A PHENOMENOLOGICAL EXAMINATION OF PEACE

OFFICERS' EXPERIENCE IN THE AFTERMATH OF

THE USE OF DEADLY FORCE

by

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STATEMENT OF DISSERTATION APPROVAL

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ABSTRACT

This dissertation is a phenomenological study presented in a three-article format. The dissertation is a phenomenological exploration of the lived experiences of peace officers following the use of deadly force. This is a qualitative study with quantitative data integrated for the purposes of providing additional perspective as well as a transparent means for the reader to check the author's description of the textual data. Quantitative data is included in the respective results sections.

The first article is entitled "A Phenomenological Examination of Internal Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript is part one of a two-part qualitative examination of peace officers' lived experience in the aftermath of deadly force incidents. The focus of the first manuscript are the individual factors affecting the process of resiliency.

Article two is entitled "A Phenomenological Examination of Ecological Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript is part two of a two-part qualitative examination of individual peace officers' experience in the aftermath of deadly force incidents. This article utilizes the same data set and methods as the first article. Themes pertaining to external factors affecting the process of resiliency are described.

Article three is entitled "Supporting Resilient Reintegration Following the Use of Deadly Force: Research Implications for Law Enforcement Agencies." This manuscript

is written as an editorial presenting recommendations for law enforcement agency policy and practice that support peace officer resilience during the process of investigating use of deadly force incidents.

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ACKNOWLEDGEMENTS

Twenty years ago I was impressed by a few educators who taught me to be a wilderness emergency medical technician. That experience opened my eyes to both experiential education and rescue work. I am proud to call myself a public safety professional and educator. It gives me tremendous pride to bring a patient into an emergency room to find someone who I have trained there to take the handoff report.

The ability to serve others is a privilege. To be there to help during someone's most desperate moments is a true calling. This research is dedicated to the women and men who serve our communities as public safety professionals. I am proud to be just one of the many people who have answered cries for help. This research is for those who have knelt on cold pavement in the dark trying to save a dying child. It is for those who know the familiar ache of missing Christmas mornings and family gatherings, for those who see and feel others' sadness, pain, death, and suffering every day. For those who have washed blood off of their boots, and for those who truly know that sometimes blood doesn't wash off. It is my sincere hope that as a society, we will recognize the price that public safety professionals pay to serve by providing them the best support that we can to help them in their times of need.

Immersion (and sometimes submersion) in public safety and education has at times eclipsed other aspects of my life. I would like to thank those people who have stood

by me and provided much needed support throughout it all. I would like to thank my committee for their support, flexibility and patience throughout the process of writing this dissertation. I would like to thank my parents, who gave me the work ethic and soft heart that has enabled me to do work that I am passionate about in a way that I am proud of. I owe many of my achievements to the love, generosity, and support of my parents. I thank my brother for being a true friend. Thank you for moving across the country (three times) so we can ski and climb more.

Finally, thank you to my wonderful wife, who has patiently waited for more time together while I pursued a PhD. The time that we have managed to squeeze in has been my greatest joy and has kept me sane. Thank you for your love and support. Now let's go play.

CHAPTER 1

INTRODUCTION

Critical incidents involving the use of deadly force by peace officers have recently received a great deal of attention. Media coverage has fueled national scrutiny of law enforcement, often calling for change to the investigation process following deadly force incidents. Careful scrutiny and oversight of the actions of peace officers is essential to the well-being of a nation. However, the impact of these traumatic incidents on the officer(s) involved should also receive consideration. This dissertation is a phenomenological inquiry into the lived experience of peace officers who have used deadly force in the line of duty.

Through rich descriptions of peace officers' life-altering experiences, this study presents data that can be used to inform policy and practice supporting recovery from traumatic incidents. As a society we ask our peace officers to put their lives on the line. The connection between routine occupational exposures to traumatic stress and negative health outcomes establishes that we also ask them to put their health on the line as well. As will be discussed in the literature review, a myriad of stress-related health problems have been well documented in police populations (Violante, 2006). With the levels of

exposure to occupational stress considered routine in law enforcement, peace officers experience increases in depression (Wang et al., 2010) and cardiovascular disease (Violante, 2006). Following exposure to critical incidents, severe depression, fear, tension, irritability, nightmares, powerlessness, and despair are common among peace officers (Karlsson & Christianson, 2003). The current study seeks to provide a deeper understanding of the peace officers' lived experience than what can be obtained through a survey alone.

"Resilience" refers to "the finding that some individuals have a relatively good psychological outcome despite suffering risk experiences that would be expected to bring about serious sequelae" (Rutter, 2006, p. 1). Richardson (2002) presents a metatheory of "resilience" consistent with Rutter's description. Conversely, "resiliency" is defined as "the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption" (Richardson, Neiger, Jensen, & Kumpfer, 1990, p. 34). The process of resiliency frames the current research and provides structure and terminology for the discussion of the target phenomena. Richardson et al. present a model of the process of resiliency in which the simplified stages of the process of resiliency are plotted sequentially along a waveform. The baseline for the waveform represents "biopsychospiritual homeostasis" (Richardson et al., 1990). The sequential stages are "interactions with life prompts, disruption, readiness for reintegration and the choice to reintegrate resiliently, back to homeostasis, or with loss" (Richardson, 2002, p. 311).

Three-Manuscript Format

The following dissertation is a phenomenological examination of the experience of peace officers who used deadly force in the line of duty. It is presented in a three-manuscript format. The three manuscripts are:

1) Chapter 2: "A Phenomenological Examination of Internal Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript is part one of a two-part qualitative examination of peace officers' experience in the aftermath of deadly force incidents. The first manuscript focuses on individual factors affecting the process of resiliency. Themes pertaining to internal factors affecting the process of resiliency are described.

2) Chapter 3: "A Phenomenological Examination of Ecological Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript is part two of a two-part qualitative examination of individual peace officers' experience in the aftermath of deadly force incidents. The second manuscript focuses on the ecological factors affecting the process of resiliency, such as the investigation process, community response, and media coverage. Themes pertaining to external factors affecting the process of resiliency are described.

3) Chapter 4: "Supporting Resilient Reintegration Following the Use of Deadly Force: Research Implications for Law Enforcement Agencies." This manuscript is written as an editorial presenting recommendations for law enforcement agency policy and practice that support peace officer resilience during the process of investigating use of deadly force incidents.

<center>Study Aims</center>

Several excellent theoretical and empirical foundations for traumatic stress interventions exist. However, there is a gap in the literature addressing practical, culturally competent design and integration of health promotion, education, and treatment interventions for peace officers. The ethos of law enforcement is complex and holds a strong influence on its members. As with any highly developed and unique culture, addressing this gap is crucial to the success of any health intervention implemented. This study aims to reduce this gap. The proposed research does not intend to develop new theory or treatment for traumatic stress. Rather, the overarching aim is to provide evidence-based recommendations needed for culturally competent integration of resources designed to support peace officer resiliency in the aftermath of the use of deadly force.

<center>Literature Review</center>

Traumatic Stress

The literature relating to traumatic stress was reviewed specific to public safety personnel as well as the subpopulation of peace officers. *Public safety personnel* is the terminology used to refer to personnel in occupations including law enforcement, emergency medical services, fire services, and emergency dispatchers. Public safety personnel are routinely exposed to high levels of stress (Alexander & Wells, 1991; Brown & Campbell, 1990; Crowe & Stradling, 1993; Davidson & Veno, 1978; Martin, McKean & Velkamp, 1986; Williams, Nicholas, & Bawa, 2011). Peace officers are exposed to both chronic and acute traumatic stressors throughout their careers. Peace

officers experience both physical and psycho-social stress on the job (Anderson, Litzenberger & Plecas, 2002).

The literature addressing the exposure to chronic and or prolonged stress clearly demonstrates a severe impact to the physical well-being of humans (Sapolsky, 2004). Acute and chronic stressors result in chronic activation of a stress response, which is pathogenic (Inslicht et al., 2011; Neylan et al., 2005; Witteveen et al., 2010). Specifically, this stress response can be observed and quantified as hypothalamic-pituitary-adrenal (HPA) axis activation. Repeated activation and overactivation of the human stress response and the corresponding rise in glucocorticoids is well documented, showing that peace officers exhibit high levels of stress response activation in the line of duty. HPA axis activation is present preceding, during, and after routine peace officer shifts (Anderson, Litzenberger, & Plecas, 2002). Due to the inherently complicated interaction between occupational stressors, individual differences, organizational environment, personal lives, and other influencing factors, it is impossible to eliminate potential confounding variables in field-based research investigating the impact of stress in public safety personnel. Dissent exists in opinion regarding the level of stress and the exact impact of that stress on the health and well-being of peace officers (Higgins, 1995). However, there is little contention that peace officers are routinely exposed to traumatic stressors in the line of duty and that there are physiological health consequences to this exposure.

Frequent exposure to stressors can also result in psychological maladies ranging from a subsyndromal constellations of signs and symptoms to full-blown stress disorders such as Complex Traumatic Stress Disorder (Rudofossi, 2007) or Posttraumatic Stress

Disorder (PTSD). As many as 26 % of public safety personnel suffer from Post-Traumatic Stress Disorder, meeting diagnostic criteria per the Diagnostic and Statistical Manual (DSM) of Mental Disorders (American Psychiatric Association, 2013; Martin, McKean, & Velkamp, 1986). Brown, Feilding, and Grover argue that in the course of police work, not only can acute stressors cause PTSD, but also that a "substantial minority of officers may be experiencing levels of distress associated with operational duties that require clinical intervention" (Brown, Fielding, & Grover, 1999, p. 324). Of those who are exposed to stressors but are not diagnosed with PTSD, as many as 75% of public safety personnel suffer PTSD symptoms, such as intrusive thoughts, that may impact their quality of life (Robinson, Sigman & Wilson, 1997). Several additional studies have shown that the incidence of public safety personnel who meet either the PTSD DSM criteria or who have significant subsyndromal effects of psychological trauma at some point during their career is greater than 50 % (Marmar et al., 2006).

Figure 1 below is an inventory of symptomology and pathology which has been linked to stress in the literature. Figure 1 was assembled from the following sources: Symptomology and pathology (Sapolsky, 2004), critical stress categories (Hoge, 2010; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004; Hoge, McGurk, Thomas, Cox, Engel, & Castro, 2008), and emotional signs and symptoms of traumatic stress from the US Veterans Administration (Norris & Hamblin, 2004; Orsillo, 2001).

The term *complex trauma* has been developed to address psychological trauma that "occurs repeatedly and escalates over its duration" (Courtois, 2008, p. 412). Repeated exposure to trauma specific to public safety personnel has been observed (Violanti et al., 2008). Despite any inconsistencies in the literature addressing police

stress, the reviewed body of research establishing the physical and psychological pathology associated with exposure to traumatic stress is sufficient to compel action. As a result of the established need for policy and practice mitigating and treating the increase in morbidity and mortality associated with traumatic stress, The National Institute of Justice (NIJ) has published recommendations that law enforcement agencies develop stress management and treatment programs (Finn & Tomz, 1997). Despite making a clear and compelling argument for stress programs for police officers, it is not clear that the practices recommended by the NIJ have been effectively implemented by agencies.

Other subgroups of public safety personnel, such as prehospital emergency medical personnel and firefighters, warrant similar investigation. Expanding the current research into these groups is discussed under Future Research in Chapter 3. A general consensus exists that peace officers are exposed to both acute and chronic traumatic stressors (Lindauer et al., 2006; Violanti et al., 2008; Violanti, et al., 2006; Witteveen et al., 2010). Peace officers are unique in their nonmilitary exposure to violence. Peace officers' exposure to violence is routine and relentless (Grossman & Christensen, 2007). Rudofossi states that the dynamic and relentless nature of stress associated with the job functions of peace officers requires a continuous application of mental health promotion and treatment at the beginning, during, and after service in this corrosive environment (Rudofossi, 2007).

Existing Theories of Resilience and Recovery

The early development of the concept of resilience has its roots in developmental psychology. Most resilience literature acknowledges Werner's (1993) longitudinal study

following the children of Kauai as foundational in the development of resilience theory. Werner's study spanned over 32 years and identified "protective factors" that promoted successful adaptation. In the years following Werner's study, several prominent authors expanded on the concept of resilience. The popularity of resilience emerged in concert with a paradigm shift in public health from treating the problems to approaching health and well-being from the positive angle (Seligman, Steen, Park, & Peterson, 2005). Throughout the literature pertaining to resilience, the concept of resilience has been applied to adults and eventually to trauma and recovery (Everly, Welzant, & Jacobson, 2008; Rutter, 1987). Examining the history of resilience, there is significant crossover and overlap with trends in positive psychology (Seligman, Steen, Park, & Peterson, 2005) as they have developed on parallel and intertwining paths.

The foundation of the study resilience remains the identification of protective factors that are utilized by the subjects to achieve resilient reintegration following disruption. For the purpose of disseminating information about these protective factors, many researchers have taken inventory and categorized protective factors. For the purpose of educating people about resilience, Richardson characterizes protective factors by the essence of the resilient qualities, categorizing the extensive inventory into "noble qualities, moral qualities, intuitive qualities and childlike qualities" (Richardson, 2002, p. 318). Other schema used to describe resilient traits focus on what the particular trait accomplished rather than describing the essence of the quality (Antonovsky, 1990; Kobasa, Maddi & Kahn, 1982). There has even been a specific schema for categorizing resilient qualities for peace officers (Miller, 2008).

<div align="center">Current Resilience Research</div>

Resilient Reintegration

Theories and studies exist that pertain to core concepts within Resilience and Resiliency Theory, but do so using different terminology. For example, when examining PTSD in public safety personnel, Yuan et al. reported, "Protective factors described in the literature include constitutional variables like temperament and personality, basic attitudes of an individual toward him/herself and the world, and specific skills including the effective use of social support and coping skills" (Yuan et al., 2011, p. 46). While the terminology used by the author is different, the underlying concepts are clearly similar.

Posttraumatic Growth and Stress-related Growth

Despite the traumatic nature of exposure to interpersonal violence, law enforcement culture demonstrates the ability to endure and thrive in the presence of psychological trauma (Andrew et al., 2008). In the applied model of resiliency, the term Richardson et al. gave to prosperous recovery following a disruptive event is resilient reintegration. Several theories informed the current research, providing a deeper understanding of resilient reintegration within the process of resiliency. Personal growth following exposure to traumatic stressors has been studied as *posttraumatic growth* (Cadell, Regehr, & Hemsworth, 2003; Calhoun & Tedeschi, 1999, 2001; Tedeschi & Calhoun, 2004) *and stress-related growth* (Park, Cohen, & Murch, 1996; Park, Edmondson, & Blank, 2009).

A distinction is often highlighted in the literature between resilience and posttraumatic growth. It is important to understand the difference between *resilient*

reintegration and resilience as it is used and critiqued in the posttraumatic growth and stress-related growth literature. Westphal and Bonanno describe *resilient outcomes* as outcomes that "provide little need or opportunity for growth" (Westphal & Bonanno, 2007, p. 417). Westphal and Bonanno and Levine et al. use the term "resilience" in a manner that is inconsistent with Richardson's process of resiliency (Levine, Laufer, Stein, Hamama-Raz & Solomon, 2009). This alternative use of *resilience* can be more precisely labeled as *stress inoculation*. Stress inoculation is discussed later in this manuscript. This is an oversimplified use of the term *resilience* when considering the scope of resilience and resiliency theory. The critique of Westphal and Bonanno and Levine et al demonstrates a common misuse of the term *resilience* in posttraumatic growth and stress-related growth literature. For the current study, a stressor that is of insufficient magnitude to overwhelm an individual's protective assets will be discussed in terms of the balance between the disruptive potential of the stressor and the value of protective factors such as stress inoculation. The term resilience will be reserved for use in the broader sense, consistent with Richardson's resilience and resiliency theory.

There is also a distinction between posttraumatic growth and stress-related growth. Based on the traumatic nature of the target phenomena, posttraumatic growth was selected as the most appropriate theory to apply to further examination of resilient reintegration. Therefore, this research incorporates posttraumatic growth theory and metrics (Tedeschi & Calhoun, 2004) to discuss the concept of resilient reintegration as described above. Closer examination of posttraumatic growth associated with the target phenomena is addressed in the Limitations and Future Research sections in Chapter 3. However, focusing entirely on resilient reintegration would diminish the practical utility

of this research. For the purpose of this research, posttraumatic growth and resilient reintegration are considered to be synonymous.

<u>Study Overview</u>

This dissertation was designed to investigate the lived experiences of peace officers in the aftermath of the use of deadly force. The main research questions included:

1) What are peace officers' experiences following the use of deadly force in the line of duty?

2) How are peace officers' lives affected by the use of deadly force and the subsequent investigation?

3) What are the disruptive factors that influence peace officers during and after the use of deadly force?

4) How do disruptive factors influence peace officers following the use of deadly force?

5) What are the individual protective factors that peace officers utilize to successfully adjust and thrive following exposure to traumatic stressors?

6) What are the ecological protective factors that help peace officers in the process of adjusting and thriving following exposure to traumatic stressors?

7) Are any of the identified disruptive factors modifiable?

<u>Study Methodology</u>

<u>Overview</u>

In accordance with the paradigmatic approach selected for this study, the primary focus of the research design is on the qualitative, phenomenological examination of the lived experience of peace officers following the use of deadly force. To enhance trustworthiness and transparency, the qualitative results were then used to develop a questionnaire to further explore themes resulting from the qualitative inquiry. The quantitative phase allowed for an additional means to check the author's description of the subjects' narratives.

<u>Ontology</u>

This research rejects positivist and post-positivist views as having severely limited application to examining the target phenomena. There are few successful examples of relevant research that control and manipulate variables in a meaningful way. With respect to the target phenomena, a singular version of truth does not exist. The results of an attempt to find singular truth relevant to the target phenomena would be unrecognizable and irrelevant. The current study explores the target phenomena from a constructivist paradigm, emphasizing "the importance of examining the world from the participants' point of view" (Tracy, 2013, p. 41).

<u>Epistemology</u>

The target phenomenon is a context-specific, complex interaction between subject, the sociocultural environment, and circumstance. Thus, this study is entirely

subjective and context specific. An emic approach to the subject's culture and experience enabled context-appropriate understanding of the target phenomena.

This research is a phenomenological study examining the subject's lived experience. No attempt to generalize these findings to a larger population is made. It is possible that similar situations exist in similar context and with similar agents. However, that is beyond the scope of the current research. The potential for over-representation of my bias is addressed through the application of systematic coding and analysis.

Axiology

My own experience uniquely qualifies me to access and engage the subject narratives. In reference to the impact of police culture on research, Woody states "the door to accessing research data on policing is kept closed to most would be researchers" (Woody, 2005, p. 525). My experience enabled access and has facilitated rapport-building with the target population. A high degree of cultural competence with respect to peace officer culture has been invaluable in understanding the semantics of the target population. Membership within the target population allowed me to obtain the subject narratives and to accurately describe semantics specific to peace officer culture.

Statement of Self-reflexivity

My (the principal investigator's) own experience uniquely qualifies me to engage the subject narratives. I am a certified and sworn peace officer and I have used deadly force in the line of duty. In reference to the impact of peace officer culture on research, a high degree of cultural competence with respect to peace officer culture has been

invaluable throughout this inquiry. No claims of objectivity are expressed or implied; I acknowledge the biases introduced by my own experiences and beliefs. I support each claim made by publishing examples of the textual warrants for that claim.

Participant Selection and Sampling

The nature of the inclusion criteria dictated the use of a purposive sampling technique. The low prevalence of the target phenomena required a "critical incident sampling" technique, where subjects were selected due to a criterion which is critical for the target phenomena (Tracy, 2013, p. 137). Inclusion criteria were (1) a certified and sworn peace officer working in the state of Utah, and (2) the officer was involved in a critical incident in which their use of deadly force resulted in death. Inclusion criteria were explained during the recruitment process and again preceding the interview. Eleven subjects were selected for participation.

Recruitment Procedures

Following IRB approval, peace officers known to the investigator were asked to identify colleagues who met the above criteria. If the officer indicated that they knew someone who met these criteria they were asked to request the prospective subject's contact information as well as permission for the principal investigator to contact them directly. A personal introduction provided the opportunity for the recommending officer to grant the principal investigator a personal endorsement. This approach was deemed essential to mitigate cultural barriers to accessing law enforcement populations for research purposes.

All subject peace officers indicated that during their encounter they employed deadly force to mitigate a clear and proximal deadly threat to themselves or others. All subjects had been deemed legally justified by the authority having jurisdiction over the use of deadly force. Two of the subjects used deadly force on two separate occasions. For instances of multiple uses of deadly force, both subjects stated that the first use of deadly force was the most impactful. In those cases, the demographic information provided reflects the initial use of force by that subject.

The sample size ($n = 11$) is consistent with a qualitative sample size required to reach data saturation for the selected style of interviews (Tracy, 2013). The number of interviews required was to be determined by the richness of the data collected. The actual number was reached by examining the data throughout the interview process to determine the point at which sufficient data had been collected (Kvale, 1996). In addition to basing the decision on the richness of the data collected, Tracy's suggestion of asking "can you predict what your interviewees will say" provided a valuable cue as well (Tracy, 2013, p. 138). As interviews progressed, it was possible to accurately predict much of how the subject would respond to questions during the interview. By the 10th and 11th interview, the ability to predict the basic flow and content of responses felt complete. This represented the point where additional data would provide a diminishing margin of utility, considering the already large amount of data.

<div align="center">Sources of Data</div>

<u>Interviews</u>

Interviews were conducted with police officers who had experienced the specified acute traumatic stressor. A semistructured approach was taken to the interview process. An interview guide was developed to serve as a suggestion for sequence and topics to be discussed. However, there was an "openness to sequence and form" (Kvale, 1996, p. 124) during the interview, which was compatible with a phenomenological research design. The emphasis was placed on eliciting the subject's self-directed narrative whenever possible (Tracy, 2013).

All interviews were conducted exclusively by the principal investigator. The interviews were conducted in a private location that was the most convenient for the subject. Eight interviews were held in offices and three were held at private residences. Only the subject and interviewer were present. The progression of the interviews was as follows: Build rapport, read the introduction, gain informed consent, then follow the interview guide with emphasis on broad prompting questions to encourage subjects to give their story in a narrative form. For example: "Describe what happened following the incident"; "Tell me your story in the weeks following the incident"; "What would you tell someone with less experience then you about dealing with stress on the job?"

The interview guide was explained to the participant as a guide only. All participants were told that they were welcome to see the guide as well as the principle investigator's (PI) notes at any point during the interview. The interview guide incorporated both unstructured and structured characteristics. Please see Appendix B for the complete interview guide. The guide started with basic demographic questions.

