



Barriers to Effective De-escalation

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1 Introduction: Why De-escalate?

The police are required to justify their use of force in a specific situation and context with legal authorities that are articulated in abstract terms. As a result, these authorities are applied in a way that can result

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in a discrepancy between the legal use of force and the (ethically) legitimate use of force (Jackson et al., 2013; Jones, 2022; Tyler, 2002). This discrepancy is often visible in the recurrent media coverage and corresponding public attention on what often can be referred to as “lawful but awful use of force” (Jones, 2022). It poses challenges to the police in their efforts to develop and maintain public trust and, ultimately, to justify their legitimacy (for the United States of America, see Kochel & Skogan, 2021; for Latin America, see Malone & Dammert, 2021; for Europe, see Nägel & Vera, 2021; for South Africa, see Lamb, 2021). Negative impacts of decreased trust by the public and legitimacy are well documented for practical police work, including reduced cooperation (e.g., Ang et al., 2021; Tyler & Fagan, 2008) and officer well-being (e.g., Donner et al., 2015). In addition, perceptions of absent legitimacy and (procedurally) just conduct have been shown to increase non-compliance and risk of violence towards police (e.g., Gerber et al., 2018).

In a free and democratic society, police are bound by the principles of legality, necessity, and proportionality. Of all the available courses of action, officers must choose the one that (a) they achieve their goal with (necessity), (b) is legally justified (legality), and (c) is least intrusive in regard to citizens’ constitutionally guaranteed rights (proportionality; Staubli, 2017; Terrill & Paoline, 2013; Tyler & Huo, 2002). De-escalation is an essential course of action to ensure legality, necessity, and proportionality in law enforcement (Dunham et al., 2020; Zaiser et al., 2022), which is why we argue there is an ethical imperative for the police to de-escalate.

In addition, de-escalation does not only protect citizens but the physical safety of everyone who is involved in an encounter. Because de-escalation attempts to reduce the use of force, it reduces the risk of physical, psychological, and moral injury. Accordingly, de-escalation has

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been shown to be a potent predictor of officer safety (Engel et al., 2022; Oliva et al., 2010; Zaiser & Staller, 2015).

On a larger scale, de-escalation has been shown to facilitate public trust in the police: the more citizens perceive the police to operate fairly and with respect, the more they reciprocate, trust, and comply with them, and the more legitimacy they grant (Giles, 2002; Kyprianides et al., 2021; Reisig & Lloyd, 2009; Tyler, 2002). This has been demonstrated across national borders and cultural boundaries (Barker et al., 2008). As such, de-escalation is at the core of policing at the individual, the institutional, and the societal level.

In this chapter, we primarily refer to de-escalation in behavioral terms rather than using it to describe a situational state, like the result of behaviors that de-escalate a conflict. Correspondingly, we understand de-escalation to be any conduct practiced by police with the goal of preventing escalation.

As social beings, we exchange information and navigate our world through communication with each other, with and without words. From this point of view, we are not able to not communicate (Watzlawick et al., 2011). There is no social interaction without communication (Luhmann, 1981). Accordingly, the course of an encounter between a citizen and the police is primarily determined by verbal and non-verbal communication. It starts with the mere presence of an officer. It keeps shaping the interaction, even during the potential use of force. And it ends with the conclusion of the encounter or even thereafter, as words and actions of the police officer can have lasting effects on a citizen and predetermine the course of subsequent encounters down the road. Even during the use of force, which, in a broader sense, can be understood as communication, verbal communication does not cease. It accompanies police action either in the form of authoritative or de-escalatory communication.

Consequently, de-escalation does not end when the use of force starts. No matter which tool on their belt officers use to achieve their goals, de-escalation should always accompany all action they take to maintain legality, necessity, and proportionality. Its continued use demonstrates

the police's commitment to these principles. It gives them their best shot at earning and maintaining the trust of those who they serve. As a result, de-escalation is not a conventional tool in the box of the officer. It is a key competency that is the foundation of any subsequent action the police will take to protect life and prevent and prosecute crime.

