

EXAMINING SUICIDAL IDEATION AS A MEDIATOR BETWEEN STRESS AND  
AGGRESSIVE POLICE MISCONDUCT

by

Quinn Trevor Gordon

APPROVED BY SUPERVISORY COMMITTEE:

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John L. Worrall, Chair

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Lynne M. Vieraitis

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Bruce A. Jacobs

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Andrew Krajewski

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Dedicated to my sister Chandris and my daughter Jade.

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by

QUINN TREVOR GORDON, BA, MA

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Quinn Trevor Gordon, PhD  
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Supervising Professor: John L. Worrall

Prior research links suicidal behaviors and aggressive forms of police misconduct to stress. However, no study examines whether suicidal cognition, specifically suicidal ideation, influences verbal and physical police misconduct. Psychological and sociological theories suggest that self- and other-directed violence are related, but social and cultural constraints determine the outcome. First, this dissertation examines whether suicidal ideation mediates the relationship between stress and aggressive police misconduct, specifically verbal abuse and excessive force, and the relationship between negative affect and aggressive police misconduct. Second, this dissertation investigates the effect negative affect (depression, burnout, and anger) has on aggressive police misconduct and whether anger exerts the greatest influence. A series of multinomial logistic regressions are conducted with mediation analysis following the guidelines set by Baron and Kenny (1986) and utilizing Karlson, Holm, and Breen's (2011) decomposition method. Primary and supplemental analyses indicate that stress and negative affect's relationship with verbally abusive police misconduct is partially mediated by suicidal ideation. Mediation does not occur when observing the excessive use of force exclusively and in the presence of all

forms of negative affect. The analysis also indicates that, individually, all forms of negative affect increase aggressive police misconduct. Whether separate or paired with the other forms of negative affect, anger is consistently the greatest emotional influence on aggressive police misconduct. The findings of this dissertation suggest that suicidal ideation may underlie verbal aggression exhibited by some law enforcement officers. This supports the theoretical perspective that suicidal behavior and external aggression are linked, but social constraints prohibit certain displays of aggression. Furthermore, it demonstrates that the processes under Agnew's General Strain Theory [GST] (1992) may be dynamic and influence multiple behavioral outcomes. Concerning GST, this dissertation further supports that anger is a key factor in perpetuating violent behavior. Given the implications of these findings and that organizational stress is consistently cited as the most influential form of stress as seen in prior research (Amaranto et al., 2003; Bishopp et al., 2016, 2019; Violanti et al., 2019), law enforcement agencies should consider promoting officer well-being. Solutions directed at organizational approaches to stress reduction are likely to make the greatest gains in reducing behavior resulting from stress detrimental to the organization and the individual. Ignoring organizational issues will likely promote further issues in policing.

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# CHAPTER 1

## INTRODUCTION

*“Die, very good, but do not make others die... suicide is restricted, and does not allow of extension; and so soon as it affects your neighbors, suicide becomes murder.”*

Victor Hugo

Stress is a natural physiological response to specific stimuli (Selye, 1956). While it may be a product of pleasant experiences (eustress), stress generally refers to the response associated with actual, anticipated, or negative stimuli (distress).<sup>1</sup> This latter form of stress can produce a range of harmful emotional and behavioral responses (See Agnew, 1992; 2002). Negative emotional responses or feelings often referred to as negative affect, include but are not limited to anxiety, anger, depression, fear, and hopelessness (Stringer, 2013). In addition, negative affect often precedes behavior, mediating the effect between stress and behavior (Bishopp & Boots, 2014; Bishopp et al., 2016; Gvion & Apter, 2011; Swogger et al., 2014a). As such, the resulting behavior often depends on the form of negative affect. For example, depression is conducive to self-destructive behaviors such as substance abuse, self-harm or non-suicidal self-injury, and suicide, while anger is conducive to violent behaviors like assault, verbal abuse, and homicide (Agnew, 2007; Violanti et al., 2019). In short, most of these responses tend to be harmful.

Public service careers, such as medicine, education, and law enforcement, are considered the most stressful (Piquero et al., 2013). In particular, law enforcement's unpredictable and sometimes dangerous nature may predispose officers to many stressors and their effects. Like

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<sup>1</sup> In this dissertation, stress refers solely to distress.

many jobs, the stress associated with the police profession stems from the organization and the unique aspects related to the occupation itself. Stress's effect on police officers is well documented, influencing various forms of self-destructive behaviors (Conner et al., 2001; Violanti et al., 2019; Zalava & Kurtz, 2016). Notably among these are aggressive police misconduct and suicide. While both are rare, they immensely impact the image of law enforcement. Theories and prior research suggest that these aggressive behaviors originate from similar factors, namely stress and negative affect. Although these two behaviors share underlying factors, no study has examined whether suicidal thoughts, otherwise known as suicidal ideation, influence aggressive police behavior resulting from stress. The potential relationship between suicidal ideation and police aggression would further signify that the maintenance of officer well-being is critical in reducing the occurrence of these behaviors.

## **1.1 Police Stress**

Although law enforcement officers undergo an evaluation to determine their behavioral and psychological suitability during recruitment, these assessments do not account for the effects stress may have on officers throughout their careers (see Armacost, 2003; Barron, 2010; Rouse et al., 2015). For law enforcement, stress and the resulting behavioral responses can prove problematic for themselves and others, given the social nature of this profession. Stress is widely acknowledged as a key factor underlying violent and suicidal behaviors (Bishopp et al., 2016, 2019; 2020; Chopko et al., 2013; Elbogen et al., 2018, Violanti et al., 2019). Both of these behaviors are often mediated by negative affective states. Police stress is often generated due to police occupation and organizational mandates (Violanti et al., 2019).

Even though law enforcement officers experience many common stressors, the nature of their profession places officers at greater risk of experiencing rare stressors. For example, while experiencing violence, witnessing the victimization of a child, or being exposed to death may not be unique to law enforcement, officers are more likely to experience these and other trauma-inducing and life-threatening stressors than practitioners in other professions (Carlier et al., 1997; Chopko et al., 2013; Hickman et al., 2011; Violanti, 2004, Violanti et al., 2019). These occupational stressors are some of the most significant stressors officers face; however, they are not the most influential.

Prior research on police stress shows a strong and consistent association between stress and the law enforcement organization where officers work (Abdollahi, 2002; Violanti et al., 2008, 2019). This association should be of little surprise since the organization is the central body dictating nearly all officers' duties and approved conduct. Organizational stressors for police officers can include failure to gain a promotion, harassment, shiftwork, heavy workload, token status due to a lack of diversity in the organization, and the lack of social support, among many others (Amaranto et al., 2003; Bishopp et al., 2016, 2019; Brooks & Piquero, 1998; Chan, 2007; Chopko et al., 2013; Hart et al., 1995; Hartley et al., 2011; Morash et al., 2006; Violanti et al., 2008, 2011a, 2019). For most officers, these are the most significant forms of stress and exert the greatest influence on behavior.

While partially related to the demands of the police organization, the community where officers conduct their duties can influence officer stress. Given the current socio-political climate, officers are inundated with negative publicity from the media and political figures alike. As a result, community relations and unwanted media attention have become an additional

source of police stress (Saunders et al., 2019). Furthermore, officer visibility and embeddedness in the community create more opportunities for adverse interactions with community members and increase the likelihood that they will receive citizen complaints (Gullion et al., 2021).

The police role is associated with distinct stressors related to society's perceptions of them. In the eyes of the public, the role of police officers often supersedes all other human traits (Griffin & Bernard, 2003). The police identity, unfortunately, makes it difficult for officers to "fit in" with non-law enforcement community members (Bartollas & Hahn, 1999; Griffin & Bernard, 2003). In this vein, officers can experience stress when they cannot remove themselves from their professional role. The inability to leave the police role creates intrapersonal role conflict and interpersonal conflict when officers interact with non-law enforcement friends and family, mainly because the professional role often bleeds over into officers' civilian life (Griffin & Sun, 2018; Stanley et al., 2016; Skolnick & Fyfe, 1993; Violanti, 1997, 2019; Waters & Ussery, 2007).

## **1.2 Negative Affect**

Studies examining stress have found that negative affect is a key predictor of the behavior that results from stress, especially with suicidal and violent behavior (Bishopp & Boots, 2014; Chopko et al., 2014; Griffin & Bernard, 2003). Although several negative affective states are associated with various forms of stress, anger, depression, and burnout tend to stand above all others with regard to self-destructive behavior. These three forms of negative affect are instrumental in shaping behavior. For example, Chopko and colleagues found that depression predicts suicidal ideation. Bishopp and Boots (2014) reached a similar conclusion; however, depression, anger, and burnout mediated the relationship between suicidal ideation among

officers and stress. The association between these negative affective states and behaviors related to self-destructive behavior, such as alcoholism, risk-taking, and fatigue, are well documented, many of which are detrimental to health in their own right (Bishopp & Boots, 2014; Selye, 1956; Violanti, 1998; Violanti et al., 2011, 2019; Waters & Ussery, 2007).

For officers, many interactions and obligations about policing are likely to provoke anger. Unfortunately, the nature of policing does not prevent the compounding of anger nor the opportunity to decompress. This leaves officers in a chronic state of arousal (Griffin & Bernard, 2003). As a result, officers experiencing this anger are likely to transfer their aggression to someone not responsible for their anger. The use of verbal abuse and excessive force is noted as the result of anger (Bishopp et al., 2016, 2020).

Gvion and Apter's (2011) review of non-criminology and criminal justice-related research indicates that anger and aggression consistently associate with suicidal behaviors. Specifically, the authors identify state aggression as one of several precursors to suicidal behavior, while trait aggression predisposes individuals to be suicidal and aggressive behaviors (Gvion & Apter, 2011; Miller, 2005). Two of the few studies related to criminal justice have also examined this relationship. In a study examining the correlation between law enforcement officer exposure to violent trauma and suicidal ideation, state anger is observed to influence suicidal ideation (Bishopp, 2013). Upon examining gender differences in a related study, Bishopp and Boots, (2014) found that anger exerted a more significant influence on female suicidal ideation than on males, and female suicide risk was also associated with depression.

The negative affective state of depression is almost exclusively related to self-harm, with few observations of other-directed violence pertaining to female perpetrators (see Bishopp &



Boots, 2014; Broidy & Agnew, 1997; Kaufman, 2009; Violanti et al., 2019). Depression is often defined as the strongest predictor of suicidal behavior regardless of population (Barron, 2010; Gvion & Apter, 2011; Swogger et al., 2014a). Furthermore, a medical diagnosis of major depressive disorder increases the risk of suicidal ideation and is also predictive of suicide attempts (Conner et al., 2003; Gvion & Apter, 2011; Stack, 2014). Depression is noted to stem from several sources, including social relationships. Social support, or lack thereof, for law enforcement is often influential in predicting suicidal behavior (Violanti et al., 2009; Rouse et al., 2015; Waters & Ussery, 2007). As such, diminished support can lead to burnout.

Similar to anger, burnout affects self- and other-directed violence. However, the mechanism burnout influences is determined by individual perceptions of stress and social and cultural motivations. Regarding police misconduct, burnout may compel officers to employ violence to cope. This is known as noble-cause corruption. This form of misconduct is derived from a moral commitment guided by what could be considered reform-era-centric crime enforcement (Caldero & Crank, 2004; Klockars, 1980). Frustrations associated with burnout paired with perceived failures of the justice system and the ongoing fight against crime may encourage officers to use excessive and sometimes illegal uses of force, as seen with Jose Polanco (Skolnick, 2002).<sup>2</sup> This behavior may be explained by burnout's partial mediation of anger and aggression, as observed by Queirós and associates (2013).

Hopelessness, an aspect of burnout, is exacerbated by the various organizational stressors attributed to police culture and may lead to maladaptive coping like suicide, especially among

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<sup>2</sup> Jose Polanco was a witness, drug dealer, and concurrent victim of a criminal assault by law enforcement during a warranted search of his apartment. He and Norman Batista were beaten for disposing of evidence prior to officers gaining access to conduct their search. Skolnick (2002, pp.14-15) details this case in his observation of the New York County Prosecutor's Official Corruption Unit (OCU).

males (Bishopp & Boots, 2014; Bishopp et al., 2019; Violanti et al., 2016). On the one hand, officers tend to avoid seeking support related to their health due to the potential ramifications of reporting, namely assurances of confidentiality to ensure the officer is not removed from active service or involuntarily separated (Ramchand et al., 2019; Stanley et al., 2016). On the other hand, while scheduling adjustments have occurred over time, policing does not allow time for officers to decompress between incidents, and narrow organizational policies do not require debriefing or services for all incidents (Chan, 2007; Jiles; 2019).

### **1.3 Stress and Behavior**

Although stress significantly affects law enforcement officers, prior research has only examined the correlation between stress's effect on violent and suicidal behaviors separately. For example, studies examining the relationship between stress and critical incidents indicate experiencing prior victimization, trauma, or similar strains increased work related stress and violent officer behavior (Kurtz et al., 2015; Kurtz & Hughes, 2021). However, no consideration is given to suicidal behaviors, although this variable factors into police suicide (Elbogen et al., 2018; Gvion & Apter, 2011). Similarly, research conducted by Wood et al. (2019) argues that officers receiving complaints of excessive force and verbal abuse are likely to work closely together and, as suggested by Simlot and colleagues (2005), tend to experience greater work-related stress and depression. These, especially the latter, are also related to suicidal behavior.

Regarding suicide, stress related to organizational support and post-traumatic stress is described as a significant risk factor (Violanti et al., 2019). A study conducted by Violanti et al. (2016) shows that an increased risk of suicide is observed with stress related to organizational practices and is linked to increases in hopelessness and further modified by PTSD. In addition,

prior research shows evidence that this aspect of burnout is associated with violent misconduct (Kop & Euwema, 2001; Sack, 2009). Finally, organizational stress is noted to increase violent police misconduct (Bishopp et al., 2016, 2019, 2020).

Several studies beyond the law enforcement field acknowledge the relationship between suicidal and violent behavior (Apter et al., 1995; Conner et al., 2003, 2009; Miller, 2005; Swogger et al., 2014). Gvion and Apter's (2011) review of aggression, impulsivity, and suicidal behavior details a long-standing association between these three factors. It is also suggested that individuals at risk of suicidal behavior are inclined to react with aggressive responses to provocation (see Conner et al., 2003, 2009; Swogger et al., 2014b). This reactive aggression may result from low impulsivity control and high stress (Swogger et al., 2014b). Although Swogger and associates (2014a, 2014b) refer to inmates, many of the same stressful situations pertaining to involvement in the criminal justice system and stressful life experiences also apply to law enforcement officers. These situations may increase reactive aggression and the risk of suicide. Additionally, the relationship between aggression and suicidal behavior is observed in youth populations (Bossarte et al., 2008; Stack, 2014). Finally, experiences of victimization and perpetration of abuse tend to inform police behaviors (Barron, 2010; Kurtz et al., 2015; Kurtz & Hughes, 2021; Violanti, et al., 2016).

#### **1.4 Theory**

Theories suggest self- and other-directed harm are linked to aggression. Social theories relating to stress, such as Robert Agnew's General Strain Theory (1992, 2002, 2006) and Dollard et al.'s. (1939) theory of Frustration and Aggression, explain the relationship between stress and aggressive behaviors. Stress, often termed "strain" or "frustration" in these theories, generates

negative affective or emotional states and compels individuals to respond irrationally with at least one form of cognitive, behavioral, or emotional coping (Agnew, 2006). As a critical element of strain theories, anger is integral to violent coping mechanisms (see Bishopp, 2013; Bishopp et al., 2019, 2020; Broidy, 2001; Capowich et al., 2001; Piquero & Sealock, 2004). While violence is often directed at the source responsible for strain, most theories state that aggression will be self-directed if outward aggression is prohibited (see Dollard et al., 1939; Durkheim, 1897; Freud 1920). The notion that the target of aggression depends on the ability to act suggests that both these forms of aggression are connected by an underlying cognitive response, potentially suicidal ideation.

