training.
- Although IMPD supervisors express: (a) confidence in using de-escalation skills, (b) believe they are adequately trained and supported in using ICAT de-escalation methods, and (c) believe their subordinates' use of these skills contributes to positive outcomes during encounters, less than 25% report often or frequently engaging in various supervision activities that reinforce de-escalation skills.

Contextual Insights from the Focus Groups

In late 2024, focus groups were conducted with IMPD officers and supervisors. The key findings are summarized below.

- **Agency Commitment to De-Escalation**: De-escalation is widely recognized as a core expectation within IMPD. For example, officers report that the term is frequently used

and emphasized in the department's culture. Use of force reports now include prompts about de-escalation tactics, reinforcing its importance.

- **Integration Across Trainings:** Participants noted overlap between ICAT and other trainings (e.g., CIT, ABLE, use of force), indicating that de-escalation principles are embedded throughout IMPD's training curriculum.
- **Officer Expectations and Practice:** Officers express confidence in their ability to use de-escalation tactics and view ICAT as reinforcing existing practices. Officers perceive supervisors to be generally supportive of ICAT skill use and supervisors report reinforcing de-escalation during debriefs and roll calls.

Impact of ICAT Training on Behavioral Outcomes

The (stepped-wedge) RCT evaluation of the impact of ICAT training and subsequent difference-in-difference panel regression estimates show three primary findings, net of controls and prior trends in the data. Specifically, across IMPD's six patrol districts, the randomized timing of the ICAT training delivery corresponds with:

- A 19.6% reduction in the number of subjects who had force used against them in the initial 12-month period post-training, and a 18.3% decline in the 18-month period post-training.
- A 25.2% reduction in the number of subjects injured during use of force incidents in the initial 12-month period post-training, and a 21.8% decline in the 18-month period post-training.
- No significant differences in the number of force incidents resulting in injured officers at either the initial or sustained follow-up period.
- Arrests declined by 15.3% during the post-training. However, statistical tests confirm that reductions in use of force and subjects injured exceed what would be expected from the decline in arrests alone, suggesting a unique and independent effect of the ICAT training.

Since Jul 1, 2023, IMPD officers are required to document their use of de-escalation tactics during use of force incidents.

- A supplemental analysis of these data shows that officers frequently use verbal de-escalation, distance, barriers, and time as tactics during force incidents.
- The collection of these data reinforces the department's commitment to integrating de-escalation into policy, practice, and accountability systems.

The reductions in use of force and subjects injured—measured through a modified RCT study—represent additional strong evidence in support of the ICAT training model helping to make police interactions with the public safer.

Taken together, these finding show the **ICAT training had a measurable and lasting impact on officers' behavior in the field,** despite low reported supervisory reinforcement of the training and possible training decay.

This study provides a comprehensive and methodologically robust replication study of the impact of de-escalation training. It confirms that ICAT training is associated with reducing the use of force and subjects injured. Despite reducing the ICAT training from 12+ hours to 8 hours (by eliminating scenario-based practice), the IMPD maintained high fidelity to the remainder of the curriculum. This condensed version of ICAT was coupled with the integration of de-escalation principles in other trainings, policies, data collection, and agency culture. This suggests that even a condensed version of ICAT can yield meaningful outcomes when accompanied with other reinforcement mechanisms. It is possible, however, that the inclusion of scenario-based training is critical for longer-term retention (e.g., beyond the 18-month post-training study period currently examined), and also for agencies that do not have de-escalation ingrained into the fabric of their agency. It also highlights the critical role of organizational culture, leadership, and peer and supervisory support in sustaining training effects. Finally, the study's findings identify areas for improvement, such as more robust supervisory reinforcement of training principles and refresher trainings, offering a roadmap for agencies seeking to implement or refine de-escalation training.

This study also reinforces the value of mixed-methods evaluations and the importance of understanding not just whether training works, but how, when, and under what conditions it produces meaningful change. Future research should continue to explore the interplay between training design, organizational support, and field-level implementation to inform the development of more effective and adaptable police training programs.

In conclusion, police agencies across the country should prioritize adherence to evidence-based models, ensure supervisory engagement, and consider booster training opportunities to sustain positive outcomes. This study reflects the IMPD's strong commitment to innovation, transparency, and continuous improvement. By embedding a rigorous evaluation into the rollout of ICAT training, IMPD has contributed valuable evidence to the field of policing and demonstrated the leadership necessary to test, learn, and evolve. Their efforts serve as a model for other agencies seeking to implement and evaluate organizational innovations grounded in evidence and accountability.

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APPENDIX A: IMPD TRAINING SURVEY INSTRUMENTS

PRE-TRAINING ICAT SURVEY

This survey is designed to assess the ICAT training you are about to receive. Please respond to all items as directed.

Identification number (to link your response across surveys; your identity will not be revealed): ☐☐☐☐☐

SECTION 1: Views on Citizen Interactions

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes.	☐	☐	☐	☐	☐
2. I am good at identifying officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
3. I am good at de-escalating encounters with citizens.	☐	☐	☐	☐	☐
4. In tense citizen encounters, the most important thing is that I get home safely.	☐	☐	☐	☐	☐
5. Officers can be trained to increase the likelihood of positive encounters with citizens.	☐	☐	☐	☐	☐
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
7. Officers can be trained to improve their ability to de-escalate citizen encounters.	☐	☐	☐	☐	☐

SECTION 2: Interactions with Persons in Crisis

Persons in crisis refers to individuals that may be behaving erratically due to things such as mental health, substance use, situational stress, and/or disabilities. Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Recognizing signs that a person is in crisis can improve the outcome of the interaction with that person.	☐	☐	☐	☐	☐
2. There is no explaining why persons in crisis act the way they do.	☐	☐	☐	☐	☐
3. Noncompliance should be viewed as a threat.	☐	☐	☐	☐	☐
4. Unnecessary risks should be avoided in encounters.	☐	☐	☐	☐	☐
5. The most important role of an officer responding to crisis is to stabilize the situation.	☐	☐	☐	☐	☐
6. In crisis situations, it is beneficial to keep a subject talking.	☐	☐	☐	☐	☐
7. In many cases, the use of force against a person in crisis can be avoided.	☐	☐	☐	☐	☐
8. As a person's emotions rise, their rational thinking declines.	☐	☐	☐	☐	☐

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
9. When responding as a team, it is important to designate roles in the crisis intervention.	☐	☐	☐	☐	☐
10. The majority of time spent communicating with a subject should be spent listening.	☐	☐	☐	☐	☐
11. An officer's nonverbal communication, such as body language, influences how a subject reacts.	☐	☐	☐	☐	☐
12. I know how to slow down an encounter with a person in crisis.	☐	☐	☐	☐	☐
13. Situational stress is no excuse for a person to act irrational.	☐	☐	☐	☐	☐
14. Responding to persons in crisis should not be a role of the police.	☐	☐	☐	☐	☐

SECTION 3: Attitudes Toward Using Force

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Officers are not allowed to use as much force as is necessary to make suspects comply.	☐	☐	☐	☐	☐
2. It is sometimes necessary to use more force than is technically allowable.	☐	☐	☐	☐	☐
3. Verbally disrespectful suspects sometimes deserve physical force.	☐	☐	☐	☐	☐
4. Refraining from using force when you are legally able to puts yourself and other officers at risk.	☐	☐	☐	☐	☐
5. It is important to have a reputation that you are an officer willing to use force.	☐	☐	☐	☐	☐
6. Not using force when you could have makes suspects more likely to resist in future interactions.	☐	☐	☐	☐	☐
7. It is important that my fellow officers trust me to handle myself in a fight.	☐	☐	☐	☐	☐
8. Trying to talk my way out of a situation is always safer than using force.	☐	☐	☐	☐	☐
9. It is important that my fellow officers trust my communication skills.	☐	☐	☐	☐	☐
10. I respect officers' ability to talk suspects down rather than using force to make them comply.	☐	☐	☐	☐	☐
11. Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, opposed to later.	☐	☐	☐	☐	☐

SECTION 4: Views on Policing

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Enforcing the law is a patrol officer's most important responsibility.	☐	☐	☐	☐	☐
2. Law enforcement and community members must work together to solve local problems.	☐	☐	☐	☐	☐
3. Working with the community to solve problems is an effective means of providing services to this area.	☐	☐	☐	☐	☐
4. I routinely collaborate with community members in my daily duties.	☐	☐	☐	☐	☐
5. My primary responsibility as a police officer is to fight crime.	☐	☐	☐	☐	☐
6. As a police officer, I have a primary responsibility to protect the constitutional rights of residents.	☐	☐	☐	☐	☐
7. A primary responsibility of a police officer is to build trust between the department and community.	☐	☐	☐	☐	☐
8. As a police officer, it is important that I have non-enforcement contacts with the public.	☐	☐	☐	☐	☐
9. As a police officer, I see myself primarily as a public servant.	☐	☐	☐	☐	☐
10. My primary role is to control predatory suspects who threaten members of the public.	☐	☐	☐	☐	☐
11. The jurisdiction that I work in is dangerous.	☐	☐	☐	☐	☐
12. As a police officer, there is a good chance you will be assaulted while on the job.	☐	☐	☐	☐	☐
13. Overall, I am satisfied with my job.	☐	☐	☐	☐	☐
14. I enjoy working with my colleagues.	☐	☐	☐	☐	☐
15. Overall, this is a good agency to work for.	☐	☐	☐	☐	☐

SECTION 5: Encounters with Persons in Crisis

Please indicate how often you engage in the following activities.

	Never 1	Seldom 2	Half-the-time 3	Usually 4	Always 5
1. How often do you change your approach with a person in crisis after you have determined those prior approaches are ineffective?	☐	☐	☐	☐	☐
2. How often do you deliberately wait to interact with a person in crisis who is not an imminent threat to assess the situation before taking action?	☐	☐	☐	☐	☐
3. When responding to a person in crisis with a second officer, how often do you assign contact and cover roles?	☐	☐	☐	☐	☐
4. When responding to a person in crisis how often do you establish a backup plan?	☐	☐	☐	☐	☐
5. How often do you recognize your own emotional state (i.e. having high emotions) during your interactions with persons in crisis?	☐	☐	☐	☐	☐
6. How often do you consider your police powers before taking action during encounters with persons in crisis?	☐	☐	☐	☐	☐

SECTION 6: Perceptions of Training

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. I consider myself "open" to using new training in my everyday work.	☐	☐	☐	☐	☐
2. I am sometimes reluctant to change the way I work.	☐	☐	☐	☐	☐
3. I look forward to new training opportunities.	☐	☐	☐	☐	☐
4. Police officers are over-trained in areas that are unhelpful to their work.	☐	☐	☐	☐	☐
5. It is important for police agencies to continually add innovative training.	☐	☐	☐	☐	☐
6. Training makes me more effective in my work.	☐	☐	☐	☐	☐
7. Some new training may reduce officer safety.	☐	☐	☐	☐	☐

SECTION 7: Demographic Information

1. What is your age?

☐ 18-20 ☐ 21-24 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44 ☐ 45-49 ☐ 50+

2. What is your sex? ☐ Male ☐ Female

3. What racial or ethnic group do you most identify with?

☐ American Indian/Alaska Native ☐ Asian ☐ Black/African American

☐ Native Hawaiian/Pacific Islander ☐ White ☐ Two or More Races ☐ Other_____

4. Do you identify as Hispanic or Latino? ☐ Yes ☐ No

5. How many years have you worked in law enforcement?

☐ Less than 1 year ☐ 1-4 years ☐ 5-9 years ☐ 10-14 years ☐ 15-19 years ☐ 20 years or more

6. What is your current rank?

☐ Patrol Officer ☐ Corporal ☐ Sergeant ☐ Lieutenant ☐ Captain and Above

☐ Civilian ☐ Retired ☐ Other: _____

7. What is your highest level of education?

☐ High School ☐ Less than two years of college ☐ Associate's Degree

☐ Bachelor's Degree ☐ Graduate Degree

8. I have received training in the past 12 months to handle situations involving the use of force.

☐ Yes ☐ No

9. I have received training in the past 12 months to handle situations involving the mentally ill.

☐ Yes ☐ No

10. I have received training in the past 12 months on de-escalation.

☐ Yes ☐ No

END OF SURVEY

POST-TRAINING ICAT SURVEY

This survey is designed to assess the ICAT training you just received. Please respond to all items as directed.