Following these closed-ended questions, the participant was asked to give a narrative of their experiences. Once the unstructured phase of the interview had begun, questions and prompts were used only when necessary to continue the flow of the subject's narrative. Following the conclusion of the unstructured portion of the interview, there was a brief structured phase where the participant was asked some additional closed-ended questions. The principal investigator then offered the participant one final opportunity to include anything that they would like before concluding the interview. Throughout the interviews, site notes were used to describe noteworthy tone and physical actions, including facial expressions that could be used to clarify or interpret meaning from the text.

Site notes, field notes, and the original audio files were used to ensure a more accurate understanding of the textual data. The repeated use of the original audio files allowed for thorough examination and in some cases correction of the transcription. The most frequent cause of transcription errors appeared to be the direct result of slowing down the audio file for ease of transcription. Site notes and field notes were used to capture intonation, contextual references, body language, and other cues to meaning which would not necessarily be translated in verbatim transcription. This proved useful in the process of in-depth interrogation of the text. In several of the cases where it would otherwise have been difficult to interpret or categorize, these notes elucidated meaning.

Questionnaire

A questionnaire was developed based on the qualitative results and was completed by the subjects approximately 1 year after the initial interview (n=11). SPSS

Statistical Package for Windows (IBM Corp., 2013) was utilized to conduct the analyses

of data generated from the questionnaire. The primary aim of the quantitative analyses

incorporated throughout the dissertation is to provide a transparent means to verify the

PI's interpretation of the data at a basic level. The incorporation of quantitative data from

the survey as well as follow-up questioning of the subjects provided the means for the

principle investigator to triangulate the qualitative data (Creswell, Clark, Gutmann, &

Hanson, 2003). No inferential statistics are included and no attempt is made to generalize

these results to a larger population.

Because the questionnaire was based partly on the qualitative results, participants

from the qualitative study were asked to complete a questionnaire approximately one year

after the original interview (*n*=11). All of the subjects submitted complete questionnaires.

Study data were collected and managed using the Research Electronic Data Capture

(REDCap) electronic data capture tools hosted at the University of Utah. REDCap is a

secure, web-based application designed to support data capture for research studies,

providing 1) an intuitive interface for validated data entry, 2) audit trails for tracking data

manipulation and export procedures, 3) automated export procedures for seamless data

downloads to common statistical packages, and 4) procedures for importing data from

external sources (Harris et al., 2009).

The questionnaire included three components. The first component contains

original items developed to specifically address key demographic information and the

results reported in Chapters 1 and 2. The second and third components were the

incorporation of two well-established instruments to further explore concepts presented in

the results section of the first article. These instruments are described in greater detail in

the following section.

<u>Original Survey Items</u>

The original survey items include binomial and Likert-type questions. These items underwent a process to verify face validity. Peer review was conducted throughout the process of development. Once in its final form, the survey instrument was evaluated by peace officer volunteers.

<u>Impact of Events Scale-Revised</u>

The Impact of Events Scale-Revised (IES-R) is a device to quantify the presence of symptoms associated with traumatic stress disorders (Weiss & Marmar, 1996, 2004; Weiss, 2007). The IES-R was included in its entirety within the questionnaire with the express permission of the scale's author. The use of this instrument has been validated to measure posttraumatic stress reactions in peace officer populations (Wilson & Keane, 2004, p. 177). The intention of incorporating the IES-R was to obtain a quantifiable measurement for the enduring impact of the target phenomena on the subjects.

<u>Posttraumatic Growth Inventory</u>

The Posttraumatic Growth Inventory (PTGI) measures psychological and personal changes following exposure to psychological trauma (Tedeschi & Calhoun, 1996), and was included in its entirety within the questionnaire with the express permission of the corresponding author. The use of this instrument has been extensively validated to measure psychological and personal changes following exposure to psychological trauma

(Zoellner & Maercker, 2006). As such, the PTGI was selected to provide a means of checking the author's understanding of the intended meaning of the subject's text with respect to posttraumatic growth.

During review for construct validity I received feedback that the term *crisis* as used by Tedeschi and Calhoun was problematic. Through discourse with members of the target population, the term *critical incident* resulted in a similar understanding of the concept of *crisis* but received less resistance. Thus, a single modification of the PTGI to replace the term *crisis* with *critical incident* was made prior to publishing the survey. The following replacement was made across the levels of response available to the subjects: "I did not experience this change as a result of my critical incident" was used instead of "I did not experience this change as a result of my crisis." The six possible responses read I did not experience this change as a result of my critical incident; I experienced this change to a very small degree as a result of my critical incident; I experienced this change to a small degree as a result of my critical incident; I experienced this change to a moderate degree as a result of my critical incident; I experienced this change to a great degree as a result of my critical incident; I experienced this change to a very great degree as a result of my critical incident.

<div align="center">Research Design</div>

A descriptive phenomenological design that met the criteria established by Giorgi (1997) for descriptive phenomenological methods for qualitative research was employed. Giorgi describes five "concrete steps of the human scientific phenomenological method." Giorgi's five steps are 1) collection of verbal data, 2) reading the data, 3) breaking of the

data into parts, 4) organization and expression of the data from a disciplinary perspective, and 5) synthesis or summary of the data for the purpose of communication. These steps are not unique. Many other authors list similar steps for qualitative research. However, Giorgi "points out the criteria necessary in order for a qualitative scientific method to qualify itself as phenomenological in a descriptive Husserlian sense" (Giorgio, 1997, p. 235). Following this overview, each of the five steps are presented in this section. Within each step, various techniques from various authors were incorporated. Each applied technique for coding and analysis meets the criteria established by Giorgi.

The integration of resilience theory into the fourth and fifth steps as described above may give the appearance of switching from an inductive and descriptive approach to a deductive and interpretive approach. However, this is not the case. As Giorgio explains: "a transformation of the subject's everyday language is required," "and it has to be expressed in terms relevant for the scientific discipline being utilized" (Giorgi, 1997, p. 242). Resilience theory provides the terminology utilized during step 4. Additionally, in the process of summarizing and synthesizing during step 5, the process of resiliency frames and provides context for discussing the essence of the emergent themes.

Giorgi acknowledges the need for flexibility in research design and provides a clause which allows for "procedural variations" (Giorgi, 1997, p. 242). As mentioned in the statement of self-reflexivity, the PI makes no claims to be free from the influence of bias. This holds true with respect to theoretical and epistemological commitments, as data are not coded in an "epistemological vacuum" (Braun & Clark, 2006).

While the final cycle of coding focused on data that were the most relevant to the essence of the predominant themes, early cycle coding was employed in a manner that

ensured accountability to all of the data, not just the parts that served the purpose of advancing the author's argument. During the initial two steps, every possible attempt was made to truly understand the phenomena as described by the subject. During step 3, the elaborate and rigorous steps described below were taken to ensure strict adherence to describing the essence of the individual's experience in their own language. Following this rigorous application of emic coding and analysis, a deliberate critical evaluation of resilience theory for goodness of fit was conducted. This included seeking expert opinions as well as verifying interpretations with the subjects themselves.

Conclusion

A great deal of research exists on traumatic stress in law enforcement, use of force by law enforcement, posttraumatic stress disorder and other stress related pathologies, as well as resiliency and related theories. The link between psychological traumatic stress and negative health outcomes is well established. Despite the knowledge and the acceptance of the use of deadly force as one of the most traumatic experiences that peace officers face, little specific information exists about peace officers' experiences in the aftermath of the use of deadly force. This information should be incorporated into training as well as policy and practice followed during the investigation of critical incidents involving the use of deadly force.

This study seeks to narrow the gap in the research addressing evidence-based, pragmatic recommendations for supporting officers in the process of resiliency following the use of deadly force. This study also aims to provide a voice to peace officers whose

perspective is underrepresented as a byproduct of the investigation process following the

use of deadly force.

Table 1: Common stress-related symptomology pathology for chronic stress

	Physical	Mental	Emotional / Spiritual
Chronic Stress	Increased risk of cardiovascular disease Higher stroke risk Immunosuppression Incr. abdominal fat Sleep disturbances Hypertension Incr. heart rate Hormone changes	Anxiety Sleep disturbances Impaired memory Impaired concentration	Depression Isolation Irritability Maladaptive coping
Critical Incident Stress	Immunosuppression Accelerated cell aging Pounding heart Substance abuse Rapid breathing Muscle tension Sweating Nausea	Numbness Intrusive thoughts Hyper vigilance Flashbacks Nightmares Amnesia	Numbness Depression Inability to control emotions Avoiding activity Limited sense of future Guilt or shame

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CHAPTER 2

A PHENOMENOLOGICAL EXAMINATION OF INTERNAL

FACTORS INFLUENCING PEACE OFFICERS'

LIVED EXPERIENCES FOLLOWING THE

USE OF DEADLY FORCE

Abstract

Phenomenological analysis was applied to interviews from 11 peace officers in the western United States. Themes emerged from the interviews identifying a shared process of personal and sociocultural disruption and subsequent reintegration. Resiliency Theory is applied to provide common terminology and structure to the discussion of the target phenomena. Generally speaking, those with more experience in the field described less severe disruption and more skillful navigation of the process of resiliency. In this article, themes identified as internal are presented. These themes include *internal protective assets* and internal responses to the *external disruptive factors*. These factors are examined as they affect the subject's experienced process of resiliency. *Internal protective assets* included mental preparation, the fortification of the pillars of resilience and self-efficacy with respect to the process of resiliency. *External disruptive*

factors included the experienced impact of the incident itself, the subsequent inquisition, and perceived lack of support. This is the first article in a two-part series. The second article utilizes the same methods to examine ecological aspects, including external protective factors and ecological aspects of disruptive factors.

Introduction

> "I don't think I am the same person today that I was before it happened, nor do I think I'll ever be able to be the same person. I feel like it takes a little bit of your soul away, when these happen, and it makes you a little bit different of a person… … I do wish that I could sometimes go back to the way I was before, because I think I'm probably a little bit angrier as a person sometimes than I was before, and a lot of that is just because of the experiences. Not only of what happened and what I had to do, but of how people treated you afterwards."(study participant)

Peace officers (PO) typically experience multiple exposures to interpersonal violence during their careers. They experience violence vicariously through interacting with victims, as the victims of assault themselves, and as the aggressors as they execute their sworn duties. Their repeated exposure to violence and the need to perpetrate violent acts make PO unique among public safety professionals. Media in the form of fiction, "reality" television, and news programs largely shape public perception of law enforcement (Dowler, 2003). Media frequently overrepresents and unrealistically portrays interpersonal violence experienced by peace officers (Oliver, 1994). The reality of interpersonal violence rarely resembles its sterilized portrayal in the media. Fights are fast, dirty, and often result in injury to the officer and suspect alike.

Author David Grossman referred to exposure to interpersonal violence as the "universal human phobia," referring to the tendency of interpersonal violence to evoke a physiological fear response in the majority of people, including peace officers (Grossman

& Christensen, 2008). This research explores the lived experiences of PO during and after exposure to the most severe form of violence experienced by law enforcement: deadly force encounters. The primary research goal was to identify the factors which affect individual coping and recovery following these critical incidents.

Background

Use of Force in Law Enforcement

Peace officers are granted qualified immunity to laws prohibiting violence for purpose of controlling others in the execution of their sworn duties. The judicious application of violence for these purposes is commonly referred to as the "use of force." The legal use of force employed by law enforcement exists on a spectrum, as depicted in Figure 2. Use of force incidents involve rapidly occurring events that are unpredictable and dangerous.

Peace officers are compelled by policy, statute, and by their own morals (as demonstrated in their narratives) to use the most sparing application of force possible to effect an arrest or to render a given situation safe. It is important to note that application of force does not require progression through various options of force available to the officer. Due to the rapidly changing circumstances of many use of force encounters, it is impractical and hazardous to do so. It is also noteworthy that the use of the respective tools of force may constitute a greater use of force, depending on how they are applied. An impact weapon such as a baton could be used in a manner which would be considered deadly force if, for example, an individual's head were intentionally targeted.

The vast majority of law enforcement interactions with the public involve no use of force at all. One agency has released basic information on all of its custodial arrests with respect to use of force. This agency reports that more than 91% of custodial arrests involve no physical force beyond the application of handcuffs to a compliant subject (Salt Lake City Police Department use of force data, 2016).

Deadly force is defined as any use of force that is "intended or likely to cause death or serious bodily injury against another" (Utah State Code 76-2-407). The use of deadly force (UODF) is considered to be the terminal end of the spectrum of use of force. It is noteworthy that there is no accepted lesser use of a tool designed to produce serious bodily injury or death. For example, an officer who discharges his firearm to "shoot out a tire" is universally considered to have inappropriately used deadly force.

The discrepancies between public perception and PO training and practice with respect to use of deadly force are problematic. For example, public perception is often directly influenced by how many rounds are fired by PO during the use of deadly force. Firing multiple rounds is often viewed by the public as excessive force (Oliver, 1994). At the point the PO reasonably believes that deadly force is necessary to eliminate a threat, there is no modified application of deadly force. It would be contrary to the PO training, for example, to shoot a firearm with the intention of causing only minor injury with the actual goal being the disarming of the subject. Peace officers are trained to eliminate the threat of death or serious bodily injury through the application of sufficient deadly force to immediately eliminate the threat. The reality of close quarter combat is that the aggressor is reliably stopped in a timely manner only by direct insult to their central nervous system (often impractical) or their cardiovascular system. Pistol and rifle

ballistics are such that multiple bullets are often required to immediately stop aggressive behavior. The majority of gunfights in law enforcement occur at a distance of 7 yards or less (United States Department of Justice, 2015). A common training standard from this distance is to start with a holstered weapon and accurately fire six rounds within 3 seconds (Lawrence and Pannone, 2009). While this response to a perceived deadly threat would be consistent with training, it would likely receive condemnation from the public (Oliver, 1994).

Officer-involved critical incidents involving the UODF are low-frequency occurrences in the geographical region where this study was conducted. While there is no accurate information at the national or state level reporting the incidence and prevalence of PO UODF, this information was obtained for the areas in which the subject PO of the current research serve. Each geographical region in the state of inquiry has an agency that has the statutory requirement to investigate all incidents involving PO UODF. A request of public information was filed with each authority having jurisdiction over the region in which study participants serve. This information was compared with public crime reporting statistics to calculate prevalence for PO UODF incidents. In the past 5 years there have been 65 UODF incidents investigated. During that same time there were 300,481 arrests made. The prevalence for the UODF when considering all arrests made in the subjects area or service is $\frac{65}{300481}$, or 0.0002%.

Traumatic Stress and the Target Population

The stressful nature of both the UODF itself and the subsequent inquisition provides a unique opportunity to study the individual's response to a complex traumatic

stressor. UODF incidents are unique in their propensity to consistently evoke a full

battery of investigative measures towards the officer involved. Common practices

include: an independent homicide investigation, internal affairs investigation by the

employing agency, public inquiry, and civil litigation. The investigations that officers

described shared similarities in structure resulting from statutory requirements and

agency adherence to best practice.

The pathogenic consequences of human stress response are well established to

cause an increased risk for dyslipidemia and obesity (Epel et al., 2000; Ljung et al., 2000;

Rosmond, Dallman, & Björntorp, 1998; Veen et al., 2009), insulin resistance, glucose

intolerance (Golden, 2007; Lloyd, Smith, & Weinger, 2005), hypertension, and an

increased thrombolytic response (Güder et al., 2007; Roy, Kirschbaum, & Steptoe,

2001), depression (Brown, Varghese, & McEwen, 2004; Burke, Davis, Otte, & Mohr,

2005; Vedhara et al., 2003; Veen et al., 2011), neurological effects, and impaired

cognitive function (Bremner, 1999; Dominique et al., 1999; McEwen & Sapolsky, 1995).

There is ample evidence that traumatic stress is an occupational hazard prevalent in law

enforcement. Studies employing methodology ranging from self-reporting to quantifying

the biomarkers of the human stress response confirm that peace officers experience

dangerous levels of stress on the job. (Anderson, Litzenberger, & Plecas, 2002). Similar

results to those from several of the studies listed above have been demonstrated in peace

officers, including cardiovascular effects (Violanti et al., 2008; Violanti, et al., 2006),

neurological and cognitive dysfunction (Lindauer et al., 2006), psychological disorders,

and depression (Inslicht et al., 2011; Witteveen et al., 2010).

Peace officers are at a high risk for stress-related increase in morbidity and mortality (Anderson, Litzenberger, & Plecas, 2002; Neylan et al., 2005; Violanti, et al., 2006; Violanti at al., 2009; Wirth et al., 2011; Witteveen et al., 2010). Researchers and health professionals have examined the effects of both acute and chronic exposure to stress in law enforcement populations. Traumatic stress is used to refer to stressors that have the propensity to act as a mechanism of psychological trauma. Additionally, the term *complex trauma* has been developed to address trauma that "occurs repeatedly and escalates over its duration" (Courtois, 2008). Treatment models specific to public safety personnel have been developed for "Public Safety Complex Trauma Syndrome" (Rudofossi, 2009; Rudofossi, 2007). The potential for interplay between acute and chronic traumatic stress is acknowledged in the literature referenced above as having the potential for cumulative and potentially synergistic impact on the individual.

Target Phenomena: The Use of Deadly Force as a Traumatic Stressor

The use of deadly force is widely accepted as one of the most stressful events experienced by peace officers (Violante & Aron, 1995). A comparison of the statute granting qualified immunity for peace officers UODF with the diagnostic criteria for post-traumatic stress disorder reveals that justified UODF meets the criteria for an acute traumatic stressor capable of eliciting a traumatic stress response (American Psychiatric Association, 2013). Specifically, all participants in this study received qualified immunity under State Criminal Code 76-2-404 (c), which states that an officer is justified in using deadly force when they reasonably believe that the UODF is necessary to prevent death or serious bodily injury to the officer or another person (Utah State Criminal Code,

2016). Thus, the justified use of deadly force satisfies the diagnostic criteria for a triggering event and has been validated as a traumatic stressor.

The literature clearly demonstrates that peace officers who experienced use of force situations resulting in serious bodily injury or death frequently experience significant levels of posttraumatic stress symptomology (Brown, Fielding, & Grover, 1999; Carlier and Gersons, 1995; Gershon et al., 2009; Komarovskaya et al., 2011; Loo, 1986; Robinson, Sigman, & Wilson 1997; Stratton, Parker, & Snibbe, 1984; Violante & Aron, 1995; Violante et al., 2006). This, specifically in addition to the likelihood of such events being experienced as traumatic, establishes these events as unique in their statutory and cultural propensity to evoke an inquisition.

The prolonged and complex nature of a UODF incident and the subsequent investigation present a chronic stressor which, by its very nature, encompasses multiple occurrences that are disruptive to the officers' life. These stressors in addition to additional unrelated stressors and traumatic stressors are frequently encountered during the process of resiliency. For the purpose of this research, "traumatic stress" is used to encompass traumatic stress in all of its forms summarized here: acute, chronic, and complex.

Resilience Theory

Resilience theory was applied as a theoretical foundation during advanced coding and analysis. Resilience theory has emerged as a prominent theory in trauma and recovery. Resiliency is defined as "the process of coping with adversity, change, or

opportunity in a manner that results in the identification, fortification and enrichment of resilient qualities or protective factors" (Richardson, 2002).

The early development of resilience theory has its roots in developmental psychology. Most resilience literature acknowledges Werner's (1993) longitudinal study following the children of Kauai as foundational in the development of resilience theory. This study spanned over 32 years and identified "protective factors" that promoted successful adaptation. In the years following Werner's study, several prominent authors expanded on resilience theory in concert with a paradigm shift within health-related fields that switched the focus from treating the problems to approaching health and well-being from the positive position of promoting health (Seligman, Steen, Park & Peterson, 2005). Since its inception, resilience theory, has been applied to adults and eventually to trauma and recovery (Everly, Welzant, & Jacobson, 2008; Rutter, 1987). Examining the history of resilience theory, there is significant crossover and overlap with trends in positive psychology (Seligman, Steen, Park, & Peterson, 2005), as they have developed on parallel and intertwining paths.

The foundation of the study of the process of resiliency remains the identification of protective factors that are utilized by the subjects to achieve resilient reintegration following disruption. For the purpose of disseminating information about these protective factors, many researchers have taken inventory and categorized protective factors. Richardson characterizes protective factors that are at work during the process of resiliency by the essence of the "resilient qualities," categorizing the extensive inventory into "noble qualities, moral qualities, intuitive qualities and childlike qualities" for the purpose of educating people about resilience (Richardson, 2002 p. 318). Other schema

used to describe resilient traits focus on what the particular trait accomplished rather than describing the essence of the quality (Antonovsky, 1990;Kobassa, Maddi, & Kahn, 1982). There has even been a specific schema for categorizing resilient qualities for peace officers (Miller, 2008).

Resilience refers to "the finding that some individuals have a relatively good psychological outcome despite suffering risk experiences that would be expected to bring about serious sequelae" (Rutter, 2006, p. 1). Richardson (2002) presents a metatheory of *resilience* as well as the process of *resiliency*. This model of the process of resiliency frames the current research and provides structure and terminology for the discussion of the target phenomena. Richardson depicts the simplified stages of the process as a waveform (see Figure 3). In this representation, the baseline for the waveform represents "biopsychospiritual homeostasis. " The sequential stages are "interactions with life prompts, disruption, readiness for reintegration and the choice to reintegrate resiliently, back to homeostasis, or with loss" (p. 311).

Protective Factors

For the purpose of this research, two categories of protective factors are discussed. Well-fortified protective factors possessed by an individual and applied at the baseline of the resiliency model (prior to disruption) are referred to as "pillars of resilience." This term was selected for its metaphorical value when discussing the degree of fortification of a subject's protective assets. For example, subjects with a strong sense of nobility (characterized by a self-identity rooted in altruism, service) would be said to have a well-fortified noble pillar of resilience. The ability of well-fortified pillars of

resilience to reduce the amplitude of a potentially disruptive event is further discussed as stress inoculation below.

Richardson's terminology of "resilient drives" is used to describe often identical protective factors when applied after the disruption as internal catalysts for recovery and growth. Placed temporally on the resilience model, this application of protective factors typically occurs deep in the trough created by the negative deflection following disruption. Rather than acting as a protective factor at this point, resilient drives are utilized as innate sources of strength, accessed by the subject to "drive" the process of resiliency (Richardson, 2002).