Psychological theories also argue that these behaviors are natural. Freud (1920) argued, it is human nature to seek destruction as the antithesis to seeking creation. This notion of destruction has since been examined as a predisposition to traits such as impulsivity (see Mann, 2003). Research shows that high impulsivity diminishes restraint and is often found in perpetrators of violence and suicide (Gvion & Apter, 2011; Mann, 2003).

## **1.5 Current Study**

This dissertation aims to bridge the gap in knowledge regarding the relationship between stress and police misconduct. Specifically, it examines whether suicidal ideation interacts with the adverse effect of stress and aggressive forms of police misconduct. In addition, given that suicidal and violent behaviors tend to stem from negative affect and share a link with aggression, this dissertation also examines the relationship between the various forms of negative affect and aggressive forms of misconduct, with particular attention to whether suicidal ideation mediates this relationship. Although there is a wealth of research on police stress and misconduct, no

study to date has examined the link between suicidal ideation and aggressive police behaviors, specifically verbal abuse and excessive force.

Prior research has already established a link between stress and violence, and stress and suicidal behaviors, with negative affect mediating these relationships (see Bishopp et al., 2020; Bishopp & Boots, 2014). Given that strain theories are limited in their capacity to explain the interactions between the various negative affective states and potential coping mechanisms, consistent associations between negative affect, suicidal behavior, and aggression imply an association exists between suicidal and violent police behavior (See Gvion & Apter, 2011; and Tittle, 2018). This dissertation thus extends prior research by bridging the gap in knowledge regarding police misconduct and suicide to understand these issues better and direct us toward potential solutions.

To begin, this dissertation provides an overview of the literature on police stress and behaviors associated with negative affect. Moving forward, theoretical explanations of stress-related deviant behaviors are explored. Next, the research methodology and analytical strategies for this study are detailed. Last, the results of these analyses and their potential implications are discussed.

## CHAPTER 2

### LAW ENFORCEMENT AND STRESS

*“What worries you masters you.”*

John Locke

Prior research within the criminal justice field and beyond details stress as a significant factor in altering health and behavior (Bartollas & Hahn, 1999; Mann, 2003; see also Violanti et al., 2019). Law enforcement officers share many everyday stressors with the general population. While work-related stressors differ between crafts, the effects of these stressors, which can include aggression and depression, tend to be similar. For law enforcement, these stressors are the most severe, particularly stress emanating from decisions by the police organization. However, unlike other most other professions, law enforcement officers also experience stressors unique to their profession. Due to the nature of policing, officers are at greater risk of experiencing violent and traumatic situations.

Although the effects of stress may differ depending on individual traits and situations, they often give rise to various emotional states, such as anger, depression, and hopelessness. In turn, these forms of negative affect may also lead to destructive behaviors directed at oneself and others (Bishopp & Boots, 2014; Violanti et al., 1998; Violanti et al., 2011a, 2011b, 2016, 2019; Waters & Ussery, 2007). These destructive behaviors are often associated with impulsivity and aggression, beginning with various forms of harmful self-directed behavior preceding outwardly aggressive behaviors. In the worst-case scenario, these behaviors may lead to severe harm or even death (Waters & Ussery, 2007; Violanti, 2007). Regarding law enforcement officers,

excessive physical force and verbal abuse are two prominent examples of externalized aggressive behavior. Granted that the association between self-destructive behavior and aggression exists, research is limited within the field of criminal justice. This is especially so regarding law enforcement populations.

## **2.1 Police Stress**

Given the unique nature of policing, it is assumed that law enforcement officers experience a great deal of stress unique to their occupation. While there is some truth to this notion, prior research suggests that police do not necessarily undergo more stress than other populations when controlling for variation in occupation and demographics (Aamodt, 2008; Aamodt & Stalnaker, 2001; Burnett et al., 1992; Loo, 2003; Piquero et al., 2013; Stack, 2001). However, client-dependent and human service careers are among the highest in stress and risk for suicides and workplace violence (Freudenberger, 1974; Johnson et al., 2005; Piquero et al., 2013; Stack, 2001).

For law enforcement, occupational stress may be divided into two main categories: organizational and occupational stress (Abdollahi, 2002). The former refers to the conventional forms of stress associated with the management and culture surrounding most occupations. Though the culture and manner in which an organization manages itself may vary, most jobs are subject to these elements. This is often not the case for the latter. Occupational stress, otherwise known as environmental stress, refers to the stressors associated with the unique aspects and functions of the occupation. In policing, these are often stressors resulting from trauma inducing incidents.

In whole, these forms of stress are described as both motivators for and a result of work-related violence (Piquero et al., 2013). Furthermore, Piquero and colleagues (2013) conclude that situational factors and the nature of the victim-aggressor relationship contribute to this violence. In the case of law enforcement, their relationship is clearly defined by their authoritative role. The innate nature of law enforcement often requires those who interact with officers to relinquish some level of liberty and submit to the request of the officer. Unwillingness to do so may create contention between both parties, demanding an escalation of authoritative power, in some cases the use of force, to gain compliance. While all situations do not escalate to a level where aggression is required, the role of law enforcement officers establishes a distinct relationship that increases the potential for work-related violence. These stressful situations may account for increases in suicidal behavior (Stack, 2012).

### **2.1.1 *Organizational Stress***

Among all forms of police stress, organizational stress is one of the most cited (Amaranto et al., 2003; Bishopp et al., 2016, 2019; Brooks & Piquero, 1998; Chan, 2007; Chopko et al., 2013; Hart et al., 1995; Hartley et al., 2011; Morash et al., 2006; Violanti et al., 2011, 2016, 2019). Organizational stress refers to stress affecting officers that originate from the directives, decisions, and policies at the administrative and managerial levels (Chopko et al., 2013). When organizational policies and practices are perceived as unjust or disrespectful, stressful situations place employees at higher risk of physical and mental health-related complications, including depression (Kivimäki et al., 2007). Such stressors consist of but are not limited to shiftwork, lack of support, unjust or targeted disciplinary practices, counterproductive policies, and work-family conflict. For example, while shiftwork is typical for the police profession, its application may be



perceived as unjust, resulting in fatigue and sleep deprivation, diminishing one's cognitive and emotional judgment (Violanti et al., 2019).

Stress stemming from organizational directives may not be intentional, but rather a factor associated with the resources available to police departments. Smaller departments or those with fewer resources may demand more of their officers and offer them little control over their duties (Violanti et al., 2012, 2019). The lack of officer input or resources may also require the same officers to conduct their duties in high-traffic or high-crime areas, thus increasing officer-citizen contact and placing them at greater risk of experiencing violent situations requiring the use of force and citizen complaints (Gullion et al., 2021). As observed by Eitle and associates (2014), these work conditions generate increases in misconduct, including the use of excessive force. Lack of control is also associated with increased work-family conflict, defined as a conflict between the work and family roles, and burnout (Griffin & Sun, 2018). While the police role and organizational stressors may be rooted in the police organization itself, both are shaped by the culture of the police organization.

Police culture is described as a belief system governed by norms and values defining behavior and defined by the organization and its messaging that permeates throughout (Armacost, 2003; Van Maanen, 1973). Within the organization, these norms dictate the conventions and expectations of police work (Armacost, 2003; Van Maanen, 1973). For officers, the assimilation process begins at recruitment, as recruits selected for this profession tend to share similar personality traits (Abdohalli, 2002; Griffin & Bernard, 2013). The acceptance and influence of cultural beliefs allow officers to distinguish themselves from other members of society and reshape their perception of the world (Van Maanen, 1973). In turn, stressors are

observed as a normal aspect of police work. The identity that emerges from this culture isolates itself from those removed from the culture, thus inhibiting access to social resources, and potentially partaking in self-destructive behaviors that are acceptable within the culture (Chappell & Piquero, 2004; Chopko et al., 2013; Griffin & Bernard, 2003; Violanti, 2007; Violanti et al., 2019).

From the emergent police culture comes a subcategory of organizational stress related to the individual and their social relations – intra-interpersonal stress, otherwise known as stress related to the police personality (Abdollahi, 2002). The police role often conflicts and, at times, supersedes that of other roles individuals have (Griffin & Sun, 2018; Stanley et al., 2016; Violanti, 1997; Violanti et al., 2019; Waters & Ussery, 2007). From an individual perspective, Abdohalli (2002) notes that several personality traits are associated with members of the police profession that contribute to police stress. Among these are cynicism and authoritarianism. Cynicism may be a protective mechanism used to deal with stress resulting from unsavory civilian interactions and a lack of trust in the police organization (Abdohalli, 2002; Chan, 2007). On the other hand, authoritarianism has been associated with lower tolerance levels and aggressive responses toward others (Blumstein et al., 2012; Griffin & Bernard, 2003). Both authoritarianism and cynicism are problematic characteristics shaping how officers interact with the community. However, this personality, associated behaviors, and responsibilities are expected to be left at work.

Unfortunately, the role of the officer may not end with their shift. Even off duty, officers are frequently introduced as such and are expected to assist or execute their police powers (Griffin & Bernard, 2003). In part, the inability to remove oneself from the law enforcement

officer role allows the officer's authoritative and sometimes cynical nature to bleed into their personal and social lives, creating additional stressful events. For example, Waters and Ussery (2007) detail how officers may affect those around them due to being unaware of or even denying the existence of stress emanating from their profession:

They are often so deeply affected by the negative aspects of their work lives that the negativity permeates their off-duty experiences. Their unexpressed hostility overflows into their home lives and is rarely reduced by positive activities. The officer's children often bear the brunt of his or her criticism. Moreover, these attacks may be unrelated to the children's actual behavior. Some police officers see their children's independence as a challenge to their positions as authority figures and as marks of disrespect. (p.177)

This inability to distinguish work-related stress and disengage from the professional role, as described by Waters and Ussery, may lead to family turmoil and the erosion of the family. These behaviors are not exclusive to familial interactions. However, family turmoil may lead to abusive behavior, such as domestic violence and child abuse, which are noted to increase aggressive behaviors and are associated with burnout and depression (Kurtz & Hughes, 2021; Kurtz et al., 2015; Waters & Ussery, 2007).

Although there are distinct stressors related to law enforcement at the organizational level, many of these are similar to those experienced by other professions. However, most professions do not expect exposure to trauma, violence, and public dissent. Given the nature of their profession, officers understand that they may encounter these incidents at some point throughout their career but may not be prepared to handle the stress that comes with these experiences.

### 2.1.2 *Occupational Stress*

Occupational stress, sometimes referred to as environmental stress, relates to stress generated from the unique duties carried out by law enforcement rather than the operations stemming from the organization itself. They can include anything from participation in the judicial system to responding to high-risk incidents.<sup>3</sup> Responding to crimes increase officer interactions with violent and traumatic situations, both of which may leave an officer with longstanding trauma.

Stress related to court proceedings may elicit feelings of anger and promote burnout and cynicism (Bishopp et al., 2016, 2019; Chan, 2007). These feelings arise when officers believe the judicial system undermines their work. Officers view their efforts as wasted when court decisions and plea bargains favor the defendant, although substantial evidence exists (Chan, 2007; Violanti et al., 2016). These frustrations may lead to increased aggressive behavior, as discovered by Bishopp and associates (2016).

Perhaps more unique to policing than any other job is the increased likelihood of experiencing traumatic events (Violanti et al., 2019). Although the majority of calls officers respond to rarely expose them to risk, the unpredictable nature of policing does place them at risk of traumatization (Abdohalli, 2002; Carlier et al., 1997; Hickman et al., 2011; Violanti, 2004, 2019). For instance, officers may be exposed to death or other unpleasant experiences when dealing with crime or its outcomes (Abdohalli, 2002). These events are more likely to be remembered than others (Griffin & Bernard, 2003). Furthermore, trauma related to the

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<sup>3</sup> Due to how stress is operationalized by scholars, court proceedings and other forms of stress can be found under both organizational and occupational categories.

occupation is mainly subjective (Chan, 2007; Chopko et al., 2013, 2014). However, the effects of trauma, such as post-traumatic stress disorder [PTSD], are more general.

PTSD can be defined as a functional impairment explicitly related to reexperiencing past violent trauma over at least one month and is associated with cognitive, aversive, and reactive behaviors (Diagnostic and Statistical Manual of Mental Disorders-5-TR [DSM5-TR], 2022). This unique stress-related disorder is associated with an increased risk of harmful behaviors, such as suicidal ideation, alcoholism, and violent impulsivity (Chopko et al., 2013; Elbogen, et al., 2018; May & Klonsky, 2016; Violanti, 2004). For instance, military veterans are at a greater risk of having suicidal ideation and violent impulses due to PTSD (Elbogen et al., 2018). In addition, since PTSD is often noted among police and military veteran populations, there may be an increased risk of PTSD due to approximately 22% of law enforcement officers being prior military (Lewis & Pathak, 2014).

## **2.2 Negative Affect and Behavior**

Stress produces many emotional responses and subsequent behaviors. These emotional responses are otherwise known as affect (Stringer, 2013). Negative affective states are known to produce aversive behaviors, such as destructive behaviors relating to violence and suicidal behavior. These are significant problems in policing, although the latter is often eclipsed by police misconduct. Unfortunately, gathering accurate accounts of these behaviors has proven problematic, given the protective nature of police organizations regarding data surrounding these events (Barron, 2010; Reiss, 1968; Van Maanen, 1973; Waters & Ussery, 2007; Violanti, 2001; Violanti & Steege, 2020). Nonetheless, several forms of negative affect correlate with these

behaviors. Among the correlates are aggression, depression, and hopelessness. While these behaviors share some affective states, both strongly link with impulsivity.

### ***2.2.1 Aggression and Police Violence***

Chronic exposure to conflict and violence influences the persistence and expression of anger (Kale & Gedik, 2020; see also Bandura, 1973). For law enforcement, this is a defining feature of their profession. Unfortunately, the nature of their profession allows for the compounding of unpleasant interactions (Chan, 2007, Griffin & Bernard, 2003; Jiles, 2019). Both citizen interactions and obligations related to the organization evoke anger in officers.

When officers are not permitted the opportunity to decompress, they may react with aggression (Chan, 2007; Griffin & Bernard, 2003; Jiles, 2019). Griffin & Bernard (2003) state, “chronically aroused [individuals] tend to interpret a wider variety of events as threatening than do other people” (p.8). This chronic arousal increases the perception of and aggressive responses to threats, transferring aggression to subjects who are not the origin of frustration. Additionally, the inability to reduce this chronic arousal may reduce the ability to cope with arousal and increases the scope of threatening events (p. 16). This transference of anger from one situation to another may explain the relationship between organizational stress, excessive force, and verbal abuse (see Bishopp et al., 2016, 2019).

Transference seems to be influenced by the officer’s perception of social integration and regulation (see Durkheim, 1897). Officers share limited social and cultural bonds with public members and are often seen as outsiders by those invested in police culture. However, this lack of integration may extend to members of the workplace, establishing another target of transference. This may explain the presence of intra-officer violence when family support is high

(Kurtz & Hughes, 2021). However, officer aggression is not confined to the acts performed on duty (Kane & White, 2009). This suggests that the target of anger depends on restrictive factors, such as social support and policy restrictions (See Dollard et al., 1939; Menninger, 1938).

### **2.2.2 *Aggression and Police Suicide***

Many studies have observed a strong link between aggression and suicidal behavior, with research and clinical practice identifying lifetime and trait aggression in those who have attempted suicide (Gvion & Apter, 2011). Miller (2005) notes aggression as one of the several verbal and behavioral warning signs of suicidal behavior, ranging from passivity and detachment to increased aggression and wanton recklessness.

These forms of aggression can be considered both reactive (impulsive) and proactive (goal-oriented or controlled; see Conner et al., 2003). However, Swogger and associates (2014b) detail the former as a “particularly important construct among individuals involved in the criminal justice system whose stressful life experiences (e.g., incarceration) may combine with tendencies toward reactive aggression to further increase risk of suicide.” (p.338). Their study of 73 offenders on pretrial supervision affirmed the risk between reactive aggression and suicide attempts. Although Swogger et al.’s (2014b) study involved offenders rather than officers, it is likely that this behavioral association remains, given how officers are embedded in the criminal justice system.