While factors associated with the target of de-escalation effort remain outside a police officer's direct sphere of influence, approaches addressing the situation and environment of an escalated encounter have been proven to effectively de-escalate conflict situations and the persons causing them (e.g., creating time and distance, and/or containing dangerous conflict parties; Goodman et al., 2020; Police Executive Research Forum [PERF], 2016). Research on de-escalation, especially in the context of policing, is scarce (Engel et al., 2020, 2022). In addition, little has been studied about the effectiveness of any single de-escalation method (for law enforcement, see Engel et al., 2020; for mental health settings, see Robertson et al., 2012). Correspondingly, conceptual and substantial clarity on what constitutes effective de-escalation appears to vary not only among practitioners and training across police agencies (Sloan & Paoline, 2021) but also in research (Staller et al., 2019). For substantial discussions on what skills and abilities make up de-escalation and establish it as the core competency we argue it is, see Chapters 9 and 11 in this volume, and Chapters 27 and 29 in Volume II.

Recurring instances of high-profile uses of force, especially of citizens of color and/or going through psychological crisis (e.g., see Fryer, 2019; Fryer and Roland, 2016; Laneyonu & Goff, 2021), continue to show that the police do not always live up to this insight yet. In the remainder of this chapter, we will investigate factors that we found inhibit the adoption of de-escalation as a key competency in police conflict management and the corresponding organizational and individual commitment to live up to this realization, learn about its potential, and train to develop and maintain the corresponding craft and practice.

2 Why De-escalation Is Neither Trained Nor Practiced Sufficiently

There are several commonly held beliefs about de-escalation and its potential in police conflict resolution. In this section, we will discuss two and then show them—based on the empirical evidence reviewed here—to be misconceived. They contribute to a misguided understanding of de-escalation, which keeps officers from using it to its full potential. As a result, they fail to manage conflict during citizen encounters in ways that reduce the risk of escalation and put officer safety and the safety of the public at jeopardy.

Misconception 1: De-escalation Increases the Risk to Officer Safety

According to Engel et al. (2020), several tactics typically taught in de-escalation trainings are in stark contrast to more traditional approaches taught to officers to manage conflict during citizen encounters. As an example, they discuss how the need for officers to slow down during potentially violent situations is seen by many critics as a risk to officer safety. Creating time allows officers to wait for backup and assess the situation and to weigh different courses of action (De Dreu, 2003; PERF, 2016).

In an unpublished master capstone project, Landers (2017) analyzed five large police agencies. He used a pre-test, post-test design to measure the effect of the implementation of their mandatory de-escalation policies on officer safety risk. The former police officer controlled his results with similar sized police agencies and found increases in both officer injuries and officer deaths. However, the study neither reported statistical significance nor any effect sizes. In addition, Landers's (2017) research is on departmental policies instructing the use of de-escalation in the years that immediately followed their implementation. The study did not capture whether any de-escalation tactics were ultimately used or not in the field. Also, the former police officer did not control for potential changing numbers of encounters between time points. Yet, he published

the results of his study without peer review in *Police Magazine* and without any critical discussion of these shortfalls or any other limitations being identified.

Meanwhile, continued notions of the benefits of effective de-escalation and corresponding commitments in law enforcement (Office of Community Oriented Policing Services [COPS], 2015; Rahr & Rice, 2015; Zaiser & Staller, 2015), along with initial, self-report based, and observational data (Todak & James, 2018; Todak & White, 2019), have been confirmed by Engel et al.'s (2022) first robust randomized controlled trial with a mid-size US police agency. The results indicate significant reductions in use-of-force incidents and, with it, citizen and officer injuries, among others. Accordingly, the evidence does not allow for the conclusion that de-escalation increases the risk to officer safety.

As a result, the evidence available to date, both in terms of quality and in terms of quantity, disqualifies the argument that de-escalation increases risk to officer safety. De-escalation much more reduces risk and predicts safety.