Key Aspects of Resilience

The results and discussion of this study were presented utilizing the perspective and terminology of resilience and resiliency theory (Richardson, 2002). Additionally, supporting theories and concepts were applied in the process of examining particular aspects of the process of resiliency. Key constructs and sensitizing theories are briefly introduced in the following subsections. Background is provided on stress inoculation, self-efficacy, posttraumatic growth, and stress-related growth. As this is a descriptive phenomenological study, theory and supporting constructs are applied as terminology used to "express the data from a disciplinary perspective" (Giorgi, 1997, p. 7). The theories and concepts discussed below provide valuable insight into possible mechanisms of action enacted at each phase during the process of resiliency. However, suggesting subscription to specific theory in order to explain the subjects' behavior is beyond the scope of the current study. For example, self-efficacy is used to describe textual

references where the subject expressed belief in their ability to successfully navigate the process of resiliency. These specific textual warrants were consistent with Bandura's concept of "self-efficacy" (1982). However, this does not represent a subscription to Bandura's social cognitive theory as it pertains to posttraumatic recovery (Benight & Bandura, 2004).

Resiliency theory's broad perspective is essential to the pragmatic nature of this study. Certain aspects of the study involved a more focused or magnified examination of phenomena. In order to maximize the practical utility of this research, it was necessary to avoid focusing too closely to any one aspect of the process of resiliency. The field of view was consistently recalibrated to the scope of resiliency theory. For example, in order to sufficiently examine the target phenomena, the research design briefly focuses on resilient reintegration. Posttraumatic growth (Tedeschi & Calhoun, 2004) and stress-related growth (Park, Cohen, & Murch, 1996) theories provided valuable guidance for understanding and exploring themes related to resilient reintegration. Posttraumatic growth was selected as the most appropriate supporting theory, and the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) was incorporated into the research design. However, the application of posttraumatic growth was limited to terminology and metrics as they were useful to the examination and discussion of the concept of resilient reintegration. Following this focused examination, the current study is recalibrated to the scope of the process of resiliency.

Resilience and Growth

Despite the traumatic nature of exposure to interpersonal violence, peace officer culture demonstrates the ability to endure and thrive in the presence of psychological trauma (Andrew et al., 2008). In the applied model of resiliency, the term given to prosperous recovery following a disruptive event is resilient reintegration. Several theories informed the current research, providing a deeper understanding of resilient reintegration within the process of resiliency. Personal growth following exposure to traumatic stressors has been studied as *posttraumatic growth* (Cadell, Regehr, & Hemsworth, 2003; Calhoun & Tedeschi, 1999, 2001; Tedeschi & Calhoun, 2004) *and stress-related growth* (Park, Cohen, & Murch, 1996; Park, Edmondson, & Blank, 2009).

A distinction is often highlighted in the literature between *resilience* and posttraumatic growth. It is an important distinction that the comparison in this study is made between resilient reintegration and posttraumatic growth, not *resilience* as it is used in these critiques. Westphal and Bonanno describe *resilient outcomes* as outcomes that "provide little need or opportunity for growth" (Westphal & Bonanno, 2007, p.417). Westphal and Bonanno and Levine et al. use the term *resilience* in a manner that is inconsistent with Richardson's process of resiliency (Levine et al., 2009). This alternative use of *resilience* is limited to the concept of stress inoculation as presented above. This oversimplified use of the term *resilience* does not address the process of *resiliency*. The critiques of Westphal and Bonnano and Levine et al. appear more valid if one replaces the term *resilience* with *stress inoculation* as described above, and then apply a stressor that is of insufficient magnitude to overwhelm an individual's protective assets. If this example were to be mapped on Richardson's resiliency model, the protective factors

would be sufficient to prevent deflection from the baseline of homeostasis or to greatly reduce the amplitude of the disruption. Throughout the process of conducting this study, it became increasingly apparent that even in cases where the subjects were extraordinarily resilient, the target phenomena were capable of acting as a disruption.

There is also a distinction between posttraumatic growth and stress-related growth. Based on the traumatic nature of the disruptive event, posttraumatic growth was selected as the most appropriate theory to apply to further examination of resilient reintegration. Therefore, this research incorporates posttraumatic growth theory and metrics (Tedeschi & Calhoun, 2004) to discuss the concept of resilient reintegration as described above. Closer examination of posttraumatic growth associated with the target phenomena is addressed in the Limitations and Future Research sections in Chapter 3. However, focusing entirely on resilient reintegration would diminish the practical utility of this research. For the purpose of this research, posttraumatic growth and resilient reintegration are considered to be synonymous.

Methods

Statement of Self-Reflexivity

The experience of the investigator uniquely qualified him to engage the subject narratives. The principal investigator is a certified and sworn PO. He has used deadly force in the line of duty. In reference to the impact of police culture on research, Woody states, "the door to accessing research data on policing is kept closed to most would be researchers" (Woody, 2005, p. 525). The experience of the investigator enabled access and facilitated rapport-building with the target population. A high degree of cultural

competence with respect to PO culture was invaluable throughout this inquiry.

The target phenomenon is a context-specific, complex interaction between subject, the sociocultural environment, and circumstance. Peace officer culture poses a unique challenge with respect to accessing subjects and overcoming guarded and insincere responses to inquiry on the part of subject officers. No claims of objectivity are expressed or implied. The bias introduced by the principle investigator's own experiences and beliefs is acknowledged. The potential for overrepresentation of the principle investigator's bias is addressed through the application of systematic coding and analysis. This claim is supported by publishing textual warrants for each claim made.

This research takes an emic approach to examining the subject's lived experience. No attempt to generalize these findings to a larger population is made. It is possible that similar situations exist in similar context and with similar agents. However, that is beyond the scope of the current research.

Ontology and Epistemology

Positivist and post-positivist views are rejected as having severely limited application to examining the target phenomena. With respect to the target phenomena, a singular version of truth does not exist. The current study explores the target phenomena from an interpretive or constructivist paradigm, emphasizing "the importance of examining the world from the participants' point of view" (Tracy, 2013, p. 41).

Research Design

A descriptive phenomenological design which met the criteria established by Giorgi (1997) for descriptive phenomenological methods for qualitative research was employed. Giorgi describes five "concrete steps of the human scientific phenomenological method." Giorgi's five steps are 1) collection of verbal data, 2) reading the data, 3) breaking of the data into parts 4) organization and expression of the data from a disciplinary perspective, and 5) synthesis or summary of the data for the purpose of communication. These steps are not unique. Many other authors list similar steps for qualitative research. However, Giorgi "points out the criteria necessary in order for a qualitative scientific method to qualify itself as phenomenological in a descriptive Husserlian sense" (Giorgi, 1997, p. 235). Following this overview, each of the five steps are presented in this section. Within each step, various techniques from various authors were incorporated. Each applied technique for coding and analysis meets the criteria established by Giorgi.

The integration of resilience theory into the fourth and fifth steps as described above may give the appearance of switching from an inductive and descriptive approach to a deductive and interpretive approach. However, this is not the case. As Giorgio explains, "a transformation of the subjects everyday language is required," and "it has to be expressed in terms relevant for the scientific discipline being utilized" (Giorgi 1997 p. 242). The model of resiliency (Richardson et al., 1990) provides the terminology utilized during step 4. Additionally, in the process of summarizing and synthesizing during step 5, the process of resiliency frames and provides context for discussing the essence of the emergent themes.

If the application of a theoretical framework represents a threat to true "Husserlian" purists, then Giorgi's clause will be evoked, which allows for "procedural variations" (p. 242). As mentioned in the statement of self-reflexivity, the principle investigator makes no claims to be free from the influence of bias. This holds true with respect to theoretical and epistemological commitments, as data are not coded in an "epistemological vacuum" (Braun & Clarke, 2006, p. 45).

While the final cycle of coding focused on data that were the most relevant to the essence of the predominant themes, early cycle coding was employed in a manner that ensured accountability to all of the data, not just the parts that served the purpose of advancing the author's argument. During the initial two steps, every possible attempt was made to truly understand the phenomena as described by the subject. During step 3, the elaborate and rigorous steps described below were taken to ensure strict adherence to describing the essence of the individual's experience in their own language. Following this rigorous application of emic coding and analysis, a deliberate critical evaluation of resilience theory for goodness of fit was conducted. This included seeking expert opinions as well as verifying interpretations with the subjects themselves.

Step One: "Collection of Verbal Data"

Interviews were conducted with police officers who had experienced the specified acute traumatic stressor. A semistructured approach was taken to the interview process. An interview guide was developed to serve as a suggestion for sequence and topics to be discussed. However, there was an "openness to sequence and form" (Kvale, 1996, p.

124). The emphasis was placed on eliciting the subjects' self-directed narrative whenever possible (Tracy, 2013).

All interviews were conducted exclusively by the principal investigator. The interviews were conducted in a private location that was the most convenient for the subject. Eight interviews were held in offices and three were held at private residences. Each interview was conducted in a private setting where only the subject and interviewer were present. The progression of the interviews was as follows: build rapport, read the introduction, gain informed consent, then follow the interview guide with emphasis on broad prompting questions to encourage subjects to give their story in a narrative form. For example: "Describe what happened following the incident"; "Tell me your story in the weeks following the incident"; "What would you tell someone with less experience then you about dealing with stress on the job?"

The interview guide was explained to the participant as a guide only. All participants were told that they were welcome to see the guide as well as the PI's notes at any point during the interview. The interview guide incorporates both unstructured and structured characteristics. Please see Appendix B for the complete interview guide. The guide started with some basic demographic questions. Following these closed-ended questions, the participant was asked to give a narrative of their experiences. Once the unstructured phase of the interview had begun, questions and prompts were used only when necessary to continue the flow of the subject's narrative. Following the conclusion of the unstructured portion of the interview, there was a brief structured phase where the participant was asked some additional closed-ended questions. The principal investigator then offered the participant one final opportunity to include anything that they would like

before concluding the interview. Throughout the interviews, site notes were used to describe noteworthy tone and physical actions, including facial expressions that could be used to clarify or interpret meaning from the text.

Subject Recruitment

Following IRB approval, a purposive sampling strategy was used to select the participants for the study. Inclusion criteria were explained during the recruitment process and again preceding the interview. Inclusion criteria were, 1) the subject was a certified and sworn PO in the state of Utah, and 2) the officer was involved in a critical incident, during which they used deadly force, resulting in the death of the suspect. Peace officers known to the investigator were asked to identify colleagues who met the above criteria. If the officer indicated that they knew someone who met these criteria, they were asked to request the prospective subject's contact information as well as permission for the principal investigator to contact them directly. A personal introduction provided the opportunity for the recommending officer to grant the principal investigator a personal endorsement. This approach was deemed essential to mitigate cultural barriers to accessing law enforcement populations for research purposes.

Eleven subjects were selected for participation. They were all certified and sworn PO working in the state of Utah. Ten of the subjects were Certified and sworn by the state of Utah and one was a federally sworn officer working in the state of Utah. All subjects were male and were between 21 and 56 years of age.

All subjects self-identified as having used deadly force in the line of duty. Due to the highly publicized nature of the target phenomena and the small pool of potential

subjects, it is not possible to disclose the typical set of demographic information for the subjects without revealing their identity. The following statements and the information in Figure 3 provide some general information.

All selected subjects were male, and all but 1 were Caucasian. Subjects had between 1 and 30 years of experience at the time of the incident ($M = 9.82$). Time elapsed between the incident and the interview ranged between 578 days (1.58 years) and 4274 days (11.71 years) ($M = 2095$ days or 5.74 years). Individual demographics can be found in Figure 4.

All subject PO indicated that during their encounter they employed deadly force to mitigate a clear and proximal deadly threat to themselves or others. All subject PO had been deemed legally justified by the authority having jurisdiction over the use of deadly force. Two of the subjects used deadly force on two separate occasions. For instances of multiple uses of deadly force, both subjects stated that the first use of deadly force was the most impactful. In those cases, the information provided above reflects the initial use of force by that subject. For the 11 subjects there were 13 uses of deadly force. The instrument used to employ deadly force was a handgun in 7 of these instances and a rifle in 6 instances.

The sample size ($n = 11$) is consistent with a qualitative sample size required to reach data saturation for the selected style of interviews (Tracy, 2013). The number of interviews required was determined by the richness of the data collected. The actual number was reached by examining the data throughout the interview process to determine the point at which sufficient data had been collected (Kvale, 1996). In addition to basing the decision on the richness of the data collected, Tracy's suggestion of asking "can you

predict what your interviewees will say" provided a valuable cue as well (Tracy, 2013, p. 138). As interviews progressed it was possible to accurately predict much of how the subject would respond to questions during the interview. By the 10th and 11th interview the ability to predict the basic flow and content of responses felt complete. This is not to say that there is not additional valuable information to be obtained; rather it represented the point where additional data would represent a diminishing margin of utility when considering the burden of adding to an already large amount of data.

Step 2: "Reading of the Data"

After the recorded interviews were transcribed, three rounds of close reading were conducted for each interview. For the first round, the audio file was played real time while reading along on the transcript of the interview. This allowed for thorough examination and correction of the transcription as well as noting intonation. The second round of close reading emphasized site notes, cultural references, sarcasm, and other cues to meaning. The "annotation" feature of NVivo was used to note context and intended meaning where verbatim transcription would not have clearly done so. The third round of close reading emphasized precoding (Layder, 1998) where passages that stood out as meaningful were highlighted and coded as "precoded" for later examination. Sunstien and Chiseri-Strater's (2007) suggestions were followed, asking "what surprised me, what intrigued me and what disturbed me." The resulting thoughts are included in self-reflexivity memos. These memos proved valuable as a means to identifying and "checking" personal biases later in the process.

Step 3: "Breaking The Data Into Some Kind of Parts"

All transcripts were broken down into meaning units. This process did not involve any interpretation; rather it exclusively separated the text into distinct units of meaning. This resulted in 3,687 meaning units for the data set. There were two observations made during this process. First, it was clear that the volume of verbatim meaning units was too cumbersome to allow meaningful attempts to proceed to step 4 without an intermediary step. Secondly, it became apparent that while there were clearly similarities in the subject's experiences, there was a distinct lack of shared terminology used by the subjects in describing them. These realizations led to the PI to develop a systematic process for developing representative terminology that meets Giorgi's criteria for adherence to the language of the subjects.

Step 4: "Organization and Expression of the Data from a

Disciplinary Perspective"

First Iteration of Coding: In Vivo Coding

The initial iteration of coding employed during step four was the *in vivo coding method* (Charmaz, 2006; Glaser, 1978; Glaser & Strauss, 1967; Saldana, 2013; Strauss, 1987). The first attempt of *in vivo coding* strictly adhered to verbatim codes generated from the individual meaning unit. This attempt resulted in too many codes for coherent organization and expression of the data.

An original process was developed and applied to the data in order to facilitate the following iterations of coding and analysis. This process developed representative in vivo terminology. It was the intention of this intermediary step to serve as a rigorous

systematic approach allowing for both "expression of the data from a disciplinary perspective" (Giorgi, 1997 p. 242) while maintaining the character of the terminology used by the subjects.

An all-inclusive list of terms used by subjects in the text was generated. The intended meaning of each term was carefully examined. Terms used synonymously or that had a shared essence were grouped together. Representative in vivo terms were selected from within the groups to facilitate organization of data by similar word meaning. The use of these "representative in vivo terms" was influenced by thematic lumping (Bernard, 2011). However, there were no attempts made to interpret meaning beyond that overtly intended by the subject. For example, *agency* was selected as a representative term for "organization, employer, city, county, sheriff's office, SO, PD and department." This process resulted in the selection of 526 representative terms. Figure 5 elaborates on the systematic process of developing the list of representative in vivo terminology.

This labor-intensive process facilitated a reduction in the overwhelming amount of stemmed and synonymous terms while maintaining the level of rigor necessary to ensure that the link between each claim made by the PI and its textual warrant in the data. The list of consolidated terms is included as Appendix C.

Second Iteration of Coding: Consolidated In Vivo Coding

The second iteration of in vivo coding examined the meaning units identified during the first pass of in vivo coding. Consolidated in vivo terminology was used to distill the essence of each meaning unit (MU). This second pass resulted in a more

manageable 113 codes (78 parent codes and 35 child codes). The MU as established during first pass coding were recoded to ensure that 100% of the text was accounted for in this pass of coding.

Third Iteration of Coding: Process Coding

The next coding method was also conducted during step 4. The method utilized was *Process coding* (Bogdan & Biklen, 2007; Charmaz, 2002, 2008; Corbin & Strauss, 2008; Strauss & Corbin, 1998, as cited in Saldana, 2013). The data were coded with emphasis on the process of the UODF investigations as well as other external factors that affected the process of resiliency. This iteration of coding focused on the officers' perception of external entities that played a role in the process or resiliency.

Step 5: "Synthesis or Summary of the Data for the Purpose of Communication"

The coding method employed during step 5 was elaborative coding (Auerbach & Silverstein, 2003, as cited in Saldana, 2013). The goal during this step was to express themes in terminology consistent with resilience theory for the purpose of organizing and disseminating the results. The subject's narratives included repeating ideas that were direct references to the constructs of resilience theory and other supporting theories and constructs introduced earlier in this chapter. Figure 6 illustrates the progression from MU to elaborative codes.

<u>Trustworthiness</u>

A questionnaire was developed based on the qualitative results and was completed by the subjects approximately 1 year after the initial interview (n=11). SPSS Statistical Package for Windows (IBM Corp., 2013) was utilized to conduct the analyses of data generated from the questionnaire. The primary aim of the quantitative analyses incorporated throughout the dissertation is to provide a transparent means to verify the PI's interpretation of the data at a basic level. The incorporation of quantitative data from the survey as well as follow up questioning of the subjects provided the means for the principle investigator to triangulate the qualitative data (Creswell, Clark, Gutmann & Hanson, 2003). No inferential statistics are included and no attempt is made to generalize these results to a larger population.

The data generated from the survey instrument have been included in the appendices to enhance transparency and trustworthiness of the study. Additionally, the incorporation of quantitative metrics allows for limited calibration and comparison of subjects' experiences with respect to the impact of the disruptive factors and certain aspects of resilient reintegration. The descriptive statistics are included in Appendices E through G.

<u>Results, Part 1</u>

Major themes in the data are categorized for presentation based on their description of 1) internal protective factors, 2) internalized effects of ecological disruptive factors, 3) resiliency outcomes, 4) ecological disruptive factors and 5) external protective measures. In this chapter the focus remains on the individual subject (1-3).

Themes are described that pertain to internal protective factors, internalized effects of

ecological disruptive factors, and resiliency outcomes. Ecological disruptive factors and

external protective measures are addressed in Chapter Three.

Recorded interviews were transcribed verbatim with time stamping. The longest

interview was 117 minutes long and the shortest was 52 minutes ($M = 74$ minutes). In

total, 321 pages of text (144,241 words) were obtained.   Interview transcripts were

imported to NVivo for coding and analysis (NVivo, QSR International, Melbourne,

Australia). In vivo coding using the consolidated terminology resulted in 113 codes. The

final iteration of elaborative coding produced 13 codes representing major themes, with

44 subthemes. Appendix D provides a complete list of the elaborative codes and

subcodes. The first eight themes are discussed in this article, the last five themes are

discussed in Chapter 3.

The data paint a clear picture of the interplay between protective assets and

disruptive factors. A conceptual model is used here to demonstrate this relationship as

described by subjects (Figure 8). In this model, more highly developed and strongly held

protective factors are indicated by a greater vertical distance from the axis. More severe

disruptive factors are indicated by a greater horizontal distance from the axis. The more

severe the disruptive factors described by the subjects, the greater the required protective

assets to stay above the line between reintegration with loss and resilient reintegration.

Internal Protective Factors

Themes pertaining to internal factors affecting resilience were categorized into the perceived impact of experience, the fortification of pillars of resilience, self-efficacy, and preparation. They are presented in greater detail in the following sections.

The Perceived Impact of Experience

The impact of time on the job was intertwined throughout the subjects' description of protective factors. The concept of time on the job will be referred to as *experience*. Experience is discussed here prior to addressing the individual protective factors. Experience emerged as the primary means by which the subjects developed and fortified internal protective factors. These internal protective factors in turn directly mitigated the impact of disruptive factors. Generally speaking, those with more experience described experiencing less severe disruption as well as more skillfully navigating the process of resiliency.

Specific comments made by individual subjects supported splitting the groups of experience between, 1) *more experience* describing subjects who had at least 7 years of experience ($n=7$), or 2) *less experienced* for subjects with 3 or fewer years of experience at the time of the UODF ($n=4$). Less experienced officers made reference to their own inexperience and, conversely, more experienced officers spoke of having substantial experience. Additionally, peace officers known to the author were asked for input on significant milestones in the development of experience as a peace officer. Several peace officers confirmed that 5 years of experience represented the time where an officer had amassed enough training and experience to no longer be considered inexperienced by

their peers. There were no subjects that had between 4 and 6 years of experience at the time of of the UODF. Thus the split between subjects who were more experienced and less experienced at the time of the UODF incident naturally occurred on either side of this 5-year milestone.

In most cases, enough time had gone by to allow the subjects who considered themselves inexperienced at the time of the incident to reflect on the impact of experience or lack thereof. Not only did the experienced subjects attribute the acquisition and fortification of protective factors to their experience, but subjects who had amassed experience during the elapsed time between the UODF incident and the interview also stated that their lack of experience was a contributing factor in their struggles following the incident.

The predominance of experience as the most common influence on the fortification of protective factors does not imply that the protective assets cannot be obtained by other means. To the contrary, the data contain strong evidence that less experienced subjects did access and fortify these same protective assets during the process of resiliency. However, the path to resilience for less experienced officers seemed to be more difficult and required greater external support. Additionally, less experienced officers described being overwhelmed by the disruptive event, often engaging in more maladaptive responses as well, noting a prolonged amount of time required for reintegration following disruption.

<u>Preparation and Understanding</u>

Preparation encompassed two subconstructs, which were both referenced by subjects with similar frequency. The first subconstruct of preparation is the mental preparation for the possibility of using deadly force. The second subconstruct is a preconceived understanding of the experience that a PO may encounter during and after the UODF incident. Experienced subjects described both having been exposed to use of deadly force situations and investigations, either directly or vicariously through colleagues' experiences. Several subjects also stated that they had participated in the investigation of other critical incident investigations (including officer-involved UODF incidents) prior to being involved in one themselves. All officers who had this experience stated that it increased understanding of the process "from the other side" and mitigated the stress of being investigated.

> I think, I think mental preparedness probably, before the fact, is probably, is the most important thing

> A lot of the stress that came from that shooting was not knowing the process, not knowing-- all right. Okay. So I have this interview, what does that mean? What does this guy do? Is this guy looking into trying to fire me? It goes to the DA after-- not understanding that process was probably one of the major stressors of it. So being able to say, "Okay, you're looking at a couple of months and then you'll get your gun back," then, after that hopefully the detective will be able to let you look at the file-- and just kind of explaining how I felt going through the process, and saying, 'be aware.' I'm not saying this is going to happen to you, but be very aware that you might have this happen to you. Just be aware that it's going to happen at some point, instead of being surprised by it.