Considering the association between stress and aggression, Bishopp (2013) found that anger and depression significantly increase suicidal ideation among officers. This was again observed when comparing male and female officers, with both forms of negative affect mediating the effect of strain on suicidal ideation (Bishopp & Boots, 2014). The results of these

studies suggest that depression rather than aggression has a more significant influence on suicidal behavior.

### **2.2.3 Depression**

Research has overwhelmingly and almost exclusively linked depression to self-destructive behaviors. Depression is the most significant predictor of self-directed harm and often precedes suicide (Barron, 2010; Gvion & Apter, 2011; Swogger et al., 2014a; Violanti et al., 2019). Depression is observed as a critical component in predicting ideation, otherwise known as suicidal thought, and distinguishing suicidal ideators from non-ideators (Chopko, 2014; May & Klonsky, 2016). The effects of depression vary but have been linked to impulsivity, aggression, and substance abuse, among other harmful traits and behaviors (Bishopp et al., 2019; Gvion & Apter, 2011; Hackett & Violanti, 2003; Violanti et al., 2019). For instance, depression increases the risk of alcohol abuse, which is associated with suicide, aggression, and PTSD (Conner et al., 2001; Chopko et al., 2013; Gvion & Apter, 2011; Violanti 2004). However, these effects differ with the demographics of those subject to depression.

Regarding law enforcement, shift work and irregular schedules may promote fatigue and negatively alter the sleep quality and regulation of those suffering from depression (Violanti et al., 2008). However, when considering gender, depression is a more significant factor in females and is linked to aggression and violence among females but not males (Bishopp & Boots, 2014; Broidy & Agnew, 1997; Violanti et al., 2019). This observation extends itself to suicidal ideation among female officers (Bishopp & Boots, 2014). Additionally, shift assignment is considered a significant factor in the relationship between depression and suicidal ideation, with females



preferring night shifts and males preferring day shifts, potentially due to the different social climates (Violanti et al., 2008).

Similar effects are observed among minority populations (Bishopp et al., 2019; Griffin & Sun, 2018; Polk, 1995). Although minority status may negatively affect depression in general, this influence is removed under the observation of suicidal ideation. Specifically, the positive and significant effect of depression has been observed to completely mediate the negative effect minority status has on suicidal ideation (Bishopp & Boots, 2014). Additionally, depression may increase when individuals perceive themselves as an outcast, which is likely to occur among minority officers (Polk, 1995). The effect depression exerts on various groups is likely due to social and cultural experiences (Brunson & Gau, 2015; Fyfe et al., 1998; Kane & White, 2009; Terrill & Ingram, 2016).

#### **2.2.4 *Burnout and Hopelessness***

Burnout, “the attitude resulting from feelings of stagnation, frustration, emotional exhaustion, or lack of energy to face another day” (Bishopp et al., 2019, p.638, see also Martinussen et al., 2007), does not explicitly align with self-directed and other-directed violent behavior. This may be due to burnout resulting from an aggregation of stressors related to anger and depression. The resulting behavior may depend on whether the individual gravitates toward frustration or exhaustion and the individual’s investment in cultural behaviors (see Durkheim, 1897; Porter & Warrender, 2009).

The frustrations of policing signify a relationship between burnout and aggression exists (Queirós et al., 2013). More so, Queirós and associates (2013) found that burnout partially explains anger and aggression. They also identified an association between burnout and physical

and verbal aggression; however, the effect of burnout on the latter was small (4%). Police use of force research on burnout concurs that burnout significantly influences excessive force and verbal abuse (Kop & Euwema, 2001; Sack, 2009). The association between physical aggression and burnout may indicate aggression as a means to exert or regain control of their fatalistic situation (See Skolnick, 2002). This is the opposite of what is seen with suicidal behavior.

Suicidal behavior is often related to a specific aspect of burnout – hopelessness. Hopelessness refers to the degree to which a person holds negative expectations about the future and provides the same functional influence of negative affect for suicide (See Beck, 1967; Mann, 2003; Martinussen et al., 2007). This is often attributed to the negative aspects and perceived futility of an officer’s work and the stress that comes with it (Violanti et al., 2016). Although hopelessness may influence individuals to conduct violence, it is usually observed in the same manner as depression and influences self-directed harmful behavior (Gvion & Apter, 2011; May & Klonsky, 2016; Violanti et al., 2016). For officers, hopelessness derived from the culmination of traumatic experiences and limited support motivates suicidal and self-destructive behaviors as a means of escape, especially in the presence of posttraumatic symptoms (Violanti et al., 2016).

### ***2.2.5 Impulsivity and Behavior***

Those who select law enforcement as their line of work are likely to have personality traits associated with risk-seeking (Próchniak, 2009). Risk-seeking and self-control may be indicative of trait impulsivity. (Athey et al., 2018). While this trait may make them better suited for the duties of this profession, it also places them at risk of destructive behaviors. Suicidal behaviors and aggression are intrinsically linked to impulsivity (Gvion & Apter, 2011; Mann, 2003; Swogger et al., 2014a). Additionally, officers that conduct acts of misconduct may possess

trait impulsivity. As noted by Pogarsky and Piquero (2004), this is due to the trait diminishing the deterrent influence of sanctions. Furthermore, this behavior is similar to suicidal behavior. Specifically, the lack of forethought also extends to the lasting repercussions of self-destructive behavior (Gvion & Apter, 2011).

### **2.3 Stress and Destructive Behavior**

The relationship between police stress and the destructive behaviors of suicide and violence is well established (See Bishopp, 2013; Bishopp & Boots, 2014; Bishopp et al., 2016, 2020; Jiles, 2019; Riksheim & Chermak, 1993; Rouse et al., 2015; Violanti et al., 2008, 2019). Additionally, studies examining these behaviors have found that negative affect is a significant predictor of each behavior (Bishopp & Boots, 2014; Chopko et al., 2014; Griffin & Bernard, 2003; Queirós et al., 2013). For law enforcement officers, these behaviors often result from the stress of organizational policies and practices and the critical incidents officers encounter as part of their occupation (Bishopp, 2013; Chae & Boyle, 1993; Kurtz & Hughes, 2021; Riksheim & Chermak, 1993; Violanti et al., 2019).

#### **2.3.1 Stress and Suicidal Behavior**

Chae and Boyle (1993) describe organizational and occupational stressors as the most prominent risk factors for suicide. For one, shift work disrupts sleeping patterns. This results in fatigue and diminishes cognitive and behavioral responses (Chae & Boyle, 1993; Violanti et al., 2008, 2019). Furthermore, the lack of preference in shift and shift consistency may conflict with officers' personal and social requirements and prevent officers from acclimating to their schedule, thus increasing stress levels and suicidal ideation (Vila, 2006; Violanti, 2008).

Whether related to organizational processes or social systems, organizational support is also a significant factor in suicide risk. Chae and Boyle's (1993) review of police suicide risk factors acknowledges that stress related to unfair disciplinary and promotional practices contributes to the risk of suicide. Furthermore, the authors detail that the lack of organizational support after suffering traumatic experiences, such as debriefing and following up, tends to be more debilitating and stressful than the event itself (see also Carlier et al., 1997; Rouse et al., 2015; Violanti et al., 2016).

Occupational trauma also significantly influences suicidal behavior. Research indicates that exposure to critical incidents relating to violence and death increases the risk of suicidal ideation, PTSD, and other behaviors associated with suicide (Bishopp, 2013; Bishopp & Boots 2014, Violanti, 2004). Several studies show that high risks populations with PTSD specifically increases the risk of suicidal ideation and suicide attempt (May & Klonsky, 2016; Violanti et al., 2019). Additionally, Violanti and associates (2016) study on police hopelessness found that PTSD significantly increases hopelessness, a risk factor for suicide, when a lack of organizational support exists.

### **2.3.2 *Stress and Violence***

Police stress is also a precursor to potential violent behaviors. Like suicidal responses to stress, violent responses also stem from organizational and occupational stressors, although differently. For instance, a preliminary study by Simlot et al. (2005) indicated that municipal officers associating with colleagues engaging in violent misconduct endured greater stress levels. Furthermore, these individuals are likely to belong to a network of officers who commit

misconduct and, as such, are likely to experience stress related to investigations from reports of misconduct (Wood et al., 2019; also see Bishopp et al., 2016).

Frustration resulting from responsibilities linked to the organization influences violent behavior. This includes the time and effort police put into resolving crimes only to have these efforts wasted due to organizational restrictions or court practices, such as plea bargaining, and placing offenders back in the community in short order (Bishopp et al., 2016). Instances related to these have been related to police violence (see Skolnick, 2002).

While different aspects of organizational stressors influence violent police behavior, critical incidents experienced by officers tend to explain a fair portion of this behavior. For example, a study examining the racial differences in police violent misconduct by Bishopp and colleagues (2020) found that, regardless of race, experiences of violence and death significantly influenced violent police behavior. This may result from civilian non-compliance and disrespect, which can be stressful and have been found to relate significantly to the use of force (Lersch & Mieczkowski, 2005; Riksheim & Chermak, 1993). However, violent behavior among police is not restricted to civilians. As examined by Kurtz and Hughes (2021), when greater stress associated with critical incidents exists, officers are more likely to report incidents of violence between themselves and other officers.

## **2.4 Summary**

To summarize, various forms of stress, both general and specific, are associated with alterations to law enforcement behavior. Consistently cited among these are organizational and occupational stress. Violent police misconduct and suicide may result as potential outcomes of these stressors. Each is driven by underlying negative affect and innate impulsivity traits. Among

these, anger and burnout seem to be the most influential when considering each behavior. However, these behaviors and their negative affective states seem to be defined by the stress experienced. While some of the issues about these behaviors are ingrained in police culture and others in the interactions officers have with the public, it seems that these behaviors are more reactive when considering the underlying mechanisms.

### CHAPTER 3

## THEORETICAL BACKGROUND

*“No neurotic harbors thoughts of suicide which are not murderous impulses against others redirected upon himself.”*

Sigmund Freud

Aggressive behaviors have been explained, in part, by the schools of sociology (Durkheim, 1895) and psychology (Freud as referenced in Fenichel, 2014; Freud, 1920; Menninger, 1938). Each of which has linked aggression to sources of stress and frustration. Each school's theories may differ, but many observe stress as a critical component in aggressive behavior. Similarly, these theories acknowledge that impediments to expressing aggression determine how aggression is conveyed.

Psychological explanations define aggressive behavior as innate. To elaborate, individuals are predisposed to self-destructive behavior given their natural biological and psychological traits (Freud, 1920; Menninger, 1938; Mann, 2003). More recent research explains these behaviors as the result of factors that disinhibit violent behavior, increasing the likelihood of violent behavior in the presence of stress. These are collectively known as stress-diatheses models (see Ferguson et al., 2008; Mann, 2003; Schotte & Clum, 1982, 1987).

Social theories of stress typically explain behavior as reactive, specifically about social regulation. This perspective states that stress results from an individual's function in and interpretation of society and social expectations (e.g., goal attainment, happiness, freedom from harm, see Agnew 1992, 2001, 2002). Events that inhibit, impair, or dispute an individual's social

function promote aggressive behavior to rectify dysfunction by targeting those responsible (see Durkheim, 1897). The resulting behavior, whether directed at oneself or others, is typically conditioned by the nature of the stress and the individual's investment in society (Agnew, 1992, 2001, 2002; Durkheim, 1897).

The following section briefly examines a few related theories of stress and aggression. This section then examines Robert Agnew's (1992) General Strain Theory and details the aggressive police behavior resulting from strain. Last, an explanation is given of the process of cognition regarding the relationship between stress and behavior.

### **3.1 Natural Inclination Toward Aggression**

Freud (1920) conceptualized that humans are naturally inclined toward destruction. This destructive inclination is expressed externally through aggression unless restricted by culture and turned back upon itself out of frustration (Lester, 2015a). Menninger (1938) describes this inclination as the motivation to seek death and to kill. The former is underpinned by a need to escape pain, and the latter by anger and aggression toward others (Gunn, 2015).

Further study has found that biological factors may support this concept. The natural predisposition to stress, otherwise known as diatheses, is related to biological or psychological vulnerabilities, such as trait impulsivity or reduced serotonin levels. These affect how individuals react to stress over time, such as current or prior traumatic experiences (Mann, 2003; Schotte & Clum, 1987).

Under this theoretical perspective, individuals are inclined to commit destructive behaviors toward the natural goal of self-destruction. Social and cultural restrictions determine whether aggression will be externalized or internalized. This suggests that the target of



aggression, for instance, the police organization (see Zavala & Kurtz, 2016), may both restrict and facilitate aggression simultaneously, promoting either self-directed aggression or the transference of aggression (see Griffin & Bernard, 2003).

### **3.2 Social Regulation**

While suicide is the focal point of Emile Durkheim's essay, *Le Suicide* (1897), his explanations are not exclusive to suicide. Durkheim's theory of suicidal behavior relates to two core concepts, social integration and social regulation (1897). Both of these uniquely relate to policing. For instance, officers are consumed by the culture of policing in nearly every aspect of their life, resulting in social isolation from society. More important is the regulatory nature of police work. Officers are heavily regulated in their duties but are also tasked with regulating the behavior of others through law enforcement. When regulations are loosened, such as with increased discretion, officers administer greater force when conducting their duties (Paoline et al., 2021; Terrill & Paoline, 2016). These, respectively, refer to fatalism and anomie.

As explained by Durkheim (1987), when the regulation of behavior is too restrictive or oppressive, behavior is likely to be fatalistic (See also Lester, 2015b). The perceived inability to express oneself or attain future goals leaves these individuals hopeless and defeated. Fatalistic behavior occurs as a means to escape this oppression and exercise autonomy.

Given society's inability to restrain behavior, anomie is considered the underlying factor behind various social behaviors, such as social unrest, suicide, and violence (Durkheim, 1893, 1897). For the individual, anomie is associated with "anger and... disappointment" and tends to be violent by nature (Durkheim, 1897, p. 285). The subject of these emotions and subsequent behavior are those the individual feels are responsible for their turmoil. If those at fault are

external figures, then violence directed at others, succeeded by self-destructive behavior, may result. When one is at fault, the individual will likely direct their aggression inward, resulting in suicidal behavior.

### **3.3 Frustration and Aggression**

Dollard and associates' (1939) theory of frustration and aggression declares that goal blockage and aggression are linked to one another. Specifically, frustration, defined as the impediment of a goal and anticipated enjoyment, *always* leads to aggression, and aggression *always* results from frustration (see also Berkowitz, 1989). Aggression is described as a means to inflict harm on those responsible for goal prevention. That said, the prevention of aggression is also deemed a blocked goal and will result in additional frustration. The nature of the aggressive behavior, if unrestrained, is defined by the degree of anticipated punishment received by the actor or their loved ones. For instance, if aggression results in severe punishment, the thwarted individual may use an indirect or covert means of inflicting harm on the target of their frustration. This explains alternative forms of aggression, such as verbal abuse or the abuse of power.

Henry and Short's (1954) extension of frustration and aggression theory explains what occurs when no action is available due to being excessively constrained. Their theory focuses on self-directed aggression and the socio- and psychological processes relating to external responsibility for the occurrence of stress. To elaborate, when an individual is unable to conform to the expectations of society and when external constraints (social control) are weak, society is held responsible for its role in frustration in the former. Individuals who hold themselves responsible will direct their aggression inward when social control and beneficence are high.

### **3.4 General Strain Theory**

Of the theories to emerge from those linked to Durkheim's (1893, 1897) theory of anomie is Robert Agnew's General Strain theory [GST]. Agnew's theory of general strain, a micro-level adaptation of Robert K. Merton's (1938) theory of anomie, details stress as "negative or adverse relations with others... ultimately defined from the perspective of the individual" (Agnew, 1992, p.61). Stress emanates from the actual or anticipated disjunction between expectations and achievements and the removal or presentation of negative stimuli, whether personally or vicariously experienced (Agnew, 2002). The nature of these experiences may be objective with subjective interpretations or completely subjective (Agnew, 1992, 2001; Broidy & Agnew, 1997). In response to stress, negative affective or emotional states develop, altering rationality and compelling individuals to respond with at least one form of cognitive, behavioral, or emotional coping, with each of these coping mechanisms potentially leading to deviant behaviors directed at oneself or others (Agnew, 1992, 2002; See also Zhang & Lester, 2008). These coping strategies are described as a means to alleviate or remove the source of stress or stress itself and differ from the associated affective state.