Misconception 2: De-escalation Requires Collaboration

Several private for-profit law enforcement training providers have stated that de-escalation is collaborative in nature and requires the willingness of an emotionally escalated citizen to be de-escalated by the police (Bostain, 2020; Savage, 2019; von Kliem, 2020). Savage (2019) stated that “[t]hinking of de-escalation as a verb, an action the police can do to a suspect, fails to account for the two things required of the suspect for de-escalation to be successful”. He elaborated: “the suspect must first agree and then participate in the process.” Similarly, Bostain (2020) wrote that “[a]ll officers can do is utilize de-escalation strategies to help individuals choose the best possible outcome by choosing to de-escalate”.

While we believe this logic connects with the lived experience of all officers (for reasons discussed below in the next section), we find it does not account for the complexity of a potential use-of-force encounter. We agree with Bostain (2020), when he argues one fundamental truth about

de-escalation to be that it cannot be guaranteed. However, choosing an authoritative approach, or going hands-on and using physical force, cannot guarantee a suspect or an individual going through psychological crisis to end up in handcuffs—just as a conducted energy weapon (CEW) or duty pistol cannot guarantee incapacitation. A CEW might be deployed without a large enough spread, while a suspect shot at might be wearing body armor or just be missed by an officer's shots. This means that any successful action police officers use to enforce the law, regardless of whether it is de-escalation or the use of force, cannot be guaranteed and is subject to several determinants. These include the situation and the environment in which the enforcement action is taken (e.g., potential threats to third parties present vs. a contained situation), the legal and regulatory framework, within which the officer acts (e.g., judicial authorizations or exigent circumstances vs. civil rights), and the circumstances within and associated with the associated parties, including the officer (e.g., warrior vs. guardian mindset, experience, training) and the citizen (e.g., actively vs. passively resisting, mental state, or potential weapons; Zaiser et al., 2022).

We are not aware of any empirical research on the conscious willingness of an emotionally escalated person to de-escalate, when offered or asked to. In contrast, creating time and distance is an established officer safety tactic (PERF, 2016). It does not only afford police officers an increase in relative safety and time to assess and come up with additional options, potential containment of the situation, and arrival for backup. Time and distance also de-escalate. Contrary to this misconception, absent of a potentially de-escalating person's conscious willingness, experimental psychological research has shown repeatedly that time pressure impedes information processing and is often followed by poor decision-making (De Dreu, 2003). At the same time, creating time (Hallett & Dickens, 2015, or Goodman et al., 2020, for emergency and psychiatric nursing; Bansal et al., 2020, as well as Dadds & Tully, 2019, for children with conduct problems, for instance) and safe spaces through containment (e.g., Hallett & Dickens, 2015, or Goodman et al., 2020, for psychiatry) have been successfully used as evidence-based de-escalation methods in primary and secondary care settings. Likewise, recognizing the early warning signs of escalation and avoiding triggers has been well

studied and is generally understood to be a viable de-escalation approach in psychiatric nursing (Goodman et al., 2020; Jamieson et al., 2000; for an overview of identified warning signs preceding escalation of mental health patients, see Brewer et al., 2017): if a person is not exposed to a trigger, it will not escalate them, no matter what their inner disposition about conflict is.

At the bottom line, both escalation and de-escalation of a situation are determined by the mutually constitutive interplay of the situational context and the plethora of layers of determinants, all of which lie within all actors that are involved in the encounter. Accordingly, the success of any action taken by police to maintain public safety and enforce the law is only partially within their realm of control. Just as police officers owe to the public to shoot well enough to minimize the risk of stray bullets, they have to be able to de-escalate well enough to minimize the risk of shooting in the first place.

3 Barriers to De-escalation

These misconceptions might inhibit officers from either practicing de-escalation in the field or practicing it in training in ways that allow law enforcement to unfold its full potential. We argue that they are rooted in (i) several cognitive biases and heuristics that determine officers' information processing and decision making, (ii) the organizational environment that they operate in, and (iii) in the ways in which they all interact with each other.