Experienced subjects also described engaging in premortem mental exercises (McCammon, 2004). Several experienced subjects talked about playing the "what if game" to prepare themselves mentally for the possibility of needing to use force at varying levels.

> You know, just if you're whatever. You're sitting on a stolen car and you, you need to go through scenarios in your head. What if this happens? What am I going if this happens? You know, or, like from start to finish in your head. Like where, where is this going to go?

All subjects described experiencing perceptual distortions of varying degrees of severity during their deadly force encounter. Most experienced subjects stated that they had been to some form of training that prepared them for the acute experience of a deadly force encounter. Accordingly, most experienced subjects indicated that they were not stressed by the perceptual distortions because they expected them. They also supposed that they would have been stressed if they did not expect to have these experiences. As long as the subject was forewarned of the intensity of the situation and the likelihood of experiencing perceptual distortions, the impact of perceptual distortions seemed to be reasonably short (a few weeks). Most officers expressed that they were relieved that they knew ahead of time that they may experience perceptual distortions.

> I would have been panicked, if I didn't know that that was common. It would have scared the hell out of me.

> I would have been panicked, if I didn't know that that was common. It would have scared the hell out of me.

> When they asked me if I fired I was like 'I don't know' if I did or not I know I pulled the trigger, but it didn't know is was just weird that it still to this day is a weird feeling. I know I pulled the trigger, why didn't I hear, why do I not know that I fired.

Two subjects who experienced multiple (two) UODF incidents both stated that they better knew how to react to the situation during the second incident. It is also noteworthy, as depicted in the following quote, that the manifestation of their experience was applied in a manner consistent with a strong noble drive to serve their fellow officers:

So when it was all over, I gathered all the shooters up, and I sat 'em down and said, Okay, this is what's gonna happen. This is what you do. This is what you don't do. Don't talk to nobody but the attorney. It's gonna be a few hours before we go home. So call your wife and tell her you're gonna be late… …I mean, 'cuz after you shoot somebody, you know you can. And that's kind of what your main question is "Could I ever do this?" So I was confident in that part of it. Um, but the process, knowing what we had our procedure for an officer-involved shooting was. Um, and knowing that it was, I was comfortable [with] it. I knew what was gonna happen.

The investigation process was identified as a larger stressor than the UODF incident itself by all but one subject. However, only two subjects indicated that they had any training pertaining to the aftermath of the UODF.

This warrior mindset training I went to talked a great deal about the aftermath. What you can expect, what's going to happen mentally, physically, emotionally and it really focused on the other half of the incident. It was phenomenal training, so, [I]learned a lot from that" A subject who did not have the benefit of this type of training stated: "we need to get more and better training on what to do after the shooting. And that-that also applies to on scene....um bang-bang he's down, shit, you know, now what?

Well, for one thing in law enforcement, we know there's this possibility out there that you may have to do this at one point in time. I think, I know for me I always kind of wonder, will I make the right decision? Can I do it you know will I do the right thing at the right time? And so it does, in my mind, give me a little bit of confidence. That knowing that yeah I made the right decision I can do it… survive and carry on. Um, it also gives you a perspective that uh...you can only get by doing it, by being involved in that situation, not that I recommend it, and not that it's fun and... You know, it'd be better to go your career and never have one... taking a life, of going through the stress, of dealing with the media and the aftermath and surviving it, coming through and you know, still being able to function in law enforcement.

Fortification and Application of the Pillars of Resilience

The level of fortification, and manner of application of the pillars of resilience represented the greatest divide between subjects with and without experience. Relevant codes were plotted on the model of resiliency (Figure 3), depicting the point at which the

subject applied these protective factors. There were two dense concentrations of codes on the model. The first cluster of codes was grouped prior to the disruptive event. The first cluster consisted mostly of positive statements pertaining to the fortification of protective factors consistent with stress inoculation. Negative statements in the first cluster addressed the overwhelming of poorly fortified protective factors. The second cluster was grouped at the bottom of the trough following the disruption but prior to reintegration. For more experienced subjects, the second cluster mostly consisted of statements indicating a high degree of self-efficacy for navigating the process of resiliency once disruption occurred. For less experienced subjects the second cluster included depictions of struggle or the subjects accessing innate sources of strength to help progress through the process of resiliency. In this section, quotes supporting themes pertaining to stress inoculation are presented. Themes pertaining to self-efficacy are addressed in the following section.

Experienced subjects made statements indicating that the cumulative effect of successfully coping with multiple disruptive events had a positive effect. Many textual warrants exist describing the impact of stress inoculation either preventing the need, or mitigating the extent of the disruption and reducing the need for the resiliency process. Experienced subjects specified that their training and experience served to mitigate the severity with which they experienced disruption from a particular stressor.

> Now, I had an incident years ago, um that did cause some of that stuff. I did lose some sleep, I did struggle to eat, I did you know, um, have some of those issues, but this go around I didn't. I didn't have any of them. I mean it was normal, everyday life for me.

> You know and some people react differently.   Because if you have been through it, I guess I was kind of desensitized more than others.

I think the first one prepared me for the second one.

Speaking of a less experienced coworker who was involved in a UODF incident, one experienced subject said the following:

> He was new here when he got in his shooting. He came down and within a year I think he had been in a shooting down here. He had a, he had a hard time going through that. Um, he almost left law enforcement immediately thereafter. He's, you know, dealt with it down the road but he was like, tell me what you feel like. And I'm like, I'm fine. He's like, wow. He goes, I wish I could, could have been like you, you know, when I was done. And he obviously wasn't prepared for that when he went into it I don't think.

In addition to experience as a PO, there was also a particularly powerful example of life experience providing a measure of stress inoculation as well:

> You know what, I feel like I've been through events I mean, the death of my wife and fighting cancer for 2 years and things like that. This shit I feel like is not anywhere in the same ballpark as that. So, like it, once you go through that, these things kind of seem like they're like eh, eh

Contrast the above examples of experience mitigating the impact of the disruption with the following statement from a less experienced subject:

> I was mad. I was so freaking new. I mean I was just, I was new. I think that I remembered getting a little upset just like, "What the hell do you need my handgun for?" And I probably wouldn't be quite [as] intimidated about it now

Self-efficacy for the Process of Resiliency

Self-efficacy is the belief in one's own abilities associated with a particular task (Bandura, 1997). In this case subjects' self-efficacy with respect to their ability to navigate the process of resiliency emerged as a theme. More experienced subjects frequently articulated possessing a high degree of self-efficacy with respect to navigating the process of resiliency. Subjects who expressed a high degree of self-efficacy also described experiencing the stressor at a lower magnitude of disruption, both with respect

to disruption from the incident itself and the subsequent inquisition. Experienced officers also described a higher degree of self-efficacy with respect to their skills set pertaining to use of force encounters. The following statements preceded longer and more detailed explanations of how experienced subjects were confident that they would cope well throughout the investigation.

> I've been doing this for so long that I just understand it and I just work through it on my own.

> By that point in time I had investigated shootings and drive-bys and homicides and all that stuff plenty of times.

> I didn't lose any sleep over it. Um, I was very confident in the fact that I had done the right thing. I never thought for a second that they were going to screen charges against me. That would have come as an absolute, utter and complete shock to me.

Experienced subjects also described identifying significant events in the process of resiliency and addressed them with proportionate and more immediate responses.

> We were able to talk that out a lot better on this one, and we handled this so much better on this one, mostly because we knew the process and we knew how we were going to react to it.

In comparison, less experienced subjects often needed more blatant cues to motivate action. From a less experienced subject:

> I started getting into a little trouble with being a little bit aggressive with people at work and so the outstanding sergeant I had at the time was picking up on stuff and always check in on me, hey how's it going what can we do to help you out. Finally I think, and good for him, he kind of puts [his] foot down and said, I'm going to make you go to counseling to do something to recognize something to show you've got to do something or you're going to hurt yourself

Internalized Effects of Ecological Disruptive Factors

External stimuli, such as unfavorable media coverage, can significantly disrupt peace officers during their postevent recovery. The greater severity of the stressor, the more powerful mechanism of disruption. Despite experience consistently mitigating the impact and amplitude of disruptions, even more experienced subjects encountered something throughout the incident or investigation process that overwhelmed their protective assets and constituted a disruption. Seven out of eleven subjects indicated that it was the most stressful event of their career. Two more said that it was close. Six out of eleven stated that the UODF was the most stressful experience of their lives. Subjects used language of struggle and loss representing the full spectrum of response ranging from mild irritation to diagnosis with posttraumatic stress disorder. The amplitude of the disruption experienced by the subject is strongly influenced by a variety of internal factors. This section presents themes pertaining to these internal factors.

Perceived Lack of Support

This theme is specific to the internalized impact of perceived lack of support. Subjects described feeling the greatest impact when they perceived a lack of support from sources that they anticipated to be supportive. Perceived lack of support on the part of family, peers, the community or law enforcement agencies was described as more upsetting than sources that they anticipated to be unsupportive, such as the media. The most frequently mentioned theme regarding unanticipated lack of support stemmed from interactions with agency administration. Instances where the subject experienced

perceived lack of support from family and friends was less frequent, but was described as more disruptive.

> I was told by detectives or admin or something, "You're not allowed to discuss what happened, so don't talk about the details of this with anybody." Which I think is a really bad idea. And so, I ended up kind of talking to my wife, but once again we weren't really communicating awesome. I just kind of said, "Well, the guy did this and I did this." But I didn't never really get into the specifics with anybody. I didn't talk about the specifics with anybody, which I think was probably not healthy

> My family was just kind of like, ugh, we'll give him some time, and you know, so... yea. I heard way more from people I work with and people around here than I did from my own family. It's kind of almost been a steady decline. Which is unfortunate. Um, and I don't know why that is honestly.

> I expect criminals to be criminals. I expect those guys to try and hurt me. I expect those guys to try to get away and to run from me. I do not expect my chief of police to be some-- I do not expect my chief of police to not back us as thoroughly as I feel like he should, to take a cowardly approach to a lot of the problems. I don't expect that to come from the administration.

Perceived Severity and Complexity of The UODF Incident

Characteristics of use of deadly force incidents that increased the severity included physical proximity of the threat, perceived level of threat to the subject's own life, perceived level of threat to the lives of others, exposure to mass casualty situations, severe and grotesque trauma, absence of back-up, and the complexity of the incident.

The UODF incident itself is typically described as an acute stressor. The described experiences of all subjects included experiencing perceptual distortions and other physiological responses that are typically associated with hypothalamic-pituitary-adrenal (HPA) axis activation (a fight or flight human stress response). In all cases, subjects stated that the application of deadly force was precipitated by an immediate action made by the suspect which the responding officer perceived as life threatening.

I saw you know the gun pointing us I went to take a shot, pulled the trigger nothing happened, and that's the first time I experienced kind of, panic fear type of thing, that was the time I guess that I started thinking about my wife and my kid and not being able to, that I wasn't going to see them again

When I get to where I popped across, he reaches up and he sits up from behind the tree and sticks the gun right in my face. And I step back at that time, go down to my knee, and he fires two more rounds that go over my shoulder somewhere. I ended up having muzzle blast stippling all of the left side of my body. It was like burned into my arm, and we went to a forensic pathology class, and he said for that to happen he had to be two to three feet away. So it was very very close, and I remember feeling that blast pressure. I remember feeling just a serious amount of blast pressure.

I think probably the biggest thing, the thing that twisted me was like, I like helping people and doing things. I got over there and I felt kind of helpless. Like holy shit, I'm not equipped to deal with what I am seeing here. I want to help these people but I don't even want to touch them right now because they're icky. You know what I mean? Because it's just spine, brain out and like holy shit. Lady holding the hand of her dead daughter. You know. And that's still, that part right there still makes me a little emotional. Because that's, terrible.

Additional disruption was caused on several occasions by the introduction of complicating factors, typically learned after the fact. These were examined as complicating factors that added to the stressful nature of the incident. Subjects described learning details about the incident and experiencing those discoveries as disruptions of varying degrees.

The only thing that bothers me about killing him was the one sentence in the report where she told her son, "Your dad will never come home because the police killed him tonight," is what she tells him. And his kid was eight years old or something. And I remember thinking, this kid's going to hate cops for the rest of his life because I killed his dad.

I was just angry. Just angry and that got worse when I found out it wasn't a real gun. It was an Airsoft pistol. I had a hard time getting over that. Just a lot of anger. I was angry I think at-- I was angry at the guy… because how the hell could you make me do this over a freaking Airsoft pistol? And then at the same time I was angry at myself and I know it doesn't make sense but I was angry at myself because I was like geez I could have just walked up to the fool and punched him in the face and had the same effect.

Compare the above examples with an incident that was perceived by the subject to lack any significant complicating factors:

> I had no problem sleeping, I knew it was a good shoot, I knew I was right, and I had no problem from when it happened clear through this day that I have no problem with what I did, with what happened. He chose his outcome and so my sleep and stuff was no problem.

Both more experienced and less experienced officers expressed that they "did their job well" and did not question their actions. In the less experienced officers, the act of killing created consternation due to the inherent conflict with the moral pillar of resilience.

> It's a catch 22 because you feel good about what you did, you did your job, but you killed somebody. You grew up your entire life thinking, knowing killing somebody is bad and you know that intuitively, I remember just even using violence against somebody-- you're socialized to, violence is bad. And I still remembered the first time I punched somebody or the first time I pointed my gun at somebody. That was a very odd experience for me. Because I grew up-- everybody grows their whole life for the most part socializing violence is bad and then here I am killing somebody. So it was just a weird dynamic to have going on in your head.

> Did I murder the guy? Because I was so mad, and I was not shooting to stop. I was shooting to kill that guy. I was not trying to just end this. He was not living through this. He tried to take me away from my family? I was killing him. And so, I was really trying to come to grips with, Did I murder this guy?

Perceived Severity and Complexity of the Inquisition

The inquisition following the shooting was typically described as the most internalized ecological stressor. In all but one case the inquisition included multiple criminal investigations which were publicized by the media. In addition, there were investigations by the subjects' own agency and in some cases civilian review boards. The majority of subjects expressed frustration, anger, and resentment directed towards the

substantial public scrutiny of the incident. The majority of the subjects also described

isolated instances of family, friends, or other social network responding in a manner that

they found disruptive. The process-oriented aspects of these disruptive factors is

discussed in greater detail in Chapter 3.

All subjects described losing control at times during the investigation. In addition,

most felt stripped of their identity as peace officers. With few exceptions, subjects

described a challenge to, or undermining of, their noble sense of self as an officer (their

noble pillar of resilience).

> They put me in the front of sergeant's car, and they drove me off. And I remember everyone. You see everyone trying to look into the car to see who it was that got in the shooting. I remember thinking, Man, I feel like a criminal. I'm in a cop car, everyone is looking at me, I feel like a criminal right now.

> It was handled very poorly. He walks up, takes my gun, sticks me in his car, and just leaves me there.

> Well, see, and that's the hard part is I start giving out assignments, and it's not very much longer after that I have administrators start showing up and they remove me from the scene.

Subjects who felt a less substantial loss of control were the more experienced

officers with self-identified high degree of self-efficacy and well-fortified pillars of

resilience.

> In fact, you know, I say I wasn't working but you know, I did. I worked actually some stuff from home. I don't think I was supposed to but I did work stuff from home and I actually had to attend some mandatory meetings due to some major cases that I had you know, and had been involved in. And I came to work for some meetings and stuff like that. And they, that, that's probably helpful as opposed to harmful that they're like oh no, it's ok, we realize that, you can keep your police car in case you need to come in to the office or go to interviews or whatever. And that's not normal. And I think they recognized that this was all gonna work out fine. So they weren't stressed about that, because that probably, they're violating their own policies by doing that but um, that probably actually helped when you think about it because you have the support that says no, we know, we trust you, we know you did right, and we trust that this is all

going to work out for you in the end. I think if, I think it would be stressful if everyone started distancing themselves from you.

They wanted me to have someone take me home but I told him no, that I can drive myself and I drove my [agency] car home

I spoke up, I mean, I wasn't in, in any position to tell anybody what to do, but I'm like, I don't think you guys can do this. And they said, well we're just trying to make it so you only have to tell the story once. And I said, I understand that, but Internal Affairs has compelled me to make this statement, via the Garrity...

For all officers, across all levels of experience, pillars of resilience that would have otherwise been protective factors were often undermined by the public inquisition and the investigative process. In every narrative, officers identified a direct impact of the public inquisition on the subject's noble pillar of resilience. This was the most prevalent theme specific to the undermining of the pillars of resilience. Subjects frequently referred to their high level of training and skill in de-escalation techniques within the context of their noble pillar of resilience. Additionally, all of the subjects indicated a high degree of confidence in their decision to use deadly force. The subjects all expressed confidence that they afforded the suspect every possible opportunity to avoid deadly force. However, most expressed that their perception of public opinion was to the contrary.

You know what? If I could have got across this guy and he was drowning in a pool, I would have jumped in and saved the guy. It's what he did that I had to take the actions that I did. That's his fault, that's not my fault. So, coming to grips with that in my head, but then, no one understanding

This is what they're saying on the media. They're saying that it was an execution killing, that he'd given up his rifle, that he was completely unarmed, he was crouched down on the ground and you shot him twice after he had given up. And, I mean that rocked my world.

I can't imagine the poor guys who have those, at least from the media and the public's perspective, where its questionable, you and I know that was a legitimate shooting, but we as a profession probably don't fight the fight as good as we could and explain it and... and educate the public on stuff.

Discussion, Part 1

The following discussion makes connections between the results presented in this chapter and relevant theory and literature. The discussion section in Chapter 3 addresses the positioning of the combined results from Chapters 2 and 3 within the literature.

Successful Mechanisms for the Fortification of Protective Factors

For the more experienced subjects the fortification of pillars of resilience can be understood in terms of terms of stress inoculation. In more experienced subjects the application of protective factors mitigated the actual impact of the disruptive event. The concept of stress inoculation was presented by Rutter and Kobassa to provide a possible mechanism for the mitigation of the impact of a disruptive event based on experience. Rutter described it as a "steeling effect" resulting from the exposure to stress (Rutter, 1987, 2012). Kobassa discusses "hardiness" and describes resilient qualities as traits that facilitate commitment to creating meaning, control of events around them, and fostering belief that challenge led to growth (Miller, 2008).

Rutter emphasizes that "immunization does not lie in the direct promotion of positive physical health; to the contrary, it comprises exposure to, and successful coping with a small (or modified) dose of the noxious infectious agent. Protection in this case resides not in the evasion of the risk, but in successful engagement with it" (Rutter, 1987, p. 318). In addition to developing a resistance to the stressor, repeated successful experiences navigating the process of resiliency can lead to a strong belief that the subject will be able to do so again in the future. The belief in one's own ability to successfully

navigate the process of resiliency is consistent with self-efficacy (Bandura, 1997) specific to the process of resiliency.

Once a stressor overwhelms the protective factors, the more experienced subjects identified a high degree of self-efficacy towards the process of resiliency. Bandura identifies perceived self-efficacy as a reliable predictor of the quality of coping behaviors in the aftermath of a disruptive event (Bandura, 1997; Benight & Bandura, 2003). While social cognitive theory presents an independent theory of posttraumatic recovery (Benight & Bandura, 2004), it is the specific construct of self-efficacy that provides some additional insight with respect to themes observed during this study.

These depictions of stress inoculation and self-efficacy elucidate possible mechanisms of action by which protective factors are fortified through experience. Most important to the current research, they provide terminology which can be used to differentiate between similar themes in the data. Stress inoculation is used to describe the application of protective factors prior to the deflection from the baseline of homeostasis in the process of resiliency. In contrast, self-efficacy is used to discuss subjects' perceived ability to navigate the process of resiliency once a disruption occurs.

Personal Experience of Peace Officers Following the Use of Deadly Force

In this study the 11 subjects provided rich descriptions of the process of resiliency following the acute traumatic stress of a deadly force encounter. Chronic disruptive factors also influenced the subjects throughout the process of resiliency. While the source of most disruptive factors was ecological, the internalized impact of these factors was prevalent throughout the subjects' narratives. The actual stressors that constitute

ecological disruptive factors are the focus of part two of this study (Chapter 3). The

purpose of this section is to discuss the identified themes pertaining to the internal

responses to ecological disruptive factors. At several points, the subjects relied on

allegory and metaphor to convey meaning. In this spirit I will utilize several proverbs and

quotes often passed around in the law enforcement community and present in the subject

narratives as I progress through the discussion of these results.

The subjects' noble pillars of resilience were conveyed as deeply rooted in service

to the community and membership within the culture of law enforcement. The more

experienced subjects described well-fortified pillars of resilience that had been forged

through years of training and experience. Subjects described the processes of gaining

experience in terms of stress inoculation and developing self-efficacy. In addition to

training and experience, cultural support within agencies and the greater law enforcement

communities was also a key facilitator in the process of fortifying the subjects'

foundation of resilience. Training and cultural indoctrination were described as effective

in resolving the notions of cognitive dissonance inherent in the use of force to keep the

peace. The ability to use violence as a tool was well integrated into the peace officers'

noble pillar of resilience.

The theme of disconnection from the communities that the subjects served was

prevalent in the data. The impact of perceived attitudes and opinion of the public is

important to consider as an internal factor. The manner in which subjects coped with

perceived negative attitudes towards law enforcement once again seems to split along the

lines of experience. Most subjects expressed negative perceptions of the public's attitudes

and opinions of law enforcement. However, more experienced subjects were less effected

by perceived negative public opinion as a challenge to their pillars of resilience. Once again, the more experienced subjects employed protective assets fortified prior to the incident. Less experienced subjects who had not yet fortified protective assets sufficient to mitigate the severity of their particular disruption experienced disruptions of greater amplitude based on "public" opinion.

Subjects often conveyed frustration towards the public's lack of understanding of their work and experiences. Several subjects expressed frustration that they could not bridge the gap between the law enforcement community and the people whom they serve. Experienced subjects described the need to come to terms with the cognitive dissonance inherent in the use of force to keep the peace in a manner that is resistant to harsh criticism. The subject's pillars of resilience were forged in the midst of fickle, often negative public opinion. Accordingly, the mechanisms for fortification of the noble pillar of resilience for these subjects appears to be based on creating distance from the public. There is an important nuance in the data: The subjects' narratives framed this emotional distance in language that can be summarized as *us for them* as opposed to *us against them*.