While there are various states of negative affect, anger is stated as the "most critical emotional reaction" and is a "key element" in violent coping (Agnew 1992, p.59, 2002, 2006, p.105). Strains related to anger share a significant relationship with violence (Mazerolle & Piquero, 1998; Piquero & Sealock, 2004). This is due to anger's ability to lower inhibitions and create the desire to retaliate or correct a transgression (Agnew, 1992, 2007). Agnew (2007) also notes that anger "reduces the awareness of and concern with the cost of crime...and creates a disposition for violence" (p.521). However, law enforcement is granted the authority to use

violence to initiate the administration of justice if necessary. This authorization is enough reason to justify anger as a response attributing to violence due to non-compliance.

Depression, on the other hand, tends to relate to self-destructive behaviors (Piquero & Sealock, 2000). These include, but are not limited to, suicide and substance use (Barbieri et al., 2019). However, self-destructive behavior is not always contained and directed inward. The externalization of violent and aggressive coping behaviors tends to indicate the subjective and contextual nature of strains associated with depression (e.g., community disorder, victimization; Botchkovar et al., 2018; Moon et al., 2011; Roland, 2002; Stogner & Gibson, 2010).

Several factors condition how individuals cope with stress (See Agnew, 2001). First, multiple strains may occur in short order and extend across time. This is inherent in the nature of policing. Many officers experience the perpetual strain related to organizational mandates overlapping with the daily occupational stressors and limited downtime. This ability to cluster also permits the co-occurrence of multiple negative affective states and reduces coping ability (Agnew, 1992; Slocum, 2010). As such, this inability to decompress will likely prompt officers to react unintentionally in an aggressive manner, especially when situations where stressful interactions occur at a high frequency (Gullion et al., 2021; Griffin & Bernard, 2003). Although it is uncertain how the compounding of long-term stressors, such as those from the organization, and short-term stressors affect the frequency of police aggression (see Tittle, 2018).

Second, the perceived weight of the strain determines how it influences behavior. This may explain why organizational stress has consistently been observed as more influential in predicting negative police behavior. For example, the decisions at the command level, whether

related to promotion, investigation, communication, or operations, are pervasive and extend well beyond the interaction with the police organization but also into their life outside of work.

Third, the resulting affective responses to strain are unique and conditioned by innate traits, such as impulsivity and emotionality (Agnew et al., 2002). In part, this explains why officer behavior varies. The definitions or attitudes one holds toward negative affect and deviant coping determine how one copes (Blevins, et al; 2010; Mazerolle & Maahs, 2000; Moon et al., 2011). Individuals at risk for behavior related to aggression, suicide, or addiction tend to have underlying traits or a history promoting these behaviors (see Gvion & Apter, 2011). Similarly, those who abstain from harmful behavior tend to be restricted by stable and supportive social control (Kurtz & Zavala, 2016; Violanti et al., 2016).

Both the nature of the strain and the affective state tailor how individuals resolve stress. Similar to how strains are perceived, the affective responses to strain are also defined by the subject (Agnew, 2001; Broidy & Agnew, 1997). Concerning self- and other-directed harm, these affective states are instrumental in determining directionality.

### **3.4.1 *GST and Suicidal Ideation***

GST (1992) posits that stress generates negative emotions and compels individual responses to cope. Among these are both cognitive and behavioral methods of coping. Tittle (2018) noted that a single response is too linear and restrictive. Of these coping mechanisms, cognition is often excluded from the series of processes leading strain to the behavioral coping mechanism.

Suicidal ideation is one such coping mechanism that occurs prior to behavioral coping. Initially, suicidal cognition was considered an aspect of human agency until the introduction of

the cognitive-mediational model designated cognition as a causal factor in relation to behavior (Ellis, 2006). Acknowledging cognition as an underlying function of behavior gave way to the cognitive-focused treatment of behavior, otherwise known as cognitive-behavioral treatment (CBT). As a mediator, cognition processes how stimuli such as stress are comprehended and how the resulting negative emotions are addressed. Limited research has examined suicidal ideation, otherwise known as suicidal thinking, in reference to GST. Yun and Kim (2020) conducted one such study, observing that anger and depression partially or completely mediated stress in males and females, although differently. This suggests that negative emotionality precedes cognition.

### **3.5 Conclusion**

This chapter briefly overviews several theoretical explanations for the potential relationship between aggressive behavior and stress. The resulting behaviors are described as frustration and may be linked to negative affective states such as anger. The coping mechanism associated with these affective states is highly contingent upon the nature and perception of the stressor and the individual. Observed as coping mechanisms, these behaviors may result from cognitive processes stemming from the negative emotions experienced by stress.

## **CHAPTER 4**

### **METHODOLOGY**

Given the nature of the data and several aspects of this research, this dissertation advances the previous research by Stephen Bishopp (2013) and associates (2016, 2019, 2020). Bishopp's (2013) study of police exposure to violent crime as a stressor observed that negative affect completely mediated the relationship between violent crime exposure and suicidal ideation (see also Bishopp & Boots, 2014). Furthermore, a direct relationship was noted between organizational and occupational stressors and the negative affective states of anger, depression, and burnout (Bishopp et al., 2019). Finally, negative affect was observed to mediate the relationship between stress and the use of excessive police force and verbal abuse (Bishopp et al., 2016, 2020). Each of these studies focused on the relationship between stress, negative affect, and either suicidal ideation or police misconduct, but none explored the potential relationship between suicidal ideation and police misconduct.

To further examine the relationship between stress and police misconduct, this dissertation seeks to answer the question of whether suicidal ideation mediates the relationship between organizational and occupational stress and violent police misconduct, specifically excessive force, verbal abuse, and the combination of both forms of misconduct. Given that these forms of stress have previously established a relationship with anger and police misconduct (Bishopp et al., 2016, 2020), this dissertation will further explore this relationship by explicitly examining if a potential mediation effect exists with a cognitive component, suicidal ideation. Theories suggest suicidal behavior is aggressive and associated with anger, which may be

directed toward others or oneself (Durkheim, 1897; Freud, 1920, Henry & Short, 1954). As such, suicidal ideation should influence aggressive behaviors like violent police misconduct.

Secondly this dissertation aims to answer which negative affective states are associated with violent police misconduct. This will be done by analyzing the direct effect each of the following forms of negative affect exerts on excessive force, verbal abuse, and combined aggressive police misconduct: anger, depression, and burnout. Furthermore, theories suggest that anger should exert the most significant effect on all forms of violent misconduct (See Agnew, 1992, 2002, 2006; Durkheim, 1897; Mann, 2003, Menninger 1923).

Third, this dissertation will answer whether suicidal ideation directly affects each form of violent police misconduct. Theories and research indicate that suicidal behaviors are linked to aggression, thus, should influence the aggressive forms of police misconduct.

Finally, this dissertation aims to answer whether suicidal ideation mediates the relationship between each form of negative affect and violent police misconduct. Figure 1 displays a complete path diagram of the proposed mediation. Simple path diagrams of both the stress and negative affect mediation relationships are displayed in Figures 2 and 3.

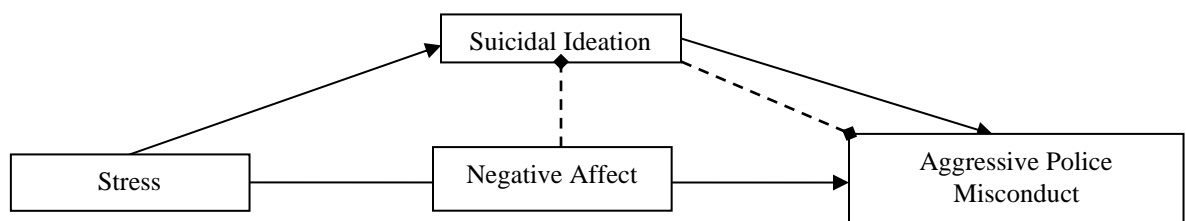


Figure 1. Complete mediation path diagram



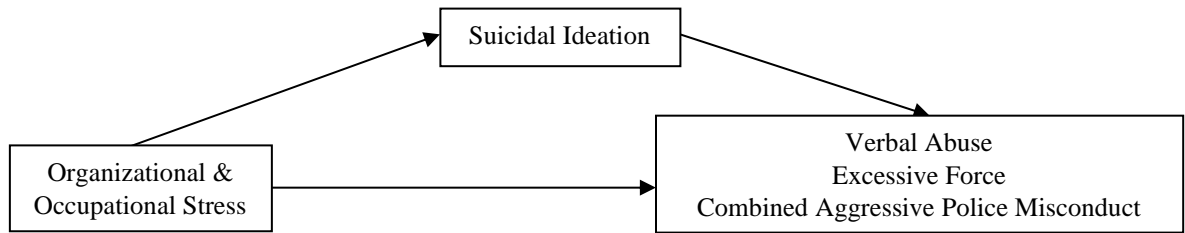


Figure 2. Stress mediation path diagram

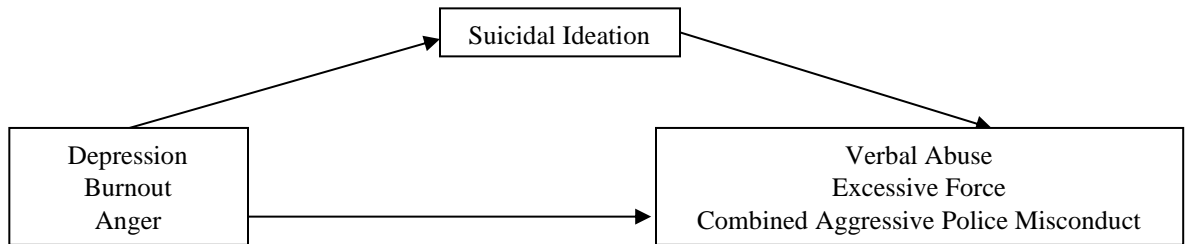


Figure 3. Negative Affect mediation path diagram

#### 4.1 Hypotheses

H1: Suicidal ideation mediates the relationship between stress and police misconduct.

H2: Suicidal ideation will negatively correlate with police misconduct.

Research indicates that stress often precipitates suicidal and violent behaviors (Griffin & Bernard, 2003; Violanti et al., 2019). Furthermore, it is implied that suicidal and violent behaviors lie on the same spectrum, as both violent behavior and suicidal ideation are significant risk factors for suicide, and each of these behaviors correlates with aggression (Gvion & Apter, 2011). Moreover, proactive and reactive aggressive behavior is noted as indicators of suicidal ideation (Conner et al., 2009).

Theories regarding suicidal behavior do not preclude the occurrence of both behaviors and often do not attend to the temporal order of behavior prior to suicide completion (for

example, see Tittle, 2018 on GST). However, theories do state that how aggression manifest itself is dependent on the various restraints related to innate predisposition and social characteristics (Agnew, 1992; Dollard et al., 1939; Durkheim, 1897; Menninger, 1938). These restraints determine whether aggressive behavior will be directed at oneself or others. As such, my first hypothesis (H1) argues that suicidal ideation will mediate the relationship between organizational and occupational police stress and violent police misconduct (excessive force, verbal assault, combined aggressive misconduct). Secondly, suicidal ideation will negatively correlate with police misconduct (H2).

H3: Depression will negatively correlate with aggressive police misconduct.

H4: Burnout will positively correlate with aggressive police misconduct.

H5: Anger will positively correlate with aggressive police misconduct.

H6: Anger will have the greatest explanatory significance among all forms of negative affect.

Negative affect underlies the relationship between stress and suicidal and violent behaviors. Although research has found these behaviors share stressors relating to depression, depression almost exclusively results in self-directed aggression (see Kaufman, 2009). This suggests that depression will negatively affect aggressive police misconduct (H3).

Unlike depression, burnout and anger are noted to mediate the relationship between stress and aggression. Regarding the use of excessive force and verbal abuse, research shows that burnout and anger explain these forms of police misconduct (Bishopp et al., 2016; 2020; Kop & Euwema, 2001; Sack, 2009). As such, burnout (H4) and anger (H5) will positively influence

each form of violent police misconduct. Furthermore, GST denotes anger as a critical component in violence (Agnew, 1992, 2002, 2006). Tests of this theory have found support for this hypothesis (Bishopp et al., 2016; Mazerolle & Piquero, 1998; Piquero & Sealock, 2004). Reasonably speaking, anger is expected to have the greatest explanatory effect on misconduct across all forms of negative affect (H6).

H7: Suicidal ideation will mediate the relationship between negative affect and all police misconduct.

Lastly, theory and research acknowledge that suicidal behavior is linked to various forms of negative affect. Given that theory indicates negative affect is a product of stress and a key determinant of successive cognition and behavior, suicidal ideation should mediate negative affect (Agnew, 1992; Durkheim, 1897). This, however, is contingent on suicidal ideation mediating the relationship between stress and negative affect. Research suggests the potential for this relationship due to prior findings that negative affect explains both suicidal ideation and police misconduct (Bishopp, 2013; Bishopp & Boots, 2014; Bishopp et al., 2016; 2020; Kop & Euwema, 2001; Sack, 2009; Queirós et al., 2013). Therefore, considering theory and prior research, my final hypothesis (H7) expects suicidal ideation to mediate the relationship between all violent police misconduct and all forms of negative affect.

## **4.2 Data**

This study utilizes survey data collected from the Police Work Experience Survey (PWES; Bishopp, 2013). The PWES is a hybrid survey instrument, deploying items from several

scales and questionnaires, as well as several unique items. This survey was distributed to the Dallas, El Paso, and Austin police departments, each with populations over 500,000 and exceeding 6,000 sworn law enforcement officers. The survey was pretested to ensure the clarity of each item and to adjust for time limitations. This web-based survey was developed and disseminated through Qualtrics by way of email. Each survey collected individual self-reported data on participating law enforcement officers. Survey distribution began in December 2012 and concluded in January 2013 with the expiration of survey access. Of the 6,260 surveys distributed, 1,449 were returned, resulting in a response rate of approximately 23 percent across all police departments. Given the anonymous nature of this survey and the population, certain demographic data are missing, such as socioeconomic status, rank, and time in service. After removing non-responses, the final sample included 1,337 respondents.

The collection of police survey data is often difficult, especially given how sensitive topics related to the police organization, occupation, and misconduct are (Reiss, 1968; Van Maanen, 1973). Dating back to Albert Reiss's (1968) study on police brutality, complications in accessing police data have existed for well over half a century. Considering the difficulties associated with accessing police data, the response rates of this survey align with response rates found in prior police survey research. Although the sample size varies across each study, studies utilizing online surveys indicate response rates trending toward 20 percent are common (Griffin & Sun, 2018; Stanley et al., 2021). Typically, higher response rates (70% and greater) are reserved for survey's held in person after roll call (see Crank & Caldero, 1991; Paoline et al., 2021; Skogan, 2015; Wolfe & Piquero, 2011).

#### **4.2.1 *Dependent Variables***

The key dependent variable for this study is police misconduct. Due to each hypothesis examining different aspects of police misconduct, this dependent variable is divided into three categories: physically aggressive misconduct (excessive force), verbally aggressive misconduct (verbal abuse), and combined aggressive misconduct (excessive force and verbal abuse).

Hypotheses I and II examine suicidal ideation as a mediator in the relationship between police stress and violent police misconduct. Hypotheses III - V examine the individual relationship between each form of negative affect and each category of misconduct. Hypothesis VI compares the effect of all forms of negative affect with each category of misconduct. Hypothesis VII examines suicidal ideation's effect on each category of misconduct and its mediating effect between the three forms of negative affect, respectively.