Identification number (to link your response across surveys; your identity will not be revealed): ☐☐☐☐☐

SECTION 1: Views on Citizen Interactions

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes.	☐	☐	☐	☐	☐
2. I am good at identifying officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
3. I am good at de-escalating encounters with citizens.	☐	☐	☐	☐	☐
4. In tense citizen encounters, the most important thing is that I get home safely.	☐	☐	☐	☐	☐
5. Officers can be trained to increase the likelihood of positive encounters with citizens.	☐	☐	☐	☐	☐
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
7. Officers can be trained to improve their ability to de-escalate citizen encounters.	☐	☐	☐	☐	☐

SECTION 2: Police Interactions with Persons in Crisis

Persons in crisis refers to individuals that may be behaving erratically due to things such as mental health, substance use, situational stress, and/or disabilities. Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Recognizing signs that a person is in crisis can improve the outcome of the interaction with that person.	☐	☐	☐	☐	☐
2. There is no explaining why persons in crisis act the way they do.	☐	☐	☐	☐	☐
3. Noncompliance should be viewed as a threat.	☐	☐	☐	☐	☐
4. Unnecessary risks should be avoided in encounters.	☐	☐	☐	☐	☐
5. The most important role of an officer responding to crisis is to stabilize the situation.	☐	☐	☐	☐	☐
6. In crisis situations, it is beneficial to keep a subject talking.	☐	☐	☐	☐	☐
7. In many cases, the use of force against a person in crisis can be avoided.	☐	☐	☐	☐	☐

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
8. As a person's emotions rise, their rational thinking declines.	☐	☐	☐	☐	☐
9. When responding as a team, it is important to designate roles in the crisis intervention.	☐	☐	☐	☐	☐
10. The majority of time spent communicating with a subject should be spent listening.	☐	☐	☐	☐	☐
11. An officer's nonverbal communication, such as body language, influences how a subject reacts.	☐	☐	☐	☐	☐
12. I know how to slow down an encounter with a person in crisis.	☐	☐	☐	☐	☐
13. Situational stress is no excuse for a person to act irrational.	☐	☐	☐	☐	☐
14. Responding to persons in crisis should not be a role of the police.	☐	☐	☐	☐	☐

SECTION 3: Attitudes Toward Using Force

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Officers are not allowed to use as much force as is necessary to make suspects comply.	☐	☐	☐	☐	☐
2. It is sometimes necessary to use more force than is technically allowable.	☐	☐	☐	☐	☐
3. Verbally disrespectful suspects sometimes deserve physical force.	☐	☐	☐	☐	☐
4. Refraining from using force when you are legally able to puts yourself and other officers at risk.	☐	☐	☐	☐	☐
5. It is important to have a reputation that you are an officer willing to use force.	☐	☐	☐	☐	☐
6. Not using force when you could have makes suspects more likely to resist in future interactions.	☐	☐	☐	☐	☐
7. It is important that my fellow officers trust me to handle myself in a fight.	☐	☐	☐	☐	☐
8. Trying to talk my way out of a situation is always safer than using force.	☐	☐	☐	☐	☐
9. It is important that my fellow officers trust my communication skills.	☐	☐	☐	☐	☐
10. I respect officers' ability to talk suspects down rather than using force to make them comply.	☐	☐	☐	☐	☐
11. Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, opposed to later.	☐	☐	☐	☐	☐

SECTION 4: Critical Decision-Making Model (CDM)

Please indicate how strongly you agree with each of the following statements.

The Critical Decision-Making Model (CDM)…	**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly Agree 5**
1. …increases my decision-making skills during everyday situations.	☐	☐	☐	☐	☐
2. …often takes too much time to use in encounters with a person in crisis.	☐	☐	☐	☐	☐
3. …may make officers hesitate to take action when needed.	☐	☐	☐	☐	☐
4. …helps me to assess the risks in a situation.	☐	☐	☐	☐	☐
5. …helps me identify my options for action in a situation.	☐	☐	☐	☐	☐
6. …helps me select an option to resolve a situation.	☐	☐	☐	☐	☐
7. …reminds me to continuously gather information during a situation.	☐	☐	☐	☐	☐
8. …is too complicated.	☐	☐	☐	☐	☐
9. ...helps me review the action I took during a situation.	☐	☐	☐	☐	☐
10. …helps me to explain my decision-making after I act in a situation.	☐	☐	☐	☐	☐
11. I am confident using the CDM during an encounter with a person in crisis.	☐	☐	☐	☐	☐

SECTION 5: Encounters with Persons in Crisis

Please indicate how often you engage in the following activities.

	Never 1	**Seldom 2**	**Half-the-time 3**	**Usually 4**	**Always 5**
1. How often do you change your approach with a person in crisis after you have determined those prior approaches are ineffective?	☐	☐	☐	☐	☐
2. How often do you deliberately wait to interact with a person in crisis who is not an imminent threat to assess the situation before taking action?	☐	☐	☐	☐	☐
3. When responding to a person in crisis with a second officer, how often do you assign contact and cover roles?	☐	☐	☐	☐	☐
4. When responding to a person in crisis how often do you establish a backup plan?	☐	☐	☐	☐	☐
5. How often do you recognize your own emotional state (i.e. having high emotions) during your interactions with persons in crisis?	☐	☐	☐	☐	☐
6. How often do you consider your police powers before taking action during encounters with persons in crisis?	☐	☐	☐	☐	☐

SECTION 6: Training Receptivity

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. The training was useful to me.	☐	☐	☐	☐	☐
2. I would recommend this training to others.	☐	☐	☐	☐	☐
3. The training content was clear.	☐	☐	☐	☐	☐
4. I am satisfied with the training.	☐	☐	☐	☐	☐
5. The training duration should be lengthened.	☐	☐	☐	☐	☐
6. The training duration should be shortened.	☐	☐	☐	☐	☐
7. The training taught me new things.	☐	☐	☐	☐	☐

END OF SURVEY

FOLLOW UP ICAT SURVEY

This survey is designed to assess the ICAT training you received a few months ago. Please respond to all items as directed.

Identification number (to link your response across surveys; your identity will not be revealed): ☐☐☐☐☐

SECTION 1: Views on Citizen Interactions

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes.	☐	☐	☐	☐	☐
2. I am good at identifying officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
3. I am good at de-escalating encounters with citizens.	☐	☐	☐	☐	☐
4. In tense citizen encounters, the most important thing is that I get home safely.	☐	☐	☐	☐	☐
5. Officers can be trained to increase the likelihood of positive encounters with citizens.	☐	☐	☐	☐	☐
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters.	☐	☐	☐	☐	☐
7. Officers can be trained to improve their ability to de-escalate citizen encounters.	☐	☐	☐	☐	☐

SECTION 2: Police Interactions with Persons in Crisis

Persons in crisis refers to individuals that may be behaving erratically due to things such as mental health, substance use, situational stress, and/or disabilities. Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Recognizing signs that a person is in crisis can improve the outcome of the interaction with that person.	☐	☐	☐	☐	☐
2. There is no explaining why persons in crisis act the way they do.	☐	☐	☐	☐	☐
3. Noncompliance should be viewed as a threat.	☐	☐	☐	☐	☐
4. Unnecessary risks should be avoided in encounters.	☐	☐	☐	☐	☐
5. The most important role of an officer responding to crisis is to stabilize the situation.	☐	☐	☐	☐	☐
6. In crisis situations, it is beneficial to keep a subject talking.	☐	☐	☐	☐	☐
7. In many cases, the use of force against a person in crisis can be avoided.	☐	☐	☐	☐	☐

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
8. As a person's emotions rise, their rational thinking declines.	☐	☐	☐	☐	☐
9. When responding as a team, it is important to designate roles in the crisis intervention.	☐	☐	☐	☐	☐
10. The majority of time spent communicating with a subject should be spent listening.	☐	☐	☐	☐	☐
11. An officer's nonverbal communication, such as body language, influences how a subject reacts.	☐	☐	☐	☐	☐
12. I know how to slow down an encounter with a person in crisis.	☐	☐	☐	☐	☐
13. Situational stress is no excuse for a person to act irrational.	☐	☐	☐	☐	☐
14. Responding to persons in crisis should not be a role of the police.	☐	☐	☐	☐	☐

SECTION 3: Attitudes Toward Using Force

Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Officers are not allowed to use as much force as is necessary to make suspects comply.	☐	☐	☐	☐	☐
2. It is sometimes necessary to use more force than is technically allowable.	☐	☐	☐	☐	☐
3. Verbally disrespectful suspects sometimes deserve physical force.	☐	☐	☐	☐	☐
4. Refraining from using force when you are legally able to puts yourself and other officers at risk.	☐	☐	☐	☐	☐
5. It is important to have a reputation that you are an officer willing to use force.	☐	☐	☐	☐	☐
6. Not using force when you could have makes suspects more likely to resist in future interactions.	☐	☐	☐	☐	☐
7. It is important that my fellow officers trust me to handle myself in a fight.	☐	☐	☐	☐	☐
8. Trying to talk my way out of a situation is always safer than using force.	☐	☐	☐	☐	☐
9. It is important that my fellow officers trust my communication skills.	☐	☐	☐	☐	☐
10. I respect officers' ability to talk suspects down rather than using force to make them comply.	☐	☐	☐	☐	☐
11. Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, opposed to later.	☐	☐	☐	☐	☐

SECTION 4: Critical Decision-Making Model (CDM)

Please indicate how strongly you agree with each of the following statements.

The Critical Decision-Making Model (CDM)…	**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly Agree 5**
1. …increases my decision-making skills during everyday situations.	☐	☐	☐	☐	☐
2. …often takes too much time to use in encounters with a person in crisis.	☐	☐	☐	☐	☐
3. …may make officers hesitate to take action when needed.	☐	☐	☐	☐	☐
4. …helps me to assess the risks in a situation.	☐	☐	☐	☐	☐
5. …helps me identify my options for action in a situation.	☐	☐	☐	☐	☐
6. …helps me select an option to resolve a situation.	☐	☐	☐	☐	☐
7. …reminds me to continuously gather information during a situation.	☐	☐	☐	☐	☐
8. …is too complicated.	☐	☐	☐	☐	☐
9. ...helps me review the action I took during a situation.	☐	☐	☐	☐	☐
10. …helps me to explain my decision-making after I act in a situation.	☐	☐	☐	☐	☐
11. I am confident using the CDM during an encounter with a person in crisis.	☐	☐	☐	☐	☐

SECTION 5: Encounters with Persons in Crisis

Please indicate how often you engage in the following activities.

	Never 1	**Seldom 2**	**Half-the-time 3**	**Usually 4**	**Always 5**
1. How often do you change your approach with a person in crisis after you have determined those prior approaches are ineffective?	☐	☐	☐	☐	☐
2. How often do you deliberately wait to interact with a person in crisis who is not an imminent threat to assess the situation before taking action?	☐	☐	☐	☐	☐
3. When responding to a person in crisis with a second officer, how often do you assign contact and cover roles?	☐	☐	☐	☐	☐
4. When responding to a person in crisis how often do you establish a backup plan?	☐	☐	☐	☐	☐
5. How often do you recognize your own emotional state (i.e. having high emotions) during your interactions with persons in crisis?	☐	☐	☐	☐	☐
6. How often do you consider your police powers before taking action during encounters with persons in crisis?	☐	☐	☐	☐	☐

SECTION 6: Views on ICAT Training

This section contains several items on IMPD's ICAT training. Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am more likely to consider using less lethal options after ICAT training.	☐	☐	☐	☐	☐
ICAT training strategies are useful.	☐	☐	☐	☐	☐
I would recommend ICAT training to other officers.	☐	☐	☐	☐	☐
I would benefit from a refresher course on ICAT training.	☐	☐	☐	☐	☐
Using ICAT training strategies has improved my interactions with persons in crisis.	☐	☐	☐	☐	☐
Using ICAT training strategies has improved my interactions with all citizens.	☐	☐	☐	☐	☐
ICAT training has helped improve police-community relations.	☐	☐	☐	☐	☐
IMPD command staff support the use of skills taught in ICAT training.	☐	☐	☐	☐	☐
My immediate supervisor supports the use of ICAT training.	☐	☐	☐	☐	☐
My peers support the use of ICAT training.	☐	☐	☐	☐	☐
ICAT training strategies are helpful beyond handling persons in crisis.	☐	☐	☐	☐	☐
I use the strategies learned in ICAT training to better manage conflicts in my personal life (e.g., with my family and friends).	☐	☐	☐	☐	☐
ICAT training strategies are useful for managing disputes with my colleagues.	☐	☐	☐	☐	☐
ICAT training strategies are useful during disputes with my supervisors	☐	☐	☐	☐	☐
The strategies I've learned in ICAT training are not beneficial in my personal life.	☐	☐	☐	☐	☐

1. My immediate supervisor reinforces ICAT training…

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 times per month)
☐ Seldom (1 per month)
☐ Never [if respondent selects this answer, skip to question 3]

2. ICAT training is reinforced by my immediate supervisor …[select all that apply]

☐ In conversations with me

☐ During roll call
☐ During my monthly review
☐ During post-incident reviews
☐ Other (please specify): _____

3. In the last 60 days, did you apply any strategies from the ICAT training in your work?

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 times per month)
☐ Seldom (1 per month)
☐ Never

4. In the last 60 days, did you apply the ***Critical Decision-Making Model*** by assessing a situation and your options during an encounter with a citizen?