The described lack of understanding on the part of non-peace officers, and perceptions of public opinion as negative emerged as complicating factors to the fortification of pillars of resilience. As stated above, training and cultural indoctrination appear to be successful in resolving the cognitive dissonance inherent in the use of violence as a tool to keep the peace. However, public opinion emerged as a problem for this process. In an old proverb, a student of martial arts asks a teacher to explain how he can speak of peace when he teaches how to fight. The teacher replies: "it is better to be a

warrior in a garden than a gardener in war." While often interpreted to mean that it is

easier to be a gardener than to be a warrior, in light of the results presented here, there is

an important alternative meaning. The "sheepdog" analogy stems from David

Grossman's reference to an allegory conveyed to him by "one Vietnam veteran, an old

retired colonel":

> Most of the people in our society are sheep. They are kind, gentle, productive
> creatures who can only hurt one another by accident…Then there are the wolves,
> [the old war veteran said], and the wolves feed on the sheep without mercy…
> Then there are sheepdogs, he went on, and I'm a sheepdog. I live to protect the
> flock and confront the wolf." and "I mean nothing negative by calling them sheep.
> To me it is like the pretty blue robin's egg. Inside it is soft and gooey but someday
> it will grow into something wonderful. But the egg cannot survive without its hard
> blue shell. Police officers, soldiers and other warriors are like that shell.
> (Grossman & Christensen, 2008, p.180)

The above quote provides a mechanism for peace officers to make sense of the

gap that exists between them and the public they serve. Several officers described using

the mechanisms presented in Grossman's books to resolves the cognitive dissonance

inherent to the use of force in keeping the peace. The fortification of the pillar of

resilience through the formation of a noble self-concept strives for independence from

perceptions of how "the public" views the officer. It was viewed by some subjects as

unfortunate that the essential functions of law enforcement come with public dislike at

times.

> The sheep generally do not like the sheepdog. He looks a lot like the wolf. He has
> fangs and the capacity for violence. The difference, though, is that the sheepdog
> must not, cannot and will not ever harm the sheep. Any sheep dog who
> intentionally harms the lowliest little lamb will be punished and removed. The
> world cannot work any other way, at least not in a representative democracy or a
> republic such as ours. (Grossman & Christensen, 2008, p. 182)

The soldier's lifestyle and mind become different when they are at war (Grossman

& Christensen, 2008; van Wingen et al., 2012). The challenge to soldiers returning to life

in a peaceful society is the subject of much recent literature (Grossman & Christensen, 2008; van Wingen et al., 2012). How, then, do we as a society apply these lessons for those peace officers we ask to fight at home? How do peace officers prepare for the less than 1% of the time when a violent sociopath "wolf" will bring violence into the garden? As presented above, experienced subjects talked about the value of playing the "what if game" as officers prepare themselves mentally for a violent encounter. Imagining violent encounters erupting at any given point in time may help prepare the officer for use-of-force situations. However, it is worth asking what the impact on health and well-being is when the first thing a person thinks about when they walk into a room is the possibility of violence erupting unexpectedly. Veteran officers conveyed pride in their ability to smile and be nice to "the public" while maintaining a state of hypervigilance. Subjects in this study frequently described coming to terms with the challenge of living as a "warrior in a garden" by employing techniques that they felt were costly to their own health and well-being.

Conclusion, Part 1

This chapter was part one of a two-part study examining individual factors influencing peace officers' lived experiences following the use of deadly force. Interviews were conducted with 11 peace officers who used deadly force in the line of duty. A descriptive phenomenological approach was taken to interrogating the meaning of the interviews. This chapter focused on individual protective factors influencing the process of resiliency as well as the subjects' perceptions of the internalized impact of disruptive factors. The major themes discussed in this chapter were as follows:

preparation and understanding, fortification and application of the pillars of resilience, and self-efficacy for the process of resiliency. Chapter 3 will provide a deeper understanding of the target phenomena as experienced by the subjects by placing UODF investigations into context. Following the presentation of ecological results, resiliency outcomes will be discussed.
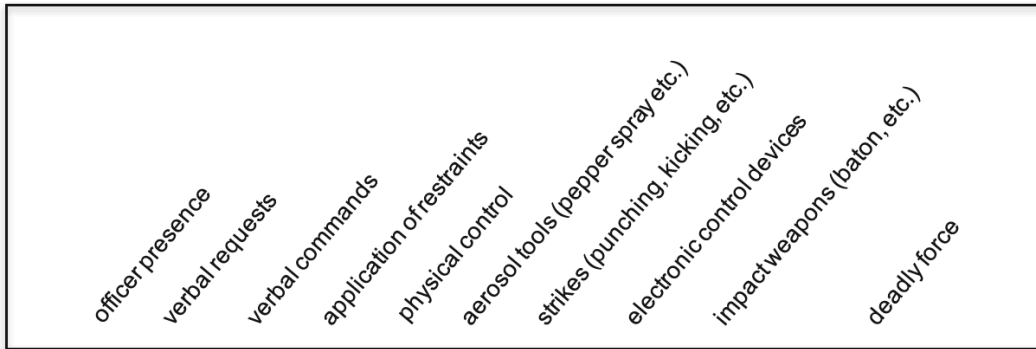
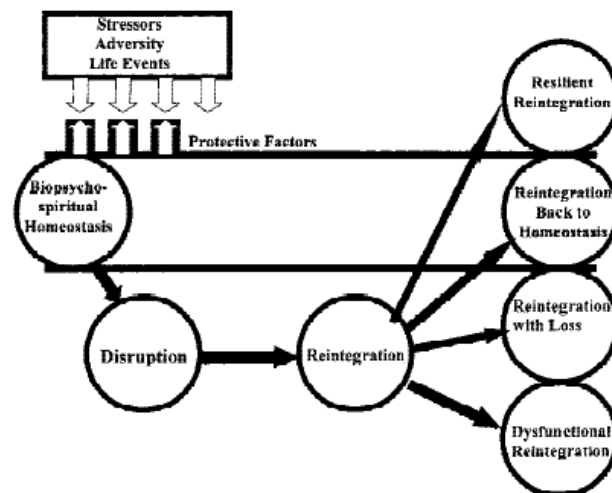Figure 1: A nonexhaustive spectrum of types of use of force

Figure 2: Model of the process of resiliency. Reprinted with permission.
(Richardson et al., 1990)

Table 2: Demographic information for subjects

Subject	Years of Experience at time of incident	Elapsed time, incident to interview (days / years)	Assignment at time of incident	Full time PO employed by agency / office
1	20	637 / 1.75	Detective	101-200
2	2	2625 / 7.19	Patrol / SWAT	51-100
3	1	866 / 2.37	Patrol	>300
4	2	2779 / 7.61	Patrol	>300
5	7	4274 / 11.71	Detective / SWAT	>300
6	8	578 / 1.58	Detective	11-50
7	30	3070 / 8.41	Administrator	11-50
8	11	972 / 2.66	Detective	11-50
9	10	3242 / 8.88	Detective / SWAT	>300
10	15	1091 / 2.99	Detective	51-100
11	2	2096 / 7.96	Patrol	51-100

System for Developing Representative In Vivo Terminology

1. Familiarization with specific language used to express meaning during close reading
2. CAQDAS assisted word frequency analysis of all interviews
3. Select in vivo root word to be used as a proxy for stemmed and synonymous words
4. Case by case verification of interpretation of intended meaning for each term

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Figure 3: System for developing representative in vivo terminology

Table 3: Examples of progression from verbatim meaning units to representative in vivo codes and finally to elaborative codes

Natural Meaning Unit	Representative / Consolidated In Vivo	Elaborative
find someone and talk about it even though these stupid attorneys are going to tell you not to	-Important to talk about the incident -Upset that talking was restricted	Support / Talking
I've been doing this for so long that I just understand it and I just work through it on my own.	-Experience leads to understanding -Doesn't need support to recover	Experience / understanding Self-efficacy
But I think every cop should want to know how they're going to react in that stressful situation.	-Peers should want to know reaction under stress	Confidence as PO

Table 4: The 13 major themes by category of presentation

Internal protective factors	(1) preparation; (2) stress inoculation / fortification of pillars of resilience; (3) process oriented self-efficacy
Internalized effects of ecological disruptive factors	(4) perceived lack of support; (5) severity of the inquisition; (6) severity of the incident
Resiliency outcomes	(7) resilient reintegration (8) reintegration with loss
Ecological disruptive factors	(9) investigation process; (10) agency; (11) the public
External protective measures	(12) agency characteristics (13) agency interventions
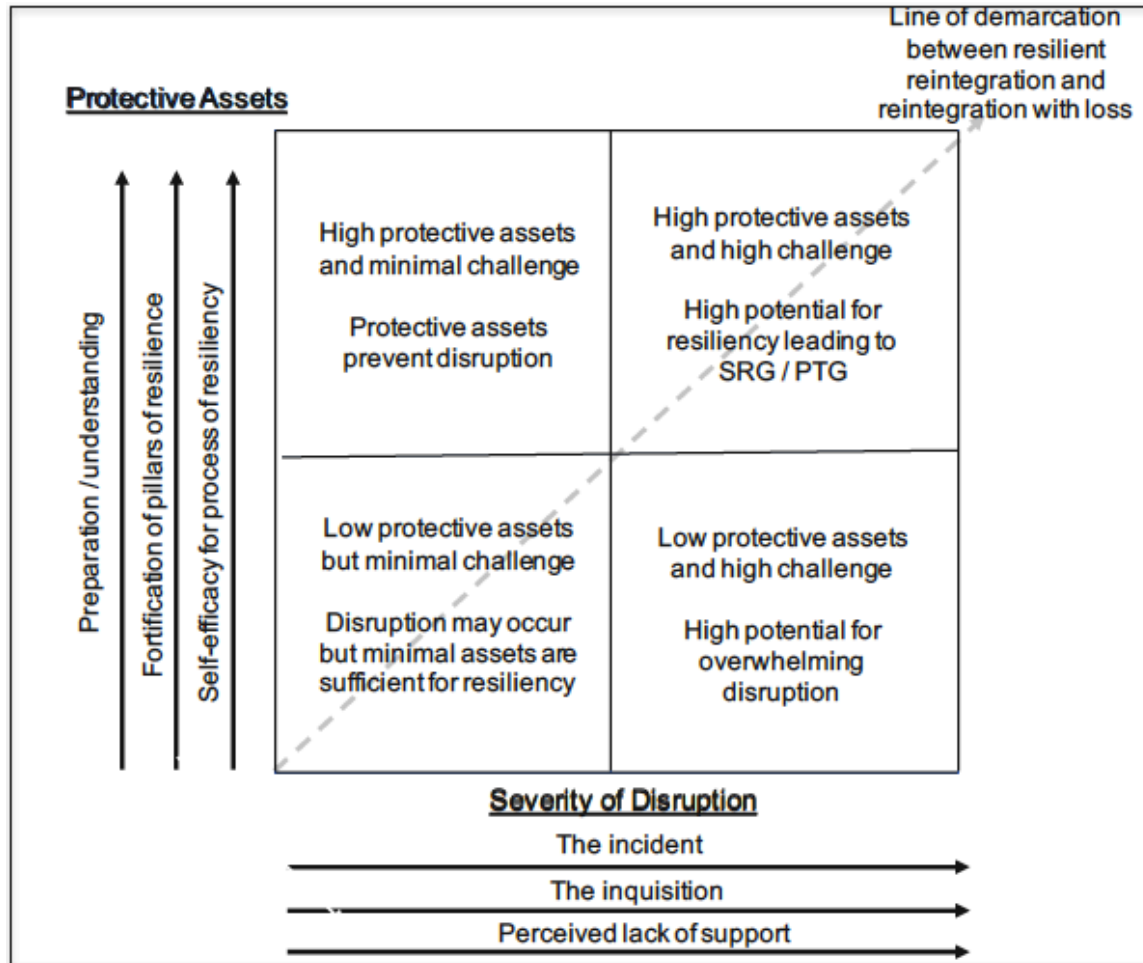
Figure 4: Model for the conceptualization of the relationship between protective assets and disruptive factors

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CHAPTER 3

A PHENOMENOLOGICAL EXAMINATION OF ECOLOGICAL

FACTORS INFLUENCING PEACE OFFICERS' LIVED

EXPERIENCE FOLLOWING THE USE OF

DEADLY FORCE

Abstract

This manuscript is part two of a two part mixed methods study design. Article one

of the series addressed individual factors affecting resiliency, including internal

protective factors and the subject's perception of the impact of external disruptive factors.

After a brief summary of the methods described in Chapter 2, the current manuscript

continues with the same data set and methodology. The focus of this manuscript is the

subject's perception of ecological factors affecting the process of resiliency. In contrast to

focusing on aspects of the process described by the subjects as disruptive or supportive,

the current article presents a more complete picture of the experience following the

officers' use of deadly force incident.

The aim of this article is to provide context to the results presented in the first

article. It is truly unfortunate that there is the need for deadly force in the western United

States. However, without examining the context within which the target phenomenon

occurs, the results cannot be applied in a practical manner. Chapter 2 revealed that the inquisition following the use of deadly force is of great impact to the subject officers. For many of the subject officers, the events following the incident were considered more stressful than the deadly force encounter itself. This chapter further explores the target phenomenon with emphasis on the subject's descriptions of the various ecological aspects surrounding the inquisition.

<u>Background</u>

<u>Investigation Process</u>

The investigation of an officer-involved use of deadly force (UODF) should be considered within the context of the criminal justice system. All officers in the current study were found justified prior to their involvement in the study. As such, this process will be described from a perspective of justified use of deadly force. The examination of unjustified use of deadly force is outside of the scope of the current study. An officer who is being investigated following a theoretically justified UODF differs from any citizen (non-law enforcement officer) being investigated for a theoretically justified UODF only in that additional measures are taken to ensure that law enforcement officers are investigated in a fair and impartial manner. In the event that the suspect is killed by the officer, as subjects of the current study were quick to point out, the officer involved "is the suspect in a homicide investigation."

In the state of inquiry, the investigation of officer-involved critical incidents involving the use of deadly force (UOFD) are regulated by state law. House Bill 361 was passed into law in 2015, directing that law enforcement agencies shall, 1) Work with the

district or county attorney, designated as the agency having jurisdiction over OICI investigation to jointly designate an investigating agency, 2) Assure that the investigation be completed by an agency other than the employing agency of the officer involved 3) Requires that an agency adopt and make publically available the policies, procedure and protocols that ensure the investigation is conducted "professionally, thoroughly and impartially" (HB 361 Investigation Protocol for Peace Officer Use of Force). Therefore, by state law, there will be two agencies responsible for conducting separate investigations of an officer involved UODF. It is noteworthy that the only aspect of any subject officers' investigation that would not have been considered compliant by the current standards is the previously accepted practice of having an agency serve as the lead investigating agency for one of their own employees. Four of the subjects had the criminal investigation handled by their employing agency.

There are potentially two decisions to be made by the authority having jurisdiction: First, whether or not the officers' actions were justified. Second, if the officers' actions were not justified, they must decide whether or not criminal prosecution for homicide will be initiated against the suspect (in this case the officer). A decision of "not justified" is likely to result in civil litigation in addition to criminal litigation.

The following quote is an example taken directly from a letter released by an authority having jurisdiction over an OICI involving the UODF. The quote is taken directly from the introductory paragraph of a letter which disseminates the findings of an OICI.

> [The] D.A.'s Office operates under Utah State law to review and screen criminal charges against individuals where criminal activity may have occurred. The D.A.'s Office operates pursuant to an agreement between the D.A.'s Office and participating law enforcement agencies to perform joint investigations and

independent reviews of officer involved critical incidents ("OICI") including
police officers' use of deadly force while in the scope of their official duties.
Pursuant to the State law and the agreement between the D.A.'s Office and
participating law enforcement agencies, the D.A.'s Office has reviewed the above
referenced matter to determine whether the above referenced use of deadly force
violated criminal statutes and whether a criminal prosecution should commence.
Part of our screening process considered whether the use of deadly force was
"justified" under Utah State law thereby providing a legal defense to a criminal
charge. …As explained more fully herein, the process of "screening" a case
includes an assessment of the facts and an application of the facts to relevant law,
using legal and ethical standards to determine whether to file a criminal charge.

As described above, the primary importance of the findings of this criminal

investigation is whether or not the officer involved will receive qualified immunity for

their UODF. A ruling of "not justified" and a decision to commence prosecution would

strip an officer of any qualified immunity, and they would then face criminal charges. In

the jurisdictions where the subjects of this study serve, OICI protocol criminal

investigations are now conducted by the county or district attorney and by either an

independent agency (not employing an officer involved), or by an interagency OICI

protocol team composed of members who do not work for the employing agency of the

officer involved.

In addition to the two criminal investigations, all officers were subjected to an

internal affairs investigation by their employing agency. The officers' actions were

scrutinized with respect to policy and procedures in addition to the law. The most

important consequence based on the findings of the internal affairs investigation is the

employing agency's decision of whether or not to indemnify the officer involved. An

agency's decision not to indemnify places the burden of cost for civil and criminal legal

defense on the officer. Independent of the decision to indemnify the officer, violations of

policy may result in a wide array of disciplinary actions, ranging from letters of reprimand to being fired.

Several subject officers were also subjected to an additional investigation conducted by an independent civilian review board. The primary role of the civilian review board in this region is to promote community involvement and to "promote greater trust between the police department and the community it serves" (retrieved from: http://www.slcgov.com/civilianreview). As such, the impact of a negative ruling by a civilian review board is unclear beyond the likely unfavorable portrayal of the officer in the media and the impact on community support. There were no cases of the civilian review board ruling differently than the previously discussed investigations.

In the current study there were no examples of dissenting findings between any of the investigations. All subjects of the current study were universally found justified in their actions, indemnified by their agencies, and faced no disciplinary action based on internal investigation. Similar to unjustified rulings, dissenting rulings by the respective investigations are outside of the scope of the current study.

Methods

The following section provides a summary of the detailed methods sections contained in Chapters 1 and 2. This dissertation employed an exploratory mixed methods design. Throughout the study, the greatest emphasis is placed on the qualitative aspects of the study. The decision to give primacy to the qualitative aspects of the study was based on their superior ability to provide a rich description of the target phenomena. The qualitative and quantitative aspects of the study were conducted sequentially and

independently. The goal of collecting the quantitative data was to enhance the qualitative results and to provide a transparent means to check the validity of the authors interpretation of the subject's narratives.

A research design which met the criteria established by Giorgi (1997) for descriptive phenomenological methods for qualitative research was employed. Following IRB approval, a purposive sampling strategy was used to select the participants for the study. Eleven subjects were selected for participation. They were all certified and sworn peace officers working in the state of Utah. All subjects self-identified as having used deadly force in the line of duty. All subjects were male and of qualifying age for civil service.

Due to the highly publicized nature of the target phenomena and the small pool of potential subjects, it is not possible to disclose the typical set of demographic information for the subjects without revealing their identity. The following statements and the information in Figure 3 provide some general information. All selected subjects were male, and all but one was Caucasian. Subjects had between 1 and 30 years of experience at the time of the incident ($M=$ 9.82). Time elapsed between the incident and the interview ranged between 578 days (1.58 years) and 4274 days (11.71 years) ($M=2095$ days or 5.74 years).

All subjects indicated that during their encounter they employed deadly force to mitigate a clear and proximal deadly threat to themselves or others. All subjects had been deemed legally justified by the authority having jurisdiction over the use of deadly force at the time of the interview. Two of the subjects used deadly force on two separate occasions. For instances of multiple uses of deadly force, both subjects stated that the

first use of deadly force was the most impactful. In those cases, the information provided above reflects the initial use of force by that subject.

In accordance with Giorgi's descriptive phenomenological method the following steps were satisfied, 1) collection of verbal data, 2) reading the data, 3) breaking the data into parts, 4) organizing and expressing the data from a disciplinary perspective, 5) synthesis of data for dissemination. (Giorgi, 1997)

A semistructured approach was taken to the interview process. An interview guide was developed to serve as a suggestion for sequence and topics to be discussed. However, there was an "openness to sequence and form" (Kvale, 1996, p. 124). The emphasis was placed on eliciting the subjects' self-directed narrative whenever possible (Tracey, 2013). All interviews were conducted exclusively by the principal investigator.

After the recorded interviews were transcribed, three rounds of close reading were conducted for each interview. All transcripts were then broken down into meaning units. Sequentially, the coding methods employed were in vivo coding (Charmaz, 2006; Glaser, 1978; Glaser & Strauss, 1967; Saldana, 2013; Strauss, 1987); Process coding (Bogdan & Biklen, 2007; Charmaz & Belgrave, 2002, Charmaz, 2008), and elaborative coding (Auerbach & Silverstein, 2003, as cited in Saldana, 2013).

Approximately 1 year after the initial interview, a questionnaire that was developed based on the qualitative results was completed by the subjects (n=11). Where applicable, relevant descriptive statistics accompany the qualitative results. In some cases, the incorporation of descriptive and frequency data provided a deeper understanding of the subject narratives. Validated metrics allows for limited calibration and between groups comparison of subjects' experiences with respect to the impact of the

disruptive factors and certain aspects of resilient reintegration. However, primarily, the descriptive information is included in the Results section to serve as a validity check for the PI's interpretation of the textual data.

<div align="center">Results, Part 2</div>

Ecological Factors

This chapter presents the themes in the data pertaining to ecological disruptive factors and external protective measures. Themes are described that pertain to internal protective factors, internalized effects of ecological disruptive factors and resiliency outcomes. For detailed information on data, and for an all-inclusive overview of major themes, please see Chapter 2.

Process-oriented Themes

As discussed in the section entitled "Internalized Effects of Ecological Disruptive Factors," the most prominent theme was an undermining of the officers' noble self-identity. Overall the subjects described the disruptive aspects of the investigation process in terms of their propensity to strip them of control of their identity as officers. The description of aspects of policy and practice that strip the officer of their identity were given with passionate frustration.

> He walks up, takes my gun, sticks me in his car, and just leaves me there. So I am sitting in the car, and I know that, that our policy and new procedures don't dictate that's how it's handled, so I am a little bit frustrated.

> Um I didn't get to bring my car home. I didn't get to, I didn't drive myself home. I was given a ride home, by a, by a lieutenant.

I was the guy that like, the first officer that showed up. I said, I want...I went to my car and I got my cones. And I said, I want you to put a cone on every shell casing and every piece of evidence that you see. You know, another [LEO] shows up, I was all like, I want you to start taping everything off and start making a list of everybody you see here right now. I mean, I was just like, doing this and then all of a sudden, as your kind of getting that locked down, you get whisked away. That sucks man. There's no two ways about it.

Subjects described being isolated and sequestered from their peers as

problematic. The isolating effect of a "gag order" or the effects of policy mandating

silence was addressed by every subject. Most subjects described a period of 1-3 months

were they were not able to openly discuss the incident with anyone other than their

spouse. The subjects that did not discuss the incident for prolonged periods of time

seemed to struggle a great deal more than those who were either permitted to talk about

it, or those who simply disregarded the gag order. Talking and telling the story were also

important with respect to the subject's noble drive. They described anger when

misinformation about the incident was spread and expressed great frustration at not being

able to clear their name:

I wanted to tell my story, and I wanted to tell it you know accurately and truthfully, and as much as possible and that I could give information to clear my name basically.