Physical misconduct was initially measured on a scale ranging from 1 - 7, with each corresponding to the frequency at which an officer used more force than necessary to make an arrest over the preceding six-month period (1 = never, 2 = a few times, 3 = once a month, 4 = 2 - 3 times a month, 5 = once a week, 6 = 2 - 3 times a week, 7 = daily). This variable does not clarify whether a firearm, taser, or another item was utilized. Verbally aggressive misconduct, measured on a similar scale, indicated how frequently an officer conducted an act of verbal abuse such as name-calling or cursing. These two variables were combined to create the nominal dependent variable aggressive misconduct. This variable measures responses pertaining to the exclusive use of any verbal abuse (1), excessive force (2), or both forms of abuse combined (3). The last of these, combined aggressive misconduct, represents the respondents that reported conducting both verbal and physical misconduct in the past six months but not solely verbal

abuse or excessive force. This measurement was determined by the total frequency of all physical and verbal misconduct based on the original 7-point scale.

#### **4.2.2 *Independent Variables***

Independent variables for the test of the Hypothesis I are occupational and organizational stress. The respective variables are measured using the same 8-item scale from Bishopp et al. (2020) and the 7-item scale utilized by Bishopp et al. (2019, 2020). An additional item is included for the occupational stress measure, creating a 9-item scale. The occupational stress [ES] variable measures severe stress-inducing street-related incidents, as observed by prior research conducted by Crank and Caldero (1991). For this measure, respondents were asked about their personal experiences related to how often did they experience the following over the past six-month period: felonious death of a police colleague, felonious assault or injury to yourself, felonious death of a citizen, severe but non-fatal injury to police colleague, having to shoot a person in the line of duty, having killed someone in the line of duty, responded to any call involving an incident which resulted with the death of a child, having to strike someone with a weapon other than your own hands, and having to use your TASER to subdue a suspect. Item responses ranged from 1 = never to 7 = daily. Organizational stress [OS] measures the frequency on a 5-point scale (1 = never to 5 = always) at which respondents experience stress derived from the police organization. In addition, respondents were asked how often they had experienced the following circumstances in the last six-months: work related activities while off-duty (e.g., court appearances, special events), overtime, fatigue, negative comments from the public, dealing with supervisors, court proceedings, internal investigations.

Hypotheses III - VII observe the following three negative affective states as a separate second set of independent variables: depression, burnout, and anger. Depression was measured on a 5-point scale describing an officer's feeling from clearly does not describe = 1 to clearly describes = 5. Respondents were asked how often they feel "down hearted and blue," "have trouble sleeping," "get tired for no reason," "are more irritable than usual", and "that others would be better off if [they] were dead." Measured on a 5-point scale of agreeableness (1 = strongly disagree to 5 = strongly agree), burnout was measured by how much work interferes with family life and feelings of burnout at work. Lastly, anger was measured by a combination of three items ("I took my anger out on someone who did not deserve it", "I was extremely angry", and "I got into a physical confrontation because I was angry.") and examined the occurrence of on-duty officer anger over the last six-month period on a 5-point scale ranging from responses of never = 1 to more than 6 times = 5.

#### **4.2.3 Controls**

Several control variables are employed in this study.<sup>4</sup> Among these are officer gender, age, race, marital status, prior military status, and education. Prior research indicates that male and female violence perpetration is dissimilar, with males often being the more likely gender to receive complaints (Chappell & Piquero, 2004; Terrill & Ingram, 2016; Wood et al., 2019). A dichotomous variable was used to measure officer gender (male =1 and female = 0). As individuals age, they also tend to age out of perpetrating violence, whether this is due to changes in status, the development of social bonds and controls, or simply due to these individuals no

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<sup>4</sup> Impulsivity was considered for inclusion as a control due to prior research indicating its correlation with violent and suicidal behavior (Apter, 2011). The items used to measure this concept did not define the immediacy of the reported behavior, preventing the determination whether impulsivity or self-control were being measured.

longer having the ability to compete physically. The age variable was measured on a scale of one through eight, beginning with ages 20-25 and all subsequent scalars increasing by an increment of 5 years, culminating with all ages 55 and older.

Race was coded dichotomously as white (1) and non-white (2). Prior studies indicate racial differences regarding police stress (Griffin & Sun, 2018; Violanti et al., 2019). As such, the potential result of aggressive behavior may also differ among races, as identified by Bishopp et al., (2020) (see also Wood et al., 2019). This variable was originally coded as white (1), black (2), hispanic (3), asian (4), native (5), and other (6).

Relationships, when positive, also act as a form of social control, reducing stress and inhibiting aggression (Chae & Boyle, 2013; Conner et al., 2003). Marital status is commonly used to measure relationships; however, it should be noted that this metric does not permit the evaluation of relationship quality. Marital status was originally measured on a five-point scale (now married = 1, divorced = 2, widowed = 3, separated = 4, never been married = 5). This measurement was dichotomized, defining marital status as married (1) and not-married (2). For the married category, both “now married” and “separated” were combined.

Research regarding military experience and the effect of stress suggests that combat experience and prior misconduct contribute to maladaptive forms of coping (Gonzalez et al., 2019; Shjarback & White, 2016). Furthermore, Elbogen and associates (2018) note that PTSD significantly predicts suicidal ideation and violent impulsivity in former service members. While these experiences may be detrimental, research also indicates that military service, in the absence of trauma and prior misconduct, can reduce maladaptive behaviors (Ivie & Garland, 2011;



Hartley et al., 2013). Respondents were coded 1 if they had any military experience and 0 if they did not.

Much like age and marital status, higher education attainment has often been a protective factor regarding the perpetration of violence (Kane & White, 2009). This, like age, is partially due to the correlation increased education has with upward career mobility. In the case of law enforcement, this will likely remove officers from primary patrol duty. This variable was measured on a scale ranging from 1 - 6 (high school or GED = 1, some college = 2, associate's degree = 3, bachelor's degree = 4, master's degree = 5, doctorate or other terminal degree = 6).

Lastly, the differences in experiences associated with officers at each department will be controlled by including department location as a control (1 = Austin, 2 = Dallas, 3 = El Paso). Like the study conducted by Bishopp (2013), Dallas was selected as the reference city. Primary law enforcement officer duty will act as a proxy for officer rank due to anonymizing these data (0 = non-patrol, 1= patrol).

#### **4.2.4 *Mediating Variable***

Suicidal ideation serves as the sole mediator for Hypotheses I and VII. To measure this concept officers were questioned whether they have seriously considered suicide while employed as an officer. This variable is coded as 1 = yes and 0 = no.

### **4.3 Analytic Strategy**

A series of multinomial logistic regressions will be conducted to analyze these data. A post-estimation likelihood test of proportionality of odds indicates that an ordered logistic regression is the more efficient statistical model for testing the dependent variable. In short, this states that all variables have a similar effect on each level of the variable (McNulty, 2021).

However, due to the nominal nature of the dependent variable, this is not appropriate since these outcomes have no true order.

Per Baron and Kenny (1986), three regression analyses must be performed to examine potential mediation:

1. The relationship between each independent variable (police stress and negative affect) and mediator variable (suicidal ideation) must be established.
2. A relationship between the independent and each dependent variable (physical misconduct, verbal misconduct, and combined aggressive misconduct) must be exhibited.
3. The mediating variables must affect the dependent variable. If a relationship is found during each analysis, then there is reason to believe mediation exists.

Mediation is maintained if the independent and mediating variables are statistically significant, and the independent variable coefficient is reduced.

As such, a simple regression model observing each form of police stress and negative affect will be conducted with suicidal ideation. Afterward, the relationship between suicidal ideation and each individual dependent misconduct variable. The final mediation test will examine the relationship between the individual independent and dependent variables. Each analysis of the dependent variable will consist of mediation and non-mediation models for each independent variable and include controls. For negative affect, the final model will include all independent variables to test Hypothesis VI.

Since multinomial logistic regression will be used for analyses, it is appropriate that Karlson, Holm, and Breen's (KHB; Kohler, Karlson, Holm, 2011) decomposition method is used to recover the degree to which the mediating variable (Z) mediates the relationship between the

independent (X) and dependent (Y) variables. This enables the examination of the total, direct, and indirect mediation effects. The total effect refers to the effect X exerts on Y and is the sum of the direct and indirect effects ( $X \rightarrow Y$ ). The direct effect, often observed as the  $\beta$  coefficient of X, displays the degree to which X explains its relationship to Y during mediation ( $X \rightarrow Z$ ). The indirect effect refers to how much of the total effect is explained by Z on Y during mediation ( $Z \rightarrow Y$ ).

## CHAPTER 5

### RESULTS

Table 1 presents the descriptive statistics for responses to the PWES. Respondents were predominantly white (60.1%) males (83.5%) between the ages of 36 and 50 (57.6%). Approximately three-quarters of the respondents were married (73.2%). Only 32.6 percent of respondents reported serving in the military. Nearly all respondents had some college education (97.9%). However, the majority either only attended college (31.2%) or held a bachelor's degree (44.1%). Less than 10 percent, 8.4 percent to be precise, held graduate-level degrees. More than half of all respondents were employed by the City of Dallas (55.6%), while nearly one-quarter were employed by Austin PD (26.7%), and slightly under one-fifth were employed by El Paso PD (17.7%) at the time of this survey. Less than half of the respondents were assigned primary patrol duties (43.5%).

Regarding stress and negative affective reports, on average, respondents reported few strenuous events related to police work ( $\mu \leq 2.5$  out of 5.0). Specifically, stressors related to the occupation, otherwise known as environmental stressors [ES], were reported by 98% of respondents as cumulatively occurring across all events less than once per month in the past six months prior to the survey. Events related to organizational stressors [OS] were more prevalent, with approximately 13.2% of respondents reported experiencing stress related to the organization more than sometimes over the past six-month period.

Reported negative affect did not differ too much from the reported stress levels, and respondents did not often experience negative feelings ( $\mu \leq 3.0$  out of 5.0). Less than two percent (1.42%) of respondents reported feeling angry across several events on more than one occasion

in the past six months. Reports of depression indicated that respondents were nearly six and a half times to experience this form of negative affect at least twice in the past six months (9.2%). Alternatively, respondents reported nearly four times as many cumulative instances of burnout as anger and depression combined (35.5%).

Across all 1,337 surveys, only 180 (13.5%) respondents reported having thoughts of suicide since becoming a law enforcement officer; however, the reports of suicidal ideation among police respondents did not drastically differ among demographics. Approximately 16 percent of these respondents were female, while 13 percent were male. Similarly, 13 percent of respondents with suicidal ideation were classified as unmarried, compared to the 14 percent who were married. Also, 14 percent of respondents with military backgrounds reported suicidal ideation, whereas only 3 percent of non-prior military respondents. This range only slightly increases with race, exhibiting a four percent difference reported between white (15%) and non-white respondents (11%). A five-point percentage difference in suicidal ideators was also reported between respondents of Austin (17%) and the other two police departments (12%).

Respondent reports of misconduct indicated that the majority of officers (65.6%) did not conduct any form of verbal abuse or use excessive force while on duty in the six months preceding the survey. Of the 34.4 percent of respondents reporting any form of aggressive misconduct during the observed period, the vast majority (97%) reported using verbal abuse. Only 7.4% reported the use of excessive force. For respondents reporting specific acts of misconduct, 27 percent reported performing only acts of verbal abuse, while one percent reported using excessive force. Furthermore, 6.3 percent of respondents reported conducting both forms of aggressive misconduct.

**Table 1.** Descriptive Statistics (N = 1337)

Variable	Mean	Std. Dev.	Min	Max	Fq. %
<b>Misconduct</b>					
No misconduct	0.656	0.475	0	1	65.59%
Only Verbal	0.270	0.444	0	1	27.00%
Only Excessive Force	0.010	0.102	0	1	1.05%
Combined Verbal and Physical	0.063	0.244	0	1	6.36%
<b>Stress</b>					
Organizational Stress [OS]	2.242	0.717	1	5	
Occupational Stress [ES]	1.286	0.314	1	4.889	
<b>Negative Affect</b>					
Depression	1.841	0.812	1	5	
Burnout	2.700	0.972	1	5	
Anger	1.394	0.545	1	4.667	
<b>Suicidal Cognition</b>					
Suicidal Ideation	0.135	0.341	0	1	13.46%
<b>Controls</b>					
Age (20 – 55+)	4.785	1.699	1	8	
Race (white)	0.601	0.490	0	1	60.13%
Gender (male)	0.835	0.372	0	1	83.47%
Marital Status	0.732	0.443	0	1	73.22%
Military	0.326	0.469	0	1	32.61%
Education	3.263	1.063	1	6	
Patrol	0.435	0.496	0	1	43.53%
<b>Department</b>					
Austin	0.267	0.443	0	1	26.70%
Dallas (reference)	0.557	0.497	0	1	55.72%
El Paso	0.176	0.381	0	1	17.58%

Cross-tabulation of respondent demographics and aggressive misconduct reported similar incidents of physical abuse in many cases and greater variance when verbal abuse. A one percent difference was reported between whites (8%) and non-whites (7%) who perpetrated acts of verbal abuse, but an 11 percent difference when observing white respondents (40%) and non-white respondents (29%) who conducted both acts of misconduct. With respect to gender, males reported more occurrences of both physical (8%) and verbal misconduct (35%) than females (3% and 26%, respectively). Eight percent of respondents with military service reported incidents

using excessive force, and 25 percent for verbal abuse. Respectively, non-military respondents reported seven percent and 33 percent. By comparison, these forms of misconduct marginally varied among married (7% physical and 33% verbal) and unmarried (8% physical and 34% verbal) respondents.

## 5.1 Bivariate Analysis

To test for collinearity, a bivariate analysis of all variables was conducted (see Table 2). Dummy variables were utilized to individually observe each category of the nominal dependent variable. The presence of collinearity with the dummy variable, combined misconduct, was expected due to this variable encompassing verbal and physical misconduct.<sup>5</sup> The correlation coefficients associated with verbal abuse ( $r = -0.16$ ) and use of force ( $r = -0.03$ ) did not satisfy the requirements for collinearity ( $|r| > 0.70$ ; see Dormann et al., 2013). However, collinearity was not a concern regarding these variables since each dependent variable was tested under separate models. While issues related to collinearity were a concern with depression and burnout due to the burnout sharing aspects with depression, the correlation coefficient for these variables was less than 0.7 ( $r = 0.58$ ). The correlation matrix shown indicates that there was no evidence of collinearity.

Several variables displayed significant ( $\alpha = 0.05$ ) relationships with all dependent variables. Organizational and occupational stress held significance with verbal misconduct (OS = 0.16, ES = 0.13) and shared significance with combined misconduct (OS = 0.16, ES = 0.21). However, only the former exhibited significance with the use of force (OS = 0.06). All three

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<sup>5</sup> When not examined exclusively, the combined aggression variable did exhibit a collinear relationship with verbal abuse and excessive force.

negative affect variables held significance with verbal and combined misconduct, but not physical misconduct. Of these, the correlation with anger was the most substantial (combined = 0.19, verbal = 0.21). The only control variables to display significance across multiple dependent variables were age (combined = - 0.16, verbal = - 0.22) and patrol status (combined = 0.17, verbal = 0.14). This suggested when excluding other variables, that officer age, patrol status, and the presence of negative affect and either or both forms of stress are integral in the use of verbally aggressive misconduct, and potentially the use of excessive force.

Excluding age and patrol status, as described above, only the following four control variables significantly correlated with one but not multiple dependent variables: race, gender, education, and the police department the respondent was allocated. Race only shared a significant relationship with verbal abuse ( $r = 0.08$ ), but this relationship did not influence combined misconduct enough to make it significant. Officer gender was positively associated with the combined use of aggressive verbal and physical misconduct (combined = 0.06). Educational attainment, like age, also correlated with the paired use of both forms of misconduct negatively and significantly ( $r = - 0.06$ ). Aside from organizational stress, the only variable associated with officer use of force was respondent department assignment (force = 0.07). Both military and marital status did not hold a significant relationship with any dependent variable.

The relationship between the mediator variable, suicidal ideation, was positive and significant with all independent variables (OS = 0.25, ES = 0.08, depression = 0.35, burnout = 0.25, anger = 0.19), but only shared significance with the dependent variable verbal abuse (0.08).