What follows is not an exhaustive list of either cognitive biases and heuristics or environmental factors that impact de-escalation. The throughline we follow in our argument is to be understood as a description of a logically likely way of several cognitive operations. Its purpose is to identify leverage points where education and training interventions can be implemented effectively. It is not an explanation of a proven causation.

Input: How Officers Perceive, Process, and Make Sense of Information

Action Bias

As mentioned in the previous section, quick and decisive action to deal with dangerous and volatile situations is still seen by many to be the safest approach (Engel et al., 2020). After all, a plethora of factors have been found to support the preference of officers to gain situational control and resolve incidents quickly rather than slowly. These include (but are not limited to) the automation of routine activities (McDaniel et al., 1988), which allows police officers to read situations and citizens through their “perceptual shorthand” (Skolnick, 1966) and resolve incidents quicker and more efficiently. However, this comes at the cost of paying attention to relevant cues and behaviors outside the scope of the officers’ perceptions, as well as of mindful engagement with situation and citizen (DeAngelo & Owens, 2017).

All these factors appear to contribute to an *action bias* that has police officers often taking immediate action to neutralize a threat and/or resolve a situation, even if taking more time to assess, deliberate, and communicate were to lead to equal or better outcomes. This phenomenon has also been studied in emergency medical settings, where time is of the essence just as much, if not more (Kiderman et al., 2013). Instances, in which taking immediate action backfire and make things worse, can be seen in repeatedly documented cases of officer-created or officer-induced jeopardy (Lee, 2021; Smith, 2022): despite an absent risk to the public or any third parties, officers immediately confront citizens, often armed with edged objects and/or going through psychological crisis. As a result, they escalate the situation to the point where they have often to use lethal force to defend themselves. Contrary to the ill-conceived notion that de-escalation increases risk to officer safety, slowing things down will increase not only their safety but also protect life and limb of anybody involved in the encounter.

When it comes to selecting between available courses of action in a dynamic situation, the distinction between rash action and “slowing things down” is not dichotomous. These are also not mutually exclusive

or opposite ends of a linear continuum. The above-mentioned complex and mutually constituting interplay of factors stemming from the police officer, the citizen, and the situational context of their encounter allows for an almost infinite number of possible scenarios that may play out. This allows officers to actually slow the situation down and contain a potentially dangerous citizen, yet still be driven by *action bias* in their attempts to de-escalate the individual. If officers do not afford sufficient time to diffuse the crisis but still attempt to rush to resolution, they might only delay escalation (Vecchi et al., 2019). Such crisis intervention attempts do not exhaust the potential for de-escalation. As a result, they do not lower the emotional intensity of the citizen to the point where the situation can be resolved peacefully. What is then left to officers is to take action and move to the next step on the use-of-force continuum, which will escalate the situation and increase the risk for all parties involved. A corresponding example constitutes the confrontation of a contained citizen going through psychological crisis in their apartment by a SWAT team (SIU, 2021). Police officers need to understand that de-escalation will take more time than any other way to maintain public safety and enforce the law.

Inattentional Bias, Cognitive Tunneling, and Task Fixation

Such rash action also constrains the time available to officers to process relevant observations and perceptions, as well as to make and execute decisions with regards to their next course of action (Buckley et al., 2022; Garrison et al., 2012; Kleider-Offutt et al., 2016). One result of exhausted cognitive capacity with significant influence on how a citizen encounter can unfold is the corresponding inattentional bias or blindness (Dirkin, 1983). This is also known as cognitive tunneling (especially in aviation) and, in policing, is often associated with tunnel vision and auditory exclusion (e.g., Klinger & Brunson, 2009). Especially under high cognitive load, police officers are at risk of narrowing their attentional focus on the most salient cues and stimuli: typically, the most prominent and outstanding visual, auditory, olfactory, and tactile stimuli. As a result, they often miss the more subtle but possibly more important

cues that allow them to assess the situation and the safety of everyone involved more effectively. For instance, they might focus on the person that challenges their directions loudest instead of the person that is subtly preparing to attack.