The way I describe it to people is like not being able to talk about it is like being told you're just going to carry this weight on your shoulders until I tell you you can lift it off, you can't put any of it down, you have to carry it until someone else says.

At this point I was told not to talk about the event. I was told by the detectives or admin or something, "You're not allowed to discuss what happened, so don't talk about the details of this with anybody." Which I think is a really bad idea. And so, I ended up kind of talking to my wife, but once again we weren't really communicating awesome. I just kind of said, Well, the guy did this and I did this. But I didn't never really get into the specifics with anybody. I didn't talk about the specifics with anybody, which I think was probably not healthy. I don't think I went off the handle and went ape shit nuts or anything, but I could have handled it

a lot better if I would have just been able to talk it out a little bit more, because I was so new.

During the whole lawsuit that I had afterward, you weren't allowed, you know the whole you weren't allowed to talk with people outside that really I think did a toll on me.

Criminal Investigations

The themes pertaining to the investigation process were focused on what frustrated the officers with how the criminal investigation process was handled. In order of prominence, these themes were as follows: time, communication, and message sent to the public. The subjects felt that they were left in the dark to wonder and wait in silent isolation.

I was called in like week 2 and a half [into the criminal investigation], and was told, alright, next week you'll be back to work, [the authority having jurisdiction] they've already round tabled it, like you should be good. So I'm like, oh alright, right on. SO the next week rolls around and they're like uh, they've had some issues with the ME doing his report, and they have to wait for his report. SO then another week, and then that week rolls around and they're like, "look, he still hasn't gotten it done. Everything's good they just wanna see that report before they'll give you the official clearance." So I think was gone like 5 weeks, and it wasn't stressful until those last 2 weeks, and it's only stressful because we're waiting on one person to do a report, that he hasn't done, and they don't want to do the official clearance until they have everything in a file.

Which was bullshit… the way I found out [that it was ruled justified] through the media. The [agency] guys were like, hey just so you know you got cleared for your shooting and I was like what? And they were like yeah it's on the news right now, even your letter being cleared from the Attorney General or the Attorney General's office. So I went into the break room I was at the [agency] and pulled it up and read to the whole thing, I sat up there and had a little moment for myself I was just kind of like sat there quietly and they were in disbelief too, nothing, no nothing from any of my administration so… so I found out that I was cleared through the media.

Themes Pertaining to Perceived Lack of Support - Agency

There were mixed results regarding perceived lack of support from the employing agency. Most subjects expressed some frustration with their agency and agency administration, but, the overall expression of feelings towards the employing agency was usually positive. Most subjects described feeling supported by their agencies. Positive feelings towards agencies were largely attributed to the impact of several key individuals and will be discussed under protective factors. In a small number of instances, particular administrator(s) were identified as the problem. More frequently expressed frustration was directed towards a specific policy or practice. There were several instances of middle and upper management (often referred to as "administration") as the focal point of expressed process-oriented frustration. Despite all subjects stating that their agency was supportive overall, in two cases where both subjects were employed by the same agency, the overall feelings towards the agency were outright negative. All other subjects reported critiques of agency support and practice as "things they could do better" citing an overall positive response by the agency.

> Administration wants you to get out there and protect the public until you do, until you do something that's negative towards the office which is killing somebody, the public don't like that, I get it, but that's what we do that's our job, so it's almost like an inconvenience to administration when an officer does something like that, does their job.

> I think like for me it's my supervisors are a buffer between administration and me, I feel they have my, they understand my job

> The [upper administrator] came out, the [middle to upper administrator] came out. They don't talk to you. They're not there for you. They come out to talk to their buddies that are there.

Insufficient resources provided to the officer was the most prominent theme pertaining to lack of support by the agency. Several subjects spoke about the employee

assistance program (EAP) contracted by their agency in unflattering terms: "I tried going

to EAP the employee assistance program, counseling; that was pathetic, at best."

> I was very disappointed with our psychiatrist, psychologist, whichever one they are, that-- I'm sure they're good for the accountant that comes in and feels sad, and they can talk to them and walk them through that, but as far as a police officer going through, there's very little in the field of psychiatry, whatever it is, that they can say, As a police officer, I can see where you're coming from. Let's work through these instances. It's just some other person that's never had the training that you've had, that's never been in a situation close to what you've been in, and that's going to say. "Oh, that must've been very hard. I understand how that feels." And I wish that that was different. To the point where if I have ever have to get a second job, that's probably what I would do.

> Don't go to the lowest bidder for psychological services. Seriously, that's what government does and I'm all for saving taxpayer's money. But at some point you need to realize the middle of the road is where you need to be. The lowest bidder isn't the best and you shouldn't be going with the highest either. Somewhere in the middle is where you need to be. You're not going to get the service you need with going with the lowest bidder and that's what happened with me. It absolutely was.

> I do wish peer support was available to the wives also. As much was provided to me, nothing was provided to my wife. We do have-- I mean, she could have-- we have the eight employee assistant, psychiatry sessions that she could go to but she didn't do that, and I didn't encourage her to do that because I didn't really know about that. But I wish there was something that we just made sure that the wives were just into it as well. That's half of what's going on at home.

Themes Pertaining to Perceived Lack of Support: The Public

Perceived lack of support from the community that the subject serves were

expressed in terms of "the public" and "the media." The most prominent theme with

respect to the broader concept of "the public" theme was a lack of understanding on the

part of the public with respect to law enforcement training and best practice.

I think it's dealing with the public. It's not even that because most of the people I interact with are very nice and they like me. I don't want to say that, it's not that they like me, it's that they appreciate what I do. That's the hardest part for me. People have, they look at me, and when I say me I mean police in general - they look at me as some kind of occupying force robot that has no feelings or anything specific about me. I'm completely dehumanized to them and they don't appreciate what I've had to go through. I'm just wanting to help. The whole reason I got into this job is because I wanted to do something good. I wanted to do something worthwhile and its just-- the biggest stressor for me is feeling unappreciated.

My stress comes from the community. The way you are treated anymore. You know, it doesn't matter how good of a cop you are or how nice you want to be, they say this on the news, and you're a horrible person.

Themes Pertaining to Perceived Lack of Support: The Media

Subjects expressed a strong dislike for the media. There was distinction between

the media and the public.

You know? Um, try not to watch the news a whole bunch; because they're gonna stay stupid things. And they are gonna get it wrong. Cuz the news usually does get things wrong. Um, and its gonna piss you off. You know? Try to stay away from the newspaper if you can – if you even still get the newspaper.

Um, so the social media aspect of the whole thing, which is, I think, the biggest problem of it all, right now. Um, didn't exist. So I got off easy, on those. But I think, telling a-, telling the guy, maybe turn off your Facebook page for a while.

Discussion, Part 2

In this chapter, part two of the current study examined ecological factors

influencing peace officers' lived experience following the UODF to a greater extent than

previous research. The following discussion makes connections between the current

study, theory, and existing relevant research. The discussion section in Chapter 5

addresses the positioning of the combined results from Chapters 2 and 3 within the literature.

The propensity for particular aspects of the UODF incident and investigation to undermine pillars of resilience was a prominent theme. In most cases, subjects described overcoming the acute trauma of the incident itself within an appropriate timeframe given the magnitude of the incident. The chronic stressors faced by subjects came from the nature of the investigation process and public inquiry. Themes of isolation, frustration, doubt and alienation stemmed directly from the investigation process. The powerful impact of varying levels of sequestration and gag orders should be carefully considered with respect to agency policy, practice, and protocol for the investigation of peace officer UODF incidents.

The Public and The Media

The subjects described feelings of frustration towards the media. These feelings of frustration were conveyed using powerful imagery of malicious acts towards law enforcement. Officers felt that the media "gets it wrong" and "bashes" them, poisoning the relationship between the police and the public they serve. Subjects expressed feelings that the media was sabotaging the relationship between law enforcement and the public. The subjects' described feelings of futility with respect to public relations are not without merit. As presented in the literature review, media in the form of fiction, "reality" television, and news programs tend to skew the public's perception of the realities of use-of-force situations as well as the frequency of occurrence (Oliver, 1994). Media and other vicarious sources of information largely form the basis of public attitudes towards the

police (Chrmak, McGarrell & Gruenewald, 2005; Dowler, 2003). Rosenbaum et al.
demonstrated that the attitudes towards law enforcement are not likely to change based
on actual positive interactions with law enforcement. The vast majority of citizens have
little to no contact with law enforcement. The efforts of peace officers have little power
to influence attitudes towards police in comparison to the media and other vicarious
sources. Attitudes and opinions about law enforcement precede a peace officers' contact
with the public, and these attitudes and opinions are not likely to change based on a
positive experience (Rosenbaum et al., 2005).

Talking and Connection to Support Networks

        The struggles faced by subjects as they navigated the process of resiliency were
exacerbated by agency policy-based barriers to accessing the subject's support networks.
Frequently, subjects identified their peers as their most valuable support network. All
subjects described talking with their peers as a valuable tool for processing traumatic
incidents. This support network is integral to the development of the peace officers' pillar
of resilience and was described as a source of strength as subjects navigated the process
of resiliency. The vast majority of subjects found a way to talk and access a support
network. There were examples of permitted means to do so (mental health professionals,
talking only to their spouse), as well as several examples of subjects who simply
disregarded the expectation that they not discuss the incident. In the only case where the
subject adhered to prolonged restrictions (greater than a few months), the subject
described severe ramifications in the form of traumatic stress reactions that affected them
personally and professionally.

More experienced subjects also described being less susceptible to the influence of undesirable agency policy and practice. There were two separate cases where one subject with less experience and one subject with more experience worked for the same agency. In these two instances the subjects with more experience asserted more control during the investigation. The more experienced subjects described less stress associated with the investigation process than less experienced subjects who worked for the same agency.

Preparation

All subjects described being fairly well prepared and experiencing less (although still meaningful) disruption based on the act of killing when compared to the inquisition that followed the incident. The inquisition caused the greatest disruption. One source of stress experienced during the public inquisition was the subjects' need to reconcile their actions and deeply held convictions with groups that did not share their understanding of use of force, or its integration to the noble drive of the peace officer. These groups - media, community members, acquaintances, and family members- were perceived by the subjects to hold negative opinions about their actions. Outside of creating emotional distance from the public and at times with the subjects' own social networks, there were no examples of preparation effectively mediating the impact of this perceived lack of understanding.

Discussion, Parts 1 and 2

Described Resiliency Outcomes

Subjects expressed an increase in confidence related to their abilities as peace officers following the UODF. Several subjects expressed growth stemming from performing well (as trained) and surviving a deadly encounter. Preparation for the potential for a deadly force incident represents a large portion of peace officer training (Rahr & Rice, 2015) and culture. However, the vast majority of officers will go their entire career without a UODF and thus will carry uncertainty with respect to how they would actually perform in a deadly force encounter (Grossman & Christensen, 2008). Training instills an understanding of how challenging interpersonal combat is to the subjects. The majority of subjects expressed that they did their job well and that the experience had a strengthening effect, bolstering their self-efficacy with respect to the skills set required during deadly force encounters. Most subjects expressed that they were better peace officers after having the UODF experience.

The majority of subjects who stated that they experienced posttraumatic growth also indicated a paradoxical impact in other areas of their lives. Subjects stated that their growth was limited specifically to the use of force. Subjects also clearly described that the growth that they experienced came at a high personal cost. The subjects' expressed feelings of loss were directly attributed to both the act of killing another human as well as various aspects of the inquisition following the UODF.

The assumption that any growth constitutes resilient reintegration, and is therefore a positive outcome, is a dangerous one. The difference between much of the literature in posttraumatic growth and the results of this study warrant careful consideration. The

results of this study do not support the notion that growth experienced makes life better for the individual. In all but two instances where posttraumatic growth was discussed, it was limited specifically to the skills set associated with the use of force and the UODF. As Sapolsky and Grossman both point out, while the physiology of fighting may be protective within the realm of interpersonal violence, it is quite damaging when applied to other aspects of life (Grossman & Christensen, 2008; Sapolsky, 2004). If the growth described by the subject is limited to a skills set pertaining to the use of force, and their effectiveness as a peace officer, and if growth comes at a high personal cost, then these results should be applied cautiously. The descriptive nature of this phenomenological study limits the degree to which the PI interprets intended meaning versus the subjects' described experiences. However, it is important to note that the essence of the subject's ruminations pertaining to posttraumatic growth was the notion of becoming a better peace officers through personal sacrifice. Thus the reader should be very cautious about accepting the subject's description of growth at face value. The experienced growth is quite possibly a negative outcome when viewed with respect to health outcomes and quality of life of the subjects.

Limitations

It was not possible based on the research design to differentiate between the cumulative effects of stress inoculation and self-efficacy. However, subjects who described higher degree of self-efficacy and control described experiencing less performance impairment (Bandura, 1997; Benight & Bandura, 2004, p. 1132). There was a strong theme tying self-efficacy for the subject's ability to navigate resiliency to a

reduction in the amplitude of the experienced disruption, i.e., stress inoculation (Rutter, 1987, 2006). All subjects with greater amounts of experience at the time of their UODF made statements indicating both stress inoculation and a high degree of self-efficacy. While this study design lacks the specificity to differentiate between self-efficacy and stress inoculation, this does not appear problematic. Self-efficacy and stress inoculation are not mutually exclusive. Subjects seem to apply both at different phases of the process of resiliency.

   The current study was limited to subjects who had killed the suspect in the deadly force encounter. It was not possible to determine the impact of the act of killing on the subject's UODF. A critical incident where UODF is employed has several possible outcomes. For example, in the event an officer is involved in a gunfight with a suspect, it is possible for the suspect to be injured and survive, for the suspect to be uninjured, for the officer to be killed and for the suspect to survive, and so forth. In the current study, it was not possible to isolate the impact of the actual act of killing from the greater context. The decision to maintain homogeneity with respect to this aspect of the target phenomena was intentional. However, there are important psychological considerations associated with the inherent human resistance to the act of killing (Grossman, 2014). UODF incidents that do not result in the death of the subject may also yield valuable information. Future examination of UODF within the context of law enforcement should examine UODF instances where the suspect is not killed.

Future Research

More study of the process of acquiring protective factors through training and experience is needed. Rutter's "live vaccine" analogy used to describe stress inoculation holds a cautionary note. Rutter explains that the value of an experience with respect to stress inoculation is not merely expressed as positive affect towards that experience. It is the exposure to stress in this case that leads to a protective response (Rutter, 2006). While the impact of repeated, net positive, relevant experiences in more experienced officers was described as resulting in a high degree of self-efficacy towards the process of resiliency, peace officers are not exposed to a safe, metered dose of a vaccine. From day one on the job, peace officers are exposed to hazardous doses of traumatic stress. Future research should focus on interventions targeting the bolstering of internal protective assets as well as the application of external support for occupational exposures to traumatic stress that are premature with respect to the fortification of the pillars of resilience. Attention should also be given to the potential for such severe disruptions or compounding / complex disruptions that may overwhelm even the most well-fortified protective assets.

The research design for this dissertation was selected, based on the research goals, to obtain a rich description of peace officers' lived experience following the use of deadly force. The examination of the quantitative data generated for the trustworthiness check affirmed the selection of a primarily qualitative approach. Isolated discrepancies between the qualitative results and quantitative data revealed that the qualitative data were superior to the quantitative data for study of the target phenomena.

Important limitations of survey instruments were demonstrated by the discrepancies between the quantitative and qualitative data. There were several cases where a subject very clearly articulated a concept in the interview and then responded differently than one would have assumed based on their comments. In these cases, the author believes that the qualitative data were accurate and the quantitative data were flawed. For example, please consider the following quote:

> Well, I wasn't happy… I don't want to say happy, I wasn't impressed with who work sent me to because we have to go see a psychologist or therapist, whatever, before we can get clearance to return to work. They sent us to a different one than they have now at the time and now I think it's a service you can pick from whatever and ever, but I remember they sent me to one [location], I don't remember the name of the place. But I went there and [they] basically told me that-- she was very nice, but she basically told me, I specialize in geriatric care. I'm thinking, Well, what the hell am I here talking to you about?

The subject who made the above statement indicated "strongly agree" on the survey item entitled "Access to mental health resources (psychiatrist, licensed clinical social workers, etc.) provided by my agency was sufficient." There were no additional statements within this subject's interview that addressed mental health resources provided by their agency.

There are several potential explanations for such discrepancies between the data resulting from the different methods. It is possible that the subject was thinking of a different service that they had access to but that they did not speak about during the interview. It is possible that the subject interpreted the author's survey item inconsistently with the author's intention. Or, the subject may simply have made a mistake and selected "strongly agree" when he intended to select "strongly disagree." It is the opinion of the PI that the true essence and a more accurate representation of the subject's lived experience exists in the subject's narrative. During the interviews the researcher had the opportunity to clarify points of confusion. With self-reported questionnaire-based data, the true

perspective of the subject will remain unclear. Perhaps more concerning is the unknown impact of undetected errors. Without the qualitative data, such an inconsistency as the example above would likely go unnoticed, having an undetected impact on everything from reliability analysis of the instrument to the final results. Future study should take into account the severe limitations of purely questionnaire-based research of such a complex, multifaceted phenomena.

The exploration of the target phenomena by quantitative means will face several challenges as described above, but future quantitative efforts may benefit from incorporating the model introduced in this study for the conceptualization of the relationship between protective assets and disruptive factors (Figure 8). Cluster analysis of data plotted via the Figure 8 matrix may serve as an interface between the qualitative data and future quantitative exploration.

Other subpopulations of public safety personnel may also benefit from similar examination of their experiences following exposure to traumatic stress. Subjects in this study were able to easily recall their more disruptive exposures to traumatic stress. The other types of traumatic incidents they described included severe motor vehicle crashes, injured children, exposure to sex crimes, and death as the result of interpersonal violence. Responses to these types of incidents are not unique to peace officers. It is quite possible, for example, that emergency medical service providers who provide more hands-on and involved medical care for the victims have a more traumatic experience during certain call types. The current study established descriptive phenomenological methodology as a valuable tool for the examination of the lived experience of public safety personnel following exposure to a disruptive traumatic stressor.

Conclusion

As established in the introduction, the morbidity and mortality in public safety personnel associated with traumatic stress should be of great concern. Because of the complex interplay between traumatic stressors and protective factors it can be difficult to quantify what constitutes a traumatic stressor. This study examined a subpopulation and traumatic stressor within public safety that is widely accepted as a traumatic stressor regardless of the individual's protective factors. While the severity of the experienced disruption did vary between subjects, all subjects experienced disruption from the use of deadly force. The inherently disruptive nature of the target phenomena provided a unique opportunity to obtain rich qualitative data from all subjects.

The goal of this study was not to develop or subscribe to one theory. Rather, the goal of this research was to describe the peace officers' experiences following the use of deadly force from their perspective. Collectively, part one and part two of the current study represent the most in-depth, descriptive, phenomenological exploration of the lived experience of peace officers following the use of deadly force to date. Prior to the current study, David Klinger's "Police Responses to Officer-Involved Shootings" was perhaps the most in depth and careful study in the literature (Klinger, 2001). With the backing of the National Institute of Justice, Klinger conducted a careful study in which 80 subjects were interviewed about their experiences in and following officer-involved shootings. Klinger's study differs from the current research in two important ways. First, Klinger's study spends a great deal of time focusing on the incident rather than the aftermath. Secondly and most importantly, Klinger's investigation of the experiences after the incident were conducted with a closed-ended instrument that covered no less than 54

items. Klinger provided an excellent inventory of "psychological and emotional phenomena" experienced by officers in his data set.

Several other researchers have conducted relevant research specific to peace officers' experiences with traumatic stress, but not specific to the use of deadly force (Hodgins, Creamer, & Bell, 2001; Karlsson & Christen, 2003; Regehr, Johanis, Dimitropoulos, Bartram, & Hope, 2003; Violante et al., 2006; Walsh, Taylor, & Hastings, 2012). Limited to the use of deadly force, Klinger also reviewed several studies published prior to 1990. The older work focused primarily on the incident itself, or applied quantitative methods (Horn & Solomon, 1986; Klinger, 2001; Nielsen, 1980; Stratton, Parker, & Snibbe, 1984). It is interesting that in Solomon and Horn's work 30 years ago, they identified a relationship where more peer and administrative support resulted in a less severe reaction (Horn & Solomon, 1986). Most recently, Broome published "A phenomenological study of the police officers' lived experience of the use of deadly force." Broome's work is a qualitative study (*n*=3) as opposed to the majority of other studies. However, Broome's study focuses once again on the incident itself (Broome, 2014).

The current research contributes to a body of literature by providing a detailed description of the peace officers' experience in the aftermath of the use of deadly force. The results provide a more thorough understanding of the impact of the event as well as the associated inquisition. Individual and ecological factors affecting the process of resiliency were presented. The implications of these results should be considered with respect to the health and well-being of the peace officers in the area of study who are exposed to the use of deadly force.

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CHAPTER 4

SUPPORTING RESILIENT REINTEGRATION FOLLOWING THE

USE OF DEADLY FORCE: RESEARCH IMPLICATIONS FOR

LAW ENFORCEMENT AGENCIES

Abstract

A descriptive phenomenological examination of the lived experience of peace officers following the use of deadly force was conducted. Long-format interviews were conducted with peace officers in a Mountain West State of the United States (n=11). All original participants completed a follow-up questionnaire approximately one year following the original interview. Themes that emerged through rigorous coding and analysis were verified via quantitative data collected from the original participants and additional peace officers who had used deadly force in the line of duty (n=21). The essence of the human experience of peace officer who were required to use deadly force in the line of duty was more similar than dissimilar between subjects. Themes emerged indicating factors which facilitate and hinder officers' resilient reintegration following a deadly force encounter. This manuscript presents the data that are most applicable for law enforcement agency leadership and community stakeholders who wish to support the resilient reintegration of the peace officer involved in these traumatic incidents.

Introduction

Researchers and health professionals have examined the effects of both acute and chronic exposure to traumatic stress on peace officers. Repeated exposure to acute and chronic stressors results in chronic over activation of the human stress response in peace officers (Inslicht et al. 2011; Neylan et al. 2005; Witteveen et al. 2010). The term "complex trauma" has been developed to address psychological trauma that "occurs repeatedly and escalates over its duration" (Courtois, 2008, p. 412). There is compelling evidence that a myriad of health consequences disproportionately affect peace officers in comparison to many other professions (Lindauer et al., 2006; Violante et al., 2009; Violanti, et al., 2006; Witteveen et al., 2010). Psychologically traumatic incidents are inevitable and sometimes frequent occurrences for peace officers. The incidence of peace officers experiencing significant effects of psychological trauma at some point during their career has been demonstrated to be greater than 50 % (Marmar et al., 2006; Weiss, 2004).