**Table 2. Correlation Matrix**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Combined	-																
2. Verbal	-0.16*	-															
3. Force	-0.03	-0.06*	-														
4. Organizational	0.16*	0.16*	0.06*	-													
5. Environmental	0.21*	0.13*	0.03	0.32*	-												
6. Depression	0.10*	0.16*	0.03	0.53*	0.20*	-											
7. Burnout	0.10*	0.14*	0.01	0.60*	0.20*	0.58*	-										
8. Anger	0.19*	0.21*	0.02	0.35*	0.18*	0.39*	0.30*	-									
9. S. Ideation	0.04	0.07*	-0.02	0.25*	0.08*	0.35*	0.25*	0.19*	-								
10. Age	-0.16*	-0.22*	-0.03	-0.17*	-0.17*	-0.12*	-0.14*	-0.17*	-0.00	-							
11. Race	-0.02	0.08*	-0.02	0.10*	0.02	0.14*	0.10*	0.07*	0.06*	0.06*	-						
12. Gender	0.06*	0.03	0.05	-0.01	0.02	0.01	0.01	0.01	-0.03	0.07*	0.12*	-					
13. Marital	0.00	-0.01	0.01	-0.00	-0.05	-0.03	-0.01	0.02	0.01	0.09*	0.11*	0.20*	-				
14. Military	0.05	-0.02	-0.04	-0.01	0.01	-0.01	0.00	0.02	0.01	0.04	-0.01	0.19*	0.02	-			
15. Education	-0.06*	-0.02	-0.02	0.01	-0.01	-0.01	-0.01	0.00	-0.02	0.09*	0.06*	-0.05	-0.00	-0.15*	-		
16. Patrol	0.17*	0.14*	0.04	0.11*	0.23*	0.07*	-0.10*	0.07*	-0.01	-0.24*	-0.02	0.06*	-0.06*	0.07*	-0.03	-	
17. Department	0.03	0.00	0.07*	-0.02	0.02	-0.07*	-0.09*	0.00	-0.03	-0.02	-0.36*	-0.00	-0.06*	0.02	-0.13*	-0.03	-

\*p ≤ 0.05

Notably missing were the use of force and the combined use of both forms of misconduct. These findings indicated that suicidal ideation does not influence nor mediate all forms of aggressive police misconduct.

Correlation between control variables and suicidal ideation were mostly negative, with a few exceptions, such as military background and the only significant variable, race ( $r = 0.06$ ). As such, this analysis detailed that respondents who were white tended to report more suicidal ideation than non-white respondents. These findings were consistent with prior research (Aamodt, 2008; Violanti, 1998; Violanti et al., 2019).

## **5.2 Multivariate Analysis**

Next, a series of multivariate multinomial logistic regression analyses were conducted to examine the effect and potential mediation of predictor variables on misconduct outcomes. These analyses exclusively restricted the behaviors of respondents to one category of misconduct - the occurrence of verbal abuse, use of force, or both forms. A total of nine regression models were used to test the separate and combined relationship each form of stress has on verbal abuse and whether suicidal ideation mediates this relationship (Table 3). As indicated by the bivariate analyses, organizational and occupational stress were significant when not controlling for other predictors. These remained significant throughout all models ( $p < 0.001$ ), with an observed beta-coefficient for occupational stress nearly double that of organizational stress in all models. The second model tested the mediation effect of suicidal ideation without the introduction of control variables. Suicidal ideation only held a statistically significant with occupational stress ( $\beta = 0.426, p = 0.017$ ).

Controls were included in the final three models. When examining organizational stress race, gender, and patrol duty status were significant factors in the perpetration of any verbal abuse, while increases in age and employment in Austin PD were significant in the reduction of verbal abuse. The significance of these controls persisted in the test of occupational and combined stress models. The inclusion of controls with occupational stress indicated that the significance level of suicidal ideation increased ( $\beta = 0.566, p = 0.003$ ). Suicidal ideation did not achieve statistical significance in the combined stress model ( $\beta = 0.168, p = 0.368$ ) prior to the addition of controls ( $\beta = 0.338, p = 0.087$ ).

Mediation analysis indicated suicidal ideation partially mediates the relationship between occupational stress and verbal abuse prior to (total effect = 1.500,  $p < 0.000$ ; direct effect = 1.465,  $p = 0.000$ ; indirect effect = 0.036,  $p = 0.093$ ) and after the inclusion of controls; (total effect = 1.194,  $p = 0.000$ ; direct effect = 1.143,  $p = 0.000$ ; indirect effect = 0.051,  $p = 0.060$ ). Suicidal ideation did not near statistical significance in any standalone organizational stress model and was not examined for mediation. While suicidal ideation did share statistical significance in the final controlled combined stress model with organizational and occupational stress, no significance was observed regarding the indirect effect of either form of stress.

Similar to the regression analyses of stress on verbal abuse, tests for relationships between stress and the use of excessive force were conducted using nine models (Table 4). Organizational and occupational stress continued to exhibit statistical significance with the use of force as seen with verbal abuse ( $p \leq 0.05$ ); however, occupational stress did not maintain its significance throughout all models. The effect of occupational stress was greater than organizational stress concerning their relationship with the use of excessive force.

**Table 3. Multinomial Logistic Regression Analysis of Stress and Verbal Abuse**

Variables	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III
		$\beta$ (SE)			$\beta$ (SE)			$\beta$ (SE)	
<b>Stress</b>									
Organizational [OS] (Direct Effect)	0.655 (0.092) ***	0.635 (0.095) ***	0.515 (0.100) ***				0.528 (0.111) ***	0.504 (0.099) ***	0.420 (0.104) ***
Occupational Stress [ES] (Direct Effect)				1.480 (0.217) ***	1.465 (0.217) ***	1.143 (0.232) ***	1.128 (0.226) ***	1.134 (0.227) ***	0.881 (0.240) ***
<b>Mediator</b>									
Suicidal Ideation [SI]		0.160 (0.184)	0.315 (0.195)		0.426 (0.179) *	0.566 (0.189) **		0.190 (0.187)	0.362 (0.197) †
<b>Controls</b>									
Age		-0.326 (0.043) ***	-0.326 (0.043) ***		-0.339 (0.043) ***	-0.339 (0.043) ***		-0.324 (0.043) ***	-0.324 (0.043) ***
Race		0.416 (0.154) **	0.416 (0.154) **		0.457 (0.153) **	0.457 (0.153) **		0.406 (0.155) **	0.406 (0.155) **
Gender		0.422 (0.194) *	0.422 (0.194) *		0.412 (0.194) *	0.412 (0.194) *		0.426 (0.196) *	0.426 (0.196) *
Marital Status		0.028 (0.156)	0.028 (0.156)		0.059 (0.156)	0.059 (0.156)		0.043 (0.157)	0.043 (0.157)
Military		-0.115 (0.150)	-0.115 (0.150)		-0.122 (0.149)	-0.122 (0.149)		-0.123 (0.150)	-0.123 (0.150)
Education		-0.077 (0.066)	-0.077 (0.066)		-0.069 (0.066)	-0.069 (0.066)		-0.082 (0.067)	-0.082 (0.067)
Parrot		0.516 (0.140) ***	0.516 (0.140) ***		0.422 (0.142) **	0.422 (0.142) **		0.413 (0.143) **	0.413 (0.143) **
<b>Department</b>									
Austin		-0.559 (0.164) ***	-0.559 (0.164) ***		-0.600 (0.165) ***	-0.600 (0.165) ***		-0.597 (0.166) ***	-0.597 (0.166) ***
El Paso		-0.069 (0.203)	-0.069 (0.203)		-0.107 (0.202)	-0.107 (0.202)		-0.118 (0.204)	-0.118 (0.204)
_cons	-2.374 (0.223)	-2.352 (0.224)	-0.990 (0.431)	-2.793 (0.289)	-2.833 (0.291)	-1.273 (0.465)	-3.538 (0.328)	-3.517 (0.328)	-1.851 (0.491)
<b>Mediation effect</b>									
OS									
Total Effect									0.463 (0.101) ***
Indirect Effect									0.043 (0.028)
ES									
Total Effect									0.885 (0.241) ***
Indirect Effect									0.004 (0.016)
N					1337				
Pseudo R <sup>2</sup>	0.04	0.041	0.127	0.041	0.044	0.128	0.062	0.064	0.14

Level of significance:

\*\*\*p ≤ 0.001

\*\*p ≤ 0.01

\*p ≤ 0.05

†p ≤ 0.10

**Table 4. Multinomial Logistic Regression Analysis of Stress and Excessive Force**

Variables	Model I	Model II β (SE)	Model III	Model I	Model II β (SE)	Model III	Model I	Model II β (SE)	Model III
<b>Stress</b>									
Organizational [OS] (Direct Effect)	1.098 (0.362) **	1.203 (0.373) ***	1.060 (0.382) **				0.982 (0.383) **	1.085 (0.395) **	0.969 (0.395) *
Occupational Stress [ES] (Direct Effect)				1.707 (0.783) *	1.748 (0.802) *	1.411 (0.876)	1.048 (0.844)	1.031 (0.870)	0.841 (0.919)
<b>Mediator</b>									
Suicidal Ideation [SI]		- 1.113 (1.062)	- 0.822 (1.087)		- 0.582 (1.046)	- 0.241 (1.056)		- 1.084 (1.062)	- 0.780 (1.089)
<b>Controls</b>									
Age			- 0.210 (0.171)			- 0.263 (0.167)			- 0.206 (0.171)
Race			0.217 (0.672)			0.275 (0.648)			0.210 (0.671)
Gender			15.318 (1021.818)			13.853 (502.842)			13.759 (468.084)
Marital Status			0.232 (0.672)			0.306 (0.674)			0.265 (0.677)
Military			- 1.334 (0.783) †			- 1.391 (0.783) †			- 1.340 (0.783) †
Education			- 0.137 (0.282)			- 0.097 (0.284)			- 0.138 (0.283)
Patrol			1.114 (0.602) †			1.026 (0.600) †			1.028 (0.605) †
<b>Department</b>									
Austin			- 0.499 (0.838)			- 0.522 (0.841)			- 0.546 (0.840)
El Paso			1.262 (0.723) †			1.318 (0.713) †			1.232 (0.722) †
_cons	- 6.755 (1.000)	- 6.902 (1.017)	- 21.033 (1021.819)	- 6.353 (1.111)	- 6.354 (1.135)	- 18.879 (502.846)	- 7.836 (1.305)	- 7.959 (1.329)	- 20.336 (468.089)
N	1337								
Pseudo R <sup>2</sup>	0.04	0.041	0.127	0.041	0.044	0.128	0.062	0.064	0.14

Level of significance:

\*\*\*p ≤ 0.001

\*\*p ≤ 0.01

\*p ≤ 0.05

†p ≤ 0.10

This remained until both forms of stress were introduced in the same model, with occupational stress never gaining statistical significance and its effect size progressively diminishing with the introduction of additional variables. Suicidal ideation was not significant in any model and, as such, did not mediate the relationship between stress and respondent use of force. Only patrol status remained significant in reference to respondent use of force. Its significance level decreased considerably between the verbal abuse and use of force models (from  $p = 0.004$  to  $p = 0.089$ ). Affiliation with El Paso PD ( $\beta = 1.232, p = 0.088$ ) and military status ( $\beta = - 1.337, p = 0.087$ ) gained statistical significance.

Table 5's multinomial logistic regression results reported the effects of stress on the combined application of aggressive police misconduct. First, organizational and occupational stress maintained statistical significance across all three instances of combined misconduct. Second, suicidal ideation again shared a statistically significant relationship with occupational stress ( $\beta = 0.649, p = 0.056$ ), maintaining the mediation effect seen with verbal abuse. Third, age, gender, education, patrol duty status, and affiliation with Austin PD were found statistically significant predictors of paired aggressive police behavior. El Paso and Austin PDs were observed to reduce the risk of respondent acts of verbal and physical misconduct compared to Dallas PD. Only patrol duty status ( $p < 0.001$ ) and male gender ( $p < 0.05$ ) were positively correlated with the use of both forms of aggression. Education was only found statistically significant when observing respondents that reported utilizing both verbal abuse and excessive force.

**Table 5. Multinomial Logistic Regression Analysis of Stress and Combined Aggressive Misconduct**

Variables	Model I	Model II β (SE)	Model III	Model I	Model II β (SE)	Model III	Model I	Model II β (SE)	Model III
<b>Stress</b>									
Organizational [OS] (Direct Effect)	1.123 (0.159) ***	1.120 (0.165) ***	0.937 (0.177) ***				0.820 (0.169) ***	0.819 (0.174) ***	0.706 (0.184) ***
Occupational Stress [ES] (Direct Effect)				2.626 (0.320) ***	2.610 (0.322) ***	2.216 (0.348) ***	2.102 (0.337) ***	2.110 (0.336) ***	1.824 (0.358) ***
<b>Mediator</b>									
Suicidal Ideation [SI]		0.032 (0.314)	0.344 (0.338)		0.390 (0.316)	0.649 (0.340) †		0.007 (0.339)	0.298 (0.353)
<b>Controls</b>									
Age			- 0.403 (0.079) ***			- 0.421 (0.078) ***			- 0.381 (0.079) ***
Race			- 0.027 (0.272)			0.021 (0.273)			- 0.030 (0.079)
Gender			1.033 (0.435) *			0.989 (0.437) *			1.026 (0.443) *
Marital Status			0.160 (0.284)			0.219 (0.288)			0.214 (0.291)
Military			0.229 (0.260)			0.251 (0.262)			0.239 (0.263)
Education			- 0.221 (0.121) †			- 0.223 (0.124) †			- 0.237 (0.124) †
Patrol			1.299 (0.286) ***			1.165 (0.290) ***			1.154 (0.292) ***
<b>Department</b>									
Austin			- 0.999 (0.347) **			- 1.150 (0.352) ***			- 1.102 (0.353) **
El Paso			- 0.166 (0.351)			- 0.190 (0.352)			- 0.219 (0.357)
_cons	- 5.017 (0.432)	- 5.014 (0.435)	- 3.680 (0.838)	- 5.882 (0.476)	- 5.916 (0.477)	- 4.346 (0.849)	- 7.125 (0.565)	- 7.135 (0.568)	- 5.566 (0.940)
<b>Mediation effect</b>									
ES									
Total Effect						2.275 (0.347) ***			
Indirect Effect						0.058 (0.039)			
N					1337				
Pseudo R <sup>2</sup>	0.04	0.041	0.127	0.041	0.044	0.128	0.062	0.064	0.14

Level of significance:  
 \*\*\*p ≤ 0.001  
 \*\*p ≤ 0.01  
 \*p ≤ 0.05  
 †p ≤ 0.10

Analyses of negative affect and aggressive misconduct utilized the same statistical designs employed with stress. A total of 12 multinomial logistic regression models were used to examine the relationship between verbal misconduct and the independent negative affect predictors (Table 6). Much like the results observed with the bivariate analyses, all negative affect were significant in their respective models. However, only anger maintained statistical significance ( $p < 0.001$ ) throughout all models. In the final combined model, no other form of negative effect neared the effect size exhibited by anger ( $\beta = 0.830, p = 0.000$ ), and only depression ( $\beta = 0.173, p = 0.108$ ) neared statistical significance. Suicidal ideation only exhibited significance in the controlled models for burnout ( $p = 0.051$ ) and anger ( $p = 0.088$ ). Therefore, mediation analysis was only conducted with these models.

Suicidal ideation partially mediated the effects of burnout (total effect = 0.299,  $p < 0.001$ ; direct effect = 0.265,  $p < 0.001$ ; indirect effect = 0.034,  $p = 0.057$ ) and anger (total effect = 0.986,  $p < 0.001$ ; direct effect = 0.947,  $p = 0.001$ ; indirect effect = 0.04,  $p = 0.103$ ) on verbal abuse. Of the control variables, age, race, gender, patrol duty assignment, and employment by Austin PD again held statistical significance and their respective positive or negative associations across all models, as seen with the stress analyses of verbal misconduct.

The examination of the use of excessive force yielded only anger and depression as significant factors when tested in their independent models (Table 7). Neither the predictor variables nor the mediator variable established statistical significance in reference to the use of force under the controlled models. This was the only observation where depression's significance value ( $p = 0.126$ ) was lower than anger's ( $p = 0.140$ ).