Correspondingly, ongoing research by Zaiser (2022) has shown that, in a hostage-taking scenario, crisis negotiators display the tendency to fixate their communication on achieving a task at hand. This happens often at the expense of the rapport they were trying to build with the subject, a *sine qua non* in crisis negotiations (Vecchi et al., 2019). In the scenario, crisis negotiators typically attempt to persuade the hostage-taker to allow them to directly speak to a hostage. Obtaining proof of life, especially by actively speaking to a hostage, is one of the major tasks to be accomplished by crisis negotiations (McMains et al., 2020). However, repeated attempts to change the hostage-taker's mind results for many crisis negotiators in an argument, which ends up increasing their emotional intensity rather than decreasing it. This ultimately undermines the stabilization of the situation, one of the paramount goals in crisis negotiation (McMains et al., 2020).

Crisis negotiators might be at risk of fixating on obtaining proof of life. Police officers on patrol might be at risk of undermining their de-escalation attempts by getting stuck in the endless repetition of issuing authoritative commands, such as “drop the knife”, which can be seen on countless video clips of use-of-force encounters across the globe.

Attentional Bias, Confirmation Bias, and Availability Bias

In addition, inattentive bias, cognitive tunneling, and task fixation can set off a perceptual cascade that will determine (a) where a police officer will allocate and direct their conscious attention, and (b) the subsequent information processing (Dibbets et al., 2021). Humans typically forage information selectively (Prat-Ortega & de la Rocha, 2018; Wimmer et al., 2015): the propensity to forage information and interpret it in ways that best supports already established beliefs and worldviews is commonly referred to as confirmation bias (Hart et al., 2009; Nickerson, 1998). Conversely, humans are quick to discount and find flaws

in information and interpretations that contradict what they believe to be true and question their worldviews.

The tendency to selectively search, perceive, learn, and interpret information often works hand in hand with the availability heuristic. Tversky and Kahneman (1973) showed in a series of studies how humans tend to infer relevance, importance, and frequency of perceptions and observations from how easily they can retrieve them from their memory. This heuristic allows for a more efficient navigation of the physical and social environment they live in. The researchers referred to this finding as the availability heuristic: the assumption that those memories that come easiest to mind are always those that contain more important and more relevant information for the task at hand. Similarly, memories of events that are associated with more serious or more severe consequences are easier to retrieve and therefore evaluated to be more relevant. Ultimately, the more relevant or important the information retrieved from memory is evaluated, the more it is deemed representative of whatever environment or situation it is associated with. It is important to keep in mind how attentional and confirmation bias feed information to that same memory.

While this shortcut might recall relevant information most of the time, it does not guarantee accuracy. Police officers find themselves regularly in complex and/or dynamic situations, usually with incomplete information and a high degree of uncertainty, in which they tend to rely on availability as a heuristic (Gore et al., 2015; Hine et al., 2018). In order to effectively manage such situations, they will draw from training and past experiences to make predictions about how interactions with others will precipitate. In other words, the availability heuristic helps officers fill the gaps, based on what their training and their experiences taught them about similar situations. As a result, both training content and perceptually selective input to the associative memory that feeds the availability heuristic can bias police officers' behavioral response and prevent the consideration of alternative approaches to conflict resolution.