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 times per month)
☐ Seldom (1 per month)
☐ Never

5. How difficult is it to use the ***Critical Decision-Making Model***?

☐ Not at all Difficult ☐ Somewhat Difficult ☐ Neutral ☐ Difficult ☐ Very Difficult

6. In the last 60 days, were there any obstacles that prevented you from using the ***Critical Decision-Making Model***?

☐ No opportunity
☐ Lack of time
☐ Could not remember the model
☐ Did not know how to use the model
☐ Did not want to use the model
☐ Did not think the model would work
☐ Other (please specify): _____
☐ N/A. There were no obstacles

7. When interacting with citizens in the last 60 days, did you apply ***ICAT Communication Skills***, such as actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject (e.g., avoiding "hot buttons"; identifying "hooks")?

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 per month)
☐ Seldom (1 per month)
☐ Never

8. How difficult is it to use ***ICAT Communication Skills***?

☐ Not at all Difficult ☐ Somewhat Difficult ☐ Neutral ☐ Difficult ☐ Very Difficult

9. In the last 60 days, were there any obstacles that prevented you from using ***ICAT Communication Skills***? [select all that apply]

☐ No opportunity
☐ Lack of time
☐ Could not remember the skills
☐ Did not know how to use the skills
☐ Did not want to use the skills
☐ Did not think the skills would work
☐ Other: _____
☐ N/A. There were no obstacles

10. In the last 60 days, did you apply the ***Reaction Gap Strategy*** by actively re-positioning yourself to keep a favorable position between you and the subject?

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 times per month)
☐ Seldom (1 per month)
☐ Never

11. How difficult is it to use the ***Reaction Gap Strategy***?

☐ Not at all Difficult ☐ Somewhat Difficult ☐ Neutral ☐ Difficult ☐ Very Difficult

12. In the last 60 days, were there any obstacles that prevented you from using the ***Reaction Gap Strategy***? [select all that apply]

☐ No opportunity
☐ Lack of time
☐ Could not remember the strategy
☐ Did not know how to use the strategy
☐ Did not want to use the strategy
☐ Did not think the strategy would work
☐ Other (please specify): _____
☐ N/A. There were no obstacles

13. In the last 60 days, did you apply the ***Tactical Pause Strategy*** by sharing information and developing a strategy with other responding officers during a citizen encounter?

☐ Frequently (more than 2-3 times per week)
☐ Often (once a week)
☐ Sometimes (2-3 times per month)
☐ Seldom (1 per month)
☐ Never

14. How difficult is it to use the ***Tactical Pause Strategy***?

☐ Not at all Difficult ☐ Somewhat Difficult ☐ Neutral ☐ Difficult ☐ Very Difficult

15. In the last 60 days, were there any obstacles that prevented you from using the ***Tactical Pause Strategy***? [select all that apply]

☐ Lack of time
☐ Could not remember the strategy
☐ Did not know how to use the strategy
☐ Did not want to use the strategy
☐ Did not think the strategy would work
☐ Other (please specify): _____
☐ N/A. There were no obstacles

16. In the last 60 days, did you attempt to use less lethal tools? [select all that apply]

☐ Taser
☐ Pepper spray (OC spray)
☐ Baton
☐ Beanbag shotgun
☐ None
☐ Other (please specify): _____

17. Since you were trained in ICAT, have you responded to an incident involving a person in crisis (*that is, an individual that may be behaving erratically due to things such as mental disorders, substance abuse, situational stress, and/or intellectual/developmental disabilities*)?

☐ Yes
☐ No [If they select No, End of Survey]

18. During your most recent incident involving a person in crisis, did you use ICAT strategies?

☐ Yes
☐ No [If they select No, End of Survey]

19. Which of the following ICAT strategies did you use in your most recent incident involving a person in crisis? [Select all that apply]

☐ Critical Decision-Making Model
[IF SELECTED] – do you think this strategy was effective?
a. Yes, effective
b. No, ineffective
c. Partially effective

☐ ICAT Communication Skills
[IF SELECTED] – do you think this strategy was effective?
a. Yes, effective
b. No, ineffective

c. Partially effective

☐ Reaction Gap

[IF SELECTED] – do you think this strategy was effective?

a. Yes, effective
b. No, ineffective
c. Partially effective

☐ Tactical Pause

[IF SELECTED] – do you think this strategy was effective?

a. Yes, effective
b. No, ineffective
c. Partially effective

☐ Less-lethal tool

[IF SELECTED] – do you think this strategy was effective?

a. Yes, effective
b. No, ineffective
c. Partially effective

END OF SURVEY

IMPD SUPERVISOR SURVEY

This survey is designed to assess the role of first line supervisors as part of the ICAT training program. The skills and tenets taught during ICAT training are generally referred to as "ICAT de-escalation skills" throughout this survey. This survey is part of a larger research project designed to understand the overall impacts of ICAT training on law enforcement personnel in Indianapolis.

Part I. Perceptions Related to *Using* ICAT De-escalation Skills

Please indicate how much you agree with the statements listed below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am confident using ICAT de-escalation skills during my encounters with citizens.	☐	☐	☐	☐	☐
2. I am confident using ICAT de-escalation skills during interactions with my subordinate officers.	☐	☐	☐	☐	☐
3. I receive the necessary equipment from my department to de-escalate situations.	☐	☐	☐	☐	☐
4. I receive sufficient training in de-escalation.	☐	☐	☐	☐	☐
5. I receive the necessary support from my supervisors to use ICAT de-escalation skills.	☐	☐	☐	☐	☐
6. When officers use ICAT de-escalation skills properly, encounters with citizens will often result in a positive resolution.	☐	☐	☐	☐	☐
7. Some encounters with citizens require additional less-lethal equipment than is currently available.	☐	☐	☐	☐	☐
8. My subordinates need more training in de-escalation than is currently provided.	☐	☐	☐	☐	☐
9. Training supervisors in ICAT de-escalation skills is also useful for interacting with and managing subordinates.	☐	☐	☐	☐	☐

Part II. Perceptions Related to *Supervising ICAT* De-escalation Skills

Please indicate how much you agree with the statements listed below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am able to effectively supervise subordinates' use of ICAT de-escalation.	☐	☐	☐	☐	☐
2. I am able to effectively coach subordinates' use of ICAT de-escalation skills.	☐	☐	☐	☐	☐
3. I receive the necessary equipment from my department to supervise my subordinates' use of ICAT de-escalation skills.	☐	☐	☐	☐	☐
4. I receive sufficient training to supervise my officers' use of ICAT de-escalation skills.	☐	☐	☐	☐	☐
5. I need more support from my supervisors to supervise my subordinates' use of ICAT de-escalation skills.	☐	☐	☐	☐	☐
6. It is difficult to supervise the use of ICAT de-escalation skills by my subordinate officers.	☐	☐	☐	☐	☐

Part III. Field Observations of Subordinates' ICAT De-escalation Skills

Please select how frequently you engage in the activities listed below.

	Never	**Seldom** (1 per month)	**Sometimes** (2-3 times per month)	**Often** (1 per week)	**Frequently** (more than 2-3 times per week)
1. How frequently do you observe your subordinate officers using ICAT de-escalation skills in the field?	☐	☐	☐	☐	☐
2. When observing subordinate officers in the field, how frequently do they use ***ICAT Communication Skills*** (such as actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject)?	☐	☐	☐	☐	☐
3. When observing subordinate officers in the field, how frequently do they use the ***Reaction Gap Strategy*** (actively re-positioning to keep a favorable position between the officer and the subject)?	☐	☐	☐	☐	☐
4. When observing subordinate officers in the field, how frequently do they use the ***Tactical Pause Strategy*** (sharing information and developing a strategy with other responding officers during a citizen encounter)?	☐	☐	☐	☐	☐
5. When observing subordinate officers in the field, how frequently do they attempt to use less lethal tools?	☐	☐	☐	☐	☐
6. How often have you observed incidents handled by your subordinates where ICAT de-escalation skills were properly used, but were unsuccessful in achieving a positive resolution to an incident?	☐	☐	☐	☐	☐
7. How often have you used ICAT de-escalation skills but were unsuccessful in achieving a positive resolution to an incident?	☐	☐	☐	☐	☐

Part IV. Video Observations of Subordinates' ICAT De-escalation Skills

Please select how frequently you engage in the activities listed below.

	Never	**Seldom** (1 per month)	**Sometimes** (2-3 times per month)	**Often** (1 per week)	**Frequently** (more than 2-3 times per week)
1. How frequently do you observe your subordinate officers using ICAT de-escalation skills during video review?	☐	☐	☐	☐	☐
2. When observing subordinate officers during video review, how frequently do they use ***ICAT Communication Skills*** (such as actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject)?	☐	☐	☐	☐	☐
3. When observing subordinate officers during video review, how frequently do they use the ***Reaction Gap Strategy*** (actively re-positioning to keep a favorable position between the officer and the subject)?	☐	☐	☐	☐	☐
4. When observing subordinate officers during video review, how frequently do they use the ***Tactical Pause Strategy*** (sharing information and developing a strategy with other responding officers during a citizen encounter)?	☐	☐	☐	☐	☐
5. When observing subordinate officers during video review, how frequently do they attempt to use less lethal tools?	☐	☐	☐	☐	☐
6. How often have you reviewed video of incidents handled by your subordinates where ICAT de-escalation skills were properly used, but were unsuccessful in achieving a positive resolution to an incident?	☐	☐	☐	☐	☐

Part V. Supervision Activities Related to ICAT De-escalation Skills

Please select how frequently you engage in the activities listed below.

	Never	**Seldom** (1 per month)	**Sometimes** (2-3 times per month)	**Often** (1 per week)	**Frequently** (more than 2-3 times per week)
1. How frequently do you talk with your subordinate officers generally about the use of ICAT de-escalation skills?	☐	☐	☐	☐	☐
2. How often do you have discussions with subordinates about their use of ICAT de-escalation skills during a specific incident?	☐	☐	☐	☐	☐
3. How frequently do you counsel subordinates about not using ICAT de-escalation skills when they should have?	☐	☐	☐	☐	☐
4. How frequently do you document the use of ICAT de-escalation skills in use of force reports?	☐	☐	☐	☐	☐
5. How frequently do you document the use of ICAT de-escalation skills in letters of commendation for subordinate officers?	☐	☐	☐	☐	☐
6. How frequently do you document the use of ICAT de-escalation skills in some other way (excluding use of force reports and commendation letters)?	☐	☐	☐	☐	☐

7. In what additional ways do you document the use of ICAT de-escalation skills?

_____

_____

_____

8. In what ways do you mentor or coach officers to improve their use of ICAT de-escalation skills?

_____

_____

_____

Part VI. Self-Reported Supervisor Activities

Please select how frequently you engage in the activities listed below.

	Never	**Seldom** (1 per month)	**Sometimes** (2-3 times per month)	**Often** (1 per week)	**Frequently** (more than 2-3 times per week)
1. Other than when it is required by department policy, how frequently do you go on your own initiative to incidents that your subordinate officers are handling?	☐	☐	☐	☐	☐
2. How frequently do your officers ask you to come to the incidents they are handling?	☐	☐	☐	☐	☐
3. How frequently do you conduct video reviews of incidents handled by your subordinate officers?	☐	☐	☐	☐	☐
4. When you are on the scene of an incident with your officers, how frequently do you tell them how to handle the incident?	☐	☐	☐	☐	☐
5. When you are on the scene of an incident with your officers, how frequently do you take it over and handle the incident yourself?	☐	☐	☐	☐	☐
6. How frequently do you talk with you officers about their performance in incidents that you observe?	☐	☐	☐	☐	☐

Part VII. Perceptions of Supervisor Functions

Below is a list of fourteen functions that first-line supervisors might be expected to perform. Please select the response that best represents your opinion of how important each function is.