**Table 7. Multinomial Logistic Regression Analysis of Negative Affect and Excessive Force**

Variables	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III
		$\beta$ (SE)			$\beta$ (SE)			$\beta$ (SE)			$\beta$ (SE)	
<b>Neg. Affect</b>												
Depression (Direct Effect)	0.563 (0.302) †	0.698 (0.326)*	0.689 (0.336)*				0.430 (0.390)	0.551 (0.408)	0.656 (0.415)			
Burnout (Direct Effect)				0.272 (0.278)	0.323 (0.286)	0.240 (0.291)	-0.046 (0.346)	-0.025 (0.348)	-0.148 (0.356)			
Anger (Direct Effect)							0.741 (0.488)	0.772 (0.495)	0.720 (0.489)			
<b>Mediator</b>												
Suicidal Ideation [SI]		-1.113 (1.090)	-0.883 (1.119)		-0.747 (1.062)	-0.418 (1.083)		-0.772 (1.057)	-0.441 (1.064)		-1.157 (1.095)	-0.881 (1.122)
<b>Controls</b>												
Age												
		-0.251 (0.169)			-0.262 (0.170)			-0.245 (0.168)			-0.238 (0.171)	
Race		0.205 (0.661)			0.300 (0.653)			0.236 (0.656)			0.129 (0.664)	
Gender		13.730 (484.386)			13.787 (500.880)			13.957 (544.526)			14.401 (671.064)	
Marital Status		0.324 (0.673)			0.244 (0.668)			0.221 (0.669)			0.311 (0.674)	
Military		-1.353 (0.781) †			-1.376 (0.782) †			-1.407 (0.781) †			-1.394 (0.781) †	
Education		-0.099 (0.281)			-0.104 (0.283)			-0.111 (0.284)			-0.099 (0.282)	
Patrol		1.186 (0.597) *			1.154 (0.595) †			1.209 (0.596) *			1.220 (0.601) *	
Department												
Austin												
		-0.503 (0.839)			-0.445 (0.837)			-0.406 (0.838)			-0.458 (0.842)	
El Paso		1.390 (0.723) †			1.406 (0.713)*			1.356 (0.719) †			1.372 (0.724) †	
cons	-5.204 (0.686)	-5.361 (0.717)	-18.311 (484.389)	-4.871 (0.828)	-4.940 (0.841)	-17.657 (500.883)	-5.465 (0.728)	-5.493 (0.737)	-18.478 (544.529)	-5.855 (0.946)	-6.081 (0.988)	-19.502 (671.066)
N												
			1330									
Pseudo R <sup>2</sup>	0.025	0.026	0.119	0.021	0.022	0.114	0.054	0.055	0.141	0.062	0.063	0.145

Level of significance:  
 \*\*\*p ≤ 0.001  
 \*\*p ≤ 0.01  
 \*p ≤ 0.05  
 †p ≤ 0.10

While burnout and suicidal ideation were not significant, it should be noted that only burnout and suicidal ideation were negatively correlated with the use of force in the complete model. As previously observed with stress, patrol duty status ( $\beta = 1.220, p = 0.043$ ) and military background ( $\beta = -1.394, p = 0.074$ ) were found statistically significant. Age did not near statistical significance at the 90 percent confidence level ( $p = 0.144$ ). Again, military experience, patrol duty assignment, and employment with El Paso PD established and maintained significance throughout all models. Respondent education level was negatively associated with the use of force; however, it never reached statistical significance.

Table 8 presents the multinomial logistic regression analysis results for distinct combined aggressive acts of misconduct. All forms of negative affect were statistically significant in their respective models. Once they were introduced into the combined model, depression no longer maintained statistical significance. After the implementation of controls, analysis of respondents reporting verbal abuse and use of force indicated that anger ( $\beta = 1.271, p < 0.001$ ) was the only statistically significant form of negative affect related to this behavior. Suicidal ideation only mediated the relationship between combined aggressive misconduct and burnout. Respondent educational level was only found to meet statistical significance at the 90 percent confidence level ( $\beta = -0.224, p = 0.068$ ).

### **5.3 Summary**

The results of these analyses partially confirmed several hypotheses to varying degrees. While organizational and occupational stress exhibited statistical significance in nearly all analyses, suicidal ideation only partially mediated both forms of stress when testing their relationship with verbal abuse. Even so, these findings partially confirmed the first hypothesis.

Many of the findings in both the bivariate and multivariate analyses displayed a positive correlation between suicidal ideation and the various form of aggressive misconduct; however, both multinomial logistic regression models indicated a negative correlation with the exclusive use of excessive force. With this exception, this suggests suicidal ideation is associated with increases in police misconduct, partially confirming yet largely rejecting hypothesis two.

Tests of the relationship between negative affect and aggressive police misconduct yielded various findings. Excluding the observance of excessive force during analyses, all negative affect were positively correlated with aggressive police misconduct. Burnout was the only form of negative affect to negatively correlate with excessive force. As such, hypothesis three was rejected, and hypothesis four was partially confirmed. Anger consistently held a positive correlation with all forms of aggressive police misconduct. Furthermore, this consistency extended to its statistical significance in all but the case of exclusive acts of excessive force, where it was not or did not near significance with excessive force. Among all analyses, anger had the greatest effect on police misconduct across all negative affect predictors. These observations confirmed hypotheses five and six. Given that only anger and burnout held statistically significant relationships with suicidal ideation during the test of verbal abuse but did not share significant relationships with the use of excessive force, mediation did not occur between all forms of negative affect and misconduct. As such, hypothesis seven was rejected.

The results of these analyses suggested that patrol duty status is consistently a significant predictor of aggressive police misconduct. Alternatively, increases in age are the most consistent predictor of reductions in aggressive police misconduct.

**Table 8. Multinomial Logistic Regression Analysis of Negative Affect and Combined Aggressive Misconduct**

Variables	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III
	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)
<b>Neg. Affect</b>									
Depression (Direct Effect)	0.640 (0.129)***	0.632 (0.139)***	0.554 (0.152)***				0.122 (0.175)	0.140 (0.181)	0.168 (0.190)
Burnout (Direct Effect)							0.259 (0.150) <sup>†</sup>	0.264 (0.151) <sup>†</sup>	0.145 (0.156)
Anger (Direct Effect)				0.552 (0.118)***	0.533 (0.122)***	0.403 (0.130)***	1.339 (0.191)***	1.345 (0.192)***	1.271 (0.203)***
<b>Mediator</b>									
Suicidal Ideation [SI]		-0.053 (0.326)	0.354 (0.354)		0.210 (0.311)	0.558 (0.333) <sup>†</sup>		-0.145 (0.342)	0.244 (0.365)
<b>Controls</b>									
Age		-0.442 (0.077)***			-0.448 (0.078)***			-0.402 (0.079)***	
Race		-0.020 (0.270)			-0.048 (0.268)			-0.083 (0.278)	
Gender		1.001 (0.431)*			0.997 (0.431)*			1.096 (0.440)*	
Marital Status		0.203 (0.281)			0.128 (0.279)			0.115 (0.286)	
Military		0.263 (0.258)			0.252 (0.258)			0.175 (0.262)	
Education		-0.195 (0.120) <sup>†</sup>			-0.199 (0.120) <sup>†</sup>			-0.224 (0.122) <sup>†</sup>	
Patrol		1.365 (0.283)***			1.348 (0.283)***			1.465 (0.291)***	
Department									
Austin		-1.067 (0.346)**			-1.029 (0.345)**			-0.935 (0.352)**	
El Paso		-0.063 (0.348)			-0.031 (0.346)			-0.088 (0.356)	
_cons	-3.568 (0.294)	-3.560 (0.299)	-2.498 (0.760)	-3.897 (0.377)	-3.870 (0.379)	-2.587 (0.791)	-4.611 (0.313)	-4.612 (0.313)	-5.322 (0.436)
<b>Meditation effect</b>									
Burnout									
Total Effect					0.453 (0.125)***				
Indirect Effect					0.050 (0.030) <sup>†</sup>				
N	1330								
Pseudo R <sup>2</sup>	0.025	0.026	0.119	0.021	0.022	0.114	0.054	0.055	0.141
							0.062	0.063	0.145

Level of significance: \*\*\* $p \leq 0.001$

\*\* $p \leq 0.01$

\* $p \leq 0.05$

<sup>†</sup> $p \leq 0.10$

Race only displayed statistical significance with verbal abuse, suggesting that white officers are likelier to report acts of verbal abuse than non-white officers. Males are reported as significantly more likely than females to conduct aggressive police misconduct. Marital status was not a significant predictor of police misconduct in any model. Military status was only statistically significant when observed exclusively with the use of force, indicating that military status reduces officer use of force. However, the inverse relationship observed with the perpetration of combined verbal and physical abuse suggests that these officers may experience different forms of stress.

Respondent's level of education was the least consistent predictor of aggressive police misconduct, often only establishing statistical significance at the 90 percent confidence level. Education was only observed to significantly influence the paired use of verbal and physical misconduct. Lastly, utilizing Dallas PD as the reference police department, Austin PD officer status almost consistently reported negative and statistically significant associations with aggressive police misconduct. Alternatively, El Paso PD only exhibited significance when exclusively observing the use of force. The findings of these analyses suggest that departmental differences may influence misconduct.

## CHAPTER 6

### DISCUSSION

*“Knowing what hurts you has an inherent curative value.”*

Hans Selye

Aggressive police behavior, whether verbal or physical aggression, has a long-standing history of public discontent (U.S. Commission on Civil Rights, 1981; Reiss, 1968). While recent events have brought attention to the need for police reform, knowledge of this behavior is ever-growing. To better inform the knowledge base on aggressive police behavior, this dissertation analyzed the responses of 1,337 Texas law enforcement officers, with 460 reporting incidents of aggressive misconduct. The results support prior research and present new knowledge about police misconduct. Specifically, (a) suicidal ideation is found to affect police misconduct and mediate the relationships stress and negative affect share with police misconduct; (b) and anger remains one of the most consistent and significant form of negative affect in relation to police misconduct.

Consistent with prior research, evidence continues to recognize stress as a significant component in perpetuating harmful behavior (Agnew, 1992; 2002; Selye, 1956). For law enforcement officers, the behaviors often of the greatest social and organizational consequence involve interactions with the public (Bishopp et al., 2019; Terrill & Ingram, 2016). As observed in other research, stress emanating from the police occupation is natural and “*an unavoidable component*” of policing (Kurtz & Hughes, 2021, p.364). The nature, proximity, and potential lasting effect of these traumatic events might influence police behavior, especially when

opportunities to decompress are limited (Chan, 2007; Griffin & Bernard, 2003; Jiles, 2019). Occupational stress did exhibit the most significant effect on verbal abuse and physical force in these analyses, similar to the findings by Bishopp and associates (2020) and those made by Kurtz & Hughes (2021) in their research focusing exclusively on physical force. However, the design of these two studies did not include analysis comparing the effect of both occupational and organizational stress in their model. When isolating each form of misconduct, it is only the latter that was the most influential and statistically significant form of stress regarding the use of force. Although this maintains the sentiment that organizational stress may be the most influential form of police stress, the effect size of occupational stress was much greater than that of organizational stress when consideration is given to verbal abuse and the combination of both forms of aggressive behavior. These results are likely contingent upon certain factors relating to these behaviors and their interactions with the observed variables.

Negative affect is often reported to alter human behavior. As such, these emotions' effects should extend to police behavior. These analyses show that each form of negative affect contributes to the facilitation of aggressive behavior. This may be greatly due to the disinhibiting factor associated with these negative affects. The results of this dissertation suggest that the presence of negative affect does influence police misconduct, like other behaviors. While studies of depression frequently report a strong association with suicidal and self-harming behaviors (Gvion & Apter, 2011; Swogger et al., 2014a; Violanti et al., 2019), the positive correlation is with aggressive police misconduct, especially the use of excessive force is shocking, to say the least, given suicidal ideations negative correlation. This suggests that officer aggression may be



linked to trait impulsivity (Conner et al., 2001; Mann, 1998, 2003).<sup>6</sup> Burnout was also largely found to increase aggressive behavior. However, when compounding of the three negative affect occurs, the effects of burnout exhibit a reduction effect on physical misconduct. While research conducted by Queirós and associates (2013) indicates that burnout does explain 22 percent of anger and aggression, certain aspects of burnout can attribute to a reluctance to act, namely hopelessness and futility. Regardless of the potential effects of depression and burnout, anger is most likely to govern aggressive police misconduct.

From a theoretical standpoint, these results affirm the perspectives presented in theories of stress (Agnew, 1992; Durkheim, 1897; Dollard et al., 1939; Henry & Short, 1954; Mann, 1998, 2003; Menninger, 1938). First, Agnew's (1992, 2002, 2006) assertion that anger is the most influential emotional factor in violent coping is supported by the findings of the analyses. Although these data cannot observe the effect of compounding, the results of this dissertation suggest that anger related to organizational issues extends to the work performed in the field. Second, suicidal ideation never shared a statistically significant relationship with the use of excessive force, which suggests that suicidal thought is inhibited when outward aggression is permitted. Similarly, the results indicate that suicidal ideation is more prevalent in lesser controlled forms of aggression, such as verbal abuse (see Dollard et al., 1939).

The shared associations of verbal abuse with suicidal ideation, anger, and burnout further imply that aggression is linked to suicidal behavior (Gvion & Apter, 2011; Mann, 1998, 2003). Given that the effects of mediation only occur with verbal abuse and the combination of verbal

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<sup>6</sup> Supplemental analyses were conducted with the excluded impulsivity variable. These analyses indicated significant relationships in all models except the analyses of independent acts of excessive force in the multinomial logistic regression. Impulsivity only mediated anger and depression when examining verbal and combined misconduct.

and physical abuse, these findings suggest that aggressive behavior is determined by the level of social control restraining behavior (Agnew, 2001; Durkheim, 1987; Dollard et al., 1939; Henry & Short, 1954; Mann, 1998, 2003; Menninger, 1938). Although verbal abuse is considered a form of police brutality and is frowned upon, it is by no means as socially egregious as the excessive use of force (Reiss, 1968). Suicidal ideation's negative correlation with excessive force can also extend to the interpretation that the influence of social regulation affects officer responses to stress and negative affect. Furthermore, officer behavior, particularly the use of force, is regulated. This may explain the effect of organizational stress on officers' excessive use of force.

The respective decreases and increases in effect associated with age and patrol on police misconduct align with prior research. This is expected given that, like education, as officer age increases, officers are more likely to be of higher rank and no longer perform duties with high officer-civilian interactions. Older officers are likely to avoid confrontations and have either grown accustomed to stressful situations or are no longer assigned to duties that experience high levels of stress (Bishopp et al., 2018; Wood et al., 2019). By its nature alone, patrol duty places officers in situations most susceptible to organizational and environmental stress. For example, patrol officers are less likely to have a say in organizational policy and the directives determining their schedule and daily duties (Morash et al., 2006).

Military status is often an influential factor in the increased risk of suicidal and violent behavior (Elbogen et al., 2018). With reference to aggressive officer misconduct, this was only the case when examining the combined use of physical and verbal abuse. Excluding this exception, military status reduced officer misconduct. Notably, the findings indicate that military

service is the most protective factor against the use of excessive force. These results contradict prior research findings (see Terrill & Ingram (2016). For instance, Terrill & Ingram (2016) found that law enforcement officers with military experience were more likely to receive use of force complaints. This difference may be due to the observance of reports of citizen complaints rather than officer self-reports. Furthermore, occupational stress is weakly correlated with military status. This suggests that the influence of traumatic stress while employed as a law enforcement officer may not exert the same influence as traumatic stress related to military service.