For instance, Pinizzotto's methodologically deficient (King & Sanders, 1997; Zaiser et al., 2022) research on police officers killed in the line of duty (Federal Bureau of Investigation [FBI], 1993) and on police officers who survived potentially lethal assaults (Pinizzotto et al., 1997), has been

widely circulated within law enforcement, for example through the *FBI Law Enforcement Bulletin* (Pinizzotto & Davis, 1995, 1999; Pinizzotto et al., 1997, 1998, 2000, 2002a, 2002b, 2006). Police officers who have been trained to see a potentially lethal threat in every citizen encounter, thus might respond to it as such. The subsequent potential escalation will confirm what was learned in training and make the officers' behavioral response a path-dependent consequence, which will reinforce and perpetuate itself down the road. Chapter 2 of this volume provides a more in-depth overview of how danger narratives shape training and practice in policing.

Summary: Input

Police officers' rash attempts to resolve potentially violent situations counteracts proven de-escalation strategies, such as creating time and distance and containing threats. It also takes its toll on their information processing and decision-making capacity. Instead of slowing things down, officers engage before they have evaluated possible alternative courses of action, received backup, and allowed an encountered citizen's emotional intensity to wear off (action bias). As relevant information exceeds officers' capacity to process it, their perception and attention often narrow down to the most salient (cognitive tunneling), yet not necessarily most important (inattentional bias), environmental cues, and/or a task they set out to accomplish before they immersed themselves in the situation (task fixation). As officers then start to make sense of the situation, they direct their attention towards the cues and information (attentional bias) that confirms their beliefs about the citizen they encounter and the nature of the situation (confirmation bias). This will, ultimately, shape the experiences they submit to memory, from which, in turn, they will shape their expectations of how the situation might unfold (availability bias).

This sequence of cognitively biased information processing leads to a potentially skewed situational awareness.

Output: How Officers Make Decisions and Act in Naturalistic Environments

The input sequence introduced above does not only lead to a skew in situational awareness, it also biases the future decisions of officers. Because potentially escalating citizen encounters are already dynamic and complex at baseline, rushed engagement by the police only increases their volatility. Performing cognitively demanding functions, including making decisions in such situations where stakes and uncertainty are high, and information, time, and resources are limited, is studied under the guise of naturalistic decision-making (NDM; Klein, 1989, 2008). In this context, Klein (1989, 2008) established his recognition-primed decision-making model (RPD) on an empirical foundation of interviews and observational studies in urban and rural firefighting, the military, in intensive medical care, as well as in speed chess (Klein, 1989, 2008). RPD assumes that decision makers in an NDM environment will generate possible courses of action based on the memory retrieval of previous experiences. They then match it with the situational outlook and choose the first best option to implement. This is in contrast with more traditional approaches to decision-making, which are characterized by a more linear and analytical approach of comparing a limited set of options by a rational actor (Pachur & Marinello, 2013).

Accordingly, aside from previous experience, which police officers draw from during RPD, their level of situational awareness plays a crucial role in the process: officers perceive, consciously and subconsciously, situational cues from their environment, which they then use to match the most suitable past experience to inform their decision on a viable course of action. This, in turn, allows for a quicker decision, without tying up cognitive resources to analytically compare all available options and choose the one they find most appropriate. Instead of an optimal solution, officers take the first best option and reassess as the situation further unfolds (cf. Klein, 2008).

At the bottom line, it is the memory of the officer, where associations are made and actions are taken, that is primed by the recognition of situational cues. That means that associations are formed out of the memories of the subjective experiences of the officer.

Organizational Context

De-escalation Training: Lack of Conceptual and Didactical Clarity

Recently, research on organizational commitment to de-escalation training, the development of corresponding training, the implementation of such training, and on how to evaluate and assess it has been emerging (Bennell et al., 2022). However, little has been studied about the effectiveness of any single de-escalation method (Daffern et al., 2012; Engel et al., 2020). Correspondingly, conceptual and substantial clarity on what constitutes effective de-escalation appears to vary not only among practitioners and training across police agencies (Sloan & Paoline, 2021) but also in research (Staller et al., 2019; Todak & March, 2021). It is easy for an organization to subscribe to allocating more time and resources to de-escalation training. It is easy for an individual officer undergoing scenario training to subsume the use of a CEW as de-escalation. It is considered a less-lethal force option, after all. However, the escalatory potential of CEW is well-documented (e.g., Ariel et al., 2019) and might not be considered a means of de-escalation by other officers. Disagreement on what constitutes de-escalation and lacking knowledge of how to teach and apply it undermines effective de-escalation training. For instance, Integrated Communication, Assessment, and Tactics trainings (Engel et al., 2020) have produced initial evidence on their efficacy in the reduction of the use of force, and they have still been evaluated as packages. On their cover, they provide little clarity on their content.