	Very Unimportant	Unimportant	Neutral	Important	Very Important
1. Disseminating information about departmental directives	☐	☐	☐	☐	☐
2. Helping officers develop sound judgement	☐	☐	☐	☐	☐
3. Protecting officers from unfair criticism or punishment	☐	☐	☐	☐	☐
4. Ensuring appropriate use of force by officers	☐	☐	☐	☐	☐
5. Giving officers feedback on their performance	☐	☐	☐	☐	☐
6. Distributing the workload fairly	☐	☐	☐	☐	☐
7. Making superior officers aware of problems on the street	☐	☐	☐	☐	☐
8. Making sure that reports are properly completed	☐	☐	☐	☐	☐
9. Enforcing department rules and regulations	☐	☐	☐	☐	☐
10. Providing input on department policy	☐	☐	☐	☐	☐
11. Ensuring fair and equal treatment of citizens	☐	☐	☐	☐	☐
12. Listening or discussing concerns officers may have on the job or in their personal life	☐	☐	☐	☐	☐
13. Motivating officers to perform organizational goals	☐	☐	☐	☐	☐
14. Providing a personal example for officers to emulate	☐	☐	☐	☐	☐

Part VIII. Demographics

Finally, we would like to gather some demographic information.

1. Age: ☐ 18-20 ☐ 21-24 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44
   ☐ 45-49 ☐ 50 and older
2. What is your sex? ☐ Male ☐ Female
3. What racial or ethnic group do you most identify with?
   ☐ American Indian/Alaska Native ☐ Asian ☐ Black/African American
   ☐ Native Hawaiian/Pacific Islander ☐ White ☐ Two or More Races ☐ Other_____
4. How long have you worked in law enforcement?
   ☐ Less than 1 year ☐ 1-4 years ☐ 5-9 years ☐ 10-14 years ☐ 15-19 years
   ☐ 20 years or more
5. What is your highest level of education?
   ☐ High School
   ☐ Less than two years of college
   ☐ Associate's Degree
   ☐ Bachelor's Degree
   ☐ Graduate Degree
6. How many years have you been a supervising officer?
   ☐ Less than 1 year ☐ 1-4 years ☐ 5-9 years ☐ 10-14 years ☐ 15-19 years
   ☐ 20 years or more
7. In the box below, please provide your 5-digit Identification Number

YOU ARE BEING ASKED TO PROVIDE YOUR IDENTIFICATION NUMBER SO THAT THE RESEARCH TEAM CAN LINK YOUR SURVEY RESPONSES OVER TIME. INFORMATION GATHERED AS PART OF THIS SURVEY IS FOR RESEARCH PURPOSES ONLY, AND INDIVIDUAL IDENTITIES WILL BE NEVER BE SHARED WITH ANYONE. NO INDIVIDUAL RESPONSES WILL EVER BE IDENTIFIED.

APPENDIX B: IMPD ICAT TRAINING SURVEY FREQUENCY TABLES

Table 1. IMPD Survey Respondent Characteristics

Demographic Characteristic	Pre-Training (*N* = 892)		Post-Training (*N* = 511)		Follow-Up (*N* = 154)		All 3 Waves (*N* = 131)	
	%	*n*	%	*n*	%	*n*	%	*n*
Age								
18-20	0.1	(1)	0.2	(1)	0.0	(0)	0.0	(0)
21-24	2.5	(22)	2.2	(11)	2.0	(3)	2.3	(3)
25-29	9.1	(81)	9.2	(47)	9.7	(15)	8.4	(11)
30-34	8.2	(73)	9.2	(47)	11.7	(18)	12.2	(16)
35-39	15.4	(137)	15.3	(78)	15.6	(24)	13.0	(17)
40-44	12.4	(111)	13.9	(71)	13.6	(21)	13.7	(18)
45-49	16.0	(143)	16.6	(85)	14.9	(23)	16.0	(21)
50+	30.5	(272)	28.8	(147)	27.9	(43)	29.8	(39)
Missing	5.8	(52)	4.7	(24)	4.6	(7)	4.6	(6)
Sex								
Male	81.5	(727)	83.2	(425)	81.8	(126)	80.2	(105)
Female	11.9	(106)	11.6	(59)	13.0	(20)	14.5	(19)
Unknown	0.8	(7)	0.8	(4)	0.7	(1)	0.8	(1)
missing	5.8	(52)	4.5	(23)	4.6	(7)	4.6	(6)
Race								
White	75.0	(669)	78.5	(401)	77.9	(120)	76.3	(100)
Black/African American	11.4	(102)	10.2	(52)	12.3	(19)	13.0	(17)
Native Hawaiian/Pacific Islander	0.2	(2)	0.4	(2)	0.0	(0)	0.0	(0)
American Indian/Alaskan Native	0.1	(1)	0.0	(0)	0.0	(0)	0.0	(0)
Asian	0.5	(4)	0.6	(3)	0.0	(0)	0.0	(0)
Other	2.5	(22)	1.6	(8)	2.0	(3)	2.3	(3)
Two or More Race	3.9	(35)	4.1	(21)	3.3	(5)	3.8	(5)
Missing	6.4	(57)	4.7	(24)	4.6	(7)	4.6	(6)
Hispanic								
Yes	4.7	(796)	5.3	(27)	5.2	(139)	6.1	(8)
No	89.2	(42)	90.2	(461)	90.3	(8)	89.3	(117)
missing	6.1	(54)	4.5	(23)	4.6	(7)	4.6	(6)
LE Experience								
Less than 1 Year	2.8	(25)	2.4	(12)	1.3	(2)	1.5	(2)
1-4 Years	11.2	(100)	11.9	(61)	13.0	(20)	13.0	(17)
5-9 Years	11.0	(98)	11.7	(60)	16.9	(26)	13.7	(18)
10-14 Years	9.9	(88)	10.4	(53)	7.8	(12)	8.4	(11)
15-19 Years	15.5	(138)	16.8	(86)	16.9	(26)	18.3	(24)
20 Years or More	44.4	(396)	42.5	(217)	39.6	(61)	40.5	(53)
Missing	5.3	(47)	4.3	(22)	4.6	(7)	4.6	(6)
Rank								
Patrol Officer	69.1	(616)	70.8	(362)	72.7	(112)	72.5	(95)
Corporal	0.1	(1)	0.2	(1)	0.0	(0)	0.0	(0)
Sergeant	15.0	(134)	14.5	(74)	16.2	(25)	16.0	(21)
Lieutenant	4.4	(39)	4.1	(21)	2.0	(3)	2.3	(3)
Captain and Above	3.9	(35)	3.7	(19)	3.3	(5)	3.1	(4)
Retired	0.5	(4)	0.6	(3)	0.0	(0)	0.0	(0)

Demographic Characteristic	Pre-Training (*N* = 892)		Post-Training (*N* = 511)		Follow-Up (*N* = 154)		All 3 Waves (*N* = 131)	
Other	1.8	(16)	1.8	(9)	1.3	(2)	1.5	(2)
Missing	5.3	(47)	4.3	(22)	4.6	(7)	4.6	(6)
Education								
High School	8.4	(75)	8.0	(41)	9.7	(15)	10.7	(14)
Less than 2 Years College	23.0	(205)	24.5	(125)	22.1	(34)	22.1	(29)
Associates Degree	15.6	(139)	15.7	(80)	14.9	(23)	15.3	(20)
Bachelor's Degree	6.2	(55)	5.1	(26)	3.9	(6)	3.1	(4)
Graduate Degree	41.1	(367)	42.3	(216)	44.8	(69)	44.3	(58)
Missing	5.7	(51)	4.5	(23)	4.6	(7)	4.6	(6)
Use of Force Training in Past Year								
Yes	87.8	(783)	88.5	(452)	87.0	(134)	86.3	(113)
No	6.7	(60)	7.2	(37)	8.4	(13)	9.2	(12)
Missing	5.5	(49)	4.3	(22)	4.6	(7)	4.6	(6)
Mental Illness Training in Past Year								
Yes	83.5	(745)	84.5	(432)	80.5	(124)	80.2	(105)
No	11.0	(98)	11.2	(57)	14.9	(23)	15.3	(20)
Missing	5.5	(49)	4.3	(22)	4.6	(7)	4.6	(6)
De-Escalation Training in Past Year								
Yes	87.8	(783)	88.5	(452)	83.8	(129)	81.7	(107)
No	6.7	(60)	7.2	(37)	11.7	(18)	13.7	(18)
Missing	5.5	(49)	4.3	(22)	4.6	(7)	4.6	(6)

Table 2. IMPD Officer Views on Policing (Pre-Training)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Enforcing the law is a patrol officer's most important responsibility. (*n* = 855)	2.6	22.6	33.6	34.7	6.6	3.20 (.95)
2. Law enforcement and community members must work together to solve local problems. (*n* = 855)	0.5	0.6	7.5	52.1	39.4	4.29 (.67)
3. Working with the community to solve problems is an effective means of providing services to this area. (*n* = 855)	0.9	2.1	11.0	59.0	27.0	4.09 (.74)
4. I routinely collaborate with community members in my daily duties. (*n* = 854)	2.8	17.6	31.7	38.4	9.5	3.34 (.97)
5. My primary responsibility as a police officer is to fight crime. (*n* = 855)	2.0	15.4	28.4	43.0	11.1	3.46 (.95)
6. As a police officer, I have a primary responsibility to protect the constitutional rights of residents. (*n* = 855)	0.2	1.3	10.1	49.5	39.0	4.26 (.71)
7. A primary responsibility of a police officer is to build trust between the department and community. (*n* = 855)	1.2	7.4	21.3	47.6	22.6	3.83 (.90)
8. As a police officer, it is important that I have non-enforcement contacts with the public. (*n* = 855)	0.6	1.9	9.5	52.6	35.4	4.20 (.73)
9. As a police officer, I see myself primarily as a public servant. (*n* = 855)	0.8	3.7	15.1	57.1	23.3	3.98 (.78)
10. My primary role is to control predatory suspects who threaten members of the public. (*n* = 855)	1.2	14.9	27.6	42.5	13.9	3.53 (.95)
11. The jurisdiction that I work in is dangerous. (*n* = 854)	0.5	2.7	18.5	48.7	29.6	4.04 (.79)
12. As a police officer, there is a good chance you will be assaulted while on the job. (*n* = 855)	0.0	2.3	7.1	48.3	42.2	4.30 (.70)
13. Overall, I am satisfied with my job. (*n* = 855)	7.4	15.4	22.6	45.9	8.8	3.33 (1.07)
14. I enjoy working with my colleagues. (*n* = 855)	0.6	1.4	11.7	60.6	25.7	4.09 (.69)

15. Overall, this is a good agency to work for. (*n* = 855)	9.9	15.4	30.9	36.5	7.3	3.16 (1.09)
Community Oriented Index (*n* = 854)	Mean = 28.0		SD = 3.6		Min: 15 Max: 35	
Enforcement Oriented Index (*n* = 855)	Mean = 10.2		SD = 2.3		Min: 3 Max: 15	

Community Oriented Index is comprised of Items 2, 3, 4, 6, 7, 8, and 9 (α = .77)
Enforcement Oriented Index is comprised of Items 1, 5, and 7 (α = .73)

Table 3. IMPD Officer General Perceptions of Training (Pre-Training, All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I consider myself "open" to using new training in my everyday work. (*n* = 843)	0.7	1.1	13.3	66.6	18.4	4.01 (.65)
2. I am sometimes reluctant to change the way I work. (*n* = 843)	4.6	38.8	30.1	25.7	0.7	2.79 (.90)
3. I look forward to new training opportunities. (*n* = 843)	1.4	3.8	27.1	49.8	17.9	3.79 (.83)
4. Police officers are over-trained in areas that are unhelpful to their work. (*n* = 843)	5.1	31.3	30.1	22.3	11.2	3.03 (1.09)
5. It is important for police agencies to continually add innovative training. (*n* = 843)	0.4	1.4	12.3	57.4	28.5	4.12 (.69)
6. Training makes me more effective in my work. (*n* = 843)	0.4	1.2	16.3	58.1	24.2	4.05 (.69)
7. Some new training may reduce officer safety. (*n* = 843)	2.7	19.1	32.0	35.7	10.4	3.32 (.99)
General Openness to Training Index (*n* = 843)	Mean = 24.8		SD = 3.7		Min: 7 Max: 35	

Index is comprised of all items with items 2, 4, and 7 reverse-coded (α = 0.74)

Table 4. IMPD Officer Receptivity to ICAT Training (Post-Training, All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. This training was useful to me. (*n* = 1,153)	3.6	6.2	21.4	53.0	15.7	3.71 (.93)
2. I would recommend this training to others. (*n* = 1,152)	3.6	5.8	25.0	49.6	16.1	3.69 (.93)
2. The training content was clear. (*n* = 1,151)	1.8	2.3	12.7	66.4	16.9	3.94 (.74)
3. I am satisfied with the training. (*n* = 1,146)	3.5	5.8	22.4	53.7	14.7	3.70 (.91)
4. The training duration should be lengthened. (*n* = 1,151)	31.6	44.1	19.4	3.7	1.2	1.99 (.88)
5. The training duration should be shortened (*n* = 1,149)	1.8	12.4	33.9	31.2	20.8	3.57 (1.01)
6. The training taught me new things. (*n* = 1,153)	8.0	15.9	28.7	37.3	10.2	3.26 (1.09)
Training Receptivity Index (n = 1,143)	Mean = 18.3		SD = 4.0		Min: 5	Max: 25