Law enforcement agencies vary greatly in every aspect, from size and resources to cultural norms. An agency employing 15 officers, for example, will presumably have different needs and resources available than an agency of 200 officers. There are also different levels of stress associated with the different assignments within an agency (Martelli & Martelli,1989). Additionally, the workload and frequency of stressors is different for those police officers. It is important to note, however, that despite differences in call volumes, suburban officers are not significantly different than their urban counterparts in their exposure to traumatic stress (Robinson, Sigman, & Wilson, 1997). The literature clearly shows the need for prevention and treatment measures to

mitigate the impact of even routine occupational stressors faced by peace officers

(Violanti et al., 2008).

Exposure to more severe instances of traumatic stress warrants special attention.

Exposure to critical incidents involving the use of deadly force (UODF) is widely

considered to be amongst the most stressful incidents faced by peace officers (Violante &

Aron,1995). The phenomenological examination of officers' experiences following the

UODF revealed ways that agency administrators can support peace officers in the

aftermath of a deadly force encounter. These results are presented in this manuscript

within the context of UODF investigations.

Background

For the purpose of these recommendations it is only necessary to understand that

the "process of resiliency" represents the process of reintegrating following a disruptive

event. Resilience and resiliency theory are more in depth than the notion that some

people are better than others at bouncing back from adversity. The following model

depicts the process of resiliency. The model presented in Figure 2 illustrates the

progression from a baseline of homeostasis through disruption to integration

(Richardson, 2002).

The process of resiliency can be brief, or, following a more significant stressor

may be prolonged. Following a UODF, the results presented in Chapters 2 and 3 suggest

that, depending on prior fortification of protective factors, this process may take months

to years. More experienced officers described well-fortified protective factors and

demonstrated an ability to navigate the process of resiliency and reintegrate more

quickly. Several officers described the process as taking years instead of months. There are internal and external factors that protect peace officers. Following Richardson's model above, these protective factors minimize the amplitude of the experienced deflection from the baseline of homeostasis. While the officer controls the internal protective factors and resilient drives used to provide the momentum towards reintegration, the officers' agency plays a key role in the process as well. It is important for both the officer and the employing agency to strive for resilient reintegration.

The agency goal should be to (1) minimize additional disruptions and (2) support the process of resiliency as needed. While there are many shared aspects to the experience of officers, there are many individual differences. A supportive agency will accommodate this. This is not the place for dogmatic application of blanket policies.

The majority of officers interviewed felt that the investigation process was more stressful than the deadly force encounter itself. Officers overwhelmingly expressed that protocol investigation process and agency response gives primacy to the suspect and community relations over their mental health and well-being. Peace officers are well indoctrinated to place the criminal justice process in front of their own needs. However, potentially disruptive practices should be carefully considered. For example, some agencies apply a gag order to the officer involved for the duration of civil litigation resulting from the incident. In light of the results of the current study, those responsible for agency policy and practice should carefully consider the consequences of maintaining silence for years. In this example, the relative importance of the "gag order" should be weighed against the likelihood that it may have a severe impact on the well-being of the officer.

<u>10 Ways for Agencies to Support Individual Resiliency</u>

This section presents some of the prominent themes in the data that are directly applicable to agency administrators and policy makers. Each subheading starts with a relevant quote and then presents the results of this study in the form of pragmatic recommendations for ways to support peace officers following the use of deadly force. Only quotes that represented major themes are presented here:

<u>1. Control</u>

Let the Officer Keep Their Identity and Control as Much as Possible

> Um I didn't get to bring my car home. I didn't get to, I didn't drive myself home. I was given a ride home, by a, by a lieutenant.

> He walks up, takes my gun, sticks me in his car, and just leaves me there.

There were many variations on the theme of loss of control and identity following the deadly force encounter. In one case where the officer was placed in a police car and left there for some time, he stated "I felt like a criminal." The language used by subjects depicted this loss of control: "stuck me in the car" "drove me home," and so forth. In the absence of reasonable suspicion that the officers' actions are criminal in nature, every effort should be made to maintain the officers' identity. Any policy or practice that strips away some aspect of control from the officer should be carefully scrutinized. Most of the officers interviewed understood the needs of the investigation. Where there were conflicts between their preferences and the needs of the investigation, the officers unanimously supported the investigation process without resentment. However, the interviews highlighted several instances where the connection between the needs of the investigations and the policy or practice limiting control was not clear. Progress has

already been made on this front. Almost all agencies replace the officers' gun right away when the officers' weapon is seized as evidence. However, officers are still stripped of control and other symbols of their status as peace officers.

In several cases the subject officers indicated that having the use of their assigned vehicle taken away was as meaningful as having their service weapon seized. Replacing the service weapon and badge of the officer involved has become a symbolic and meaningful gesture followed by most administrators. Similarly, allowing the officer to maintain the use of an assigned vehicle is a meaningful gesture that is not only visible to the officer, but to others as well. It is reasonable to believe that the loss of vehicle use would affect the officers' sense of identity. Imagine that an officer waves at his neighbor most days as he pulls his patrol vehicle into his garage. Now think of the implications for that officer being dropped off at home by an administrator. Allowing the officer involved to keep this symbol of their position of authority conveys the notion of innocent until proven guilty in contrast to the opposite.

2. Training for the Incident

Train Officers in the Skills to Survive a Deadly Force Encounter

> So leading up to this, I had been to street survival two different times. My incident happened in April, and I was at the Vegas street survival the December before. So 5 months before, I was at street survival. And I remember all these things are going through my head, I was remembering things that were talked about at street survival. I was...in fact, there's a video they showed during street survival. I was actually playing that video in my mind while I'm in the middle of my incident. I could picture this - I can picture it right now, this video that they played.

Almost every subject was very pleased with the training that they received from their agency prior to the UODF incident. However, they wanted more training. The

results of the current study clearly demonstrate the importance of experience. With respect to preparation and understanding, training was a close second to actual experience. Most officers adamantly recommended more training for less experienced officers. The results of the current study were clear: Inexperience is a meaningful risk factor for peace officers. The skills for survival should be trained with sufficient frequency and instructional methods to build the officers' confidence. Officers who were confident in the skills necessary to survive a deadly force encounter described more success in navigating the process of resiliency after the UODF. Training is not a good substitute for experience, but it is the only substitute for experience.

3. Train for the Aftermath

Train for the "Other Half" of the Incident

> This warrior mindset training I went to talked a great deal about the aftermath. What you can expect, what's going to happen mentally, physically, emotionally. It really focused on the other half of the incident. It was phenomenal training, so... learned a lot from that too.

Officers frequently identified understanding of use of deadly force encounters and the investigation process that will be followed in the aftermath as a stress-mitigating factor. Subjects who went through the process more than once (reporting more than one UODF throughout their career) stated that the process was easier the second time because they knew what to expect. Once again, training is not a good substitute for experience, but it is the only substitute for experience. Training is the best that can be done to prepare officers until they have the chance to forge protective factors through experience. Officers who had not been through multiple use of deadly force encounters, but who had

received training specific to the investigations that follow the incident, also described struggling less during and after the investigation process.

The officers interviewed emphasized the importance of high-end training, citing specific programs that they felt were of great value. Agencies should provide training and instill an understanding of the investigation process that the officer involved in a UODF will experience in their own jurisdiction. Officers' interviewed specifically stated that they disliked "stress management"-type classes. While officers should have a basic understanding of the warning signs and symptoms of stress-related pathology, the beneficial training that subjects spoke of was specific to the UODF.

4. Mental Health Services

Provide Access to Sufficient Mental Health Services

> Don't go to the lowest bidder for psychological services. Seriously, that's what government does and I'm all for saving taxpayers' money, but at some point you need to realize the middle of the road is where you need to be.

Almost all of the subjects stated that they had bad experiences with the mental health services provided through traditional employee assistance programs. In contrast, the few officers who were able to connect with a mental health provider that had training and experience specific to public safety personnel (or even specific to law enforcement) had positive experiences. Officers who received mental health services from providers who they considered qualified, attributed substantial benefit to the services they received. As an agency, take the time to develop a relationship with mental health service providers that are qualified to work with your staff. The additional time and effort that it takes to establish access to these providers will pay dividends for the officers and the agency in

the long run. It is also noteworthy that the subjects who chose not to utilize mental health

services often made the decision based on negative comments that others had made about

the services available through the agency.

5. Support for the Spouse

Provide Access to Support Services to the Officers' Spouse

> The reason we wanted to have the wives there was because [this was]
> some of these guys' first critical 'oh shit' incident. They had tons of questions.
> Some guys can't explain to their wives what they are going through. [the critical
> incident stress debriefing that incorporated spouses] kind of laid it out, this is
> what they are going to go through, A to Z. You'll experience this after this
> traumatic incident no matter who you are. In some sort of fashion, some extreme,
> some less. So it gave the wives a guideline, it kind of gave them, like oh my
> gosh, it's ok. So they weren't like looking from the outside completely at their
> husband or you know, significant other saying, well he's acting totally weird. No,
> that's kind of normal.

Several subjects stated that they did not know how to talk about the incident with

their wives. Several more stated that they had serious marital problems after the incident.

The one subject whose spouse was provided with mental health services said that they

were invaluable.

Please note that both items addressing mental health services indicate to "provide

access" to these services. There is nothing in the data that suggests making these services

mandatory. To the contrary, two of the more experienced subjects chose not to utilize

mental health services and did not regret this decision. On the other hand, several of the

subjects who were forced to go to mental health providers that they did not feel were

qualified described the experience as harmful rather than helpful.

6. Peer Support Selection

Pick the Right People for Peer Support

> I'm not going to listen to that guy. But if I heard the guy that's like, 'Hey. I'm also a type A personality. You work with me every day. You know I'm willing to deal with a lot of stuff. You might want to go look into this. I don't want this to see you happen this way.' It just needs to come from the right people, and I don't think it's coming from the right people necessarily right now.

The majority of people who had experiences with formal peer support groups said something to the effect of "I just didn't want to talk to that particular person." One agency had a policy of bringing whatever peer the officer involved requested to the scene. That officer did not have specialized training, but in the subject's opinion, that fact was inconsequential. The officer at this agency appreciated having the officer whom they knew and trusted to fill that role. Another subject stated, "it's good for me to talk it out with people. Not the psychologist, not people I don't know, but my close friends that I work with to talk it out with them."

The prominent theme with respect to peer support was the importance of a connection with the culture of law enforcement that they rely on for processing and handling difficult situations. While the use of deadly force represents one of the greatest stressors faced by peace officers, it is certainly not the only traumatic stressor they face. Subjects frequently discussed other traumatic incidents and the use of their informal peer support network and their agency's overall supportive culture to cope with other traumatic incidents. The important difference highlighted by this study is that the investigation process following the use of deadly force causes agencies to restrict (often to completely sever) the officers' access to their tried and true support network. Consideration should be given to allowing the PO to select their own peer support

personnel. The individual's relationship with the peer support provider in some cases may be more important than specialized training in peer support.

7. Allow Communication

Let Your Officers Talk About the Incident as Soon as Possible

> The way I describe it to people is like, not being able to talk about it is like being told you're just going to carry this weight on your shoulders until I tell you you can lift it off, you can't put any of it down, you have to carry it until someone else says.

As a continuation of the concept of peer support, it is important to realize the impact of restricting the officers' ability to talk about the incident. Every officer interviewed emphasized that talking about the incident with the right people was one of the most important things. During the initial investigation (prior to receiving a ruling of justified or unjustified from the authority having jurisdiction) most subjects limited their talking to legal counsel, mental health providers, and their spouse. The longer that interviewed officers were prevented from talking with their peers about the incident, the more they described struggling with the process of recovery.

Officers interviewed described a wide variety of policy and practice with respect to gag orders. The least restrictive practice was to forbid the subject from talking about the incident prior to a ruling of "justified" from the authority having jurisdiction. Some agencies restricted the officer from discussing the incident until all related criminal proceedings were complete. One agency required silence until all criminal and civil legal matters were resolved. Interviewed subjects described waiting between two weeks and several months for a ruling from the authority having jurisdiction. As public scrutiny increases and these decisions take more and more time, policy and practice that may be

harmful to the officer should receive careful consideration. The officers interviewed clearly stated that more restrictive gag orders are harmful and they should be modified or eliminated.

8. Media Messages

If You Talk to the Media, Say Something Positive About Your Officers

> [The chief] called a press conference, and he actually brought in this [evidence] to show the media and you can see the bullet hole and they put a dowel through it and had a person stand there and you can see what the trajectory was… he gave them a lot of information, more than probably most people would do...

There's clearly no one-size-fits-all approach to handling the media. However, officers frequently described feeling as if they had been tried and convicted in a court of public opinion. When a statement comes from the officers' agency, even a nonspecific token of support like prefacing a statement with "we have the best-trained officers" reduces the feeling that the officer is guilty until proven innocent. Preface comments with something indicating support for your officers. The officer(s) involved are listening. Actually, all officers are probably listening.

9. Modified Duty

Provide Modified Duty Options for Officers as They Return

> But to be in charge of the [incident], and leading it, and things like that, was a lot of stress to put on a guy who had just come back to work after shooting somebody.

Peace officers are at particular risk for traumatic stress that "occurs repeatedly and escalates over its duration" (Courtois, 2008, p. 412). Most subjects expressed some

elevated stress upon returning to work. The timing and manner of an officers' return is a natural place to give them more control.

10. Lack of Experience as a Risk Factor

Recognize and Address Lack of Experience

> If I had had 10 years on and then been around a bunch of [UODF investigations], it wouldn't have been as big of a deal. But being so new to the situation, I didn't know how things were supposed to happen, and I didn't really talk to anybody about it."

The most prominent theme in the current study was that of experience fortifying protective factors for officers who were involved in deadly force encounters. More experienced officers (officers having at least 7 years of experience at the time that they used deadly force) described less severe reactions following the incident. This does not mean that experience prevents pathological response to the use of deadly force as a traumatic stressor. There is a complex interaction between protective factors bolstered by experience and disruptive factors such as the complexity and severity of the incident and inquisition, as well as perceived lack of support. However, when distilled down to their essence, one of the most important findings of the current study was the identification of inexperience as a risk factor. Based on these results, inexperience at the time of the use of deadly force incident merits additional effort with respect to the above items.

Conclusion

There are many factors that impact peace officers' process of resiliency in the aftermath of a deadly force encounter. The majority of the external factors are modifiable by the by the officers' employing agency. This editorial presents 10 ways that agency

leadership can externally support officer resilience in the aftermath of UODF incidents.

The 10 items listed above represent a sampling of results from the data presented in the

complete study. These items were specifically selected for presentation here because they

are external factors affecting individual resilience and easily modifiable at the agency

level without large financial demand

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CHAPTER 5

SUMMARY

Three articles were presented. The first two described the lived experience of peace officers involved in critical incidents that involved the use of deadly force. The final article was written as an editorial presenting a simplified version of how the results of this dissertation may be widely disseminated in a pragmatic means consistent with the study aims:

1) Chapter 2: "A Phenomenological Examination of Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript was presented as part one of a two-part qualitative examination of peace officers' experience in the aftermath of deadly force incidents. The focus of the first manuscript was qualitative analysis of interview data. Themes pertaining to factors affecting the process of resiliency were described.

2) Chapter 3: "A Phenomenological Examination of Ecological Factors Influencing Peace Officers' Lived Experience Following the Use of Deadly Force." This manuscript was presented as part two of a two-part qualitative examination of individual peace officers' experience in the aftermath of deadly

force incidents. The second manuscript focused on the ecological factors affecting the process of resiliency, such as the investigation process, community response and media coverage. Themes pertaining to external factors affecting the process of resiliency were described. Quantitative data were incorporated to allow triangulation as a means to check the trustworthiness of the principle investigator's interpretation of the data. Quantitative data are included in the appendices.

3) Chapter 4: "Supporting Resilient Reintegration Following the Use Of Deadly Force: Research Implications for Law Enforcement Agencies." This manuscript was written as an editorial presenting recommendations for law enforcement agency policy and practice that support peace officer resiliency during the process of investigating use of deadly force incidents.

APPENDIX A

RECRUITMENT MATERIALS

Example Recruitment Email for Interview Participants: Version 1

Dear Potential Participant:

I am writing to you request your participation in research that I am conducting. I am studying police officer resilience in the aftermath of deadly force incidents. I am the principal investigator for this study at the University of Utah, Center for Emergency Programs. This study will explore factors facilitating resilient reintegration in police officers following incidents that required the use of deadly force. For the initial phase of this research I am conducting interviews with officers who have been involved in deadly force incidents. For the second phase of the research, I will be surveying law enforcement departments regarding their policies and procedures following deadly force incidents. The policy and procedures that support your officers and protect the citizens that you serve are an important aspect of this research. I am writing to ask if you are willing to participating in this research by completing a brief online survey.

Your identity will not be disclosed and your agencies' identity will be used for internal tracking purposes only. In the final publication, agencies will only be identified by non-identifiable demographic descriptors such as "a medium sized law enforcement agency in the state of Utah". I you do not wish to participate in this study, simply reply to this email or call me (Mike Ditolla) at 801-503-7379 and I will immediately discontinue attempts to contact you. If you reply and indicate that you are willing to complete the survey. I will send you an email, which includes additional information on the study and a link to the online survey.   The survey should only take about 15-20 minutes to complete.

Agreement to be contacted or a request for more information does not obligate you to participate in any study. If you have questions or would like additional information about this study, please call Mike Ditolla at 801-503-7379 or email at mike.ditolla@utah.edu.

Thank you for considering this research opportunity.

<u>Example Recruitment Email for Interview Participants: Version 2</u>

Dear Sample Potential Participant:

I am writing to you because Officer Joe Smith with the Provo Police Department referred you to me and said that you may be interested in participating in research that I am conducting. Officer Smith told me that he spoke with you and that you indicated it would be OK to contact you. I want to let you know about an opportunity to participate research study about Police officer resilience in the aftermath of deadly force incidents. I am the principal investigator for this study at the University of Utah, Center for Emergency Programs. This study will explore factors facilitating resilient reintegration in police officers following incidents that required the use of deadly force. For the initial phase of this research I am conducting interviews with officers who have been involved in deadly force incidents. For the second phase of the research, I will be surveying law enforcement departments regarding their policies and procedures following deadly force incidents. I am writing to ask if you are interested in participating in this research by allowing me to interview you about your experiences. The emphasis of the interview will be on the your experiences following the deadly force incident that you were involved in.

I will only contact you if you reply and indicate that you are interested in being interviewed. Agreement to be contacted or a request for more information does not obligate you to participate in any study.

If you would like additional information about this study, please call Mike Ditolla at 801-503-7379 or email at mike.ditolla@utah.edu.

Thank you for considering this research opportunity.

APPENDIX B

IRB CONSENT TEXT

BACKGROUND: You are being asked to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Your participation in this study will take the form of an interview. Please feel free to ask me if there is anything that is not clear or if you would like more information. Take time to decide whether you want to volunteer to take part in this study.

These interviews are a part of a multifaceted study that I am conducting. The purpose of this research is to provide evidence that can be used to inform policy and practice helping peace officers in the aftermath of deadly force incidents. This research is first and foremost an inquiry into the process of recovery following the disruptive event of using deadly force in the line of duty. There will also be a separate survey completed by agency representatives and line officers targeting information on administrative policy and practice following incidents involving use of deadly force.

This interview will be recorded and then transcribed for analysis. I'll be running two digital recorders during the interview, one if just a backup. The recordings will be stored on an encrypted drive labeled with only todays date and time. The recordings will be transcribed for coding and analysis. The transcript will not contain your name or any other information that could be used to infer your identity. As the interview is transcribed, I will censor names and any responses that could be used to infer your identity or your agency's identity. It will take about one hour to complete.

STUDY PROCEDURE: Your participation in the study will be completing an interview. It will take about an hour to complete the interview. I will be asking you to tell me about the incident that you were involved in, and time following the incident. Participation in the study is voluntary: No compensation for your participation is expressed or implied. You may choose to discontinue the interview at any time, by saying that you do not wish to continue with the interview.

RISKS: The risks of this study are minimal. You may feel upset thinking about or talking about personal information related to the use of deadly force. These risks are similar to those you experience when discussing personal information with others. If you feel upset from this experience, you can tell me, and I will tell you about resources available to help.

BENEFITS: No direct benefit to you is anticipated to result from your participation. However, I hope the information we get from this study may help develop a greater understanding of the individual officers' experiences. It is the goal to provide evidence to guide policy and practice that supports officers' in the process of recovering following event that is always disruptive and often traumatic in the lives of officers.

CONFIDENTIALITY: All research records that identify you will be kept private to the extent allowed by law. This interview will be recorded and then transcribed for analysis. I'll be running two digital recorders during the interview. The second recorder is just a backup. The recordings will be stored on an encrypted drive labeled with only todays date and time. The recordings will be transcribed for coding and analysis. In the transcribing process your name and any other information that could be used to infer your identity will be censored. Only researchers working on this project will have access to the original recording for the transcription process. The recording and consent documents which contain identifying information will then be stored in a locked safe that only I have access to.

PERSON TO CONTACT: If you have questions, about this study, you can contact the principal investigator, Mike Ditolla 801-503-7379. If you feel you have been harmed as a result of participation, please call Les Chatlain at 801-581-8114. He may be reached during 8am-5pm, Monday through Friday.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

VOLUNTARY PARTICIPATION: Research studies include only people who choose to take part. You can tell me that you don't want to be in this study. You can start the study and then choose to stop the study later.

COSTS AND COMPENSATION TO PARTICIPANTS: There is no cost for participation in the study. No compensation for your participation is expressed or implied.

CONSENT: By signing this consent form, I confirm I have read the information in this consent form and have had the opportunity to ask questions. I will be given a signed copy of this consent form. I voluntarily agree to take part in this study.

_____
Printed Name of Participant

_____   _____
Signature of Participant   Date

_____
Printed Name of Person Obtaining Consent

_____   _____
Signature of Person Obtaining Consent   Date

APPENDIX C

INTERVIEW GUIDE

To be read following a reading of the consent document:

Do you have any questions about the research?