Although law enforcement agencies may have similar structures and directives, the findings of this dissertation indicate that, even with comparative populations, the influences of unique policies and conditions related to each geographic area may contribute to officer misconduct. For instance, both Austin (approximately 3.6 per 1,000) and El Paso (approximately 3.7 per 1,000) had similar violent crime rates in 2013, but employment with Austin PD is a protective factor against misconduct (Federal Bureau of Investigation [FBI], 2014). Although the crime rate for Dallas (6.6 per 1,000) was vastly higher than either Austin or El Paso in 2013, the likelihood of physical misconduct is lower for those employed with Dallas PD than El Paso PD (FBI, 2014). While two of these police departments have similar crime rates, the number of officers each city employs differs. During 2013 Dallas PD (3,474) employed nearly twice as many officers as Austin (1,675) and three times as many as El Paso (1,069; FBI, 2014). Given these differences and the different effects produced by each department on the observed forms of aggressive misconduct, these findings reinforce the notion that the policies and the environment officers are subject to contribute to officer behavior.

## **6.1 Limitations**

Several limitations should be acknowledged when examining the findings of this dissertation. First, the data analyzed in this study was selected for the unique variables available: stress, suicidal ideation, and police misconduct. However, this selection forgoes using more current and socially relevant data. These data do not account for the recent cultural and organizational shifts surrounding policing, nor the nation itself. For instance, recent public perceptions of policing paired with political calls for reform have prompted shifts in policing. Historically, these events are noted as stressful (Violanti, 1995). Similarly, the implementation of programs targeting officer health and well-being has increased over the past several years due to a rise in mental health awareness across the nation. In part, this has been made possible by the Law Enforcement Mental Health and Wellness Act of 2017 (2018), with the aim of supporting law enforcement agencies through the use of resources and research related to mental health and officer well-being. Many resources are now provided by each of the police departments in the three cities observed in this dissertation, such as the Austin PD Health and Wellness Committee and Dallas's Officer Wellness Initiative.

Furthermore, since these data were self-reported, they will likely suffer from selection bias and difficulties when discerning their accuracy without some form of triangulation. As implied by the more significant number of respondent responses acknowledging verbal abuse but potential under-reporting of the use of excessive force, the results of this dissertation may suffer from reliability issues. These self-reports may also be distorted given respondent recollection of events over the past six months, alongside their subjective perceptions of aggressive misconduct, which may result in over-reporting. Future research should include official department data such

as citizen complaints or disciplinary reports about police misconduct and informant feedback regarding suicidal behavior. Triangulation, or the use of multiple measures for the same concept to increase its accuracy, is acknowledged to increase the validity of social science research. Increased reliability is necessary when observing data related to officer misconduct and suicidal behavior due to their sensitive nature. Unfortunately, gathering additional data related to these behaviors may be challenging, as these data are often well guarded to prevent any detrimental effects to the officer or their organization (Reiss, 1968; Van Maanen, 1973).

Second, these data are cross-sectional. This poses an issue for both mediation analysis and the determination of causation. The exclusion of the temporal component does not permit an accurate examination of either mediation or causation, as it is impossible to determine the order in which any event occurs, thus leaving these open to reciprocal causation (Tittle, 2018). The results of this dissertation do not acknowledge when suicidal ideation occurs in reference to stress, or the influence verbal abuse has on subsequent physical abuse. As observed in prison research, verbal abuse often precedes and facilitates physical violence among incarcerates (Edgar & O'Donnell, 1998). Incidents like these can be perceived as stressful and may precede suicidal cognition and behavior. Furthermore, the effect of occupational stress on verbally abusive behavior may be less pronounced in the absence of immediate stressors. This is one of several complications with the application of GST. Another is that its linear nature does not account for contingencies in how strain operates, such as reinforcing mechanisms or the divergence or convergent outcomes (Tittle, 2018). This may be overcome by including qualitative analysis and repeated measures to measure temporal elements of officer behavior. Although mortality and

selection bias are likely to pose an issue, it is essential to include temporal elements to resolve ordinal issues in future studies.

Concerning the methodology, the results of the analyses may have reduced accuracy due to the structure of several variables. Agnew (2001) recommends that strain be analyzed individually to determine the strength of their relationship to the observed deviant behavior before creating and analyzing cumulative strain variables. Given the limited survey items and responses, this option would further reduce survey item availability. As such, the independent stress construct variables did not adhere to the model that is best determined to examine strain. Agnew (2001) also recommends that social control and social learning are controlled when examining the effect of strain measures. Only social control is measured in a limited capacity in this dissertation. On another note, using variable dichotomization might have inflated the effect of select variables while masking the effect of the combined variables. This also reduces the variance, producing a more accurate and false result (Royston et al., 2006).

## CHAPTER 7

### CONCLUSION

*“In times of stress, the best thing we can do for each other is to listen with our ears and our hearts and to be assured that our questions are just as important as our answers.”*

Fred Rogers

The relationship between stress and negative behavior has been well examined. Research indicates that aggressive and suicidal behavior are two potential outcomes of stress (Kurtz & Hughes, 2021; Violanti et al., 2019). These are also two critical issues related to law enforcement. Each of these has been explored separately. Studies have not only found that police stress is a significant underlying factor in these behaviors, but also that these behaviors have strong relationships with negative affect (see Bishopp et al., 2016, 2020; Stanley et al., 2021; Violanti et al., 2019). Research outside the field of criminal justice indicates suicidal thought and aggressive behavior often precedes suicide; however, no body of research has sought to study how these influence one another with respect to the field of justice. As such, this dissertation is the first body of research to examine whether suicidal ideation mediates stress and negative affect’s relationship with aggressive police misconduct.

The findings of this dissertation suggest that verbal and physical aggression are likely indicative of increased officer stress and the potential negative affective states that follow. These behaviors can be detrimental to police legitimacy, and, as such, police administrators should be cognizant of the effect organizational stress has on aggressive misconduct (McCluskey & Terrill, 2005). This is especially so given that stress emanating from the organization rather than the

occupation is observed as a significant factor in the use of excessive force.<sup>7</sup> Furthermore, verbally abusive misconduct may signify underlying stress-related issues, such as suicidal ideation. The results of this dissertation suggest that much of the verbally abusive behavior exhibited by officers may be driven by immediate occupational stressors, but the influence of organizational stressors should not be dismissed. While access to services to assist officer stress management and stress-related issues has increased over time, these are underutilized mainly due to confidentiality concerns (Waters & Ussery, 2007).

Resolutions targeting stress reduction and aggressive police misconduct should focus on situations that evoke anger. Although anger is a natural response to stressful situations, this emotion is the most influential with regard to violent coping mechanisms (Agnew, 1992, 2002, 2006). While this dissertation reinforces this notion put forth by Agnew's (1992) General Strain Theory, it also signifies that suicidal ideation may underly some of the aggressive behavior resulting from stress. This also implies that multiple behavioral outcomes may co-occur, and the factors influencing one may also influence another, suggesting that strain is a dynamic process (see Tittle, 2018). As such, officers and law enforcement administrators should be mindful of behaviors related to aggression and the potential outcomes of these behaviors.

As suggested by Hart and associates (1995), improving health and well-being at the organizational level will likely be more beneficial in reducing stress than focusing on individualized approaches (see also The President's Task Force on 21st Century Policing, 2015). Due to the unique stressors officers experience on the job compared to those prior to

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<sup>7</sup> Supplemental mediation analysis was conducted between the stress and negative affect variables. Mediation did occur; however, no form of negative affect mediated the relationship between organizational stress and excessive force.



employment, consideration should be given to evaluating officers for trauma prior to employment (Rouse et al., 2015) and throughout their career (Chopko et al., 2014). Doing so will provide police administrators with some insight into the well-being of their officers. This may encourage administrators to recommend officers utilize the services offered and potentially promote open communication to resolve organizational issues. However, such action may increase officers' likelihood of being removed from service. Officers are already concerned that utilizing services will remove them from active service. With the current decline of law enforcement officers, further removal of officers from service would be detrimental to the organization and the community.

Given the nature of patrol, patrol officers are likely to have the greatest number of interactions with members of the public. The findings of this dissertation indicate that patrol officers are also at a much higher risk of conducting aggressive misconduct than non-patrol officers. Increased public interaction may contribute to this behavior due to chronic arousal (Griffin & Bernard, 2003). When possible, more consideration should be given to increasing the downtime between stressful interactions. This includes shift operations and patrol assignments. Officers policing high-traffic and high-crime areas will likely receive more citizen complaints for aggressive behavior due to increased exposure (Gullion et al., 2021). Regular assignments in these locations might be perceived as unfair, generating more stress and likely resulting in more substantiated complaints of aggressive misconduct. Rotating officers out of these areas may reduce stress and reports of aggressive behavior. The ramifications of replacing or removing officers familiar with the inhabitants and activities occurring at these locations have yet to be discovered.

Due to the findings that age serves as a protective factor, one suggestion to mitigate instances of misconduct is to pair older officers with younger officers (Wood et al., 2019). Doing so in a supervisory or mentorship capacity may encourage appropriate situational responses and guide them as they transition to their new role. The experiences of these veteran officers are likely to encompass many of the challenges new officers will face. Mentorship may prompt officers to voice their concerns and promote the use of services. However, the officers in the mentorship position should be receptive to using these services and should not have a record of misconduct. Otherwise, these officers will likely promote cultural perceptions that discourage officers from maintaining their well-being (Waters & Ussery, 2007) and promote officer misconduct in the ranks (Wood et al., 2019).

In whole, police stress should be heavily considered when investigating incidents related to aggressive police behavior. While this behavior may be evident, several underlying factors influence this behavior and may result in alternate detrimental outcomes, such as suicide. Since organizational stress seems to be at the heart of many of these issues, police organizations should investigate the greatest organizational stressors that influence officer behavior and determine the best course of action to reduce officer stress. Although this dissertation indicates that suicidal ideation does influence aggressive police behavior, more research should be conducted to understand better the effect it has on officer behavior.

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## **BIOGRAPHICAL SKETCH**

Quinn Gordon was born in Tyler, Texas. He attended and graduated from Robert E. Lee High School in 2004. Afterward, he enlisted in the United States Air Force, primarily working in aircraft maintenance as an avionics maintainer until 2011. In 2012, Quinn attended Collin College in McKinney, Texas. He then transferred to The University of Texas at Dallas in 2015, completing his Bachelor of Arts in Criminology with a minor in psychology in 2016. Quinn began his graduate studies in 2017 at John Jay College of Criminal Justice. He graduated in 2018 with his Master of Arts in Criminal Justice, specializing in criminology and deviance, and terrorism studies. Quinn entered the criminology doctoral program at The University of Texas at Dallas in 2019. He has taught undergraduate courses on the introduction to criminal justice, policing, and crime and justice policy. Since 2020, Quinn has served as the managing editor for *Police Quarterly*. His research interests include policing, violence, suicide, and terrorism.



## CURRICULUM VITAE

### QUINN GORDON, MA

School of Economic, Political & Policy Sciences – Criminology  
The University of Texas at Dallas  
800 West Campbell Road, GR 2.510  
Richardson, TX 75080  
Qtg140030@utdallas.edu

### EDUCATION

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- 2023            PhD, Criminology – The University of Texas at Dallas – Richardson, TX  
  
                  Dissertation: “Examining Suicidal Ideation as a Mediator Between Stress and Aggressive Police Misconduct”  
  
                  Committee: Drs. John L. Worrall (Chair), Lynne M. Vieraitis, Bruce A. Jacobs, and Andrew Krajewski
- 2018            MA, Criminal Justice – John Jay College of Criminal Justice – New York, NY
- 2016            BA, Criminology – The University of Texas at Dallas – Richardson, TX

### PROFESSIONAL CERTIFICATES

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- 2022            Advanced Graduate Teaching Certificate – The University of Texas at Dallas
- 2020            Graduate Teaching Certificate – The University of Texas at Dallas
- 2018            Advanced Certificate in Terrorism Studies – John Jay College of Criminal Justice

### RESEARCH PUBLICATIONS

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#### Works Published

- Worrall, J. L., **Gordon, Q.** (2022). Is Criminology & Public Policy “Influential?” Answers from Altmetrics. *Criminology and Public Policy*.
- Worrall, J. L., **Gordon, Q.**, & Zanolini Jr, P. A. (2022). Effects on calls for service of police ‘scarecrow’ cars. *Police Practice and Research*, 1-14.
- Baek, H., Han, S., & **Gordon, Q.** (2021). Factors that influence trust in the police in Mexico. *International Journal of Comparative and Applied Criminal Justice*, 1-16.

## **Works Under Review**

Corey, J., **Gordon, Q.** Violent Misconduct Amongst State Prison Inmates: An Examination of Mental Disorders, Physical Conditions, and Social Factors.

**Gordon, Q.** Prison Mortality: An Analysis of Deprivation in Prison Suicides and Homicides.

Kim, W., Han, S., **Gordon, Q.** The Effect of Fear of Terrorism on Individual Perception on Government's Counterterrorism Activities.

## **Works in Progress**

**Gordon, Q.**, Corey, J. Fatal Force: An Analysis of Police Interactions with the Mentally Ill.

Han, S., Kim, W., **Gordon, Q.** Theoretical Foundations for the Fear of Terrorism.

## **ACADEMIC PRESENTATIONS**

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### **The American Society of Criminology**

2021 Corey, J., **Gordon, Q.** Violent Misconduct Amongst State Prison Inmates: An Examination of Mental Disorders, Physical Conditions, and Social Factors.

2022 **Gordon, Q.**, Corey, J. Fatal Force: An Analysis of Police Interactions with the Mentally Ill.

### **The Academy of Criminal Justice Sciences**

2022 **Gordon, Q.** Unintended Consequences: An Analysis of Contextual Factors in Prison Suicides and Homicides.

## **TEACHING EXPERIENCE**

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*The University of Texas at Dallas*

### Instructor of Record

- Introduction to Criminal Justice
- Police and Society
- Crime and Justice Policy
- Critical Issues in the Social Sciences

### Teaching Assistant

- Critical Issues in the Social Sciences – Dr. Carroll Lanham
- Introduction to Criminal Justice – Dr. Elmer Polk
- Corrections – Dr. Elmer Polk

- Criminal Prosecution and the Court Process – Dr. Elmer Polk
- Youth Crime and Justice – Dr. Elmer Polk

### Guest Lectures

#### *The University of Texas at Dallas*

- Introduction to Crime and Criminology: Terrorism
- Advanced Criminology: Labeling Theory
- Offender Rehabilitation: Program Evaluation
- Advanced Criminal Justice: Domestic Violence
- Youth Crime and Justice: Policing Juveniles
- Advanced Criminal Justice: Juvenile Justice
- Advanced Criminal Justice: Terrorism
- Introduction to Criminal Justice: Terrorism
- Theories of Justice: Egoism, Pleasure and Indifference
- Media and Crime: Police and the Media
- Theories of Justice: Ethics and Terrorism

#### *Kentucky Wesleyan College*

- Global Perspectives on Crime and Justice: Terrorism and Public Policy
- Juvenile Delinquency: School and Delinquency
- Corrections: Effects of Prison on Inmates, Deprivation and Importation
- Rehabilitation: Community Effects on the Success of Rehabilitation

### **SERVICE**

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#### **Journal Service**

- *Police Quarterly*: Managing Editor

#### **University Service**

#### *The University of Texas at Dallas*

- Criminology Graduate Student Association: Treasurer
- Committee on Effective Teaching: Graduate Student Representative
- EPPS Dean's Student Council: Criminology Graduate Student Member
- Search Committee for the Vice President for Diversity, Equity and Inclusion: Graduate Student Representative
- Peer Advisors for Veteran Education (PAVE): Peer Advisor
- Comets to the Core Assessment: Student Project Assessor

## **RESEARCH INTERESTS**

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Policing  
Violence & Violent Crime

Suicidal Behavior & Mental Health  
Terrorism

## **PROFESSIONAL EXPERIENCE**

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2021 – Present

*Police Strategies LLC.*  
Independent contractor – Police Data Analyst

2005 – 2011

*The United States Air Force*  
Security Forces Augmentee - Prisoner Escort, Patrol, & Traffic

## **PROFESSIONAL AFFILIATIONS**

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Academy of Criminal Justice Sciences  
Alpha Phi Sigma  
The American Society of Criminology  
The American Society of Evidence Based Policing  
The Texas Association of Criminal Justice Educators

## **UNIVERSITY ORGANIZATIONS**

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UTD Criminology Graduate Student Association  
UTD Student Veteran Association