Index is comprised of Items <u>except</u> for Items 5 and 6 (α = .91)

Table 5. IMPD Officer Views on the Critical Decision-Making Model Utility – Post-Training to Follow-Up (Matched)

The CDM Model …		Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	$\bar{X}$ (SE)	*t*	*W*
1. …increases my decision-making skills during everyday situations. (*n* = 194)	Post	0.0	4.6	21.7	62.4	11.3	3.80 (.05)	5.95*	5.68*
	FU	1.0	5.7	42.8	44.9	5.7	3.48 (.05)		
2. …often takes too much time to use in encounters with a person in crisis. (*n* = 192)	Post	6.8	62.0	26.6	4.2	0.5	2.30 (.05)	-8.21*	-7.52*
	FU	1.6	34.4	52.6	10.4	1.0	2.75 (.05)		
3. …may make officers hesitate to take action when needed. (*n* = 193)	Post	3.1	43.0	28.0	20.7	5.2	2.82 (.07)	-5.01*	-4.95*
	FU	1.0	20.2	47.7	26.4	4.7	3.13 (.06)		
4. …helps me to assess the risks in a situation. (*n* = 193)	Post	0.5	2.1	17.6	71.5	8.3	3.85 (.04)	7.78*	7.04*
	FU	0.5	8.3	36.3	52.3	2.6	3.48 (.05)		
	Post	0.5	3.7	14.6	69.8	11.5	3.88 (.05)	7.37*	6.80*

5.	…helps me identify my options for action in a situation. (*n* = 192)	FU	0.5	6.3	38.0	52.6	2.6	3.51 (.05)		
6.	…helps me select an option to resolve a situation. (*n* = 192)	Post	1.0	2.1	18.7	68.4	9.8	3.84 (.05)	7.26*	6.90*
		FU	0.5	6.2	40.9	49.7	2.6	3.48 (.05)		
7.	…reminds me to continuously gather information during a situation. (*n* = 192)	Post	0.0	3.1	10.9	72.9	13.0	3.96 (.04)	6.84*	6.32*
		FU	0.0	4.7	34.4	54.2	6.8	3.63 (.05)		
8.	…is too complicated. (*n* = 192)	Post	12.5	61.5	17.2	6.8	2.1	2.24 (.06)	-6.98*	-6.74*
		FU	3.1	37.5	49.0	8.3	2.1	2.69 (.05)		
9.	…helps me review the action I took during a situation. (*n* = 189)	Post	0.0	3.2	16.9	69.8	10.1	3.87 (.04)	6.89*	6.18*
		FU	1.1	4.8	39.2	50.8	4.2	3.52 (.05)		
10.	…helps me to explain my decision-making after I act in a situation. (*n* = 192)	Post	0.0	3.7	16.7	65.6	14.1	3.90 (.05)	5.83*	5.90*
		FU	1.0	4.7	36.5	51.6	6.3	3.57 (.05)		
11.	I am confident using the CDM during an encounter with a person in crisis. (*n* = 193)	Post	1.6	2.6	22.8	60.1	13.0	3.80 (.05)	6.84*	6.57*
		FU	1.6	4.7	49.2	38.7	5.7	3.42 (.05)		
CDM Utility Index (*n* = 186)		Post	-	-	-	-	-	41.60 (.39)	11.24*	9.24*
		FU	-	-	-	-	-	37.53 (.44)		

*** Statistically significant at *p* < .05**

Index comprised of all items with items 2, 3, and 8 reverse-coded (Post: α = .91; Follow-Up: α = 93)

Table 6. IMPD Officer Views on Critical Decision-Making Model (CDM) Utility – Post-Training (All Respondents)

The CDM Model…	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. …increases my decision-making skills during everyday situations. (*n* = 1,142)	0.5	3.7	24.2	59.9	11.7	3.79 (.71)
2. …often takes too much time to use in encounters with a person in crisis. (*n* = 1,136)	8.5	59.2	26.5	4.8	1.0	2.30 (.73)
3. …may make officers hesitate to take action when needed. (*n* = 1,140)	4.5	39.2	33.0	19.9	3.4	2.79 (.93)
4. …helps me to assess the risks in a situation. (*n* = 1,141)	0.4	2.0	19.6	67.4	10.5	3.86 (.63)
5. …helps me identify my options for action in a situation. (*n* = 1,140)	0.4	2.9	19.1	66.8	10.8	3.85 (.66)
6. …helps me select an option to resolve a situation. (*n* = 1,142)	0.5	2.5	22.0	63.9	11.1	3.83 (.67)
7. …reminds me to continuously gather information during a situation. (*n* = 1,140)	0.4	2.5	16.3	66.0	14.7	3.92 (.67)
8. …is too complicated. (*n* = 1,139)	15.3	55.9	21.4	6.0	1.4	2.22 (.83)
9. …helps me review the action I took during a situation. (n = 1,133)	0.5	2.4	23.1	64.9	9.1	3.80 (.65)
10. …helps me to explain my decision-making after I act in a situation. (*n* = 1,142)	0.5	2.0	20.9	64.4	12.2	3.86 (.66)
11. I am confident using the CDM during an encounter with a person in crisis. (*n* = 1,143)	1.0	2.4	26.1	58.2	12.4	3.79 (.72)
CDM Utility Index (*n* = 1,113)	Mean = 41.4		SD = 5.8	Min: 17	Max: 55	

Index is comprised of all items with Items 2, 3, and 8 reverse-coded (α = .91)

Table 7. IMPD Officer Views on Critical Decision-Making Model (CDM) Utility – Follow-Up (All Respondents)

The CDM Model…	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. …increases my decision-making skills during everyday situations. (*n* = 287)	1.1	4.9	45.6	42.9	5.6	3.47 (.72)
2. …often takes too much time to use in encounters with a person in crisis.(*n* = 287)	1.4	30.0	56.8	10.1	1.7	2.81 (.70)
3. …may make officers hesitate to take action when needed. (*n* = 287)	0.7	18.5	48.1	26.8	5.9	3.19 (.83)
4. …helps me to assess the risks in a situation. (*n* = 287)	0.7	8.0	39.0	49.8	2.4	3.45 (.71)
5. …helps me identify my options for action in a situation. (*n* = 287)	1.1	6.3	41.1	49.1	2.4	3.46 (.70)
6. …helps me select an option to resolve a situation. (*n* = 287)	0.7	5.9	44.6	46.3	2.4	3.44 (.68)
7. …reminds me to continuously gather information during a situation. (*n* = 286)	0.4	4.9	37.8	51.4	5.6	3.57 (.69)
8. …is too complicated. (*n* = 286)	2.5	34.6	51.8	9.1	2.1	2.74 (.74)
9. …helps me review the action I took during a situation. (n = 286)	1.4	4.9	43.4	46.9	3.5	3.46 (.71)
10. …helps me to explain my decision-making after I act in a situation. (*n* = 286)	1.4	4.6	39.5	50.4	4.2	3.51 (.71)
11. I am confident using the CDM during an encounter with a person in crisis. (*n* = 286)	1.8	6.3	51.4	36.7	3.9	3.35 (.73)
CDM Utility Index (*n* = 286)	Mean = 37.0		SD = 6.0	Min: 11	Max: 55	

Index is comprised of all items with Items 2, 3, and 8 reverse-coded (α = .93)

Table 8. IMPD Officer Follow-Up Reactions to ICAT Training (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I am more likely to consider using less-lethal options after ICAT training. (*n* = 275)	5.5	14.6	50.9	25.5	3.6	3.07 (.87)
2. ICAT training strategies are useful. (*n* = 274)	3.3	4.7	38.3	48.9	4.7	3.47 (.80)
3. I would recommend ICAT training to other officers. (*n* = 274)	5.1	8.4	39.1	41.2	6.2	3.35 (.91)
4. I would benefit from a refresher course on ICAT training. (*n* = 274)	8.3	18.6	44.5	24.1	4.4	2.97 (.97)
5. Using ICAT training strategies has improved my interactions with persons in crisis. (*n* = 274)	5.5	14.6	50.0	27.7	2.2	3.07 (.85)
6. Using ICAT training strategies has improved my interactions with all citizens. (*n* = 274)	5.8	14.6	49.6	27.7	2.2	3.06 (.86)
7. ICAT training has helped improve police-community relations. (*n* = 274)	8.4	13.5	50.0	24.8	3.3	3.01 (.92)
8. My command staff support the use of skills taught in ICAT training. (*n* = 274)	2.6	1.5	40.9	46.7	8.4	3.57 (.77)
9. My immediate supervisor supports the use of ICAT training. (*n* = 274)	1.5	2.9	43.4	46.4	5.8	3.52 (.72)
10. My peers support the use of ICAT training. (*n* = 274)	4.7	7.3	56.2	28.8	2.9	3.18 (.80)
11. ICAT training strategies are helpful beyond handling persons in crisis. (*n* = 274)	4.4	5.8	41.6	43.1	5.1	3.39 (.85)
12. I use the strategies learned in ICAT training to better manage conflicts in my personal life (e.g., with my family and friends). (*n* = 274)	8.8	16.8	49.6	23.0	1.8	2.92 (.90)
13. ICAT training strategies are useful for managing disputes with my colleagues. (*n* = 274)	5.8	14.2	52.2	24.8	2.9	3.05 (.86)
14. ICAT training strategies are useful during disputes with my supervisors. (*n* = 274)	6.9	16.4	55.1	19.0	2.6	2.94 (.86)
15. The strategies I've learned in ICAT training are not beneficial in my personal life. (*n* = 274)	6.2	24.8	49.6	14.6	4.7	2.87 (.90)
Experiences with ICAT Index (*n* = 274)	Mean = 47.70		SD = 10.04		Min: 15 Max: 75	

Table 9. Changes in IMPD Officer Views on Interactions with the Public (Matched Sample, Pre-Post)

		Never	Seldom	Half-the-time	Usually	Always	$\bar{X}$ (SE)	*t*	*W*
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes. (*n* = 511)	Pre	0.4	5.9	22.3	55.0	16.4	3.81 (.03)	-4.63*	-4.46*
	Post	0.4	2.2	14.9	64.0	18.6	3.98 (.03)		
2. I am good at identifying officer safety risks in citizen encounters. (*n* = 510)	Pre	0.2	0.2	4.9	63.5	31.2	4.25 (.03)	-1.08	-1.16
	Post	0.2	0.0	2.9	65.1	31.8	4.28 (.02)		
3. I am good at de-escalating encounters with citizens. (*n* = 509)	Pre	0.0	0.6	10.0	63.3	26.1	4.15 (.03)	-.70	-.72
	Post	0.2	0.0	6.7	69.0	24.2	4.17 (.02)		
4. In tense citizen encounters, the most important thing is that I get home safely. (*n* = 508)	Pre	0.8	3.7	11.0	29.5	54.9	4.34 (.04)	6.86*	6.74*
	Post	0.4	5.5	19.1	38.0	37.0	4.06 (.04)		
5. Officers can be trained to increase the likelihood of positive encounters with citizens. (*n* = 507)	Pre	0.0	2.4	14.4	58.2	25.1	4.06 (.03)	-5.81*	-5.88*
	Post	0.2	0.4	7.9	57.6	33.9	4.25 (.03)		
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters. (*n* =510)	Pre	0.0	0.0	2.8	59.2	38.0	4.35 (.02)	.85	.64
	Post	0.2	0.0	3.1	60.0	36.7	4.33 (.02)		
7. Officers can be trained to improve their ability to de-escalate citizen	Pre	0.0	0.6	10.2	61.8	27.5	4.16 (.03)	-4.45*	-4.51*
	Post	0.2	0.0	5.5	59.0	35.3	4.29 (.03)		

encounters. (*n* = 510)									
Views on Interactions with the Public Index (*N* = 503)	Pre	-	-	-	-	-	24.80 (.12)	-4.34*	-5.23*
	Post	-	-	-	-	-	25.31 (.12)		

*** Statistically significant at *p* < .05**
Index is comprised of all items <u>except</u> for Item 4 (Pre: α = .78; Post: α = .80)