In addition, the role that factors underlying the successful transfer of de-escalation skills, methods, and tactics from training and education in the real world that citizens encounter play are often unclear (Staller et al., 2019; Zaiser et al., 2022). These include, among others, personality, attitude, and motivation. While motivation and attitude, often formed through socialization in the organization and under its culture, can be influenced by training and education, personality and other dispositional factors are subject to recruiting and candidate selection, which are beyond the scope of this chapter.

De-escalation Training: Insufficient Time and Resources Allocated

Surveys in several countries across the globe have found a disparity in law enforcement training and education between the amount of time and resources allocated to the use of force (including physical fitness, especially during basic training) and to de-escalation. Law enforcement recruits and officers spend significantly more time training and maintaining skills associated with the use of force than with communication and de-escalation (COPS, 2015; PERF, 2015; Staller et al., 2020; Zaiser et al., 2022). This is in stark contrast to the reality of citizen encounters, which typically does not require the use of force (COPS, 2015; PERF, 2015). Furthermore, this disparity reflects a focus on building and maintaining a repertoire of reactive skills, since the use of force is typically a reaction to an escalation perceived by the police (COPS, 2015; PERF, 2015; Rubin et al., 1994). As a result, the training of de-escalation and communication skills falls short, which withdraws their potential to prevent escalation, de-escalate volatile situations, and reduce risk of bodily and psychological harm to everyone involved in the encounter (Barker et al., 2008; Gau et al., 2012; Giles, 2002; Kochel et al., 2013; Reisig & Lloyd, 2009; Tyler, 2002).

We argue that the countless instances of publicly documented officer-created jeopardy testify to the potentially fatal consequences of this training disparity. Officers yelling repeated commands, such as “drop the knife” or “don’t move”, especially during encounters with citizens going through psychological crisis or under the influence of drugs or alcohol (cf. cognitive tunneling, inattentional bias, and task fixation), appear to lack (i) a broader repertoire of available courses of action and approaches to problem-solving, (ii) the experience to choose the most viable one at the time, (iii) the flexibility to adapt if it doesn’t work, and (iv) the agility to implement another one, when appropriate. The literature on expertise and competence is conclusive: Drawing from a broad knowledge base and using skills and abilities, especially in stressful situations, requires corresponding education and training through deliberate practice (Campitelli & Gobet, 2011; Ericsson et al., 1993).

Summary: Catch-22

As we roll the argumentative steps taken in this section back, the predicament of a cognitive-behavioral catch-22 becomes apparent. A disproportionate amount of training and education time and resources is allocated to practice and maintain use-of-force skills do deal with violent citizens. This over-exposes officers in their training to bad, worse, and worst-case scenarios, which that are not representative of their daily duty (insufficient time and resources). The time and resources left for de-escalation often lack evidence on their efficacy and clarity as to what actually constitutes de-escalation, as well as how it is taught (lack of conceptual and didactical clarity). This leaves officers with a reduced certainty in the efficacy of their skills and ability and a correspondingly low comfort in using de-escalation. At the same time, use-of-force skills are taught much more consistently and frequently, which allows for officers to experience a comparatively higher level of comfort in their use in potentially violent situations, as they experience a higher degree of efficacy during training.