Ok, if you wish to continue I'll start with some preliminary questions:

1. Have you been involved in an on-the-job incident that resulted in serious bodily injury or death?

2. Would you consider this the most stressful event in your career? If not, what was?

3. When was the last event that met the above description?

4. Are you currently under orders from your department, or legal counsel that would prohibit you from freely discussing the incident?

o   How many years as an officer? What is your current assignment? How many officers work for your agency?

o   Please tell me about the use of force incident that you described above.

o   Staring on scene after the incident was stabilized, describe what happened following the incident?
    o   Now tell me your story in the weeks following the incident
    o   Tell me about the months after that

   Clarify approximation of time estimations

o   What was the most helpful thing for you as you went back to your life after the incident?

o   What factors made getting back to your life more difficult?

o   Prior to the incident, what programs or trainings were provided by your agency for dealing with traumatic stress?
    o   Did you use these programs?
    o   What would have (or did) encouraged you to participate in TSM programs?

o   What other things does your agency do that are helpful in dealing with stress?

o   What do you do to manage stress that can build up and get to you?

o   What do you do to manage critical incident stress?

o   What would you tell someone with less experience then you about dealing with stress on the job?

o   What do you think could be done to encourage cultural acceptance of TSM programs?
  o   Prevention
  o   Treatment

Closed ended questions:
   -Treatment -
o   Does your agency have a peer support network?
o   Which do you feel is the greatest source of stress in law enforcement: stress that comes from the agency or the work itself?
o   Do you feel that you have recovered from this incident and it's aftermath?
o   If so, are you worse off, the same, or better off than you were before the incident? *A "better off" response does not imply that you are happy that the incident occurred. It simply means that you experienced personal growth afterwards.
o   Identify at least one thing that your agency does that makes it harder to cope with stress.
o   Identify one thing that they do to make it easier to cope with stress.

APPENDIX D

MAJOR THEMES

Chapter Two

Internal protective factors:

1) Experience produced
   a) Preparation
      i) Accept possibility
      ii) Understand process
      iii) Survival skills
   b) Stress inoculation
      i) Pillars of resilience
         (1) Noble self
            (a) control
   c) Self-efficacy
      i) Process of resiliency

2) Innate sources of strength
   a) Resilient drives
      i) Noble
      ii) Intuitive
      iii) Moral
      iv) Childlike

Internalized effects of ecological disruptive factors:

1) Perceived lack of support
   a) Family
   b) Peers
   c) Community
2) Incident
   a) Severity
   b) Complexity
3) Inquisition
   a) Severity
   b) Complexity

Described resiliency outcomes:

4) Resilient reintegration
   a) Posttraumatic growth
   b) Stress related growth
   c) Stress inoculation
   d) Self-efficacy
5) Reintegration with loss
   a) Maladaptive coping
   b) Pathology

Chapter Three

Ecological disruptive factors:

1) Investigation process
   a) Agency policy / practice
   b) Criminal investigations
   c) Internal affairs
2) Perceived lack of support / agency
   a) Administration
   b) Policy and practice
   c) Insufficient psych. care
3) The public
   a) Media
   b) Social Media
   c) Protesting
4) The Incident

External protective measures:

1) Agency
   a) Culture
   b) Key personnel
   c) Exercise
2) Agency interventions
   a) Training
      i) Preparation
      ii) Understand process
   b) Mental health services
      i) Mental health Provider
      ii) CISD
      iii) Peer support

APPENDIX E

DESCRIPTIVE STATISTICS

Questionnaire responses relevant to internalized effects of ecological disruptive factors.

Items for extent of the disruption experienced by the subject:		Frequency
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career.	No	4
	Yes	7
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career. AND of life outside of law enforcement as well.	No	5
	Yes	6

Comparison of groups: questionnaire responses relevant to internalized effects of ecological disruptive factors (presented as: less experience / more experience)

Items for extent of the disruption experienced by the subject:		Frequency
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career.	No	2/3
	Yes	2/4
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career. AND of life outside of law enforcement as well.	No	2/3
	Yes	2/4

Frequency analysis for binomial survey items (combined results for all subjects n=11)

Questionnaire items for extent of the disruption experienced by the subject:		Frequency	Percent
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career.	No	4	36.4
	Yes	7	63.6
The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career. AND of life outside of law enforcement as well.	No	5	45.5
	Yes	6	54.9
Which did you find more stressful: The actual deadly force incident or the the investigation process resulting from the incident?	Incid.	4	36.4
	Inves.	7	63.6
After a use of deadly force incident, my agency policy prohibits talking about the incident until the officers' actions are ruled "justified" by the DA, CA, or other authority having jurisdiction.	No	1	9.1
	Yes	10	90.9
After a use of deadly force incident, my agency policy prohibits talking about the incident until the resolution of all CRIMINAL litigation. (litigation affecting the officer(s) involved, the agency, suspect etc.).	No	1	9.1
	Yes	10	90.9
After a use of deadly force incident, my agency policy prohibits talking about the incident until the resolution of all CIVIL litigation (litigation affecting the officer(s) involved, the agency, suspect etc.).	No	3	27.3
	Yes	8	72.7

The following questionnaire items addressing process oriented themes descriptive were calculated based on likert-like questionnaire items. The ordinal value generated was between (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.

Scale	SD	D	N	A	SA
My agency provided support to my spouse after the incident	4	4	2	0	1
I trust that a civilian review board would fairly evaluate my actions during the incident	4	3	3	1	0
The media represented the incident accurately	2	5	1	3	0
Access to mental health resources (psychiatrist, licensed clinical social workers, etc.) provided by my agency was sufficient	2	2	5	0	2
The mental health professional that I had access to was competent to deal with this sort of incident	2	3	3	1	2

APPENDIX F

IMPACT OF EVENTS SCALE – REVISED

Subjects were asked to complete the impact of events scale-revised (IES-R) (Wiess, 1995) to provide additional information on the impact of the event on their lives. All subjects completed the IES-R approximately one year following the interview. The primary goal for the application of the IES-R for this study was to provide a means to check the authors interpretation of experience as a mitigating factor of the experienced impact of the use of deadly force on the subjects.

The mean IES-R score for subjects with three or less years of experience at the time of the incident was 2.09, experiencing a "moderate" amount of stress related symptomology. The mean IES-R score for subjects with seven or more years of experience was 1.04, experiencing "a little bit" of stress related symptomology.

Based on the small sample size no inferential statistics were conducted and results should be considered with caution. Additionally, the results from the IES-R are specific to the "last 7 days" prior to taking the IES-R. Thus is quite possible that subjects would have reported a greater impact if the incident were closer to the current time. The elapsed times between the incident and interview are presented in figure four.

IES-R AND SUBSCALE SCORING

Scale	N	Minimum	Maximum	Mean	Std. Deviation
IES-R	11	0	3	1.03	0.938
Intrusion subscale	11	0	3	1.21	1.12
Avoidance subscale	11	0	3	0.89	0.934
Hyperarousal subscale	11	0	3	0.98	0.938

COMPARISON OF GROUPS IES-R AND SUBSCALES (PRESENTED AS: LESS EXPERIENCE / MORE EXPERIENCE)

Scale	N	Minimum	Maximum	Mean	Std. Deviation
IES-R	4 / 7	1.13 / 0	2.88 / 3.13	2.09 / 1.04	0.74 / 1.13
Intrusion subscale	4 / 7	1.00 / 0	2.88 / 1.50	1.75 / 0.52	0.84 / 0.60
Avoidance subscale	4 / 7	0.67 / 0	2.50 / 2.33	1.75 / 0.79	0.78 / 0.87
Hyperarousal subscale	4 / 7	1.01 / 0	2.75 / 2.11	1.86 / 0.78	0.71 / 0.78

APPENDIX G

POSTTRAUMATIC GROWTH INVENTORY

Based on the traumatic nature of the disruptive event, the posttraumatic growth inventory (PTGI) (Tedeschi and Calhoun, 2004) was selected as the most appropriate metric to further examine resilient reintegration. The PTGI was completed by all of the subjects approximately one year following the interview. The PTGI has been extensively validated as a "measure of positive outcomes following traumatic experiences" (Linley et al., 2007 p. 322). The following figure reports the PTGI and subscale scores for subject officers:

COMBINED PTGI AND SUBSCALE SCORING

Scale	N	Minimum	Maximum	Mean	Std. Deviation
PTGI	11	0	3.28	1.75	1.00
Relating to Others	11	0	3.50	1.62	1.20
New Possibilities	11	0	3.50	1.45	1.09
Personal Strength	11	0	3.66	2.21	1.38
Spiritual Change	11	0	3.00	1.81	1.29
Appreciation of Life	11	0	4.33	2.33	1.46

COMPARISON OF GROUPS PTGI AND SUBSCALES (PRESENTED AS: LESS EXPERIENCE / MORE EXPERIENCE)

Scale	N	Minimum	Maximum	Mean	Std. Deviation
PTGI	4/7	1.29 / 0	3.29 / 3.10	2.20 / 1.50	0.89 / 1.03
Relating to Others	4/7	0.67 / 0	3.33 / 3.50	2.08 / 1.36	1.22 / 1.20
New Possibilities	4/7	1.25 / 0	3.50 / 2.00	2.31 / 0.96	1.11 / 0.78
Personal Strength	4/7	1.67 / 0	3.67 / 3.67	2.25 / 2.19	0.96 / 1.64
Spiritual Change	4/7	0.00 / 0	2.50 / 3.00	1.88 / 0.79	1.25 / 1.22
Appreciation of Life	4/7	0.00 / 0	4.33 / 4.00	2.83 / 2.05	1.29 / 1.57

APPENDIX H

IRB CONSENT COVER LETTER

Consent Cover Letter

Police officer resilience in the aftermath of deadly force incidents: A mixed methods study

The purpose of this research is to provide evidence that can be used to inform policy and practice helping peace officers in the aftermath of deadly force incidents. This research is first and foremost an inquiry into the process of recovery following the disruptive event of using deadly force in the line of duty.

Please complete the following online survey. The survey will take approximately 10 minutes to complete. You will only answer some basic demographic questions about your job and employing agency, no identifying information will be required of you.

If you have any questions please contact Mike Ditolla, principle investigator at 801-503-7379 or at *mike.ditolla@utah.edu*. If you feel you have been harmed as a result of participation, please call Les Chatlain at 801-581-8114. He may be reached 8am-5pm, Monday through Friday.

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the questionnaire or omit any question you prefer not to answer

By completing this online questionnaire, you are giving your consent to participate. Thank you for your time and valuable contributions to this research.

APPENDIX I

ONLINE QUESTIONNAIRE

Officer involved perceptions of policy and practice following the use of deadly force

◉ **Project Setup** 📝 **Online Designer** 📧 **Data Dictionary**

🎬 [VIDEO: How to use this page](#)

This page allows you to build and customize your data collection instruments one field at a time. You may add new fields or edit existing ones. New fields may be added by clicking the Add Field buttons. You can begin editing an existing field by clicking on the 🖉 **Edit** icon. If you decide that you do not want to keep a field, you can simply delete it by clicking on the ❌ **Delete** icon. To reorder the fields, simply **drag and drop** a field to a different position within the form below. NOTE: While in development status, all field changes will take effect immediately in real time.

◉ Return to list of instruments

Current instrument: **Officer Involved Survey**   [Return to edit view]

NOTE: Please be aware that branching logic and calculated fields will not function on this page. They only work on the survey pages and data entry forms.

Participant ID	

If you are currently a certified and sworn law enforcement officer in the state of Utah please complete this survey.

This survey is part of a multi-faceted study focused on the experiences of law enforcement officers following the use of deadly force. Because the investigation of officer involved critical incidents requires the silence of the officer involved, the officer's perspective is under-represented. The purpose of this research is to provide information from the perspective of the officer involved. The results of this research will be made available to stakeholders in the process of investigating officer involved critical incidents, so that the perspective of the officer involved can be considered. This survey is anonymous. No identifying information will be required for you or your agency.

Please complete this survey WHETHER OR NOT you have used deadly force in the line of duty. If you have not used deadly force in the line of duty, the survey will only take a minute or so to complete. If you have used deadly force in the line of duty, the survey will take about 5 - 10 minutes to complete. You will be asked to answer some questions about your experience following the use of deadly force. You will also be asked some basic demographic questions about your job and employing agency.

If you have any questions please contact the principle investigator, Mike Ditolla at 801-503-7379 or at mike.ditolla@utah.edu. If you feel you have been harmed as a result of participation, please call Department Chair, Les Chatlain at 801-581-8114. He may be reached 8am-5pm, Monday through Friday. Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the questionnaire.

By completing this online survey, you are giving your consent to participate. Thank you for your time and valuable contributions to this research.

Are you a certified and sworn law enforcement officer, working in the state of Utah? * must provide value	○ Yes ○ No reset
How many years of law enforcement experience do you currently have? * must provide value	[▽]

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How many certified and sworn law enforcement officers work for your agency?
* must provide value

Have you ever been in a situation that met the legal requirements and standards for the use of deadly force, during which you DID NOT use deadly force?
* must provide value
○ Yes ○ No
reset

Does your agency serve primarily a rural or urban population?
* must provide value
☐ Urban ☐ Rural

In general, which do you feel is the greater source of stress in law enforcement:
* must provide value
☐ The actual work of law enforcement, such as dealing with the criminal element, exposure to dangerous situations, exposure to human pain and suffering, etc.
☐ Organizational issues such as rigid hierarchical of law enforcement agencies, structure, management / leadership issues, bureaucracy, etc .

Have you used deadly force in the line of duty?

*Answer "yes" only for instances that meet state code for the use of deadly force, not for instances in which only the threat of deadly force was used. For example: Instances where you have pointed your service weapon at suspects, but have not fired the weapon should not receive a "yes".
* must provide value
○ Yes ○ No [End Survey]
reset

How many times have you used deadly force in the line of duty?
* must provide value

How many years have passed since the first critical incident that required you to use deadly force?
* must provide value

How many years of law enforcement experience did you have when you first used deadly force?
* must provide value

What was your primary assignment at the time that you first used deadly force (for example: patrol, investigations, administration, etc.)
* must provide value

If you have used deadly force more than once, how many years have passed since the most recent critical incident that required you to use deadly force?
* must provide value

Considering all incidents where you have used deadly force, how many officers used deadly force during the same incident(s)? (do not include yourself in the count)

*For example, if you were involved in one shooting during which you and three other officers shot at the suspect during the incident, please enter "3"
* must provide value

In any of the instances in which you have used deadly force, did the suspect die as a result of your actions?
* must provide value
○ Yes ○ No
reset

In any of the instances in which you have used deadly force, was the suspect seriously injured (did not die)?
* must provide value
○ Yes ○ No
reset

https://redcap01.brisc.utah.edu/ccts/redcap/redcap_v6.10.15/Design/online_designer.php?pid=3205&page=officer_involved_survey 2/8

My agency was supportive of me following the incident in which I used deadly force.

* must provide value

○ Yes   ○ No

reset

My employer made mental health, counseling, or other traumatic stress related services available to me within the first month following the incident in which I used deadly force.

* must provide value

○ Yes   ○ No

reset

I was required by my employer to utilize mental health, counseling, or other traumatic stress related services within the first month following the incident in which I used deadly force.

* must provide value

○ Yes   ○ No

reset

I chose not to use mental health, counseling, or other traumatic stress related services initially, but then chose to use them at some time after the first month following the incident in which I used deadly force.

* must provide value

○ Yes   ○ No

reset

I have a strong personal support network outside of work.

* must provide value

○ Yes   ○ No

reset

My agency has an official peer support network.

* must provide value

○ Yes   ○ No

reset

My agency has a peer support network that I would choose to use following a deadly force incident.

* must provide value

○ Yes   ○ No

reset

If you would choose not to take advantage of a peer support program please explain why.

Expand

The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career.

* must provide value

○ Yes   ○ No

reset

The critical incident during which I used deadly force, and the investigation that followed, was the most stressful event of my law enforcement career. AND of life outside of law enforcement as well.

* must provide value

○ True   ○ False

reset

If the critical incident during which you used deadly force (including the investigation that followed) was not the most stressful event in your career, please indicate what was.

After a use of deadly force incident, my agency policy prohibits talking about the incident until the officer's actions are ruled "justified" by the DA, CA, or other authority having jurisdiction.

* must provide value

○ True   ○ False

reset

After a use of deadly force incident, my agency policy prohibits talking about the incident until the resolution of all CRIMINAL litigation. (litigation affecting the officer(s) involved, the agency, suspect etc).

* must provide value

○ True   ○ False

reset

After a use of deadly force incident, my agency policy

prohibits talking about the incident until the resolution of all CIVIL litigation (litigation affecting the officer(s) involved, the agency, suspect etc).
must provide value

○ True   ○ False   reset

Which did you find more stressful:
must provide value

☐ The actual deadly force incident
☐ The investigation process resulting from the incident

Please select the most appropriate response for each of the following items:

	Strongly Agree	Agree	Neutral, (or does not apply)	Disagree	Strongly Disagree	
My agency provided support to my spouse after the incident	○	○	○	○	○	reset
The community that I serve was supportive of me following the incident	○	○	○	○	○	reset
My spouse was supportive of me following the incident	○	○	○	○	○	reset
The fact that i could not discuss the incident was harmful	○	○	○	○	○	reset
I trust that a civilian review board would fairly evaluate my actions during the incident	○	○	○	○	○	reset
The media represented the incident accurately	○	○	○	○	○	reset
Access to mental health resources (psychiatrist, liscened clinical social workers, etc) provided by my agency was sufficient	○	○	○	○	○	reset
The mental health professional that I had access to was competent to deal with this sort of incident	○	○	○	○	○	reset
The peer support staff at my agency includes officers that I am receptive to working with after a deadly force encounter	○	○	○	○	○	reset
I felt alienated by my agency after the incident	○	○	○	○	○	reset
I felt alienated by my community after the incident	○	○	○	○	○	reset
I had problems coping with the incident and the investigation because I was not free to talk about it	○	○	○	○	○	reset
I was able to choose the peer support staff that was assigned to me following the incident	○	○	○	○	○	reset
My agency policy prohibited me from talking about the incident during the investigation	○	○	○	○	○	reset

The remainder of this survey is the completion of two instruments: The Impact of Events Scale - Revised (Weiss and Marmar, 1995) and the Post Traumatic Growth Inventory (Zoellner and Maercker, 2006). Please look past the fact that the language used in these instruments is not designed for law enforcement populations.

Instructions for the next scale: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you **DURING THE PAST SEVEN DAYS** with respect to your use of deadly force incident and the consequences of the incident (including the investigation, social interactions, professional interactions and public response). How much were you distressed or bothered by these difficulties?

(One selection allowed per column)	Not at all	A little bit	Moderately	Quite a bit	Extremely	
Any reminder brought back feelings about it. * must provide value	○	○	○	○	○	reset
I had trouble staying asleep. * must provide value	○	○	○	○	○	reset
Other things kept making me think about it. * must provide value	○	○	○	○	○	reset
I felt irritable and angry. * must provide value	○	○	○	○	○	reset
I avoided letting myself get upset when I thought about it or was reminded of it. * must provide value	○	○	○	○	○	reset
I thought about it when I didn't mean to. * must provide value	○	○	○	○	○	reset
I felt as if it hadn't happened or wasn't real. * must provide value	○	○	○	○	○	reset
I stayed away from reminders of it. * must provide value	○	○	○	○	○	reset
Pictures about it popped into my mind. * must provide value	○	○	○	○	○	reset
I was jumpy and easily startled. * must provide value	○	○	○	○	○	reset
I tried not to think about it. * must provide value	○	○	○	○	○	reset
I was aware that I still had a lot of feelings about it, but I didn't deal with them. * must provide value	○	○	○	○	○	reset
My feelings about it were kind of numb. * must provide value	○	○	○	○	○	reset
I found myself acting or feeling like I was back at that time. * must provide value	○	○	○	○	○	reset
I had trouble falling asleep. * must provide value	○	○	○	○	○	reset
I had waves of strong feelings about it. * must provide value	○	○	○	○	○	reset
I tried to remove it from my memory. * must provide value	○	○	○	○	○	reset

I had trouble concentrating. * must provide value	○	○	○	○	○ reset
Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart. * must provide value	○	○	○	○	○ reset
I had dreams about it. * must provide value	○	○	○	○	○ reset
I felt watchful and on-guard. * must provide value	○	○	○	○	○ reset
I tried not to talk about it. * must provide value	○	○	○	○	○ reset

The last scale includes factors of growth and change that can occur after a critical incident such as a deadly force encounter. Please indicate the extent to which you you have experienced the following changes **SINCE THE TIME OF THE DEADLY FORCE INCIDENT.** If you have used deadly force more than once in the line of duty, please respond with the most impactful incident in mind.

(One selection allowed per column)	I did not experience this change as a result of my critical incident	I experienced this change to a very small degree as a result of my critical incident	I experienced this change to a small degree as a result of my critical incident	I experienced this change to a moderate degree as a result of my critical incident	I experienced this change to a great degree as a result of my critical incident	I experienced this change to a very great degree as a result of my critical incident
My priorities about what is important in life * must provide value	○	○	○	○	○	○ reset
An appreciation for the value of my own life * must provide value	○	○	○	○	○	○ reset
I developed new interests * must provide value	○	○	○	○	○	○ reset
A feeling of self-reliance * must provide value	○	○	○	○	○	○ reset
A better understanding of spiritual matters * must provide value	○	○	○	○	○	○ reset
Knowing that I can count on people in times of trouble * must provide value	○	○	○	○	○	○ reset
I established a new path for my life * must provide value	○	○	○	○	○	○ reset
A sense of closeness with others * must provide value	○	○	○	○	○	○ reset
A willingness to express my emotions * must provide value	○	○	○	○	○	○ reset
Knowing I can handle difficulties * must provide value	○	○	○	○	○	○ reset
I'm able to do better things with my life * must provide value	○	○	○	○	○	○ reset
Being able to accept the way things work out	○	○	○	○	○	○ reset

*must provide value

Appreciating each day * must provide value	○	○	○	○	○	○ reset
New opportunities are available which wouldn't have been otherwise * must provide value	○	○	○	○	○	○ reset
Having compassion for others * must provide value	○	○	○	○	○	○ reset
Putting effort into my relationships * must provide value	○	○	○	○	○	○ reset
I'm more likely to try to change things which need changing * must provide value	○	○	○	○	○	○ reset
I have a stronger religious faith * must provide value	○	○	○	○	○	○ reset
I discovered that I'm stronger than I thought I was * must provide value	○	○	○	○	○	○ reset
I learned a great deal about how wonderful people are * must provide value	○	○	○	○	○	○ reset
I accept needing others * must provide value	○	○	○	○	○	○ reset

What would you like to tell members of the CIVILIAN population who are considered stakeholders in the process of investigating officer involved use of deadly force incidents (lawmakers, politicians, community members, etc.)?

Expand

What would you like to tell members of LAW ENFORCEMENT who are involved in the process of investigating officer involved use of deadly force incidents (agency management, administrators, staff assigned to the investigations, etc.)?

Expand

If you have anything else to add, please do so here.

Expand

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