Table 10. IMPD Officer Views on Interactions with the Public, Pre-Training Survey (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes. (*n* = 892)	0.7	4.4	23.4	54.3	16.7	3.81 (.79)
2. I am good at identifying officer safety risks in citizen encounters. (*n* = 892)	0.1	0.3	5.6	62.8	31.2	4.25 (.58)
3. I am good at de-escalating encounters with citizens. (*n* = 892)	0.0	0.5	9.9	64.4	25.3	4.15 (.59)
4. In tense citizen encounters, the most important thing is that I get home safely. (*n* = 891)	0.5	4.4	13.9	29.3	52.0	4.28 (.89)
5. Officers can be trained to increase the likelihood of positive encounters with citizens. (*n* = 891)	0.3	1.9	13.6	59.3	24.9	4.07 (.70)
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters. (*n* = 892)	0.0	0.0	3.8	57.5	38.7	4.35 (.55)
7. Officers can be trained to improve their ability to de-escalate citizen encounters. (*n* = 892)	0.0	0.9	9.2	62.0	27.9	4.17 (.62)
***Views on Interactions with the Public Index* (*n* = 891)**	Mean = 24.8		SD = 2.7		Min = 16 Max=30	

Index is comprised of all items <u>except</u> for Item 4 (α = .78)

Table 11. IMPD Officer Views on Interactions with the Public – Post-Training Survey (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes. (*n* = 1,159)	0.5	1.8	15.5	62.9	19.2	3.99 (.68)
2. I am good at identifying officer safety risks in citizen encounters. (*n* = 1,160)	0.1	0.2	4.2	63.1	32.4	4.28 (.55)
3. I am good at de-escalating encounters with citizens. (*n* = 1,151)	0.1	0.3	8.2	66.6	24.9	4.16 (.57)
4. In tense citizen encounters, the most important thing is that I get home safely. (*n* = 1,153)	0.6	5.4	17.6	38.4	38.0	4.08 (.91)
5. Officers can be trained to increase the likelihood of positive encounters with citizens. (*n* = 1,154)	0.3	0.5	8.6	56.9	33.8	4.23 (.64)
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters. (*n* = 1,155)	0.3	0.1	4.3	59.0	36.4	4.31 (.58)
7. Officers can be trained to improve their ability to de-escalate citizen encounters. (*n* = 1,155)	0.3	0.3	6.2	58.1	35.2	4.28 (.64)
Views on Interactions with the Public Index (*n* = 1,138)	Mean = 25.2		SD = 2.8		Min: 6 Max: 30	

Index is comprised of all items except for Item 4 (α = .80)

Table 12. Officer Views on Interactions with the Public– Follow-Up (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I have considerable ability to control the nature of citizen interactions to create positive outcomes. (*n* = 316)	1.0	4.8	24.1	54.1	16.1	3.80 (.80)
2. I am good at identifying officer safety risks in citizen encounters. (*n* = 316)	1.0	0.0	2.9	55.4	40.8	4.35 (.63)
3. I am good at de-escalating encounters with citizens. (*n* = 316)	1.0	0.3	7.3	62.3	29.1	4.18 (.66)
4. In tense citizen encounters, the most important thing is that I get home safely. (*n* = 316)	2.5	3.2	11.7	29.4	53.2	4.28 (.96)
5. Officers can be trained to increase the likelihood of positive encounters with citizens. (*n* = 316)	1.0	2.9	14.2	57.6	24.4	4.02 (.77)
6. Officers can be trained to improve their ability to identify officer safety risks in citizen encounters. (*n* = 316)	1.0	0.3	6.0	55.7	37.0	4.28 (.67)
7. Officers can be trained to improve their ability to de-escalate citizen encounters. (*n* = 316)	0.6	1.6	8.9	64.9	24.1	4.10 (.66)
***Views on Interactions with the Public Index* (*n* = 316)**	Mean = 24.72		SD = 3.09		Min: 6	Max: 30

Index is comprised of all items <u>except</u> for Item 4 (α = .83)

Table 13. Changes in IMPD Officer Attitudes Toward Interactions with Persons in Crisis (Pre v. Post, Matched)

			Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	$\bar{X}$ (SE)	*t*	*W*
1.	Recognizing signs that a person is in crisis can improve the outcome of the interaction with that person. (*n* = 505)	Pre	0.0	0.6	8.5	65.0	25.9	4.16 (.03)	-6.54*	-6.35*
		Post	0.2	0.0	4.6	55.5	39.8	4.35 (.03)		
2.	There is no explaining why persons in crisis act the way they do. (*n* = 502)	Pre	7.4	57.6	24.5	9.0	1.6	2.40 (.04)	-2.10*	-1.78
		Post	8.6	51.0	25.7	12.6	2.2	2.49 (.04)		
3.	Noncompliance should be viewed as a threat. (*n* = 504)	Pre	3.0	28.4	44.4	20.4	3.8	2.94 (.04)	11.01*	10.21*
		Post	8.1	48.2	32.7	9.7	1.2	2.48 (.04)		
4.	Unnecessary risks should be avoided in encounters. (*n* = 501)	Pre	0.0	1.2	8.6	58.3	31.9	4.21 (.03)	1.14	.66
		Post	1.0	1.0	10.6	55.1	32.3	4.17 (.03)		
5.	The most important role of an officer responding to crisis is to stabilize the situation. (*n* = 502)	Pre	0.2	2.4	13.2	62.0	22.3	4.04 (.03)	-1.29	-1.61
		Post	0.4	2.6	10.4	61.4	25.3	4.09 (.03)		
6.	In crisis situations, it is beneficial to keep a subject talking. (*n* = 504)	Pre	0.0	2.2	32.5	56.2	9.1	3.72 (.03)	-10.48*	-9.86*
		Post	0.2	0.4	13.1	64.9	21.4	4.07 (.03)		
7.	In many cases, the use of force against a person in crisis can be avoided. (*n* = 505)	Pre	1.8	17.4	46.3	31.3	3.2	3.17 (.04)	-8.14*	-7.78*
		Post	0.6	6.1	44.4	41.4	7.5	3.49 (.03)		
8.	As a person's emotions rise, their rational thinking declines.	Pre	0.2	0.4	8.3	58.6	32.5	4.23 (.03)	-3.85*	-4.11*
		Post	0.6	0.4	4.0	53.1	42.0	4.45 (.03)		

		Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	$\bar{X}$ (SE)	*t*	*W*
(*n* = 505)									
9. When responding as a team, it is important to designate roles in the crisis intervention. (*n* = 504)	Pre	0.0	2.2	9.3	60.5	28.0	4.14 (.03)	-8.53*	-8.29*
	Post	0.0	0.4	1.8	53.2	44.6	4.42 (.02)		
10. The majority of time spent communicating with a subject should be spent listening. (*n* = 504)	Pre	0.2	3.4	33.1	53.4	9.9	3.69 (.03)	-11.14*	-10.34*
	Post	0.0	0.8	15.1	58.5	25.6	4.09 (.03)		
11. An officer's nonverbal communication, such as body language, influences how a subject reacts. (*n* = 505)	Pre	0.0	2.4	12.9	61.4	23.4	4.06 (.03)	-5.23*	-5.08*
	Post	0.0	0.2	6.3	63.8	29.7	4.23 (.03)		
12. I know how to slow down an encounter with a person in crisis. (*n* = 502)	Pre	0.0	3.0	23.9	63.2	10.0	3.80 (.03)	-9.73*	-9.15*
	Post	0.2	0.0	11.2	68.1	20.5	4.09 (.03)		
13. Situational stress is no excuse for a person to act irrational. (*n* = 505)	Pre	2.8	38.6	31.9	23.0	3.8	2.86 (.04)	5.48*	5.57*
	Post	6.1	48.1	27.5	15.6	2.6	2.60 (.04)		
14. Responding to persons in crisis should not be a role of the police. (*n* = 503)	Pre	8.0	36.6	33.0	15.1	7.4	2.77 (.05)	.54	.96
	Post	8.2	37.4	33.0	14.5	6.7	2.75 (.05)		
Attitudes Towards Persons in Crisis Index (*N* = 492)	Pre	-	-	-	-	-	39.22 (.17)	-12.55*	-11.97*
	Post	-	-	-	-	-	41.35 (.18)		

*** Statistically significant at *p* < .05**

Index is comprised of all items <u>except</u> for Items 2, 3, 13, and 14 (Pre: α = .74; Post: α = .81)

Table 14. IMPD Officer Attitudes on Interactions with Persons in Crisis – Pre-Training Survey (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Recognizing the signs that a person is in crisis can improve the outcome of an interaction with that individual. (*n* = 878)	0.1	0.6	7.6	65.8	25.9	4.17 (.58)
2. There is no explaining why a person in crisis acts the way they do. (*n* = 878)	7.2	55.1	26.8	9.6	1.4	2.43 (.81)
3. Noncompliance should be viewed as a threat. (*n* = 878)	2.5	27.6	44.7	22.2	3.1	2.96 (.85)
4. Unnecessary risks should be avoided in encounters. (*n* = 877)	0.0	1.4	11.0	55.8	31.9	4.18 (.67)
5. The most important role of an officer responding to a crisis is to stabilize the situation. (*n* = 878)	0.3	2.5	13.0	62.4	21.8	4.03 (.69)
6. In crisis situations, it is beneficial to keep a subject talking. (*n* = 877)	0.1	1.8	31.4	57.7	9.0	3.74 (.65)
7. In many cases, the use of force against a person in crisis can be avoided. (*n* = 878)	1.3	16.1	48.1	31.8	2.9	3.19 (.78)
8. As a person's emotions rise, their rational thinking declines. (*n* = 877)	0.2	0.5	8.2	60.2	30.9	4.21 (.62)
9. When responding as a team, it's important to designate roles in the crisis intervention. (*n* = 878)	0.0	1.5	9.5	62.0	27.1	4.15 (.64)
10. The majority of time spent communicating with a subject should be spent listening. (*n* = 878)	0.1	3.1	36.0	51.9	8.9	3.66 (.69)
11. An officer's nonverbal communication, such as body language, influences how a subject reacts. (*n* = 878)	0.1	1.7	12.1	62.3	23.8	4.08 (.66)
12. I know how to slow down an encounter with a person in crisis. (*n* = 878)	0.0	1.8	23.6	63.7	10.9	3.84 (.63)
13. Situational stress is no excuse for a person to act irrational. (*n* = 877)	2.6	36.7	35.4	21.7	3.7	2.87 (.90)
14. Responding to persons in crisis should not be a role of the police. (*n* = 878)	7.6	35.9	35.1	13.3	8.1	2.78 (1.04)
Interactions with Persons in Crisis Index (*n* = 877)	Mean = 39.2	SD=3.6	Min: 28	Max: 49		

Index is comprised of all items except for Items 2, 3, 13, and 14 (α = .74)

Table 15. IMPD Officer Attitudes on Interactions with Persons in Crisis – Post-Training Survey (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Recognizing the signs that a person is in crisis can improve the outcome of an interaction with that individual. (*n* = 1,157)	0.4	0.1	5.4	55.6	38.6	4.32 (.62)
2. There is no explaining why a person in crisis acts the way they do. (*n* = 1,153)	8.6	49.0	26.9	13.0	2.5	2.52 (.91)
3. Noncompliance should be viewed as a threat. (*n* = 1,151)	7.7	44.1	35.4	11.2	1.7	2.55 (.85)
4. Unnecessary risks should be avoided in encounters. (*n* = 1,141)	0.9	2.2	12.1	55.3	29.5	4.10 (.76)
5. The most important role of an officer responding to a crisis is to stabilize the situation. (*n* = 1,154)	0.5	2.6	12.9	62.1	21.8	4.02 (.71)
6. In crisis situations, it is beneficial to keep a subject talking. (*n* = 1,156)	0.3	0.9	14.0	65.5	19.4	4.03 (.63)
7. In many cases, the use of force against a person in crisis can be avoided. (*n* = 1,156)	0.6	6.1	45.1	40.9	7.4	3.48 (.74)
8. As a person's emotions rise, their rational thinking declines. (*n* = 1,158)	0.7	0.6	6.3	54.9	37.5	4.28 (.67)
9. When responding as a team, it's important to designate roles in the crisis intervention. (*n* = 1,153)	0.0	0.3	3.0	53.7	43.1	4.40 (.56)
10. The majority of time spent communicating with a subject should be spent listening. (*n* = 1,152)	0.1	1.4	16.5	59.4	22.7	4.03 (.67)
11. An officer's nonverbal communication, such as body language, influences how a subject reacts. (*n* = 1,152)	0.1	0.1	6.6	67.0	26.2	4.19 (.55)
12. I know how to slow down an encounter with a person in crisis. (*n* = 1,143)	0.2	0.0	12.5	68.6	18.7	4.06 (.57)
13. Situational stress is no excuse for a person to act irrational. (*n* = 1,151)	5.2	44.2	31.8	16.2	2.6	2.67 (.90)
14. Responding to persons in crisis should not be a role of the police. (*n* = 1,150)	8.9	37.5	33.3	13.1	7.2	2.72 (1.04)
Interactions with Persons in Crisis Index (*n* = 1,116)		Mean = 40.9	SD = 4.0	Min: 18	Max: 50	