This makes it likely that officers' associative memory to store experiential knowledge represents use-of-force encounters and corresponding situational cues. As they take their training into the real world, this prompts/justifies the use of force, since it is more easily accessible than memories associated with de-escalation and corresponding cues (RPD, availability bias). In addition, it shapes the way officers perceive and interpret their environment (attentional bias), as it makes them then more likely to perceive environmental cues and stimuli that support their worldview of a constantly threatening environment (confirmation bias). The lack of alternative training exposure supports the situational cognitive tunneling, task fixation, and inattentional bias at the expense of less-trained, harder-to-retrieve, de-escalatory courses of action. The result is often an escalation of the situation, which, in turn, drives the action bias that starts a new, self-contained input-output cycle.

The interplay between these internal and external interferences manifests this self-perpetuating cycle on two levels, within a situation, as demonstrated above, as well as between situations, across a career lifespan. This cognitive-behavioral cycle keeps officers caught with a both

individually and group owned perspective on the potential and limits of de-escalation, which manifests itself in the commonly found opinions that lack scientific evidence or profound logic.

4 Conclusion

In this chapter, we have reiterated the ethical imperative of de-escalation and drawn the corresponding conclusion that de-escalation knowledge, skills, and abilities are a key competency for every law enforcement officer. We then identified two empirically unsupported but rather prominent notions on the limited efficacy of de-escalation in police conflict management. We have offered an explanation of how these misconceptions are rooted in a self-contained, cognitive-behavioral loop that is perpetuated by the organizational features of de-escalation training in law enforcement at large.

This leaves the question of how we can bust these myths. We need to break this feedback loop of a self-fulfilling prophecy to increase individual and organizational openness to de-escalation training and practice, so police officers can actually exhaust the full potential of de-escalation, when they manage conflict.

While, as noted in the previous section, substantial research on the efficacy of specific de-escalation methods is scarce, initial evidence on the efficacy of certain training packages is emerging: The PERF's ICAT training has been the first training module focused on de-escalation that has been rigorously evaluated and found to significantly reduce the use of force and associated injuries of both police officers and citizens (Engel et al., 2020). ICAT's (PERF, 2016) focus on concepts such as the "tactical pause" or using distance and cover to create time directly addresses the action bias discussed in the previous section.

As the evidence-base on de-escalation's efficacy begins to form, the police service will have to commit more time and resources to adopt these findings, so officers can be exposed to more and more different approaches to conflict management, which will add to their behavioral repertoire and, ultimately, increase the level of comfort, confidence, and

competence as they start to understand how to maximize the impact of de-escalation.

Avenues of further research include the evaluation of the efficacy of single methods and combinations of methods, as well as empirical tests of the barriers we have theorized impede effective de-escalation.

Key Takeaways**Police Officers**

We encourage police officers, who are regularly managing conflict with the public, to:

- Familiarize themselves with the cognitive-behavioral factors that shape the way they experience and interpret their worlds, including their level of comfort, confidence, and competency in de-escalation;
- Be open to de-escalation training and seek opportunities on and off the clock to educate and train accordingly;
- Step outside their comfort zone in training and in the field to increase their proficiency and advance their practice of de-escalation both in training and in the field—as long as officer safety allows them to.

Conflict Management Trainers

We encourage practical skills instructors and conflict management trainers to:

- Familiarize themselves with the cognitive-behavioral factors that shape the way they and the people they teach experience and interpret their worlds, including everyone's level of comfort, confidence, and competency in de-escalation;
- Familiarize themselves with the organizational factors that keep individual police officers and the police as a whole from practicing de-escalation as proficiently as the use of force;
- Acknowledgements that de-escalation requires not only training but also education and seek opportunities to design corresponding modules and sessions based on current research and in ways that address conceptual and didactical shortfalls.

Police Decision-Makers

We encourage police decision-makers to:

- Commit education and training under their area of command or responsibility to evidence-based best practices;
- Increase the amount of time and resources allocated to not just de-escalation training but also de-escalation education to reduce the disparity between the amount of time and resources allocated to de-escalation and the use of force topics;
- Reflect on de-escalation as a key competency in their service's policies and procedures.

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