Index is comprised of all items except for Items 2, 3, 13, and 14 (α = .81)

Table 16. Officer Attitudes on Interactions with Persons in Crisis – Follow-Up (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Recognizing the signs that a person is in crisis can improve the outcome of an interaction with that individual. (*n* = 304)	0.0	1.6	9.5	63.5	25.3	4.13 (.63)
2. There is no explaining why a person in crisis acts the way they do. (*n* = 304)	6.3	48.0	30.6	12.2	3.0	2.58 (.89)
3. Noncompliance should be viewed as a threat. (*n* = 304)	2.0	27.0	45.1	22.4	3.6	2.99 (.85)
4. Unnecessary risks should be avoided in encounters. (*n* = 304)	0.0	1.6	11.8	52.0	34.5	4.19 (.70)
5. The most important role of an officer responding to a crisis is to stabilize the situation. (*n* = 304)	0.7	3.6	17.1	62.8	15.8	3.89 (.72)
6. In crisis situations, it is beneficial to keep a subject talking. (*n* = 304)	0.0	4.9	24.7	58.9	11.5	3.77 (.71)
7. In many cases, the use of force against a person in crisis can be avoided. (*n* = 304)	0.7	15.5	46.7	32.6	4.6	3.25 (.79)
8. As a person's emotions rise, their rational thinking declines. (*n* = 304)	0.3	0.0	6.9	55.6	37.2	4.29 (.62)
9. When responding as a team, it's important to designate roles in the crisis intervention. (*n* = 304)	0.0	1.0	11.8	59.5	27.6	4.14 (.65)
10. The majority of time spent communicating with a subject should be spent listening. (*n* = 304)	0.0	3.0	33.2	52.0	11.8	3.73 (.70)
11. An officer's nonverbal communication, such as body language, influences how a subject reacts. (*n* = 304)	0.3	2.3	14.1	61.2	22.0	4.02 (.70)
12. I know how to slow down an encounter with a person in crisis. (*n* = 304)	0.0	0.7	16.1	67.4	15.8	3.98 (.59)
13. Situational stress is no excuse for a person to act irrational. (*n* = 304)	2.3	34.9	38.2	20.4	4.3	2.89 (.90)
14. Responding to persons in crisis should not be a role of the police. (*n* = 304)	3.6	18.4	35.9	21.7	20.4	3.37 (1.11)
Interactions with a Person in Crisis Index (*n* = 304)	Mean = 39.40	SD = 3.94	Min: 28	Max: 50		

Index is comprised of all items <u>except</u> for Items 2, 3, 13, and 14 (α = .78)

Table 17. Changes in IMPD Officer Attitudes Toward Use of Force (Pre v. Post, Matched)

			Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	$\bar{X}$ (SE)	*t*	*W*
1.	Officers are not allowed to use as much force as is necessary to make suspects comply. (*n* = 498)	Pre	9.6	39.0	28.9	16.7	5.8	2.70 (.05)	5.41*	5.41*
		Post	16.1	47.6	20.5	11.5	4.4	2.41 (.05)		
2.	It is sometimes necessary to use more force than is technically allowable. (*n* = 495)	Pre	20.0	39.0	26.9	12.7	1.4	2.37 (.04)	-.74	-.23
		Post	19.2	42.6	20.0	15.6	2.6	2.40 (.05)		
3.	Verbally disrespectful suspects sometimes deserve physical force. (*n* = 497)	Pre	40.2	46.1	10.7	2.4	0.6	1.77 (.03)	1.16	1.71
		Post	41.9	46.9	8.3	2.2	0.8	1.73 (.03)		
4.	Refraining from using force when you are legally able to puts yourself and other officers at risk. (*n* = 496)	Pre	4.8	31.7	39.9	16.7	6.9	2.89 (.04)	3.36*	3.48*
		Post	7.5	36.1	36.1	16.1	4.2	2.74 (.04)		
5.	It is important to have a reputation that you are an officer who is willing to use force. (*n* = 499)	Pre	17.0	38.7	28.5	13.6	2.2	2.45 (.04)	3.73*	4.35*
		Post	23.3	40.5	23.9	9.2	3.2	2.29 (.05)		
6.	Not using force when you could have makes suspects more likely to resist in future interactions. (*n* = 498)	Pre	9.2	48.0	31.7	6.8	4.2	2.49 (.04)	5.52*	5.81*
		Post	16.1	51.8	24.1	6.6	1.4	2.26 (.04)		
7.	It is important that my fellow officers trust me to handle myself in a fight. (*n* = 499)	Pre	0.4	2.0	10.0	56.3	31.3	4.16 (.03)	5.43*	5.36*
		Post	1.6	3.4	15.0	56.9	23.1	3.96 (.04)		
		Pre	2.4	16.9	20.5	41.7	18.5	3.57 (.05)	-1.87	-1.74

		Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	X̄ (SE)	*t*	*W*
8. Trying to talk my way out of a situation is always safer than using force. (*n* = 497)	Post	2.0	13.9	21.3	41.5	21.3	3.66 (.05)		
9. It is important that my fellow officers trust my communication skills. (*n* = 498)	Pre	0.0	0.0	4.2	60.8	34.9	4.31 (.02)	.73	.31
	Post	0.2	0.8	3.6	60.8	34.5	4.29 (.03)		
10. I respect officers' ability to talk suspects down rather than using force to make them comply. (*n* = 498)	Pre	0.0	0.2	7.4	55.2	37.2	4.29 (.03)	-1.27	-1.13
	Post	0.2	0.2	5.6	54.2	39.8	4.33 (.03)		
11. Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, opposed to later. (*n* = 498)	Pre	4.2	39.6	37.8	14.5	4.0	2.74 (.04)	6.94*	7.09*
	Post	12.7	43.0	33.7	8.0	2.6	2.45 (.04)		
Attitudes Toward Use of Force Index (*n* = 485)	Pre	-	-	-	-	-	33.49 (.19)	-6.33*	-6.34*
	Post	-	-	-	-	-	34.47 (.20)		

*** Statistically significant at *p* < .05**
Index comprised of all items <u>except</u> for Items 1 and 7 (Pre: α = .70; Post: α = .69)

Table 18. IMPD Officer Attitudes Toward Use of Force – Pre-Training Survey (All Respondents)

		Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1.	Officers are *NOT* allowed to use as much force as is necessary to make suspects comply. (*n* = 866)	9.6	36.3	30.3	18.1	5.8	2.74 (1.05)
2.	It is sometimes necessary to use more force than is technically allowable. (*n* = 864)	19.0	35.7	30.8	12.5	2.1	2.43 (1.00)
3.	Verbally disrespectful suspects sometimes deserve physical force. (*n* = 866)	37.3	49.2	11.2	1.96	0.4	1.79 (.74)
4.	Refraining from using force when you are legally able to puts yourself and other officers at risk. (*n* = 865)	4.6	30.8	40.0	17.8	6.8	2.91 (.97)
5.	It is important to have a reputation that you are an officer willing to use force. (*n* = 866)	15.9	39.0	29.8	13.5	1.7	2.46 (.97)
6.	Not using force when you could have makes suspects more likely to resist in future interactions. (*n* = 898)	8.4	48.0	31.6	7.6	4.3	2.51 (.91)
7.	It is important that my fellow officers trust me to handle myself in a fight. (*n* = 866)	0.6	2.0	11.2	56.1	30.1	4.13 (.73)
8.	Trying to talk my way out of a situation is always safer than using force. (*n* = 866)	3.0	16.3	23.7	39.7	17.3	3.52 (1.05)
9.	It is important that my fellow officers trust my communication skills. (*n* = 866)	0.1	0.2	5.9	61.0	32.8	4.26 (.58)
10.	I respect officers' ability to talk suspects down rather than using force to make them comply. (*n* = 866)	0.1	0.4	9.1	52.2	38.2	4.28 (.65)
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. (*n* = 864)	4.2	37.9	40.3	13.7	4.1	2.76 (.87)
Attitudes Toward Use of Force Index (*n* = 862)		Mean = 33.20		SD = 4.28		Min: 17 Max: 44	

Index is comprised of all items <u>except</u> for Items 1 and 7 (α = .70)

Table 19. IMPD Officer Attitudes Toward Use of Force – Post-Training Survey (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Officers are *NOT* allowed to use as much force as is necessary to make suspects comply. (*n* = 1,146)	16.3	45.5	24.0	11.1	3.1	2.39 (.99)
2. It is sometimes necessary to use more force than is technically allowable. (*n* = 1,140)	17.1	39.2	25.3	16.3	2.1	2.47 (1.02)
3. Verbally disrespectful suspects sometimes deserve physical force. (*n* = 1,145)	40.6	46.6	9.9	2.1	0.8	1.76 (.78)
4. Refraining from using force when you are legally able to puts yourself and other officers at risk. (*n* = 1,145)	6.0	36.1	35.0	18.1	4.8	2.80 (.97)
5. It is important to have a reputation that you are an officer willing to use force. (*n* = 1,144)	22.6	39.2	27.1	9.0	2.2	2.29 (.98)
6. Not using force when you could have makes suspects more likely to resist in future interactions. (*n* = 1,148)	14.5	49.1	26.7	8.5	1.2	2.33 (.87)
7. It is important that my fellow officers trust me to handle myself in a fight. (*n* = 1,144)	1.4	4.3	16.1	54.2	24.0	3.95 (.83)
8. Trying to talk my way out of a situation is always safer than using force. (*n* = 1,144)	1.8	13.4	24.7	40.3	19.8	3.63 (1.00)
9. It is important that my fellow officers trust my communication skills. (*n* = 1,147)	0.1	0.6	5.4	59.0	34.9	4.28 (.60)
10. I respect officers' ability to talk suspects down rather than	0.2	0.3	8.6	53.1	37.8	4.28 (.64)

using force to make them comply. (*n* = 1,148)						
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. (*n* = 1,145)	11.2	42.2	36.8	7.3	2.5	2.48 (.88)
***Attitudes Toward Use of Force Index* (*n* = 1,112)**	Mean = 34.1		SD = 4.2		Min: 16	Max: 45

Index is comprised of all items <u>except</u> for Items 1 and 7 (α = .69)

Table 20. IMPD Officer Attitudes Toward Use of Force – Follow-Up (All Respondents)

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. Officers are *NOT* allowed to use as much force as is necessary to make suspects comply. (*n* = 297)	10.4	39.7	29.3	16.2	4.4	2.64 (1.01)
2. It is sometimes necessary to use more force than is technically allowable. (*n* = 296)	16.6	39.9	28.4	14.2	1.0	2.43 (.96)
3. Verbally disrespectful suspects sometimes deserve physical force. (*n* = 297)	29.0	51.9	14.5	4.0	0.7	1.96 (.81)
4. Refraining from using force when you are legally able to puts yourself and other officers at risk. (*n* = 297)	3.0	27.6	40.7	21.2	7.4	3.02 (.95)
5. It is important to have a reputation that you are an officer willing to use force. (*n* = 296)	11.5	35.1	35.5	14.9	3.0	2.63 (.97)
6. Not using force when you could have makes suspects more likely to resist in future interactions. (*n* = 296)	6.4	46.3	33.1	11.2	3.0	2.58 (.88)

7. It is important that my fellow officers trust me to handle myself in a fight. (*n* = 297)	0.3	0.7	8.8	53.2	37.0	4.26 (.67)
8. Trying to talk my way out of a situation is always safer than using force. (*n* = 297)	3.4	13.1	31.7	35.7	16.2	3.48 (1.02)
9. It is important that my fellow officers trust my communication skills. (*n* = 297)	0.0	0.3	5.1	58.6	36.0	4.30 (.58)
10. I respect officers' ability to talk suspects down rather than using force to make them comply. (*n* = 296)	0.0	0.3	13.5	50.7	35.5	4.21 (.68)
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. (*n* = 297)	3.4	28.0	44.8	19.2	4.7	2.94 (.89)
***Attitudes Toward Use of Force Index* (*n* = 296)**	Mean = 32.43		SD = 4.29		Min: 20	Max: 45
Index is comprised of all items <u>except</u> for Items 1 and 7 (α = .71)						

Table 21. IMPD Officers' Self-Reported Use of ICAT Skills at Follow-Up

In the last 60 days, did you apply…	**Never (%)**	**Seldom (%)**	**Sometimes (%)**	**Often (%)**	**Frequently (%)**	**Mean (SD)**
1. …any strategies from the ICAT training in your work? (*n* = 267)	31.1	19.1	28.5	12.7	8.6	2.49 (1.28)
2. …the CDM model during an encounter with citizens? (*n* = 266)	29.3	19.6	27.8	13.2	10.2	2.55 (1.31)
3. …ICAT Communications Skills with a subject? (*n* = 266)	23.7	16.2	24.1	16.9	19.2	2.92 (1.43)
4. …the Reaction Gap Strategy to keep a favorable position between you and the subject? (*n* = 264)	22.7	12.1	20.5	13.6	31.1	3.18 (1.54)
5. …the Tactical Pause Strategy during a citizen encounter? (*n* = 265)	31.3	19.6	19.3	18.9	10.9	2.58 (1.38)

Note: Seldom = 1 per month; Sometimes = 2-3 times per month; Often = 1 per week; Frequently = more than 2-3 times per week

Table 22. IMPD Officers' Perceived Obstacles Preventing Use of ICAT Skills

In the last 60 days, were there any obstacles that prevented you from using…	The CDM Model (*n* = 266)	ICAT Communication Skills (*n* = 266)	Reaction Gap Strategy (*n* =264)	Tactical Pause Strategy (*n* = 265)
No opportunity	27.4	25.6	29.2	30.9
Lack of time	10.9	9.4	6.1	8.3
Could not remember the strategy	19.9	12.0	4.2	5.3
Did not know how to use the strategy	1.5	0.4	1.1	0.4
Did not want to use the strategy	6.0	3.4	1.5	1.9
Did not think the strategy would work	4.9	3.4	2.7	3.0
Other	6.0	5.6	5.7	3.8
N/A. There were no obstacles	37.6	46.2	53.8	49.8

***Notes*: Select all that Apply (totals will not add up to 100%)**

Supervisor Surveys

Table 23. IMPD Supervisor Survey Respondent Characteristics (n = 171)

Demographic Characteristic	First-line Supervisors	
Age		
30-34	1.17	(2)
35-39	9.94	(17)
40-44	15.79	(27)
45-49	22.81	(39)
50+	40.35	(69)
missing	9.94	(17)
Sex		
Male	74.27	(127)
Female	12.87	(22)
Unknown	0.58	(1)
missing	12.28	(21)
Race		
White	66.67	(114)
Black/African American	12.87	(22)
American Indian/Alaskan Native	0.58	(1)
Other	2.92	(5)
Two or More Race	3.51	(6)
missing	13.45	(23)
LE Experience		
5-9 Years	2.34	(4)
10-14 Years	9.36	(16)
15-19 Years	15.79	(27)
20 Years or More	61.99	(106)
missing	10.53	(18)
Education		
High School	1.75	(3)
Less than two years of college	16.37	(28)
Associate's Degree	15.79	(27)
Bachelor's Degree	45.61	(78)
Graduate Degree	9.36	(16)
missing	11.11	(19)
Supervising Experience		
Less than 1 year	4.09	(7)
1-4 years	21.64	(37)
5-9 Years	22.22	(38)
10-14 Years	14.04	(24)
15-19 Years	8.19	(14)
20 Years or More	19.30	(33)
missing	10.53	(18)

Table 24. IMPD Supervisor Self-Reported Supervision Activities

		Never (%)	Seldom (%)	Sometimes (%)	Often (%)	Frequently (%)	Mean (SD)
1.	Other than when it is required by department policy, how frequently do you go on your own initiative to incidents that your subordinate officers are handling? (*n* = 157)	13.4	10.8	15.3	24.2	36.3	3.59 (1.41)
2.	How frequently do your officers ask you to come to the incidents they are handling? (*n* = 155)	14.8	15.5	27.7	21.3	20.7	3.17 (1.33)
3.	How frequently do you conduct video reviews of incidents handled by your subordinate officers? (*n* = 154)	17.5	23.4	20.1	22.1	16.9	2.97 (1.36)
4.	When you are on the scene of an incident with your officers, how frequently do you tell them how to handle the incident? (*n* = 157)	14.7	49.7	24.8	9.6	1.3	2.33 (.89)
5.	When you are on the scene of an incident with your officers, how frequently do you take it over and handle the incident yourself? (*n* = 155)	43.2	40.7	12.9	3.2	0.0	1.76 (.80)
6.	How frequently do you talk with you officers about their performance in incidents that you observe? (*n* = 154)	7.8	18.2	25.3	31.8	16.9	3.32 (1.18)

Table 25. IMPD Supervisor Perceptions Related to *Using* ICAT De-Escalation Skills

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I am confident using ICAT de-escalation skills during my encounters with citizens. (*n* = 170)	0.6	1.8	11.2	66.5	20.0	4.04 (.66)
2. I am confident using ICAT de-escalation skills during interactions with my subordinate officers. (*n* = 170)	0.6	1.8	12.4	65.9	19.4	4.02 (.67)
3. I receive the necessary equipment from my department to de-escalate situations. (*n* = 168)	1.2	7.7	35.1	46.4	9.5	3.55 (.82)
4. I receive sufficient training in de-escalation. (*n* = 169)	1.2	3.6	18.9	60.4	16.0	3.86 (.76)
5. I receive the necessary support from my supervisors to use ICAT de-escalation skills. (*n* = 169)	0.6	2.4	25.4	57.4	14.2	3.82 (.72)
6. When officers use ICAT de-escalation skills properly, encounters with citizens will often result in a positive resolution. (*n* = 170)	0.6	1.8	28.8	54.1	14.7	3.81 (.72)
7. Some encounters with citizens require additional less-lethal equipment than is currently available. (*n* = 169)	0.6	8.9	24.3	53.3	13.0	3.69 (.82)
8. My subordinates need more training in de-escalation than is currently provided. (*n* = 170)	4.7	25.9	35.9	30.6	2.9	3.01 (.94)
9. Training supervisors in ICAT de-escalation skills is also useful for interacting with and managing subordinates. (*n* = 170)	0.6	2.4	23.5	61.2	12.4	3.82 (.69)
Perceptions of Using ICAT Skills Index (n = 167)	Mean = 23.2		SD = 3.0		Min: 9 Max: 30	
Index comprised of items 1 through 6 (α = .80)						

Table 26. IMPD Supervisor Perceptions Related to *Supervising* ICAT De-escalation Skills

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean (SD)
1. I am able to effectively supervise subordinates' use of ICAT de-escalation. (*n* = 168)	1.8	4.2	27.3	56.6	10.1	3.69 (.78)
2. I am able to effectively coach subordinates' use of ICAT de-escalation skills. (*n* = 168)	1.8	3.6	25.6	59.5	9.5	3.71 (.76)
3. I receive the necessary equipment from my department to supervise my subordinates' use of ICAT de-escalation skills. (*n* = 168)	1.8	6.6	41.1	47.6	3.0	3.44 (.74)
4. I receive sufficient training to supervise my officers' use of ICAT de-escalation skills. (*n* = 168)	1.8	8.9	27.4	55.4	6.6	3.56 (.82)
5. I need more support from my supervisors to supervise my subordinates' use of ICAT de-escalation skills. (*n* = 167)	1.8	14.4	41.3	35.9	6.6	3.31 (.86)
6. It is difficult to supervise the use of ICAT de-escalation skills by my subordinate officers. (*n* = 167)	1.2	15.6	31.7	46.1	5.4	3.39 (.86)
Perceptions of Supervising ICAT Skills Index (n = 168)	Mean = 14.4		SD = 2.7		Min: 4	Max: 20

Index comprised of items 1 through 4 (⍰ = .90)

Table 27. IMPD Supervisor's Self-Reported Supervision Activities Related to ICAT De-escalation Skills

	Never (%)	Seldom (%)	Sometimes (%)	Often (%)	Frequently (%)	Mean (SD)
1. How frequently do you talk with your subordinate officers generally about the use of ICAT de-escalation skills? (*n* = 161)	14.3	36.7	31.1	10.6	7.5	2.6 (1.1)
2. How often do you have discussions with subordinates about their use of ICAT de-escalation skills during a specific incident? (*n* = 161)	14.9	29.2	32.9	16.8	6.2	2.7 (1.1)
3. How frequently do you counsel subordinates about not using ICAT de-escalation skills when they should have? (*n* = 159)	37.7	40.9	13.2	6.9	1.3	1.9 (1.0)
4. How frequently do you document the use of ICAT de-escalation skills in use of force reports? (*n* = 159)	23.9	22.6	18.2	20.1	15.1	2.8 (1.4)
5. How frequently do you document the use of ICAT de-escalation skills in letters of commendation for subordinate officers? (*n* = 159)	27.0	28.9	26.4	12.6	5.0	2.4 (1.2)
6. How frequently do you document the use of ICAT de-escalation skills in some other way (excluding use of force reports and commendation letters)? (*n* = 159)	34.0	32.7	20.1	10.1	3.1	2.2 (1.1)
ICAT Supervision Activities Index (n = 156)	Mean = 14.6		SD		Min: 6	Min: 6

Index comprised of all 6 items (α = .90)

Table 28. IMPD Supervisor Field Observation of Subordinates' ICAT Skills

	Never (%)	Seldom (%)	Sometimes (%)	Often (%)	Frequently (%)	Mean (SD)
1. How frequently do you observe your subordinate officers using ICAT de-escalation skills? (*n* = 164)	12.2	26.8	17.1	27.4	16.5	3.1 (1.3)
2. When observing subordinate officers, how frequently do they use *ICAT Communication Skills* (such as actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject)? (*n* = 142)	2.1	7.0	21.1	39.4	30.3	3.9 (1.0)
3. When observing subordinate officers, how frequently do they use the *Reaction Gap Strategy* (actively re-positioning to keep a favorable position between the officer and the subject)? (*n* = 143)	4.2	5.6	21.7	33.6	35.0	3.9 (1.1)
4. When observing subordinate officers, how frequently do they use the *Tactical Pause Strategy* (sharing information and developing a strategy with other responding officers during a citizen encounter)? (*n* = 142)	2.8	10.6	23.9	28.9	33.8	3.8 (1.1)
5. When observing subordinate officers, how frequently do they attempt to use less lethal tools? (*n* = 143)	7.0	16.8	28.7	28.7	18.9	3.4 (1.2)
6. How often have you observed incidents handled by your subordinates where ICAT de-escalation skills were properly used, but were unsuccessful in achieving a positive resolution to an incident? (*n* = 143)	9.1	35.0	29.4	18.9	7.7	2.8 (1.1)
7. How often have you used ICAT de-escalation skills but were unsuccessful in achieving a positive resolution to an incident? (*n* = 157)	22.3	37.6	28.0	10.2	1.9	2.3 (1.0)

Note: items 2 through 6 show responses for those who did not select "Never" for item 1.

Table 29. IMPD Supervisor Video Observation of Subordinates' ICAT Skills

	Never (%)	Seldom (%)	Sometimes (%)	Often (%)	Frequently (%)	Mean (SD)
1. How frequently do you observe your subordinate officers using ICAT de-escalation skills? (*n* = 159)	20.1	17.6	20.8	28.3	13.2	3.0 (1.3)
2. When observing subordinate officers, how frequently do they use *ICAT Communication Skills* (such as actively gathering information from a subject, communicating to other officers, using active listening, or maintaining communication with a subject)? (*n* = 128)	0.0	11.7	23.4	34.4	30.5	3.8 (1.0)
3. When observing subordinate officers, how frequently do they use the *Reaction Gap Strategy* (actively re-positioning to keep a favorable position between the officer and the subject)? (*n* = 128)	0.0	8.6	22.7	42.2	26.6	3.9 (0.9)
4. When observing subordinate officers, how frequently do they use the *Tactical Pause Strategy* (sharing information and developing a strategy with other responding officers during a citizen encounter)? (*n* = 127)	0.0	11.8	22.1	37.8	28.4	3.8 (1.0)
5. When observing subordinate officers, how frequently do they attempt to use less lethal tools? (*n* = 127)	1.6	22.1	33.9	30.7	11.8	3.3 (1.0)
6. How often have you observed incidents handled by your subordinates where ICAT de-escalation skills were properly used, but were unsuccessful in achieving a positive resolution to an incident? (*n* = 154)	21.4	35.1	23.4	11.7	8.4	2.5 (1.2)

Note: items 2 through 5 show responses for those who did not select "Never" for item 1.

Table 30. Multivariate OLS Regression Results Predicting Frequency of Supervising ICAT Skills

	Frequency of Supervising ICAT Skills	
Variables	Coefficient	St. Error
Officer Age	-.215	.235
Male Officer	.685	.728
White Officer	-.166	.668
Bachelor's Degree or Higher	-.613	.491
Community Orientation	.081	.076
Intercept	15.313	2.739
N^{+}	71	
R^2	.071	

Notes: $^{+}$ Reduction in sample size is because of the use of listwise deletion.

** p<0.05, ** p<0.01, *** p<0.001 (two-tailed test)*