STRESS, BURNOUT, AND WORK-FAMILY CONFLICT AMONG POLICE
OFFICERS: THE MODERATING EFFECT OF EMOTION REGULATION
STRATEGIES

by

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ABSTRACT

ALLISON A. TOTH. Stress, burnout, and work-family conflict among police officers:
The moderating effect of emotion regulation strategies. (Under the direction of DR.
JAIME BOCHANTIN & DR. LINDA R. SHANOCK)

Police officers have an incredibly stressful and emotionally laborious job, which
can lead to burnout and issues with their work on the clock spilling over and influencing
their time with their family off the clock (i.e. work-family conflict). Due to the harmful
effects of stress on burnout and work-family conflict, it is important to find coping
mechanisms to reduce these harmful effects. Two such coping mechanisms that were
investigated in this study were emotion regulation strategies, specifically reappraisal and
suppression. A sample of 81 police officers was used to test whether reappraisal buffers,
and suppression strengthens, the relationship between stress and burnout and stress and
work-family conflict. Ultimately, reappraisal and suppression did not significantly
moderate the relationship between stress and negative outcomes. Because this study was
underpowered and because of the positive practical implications of finding a coping
strategy to help reduce the negative effects of stress in policing, future research should
continue to investigate emotion regulation strategies as potential coping mechanisms for
individuals in high-stress occupations.

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CHAPTER 1: INTRODUCTION

Police officers play a vital role in American communities. They are responsible for protecting and serving their communities and often put themselves in danger to ensure that civilians are safe (Territo & Vetter, 1981). They also have to do their job as shift workers, which means their schedules can change week to week or month to month and that they might be working during hours beyond the typical nine to five shift (Vyas et al., 2012). Due to the demanding and dangerous nature of the job, not to mention the difficulties that can arise from shiftwork in general (Vyas et al., 2012; Williams, 2008), those in policing can experience high levels of stress and burnout, as well as conflict between their work and family roles (Bochantin, 2016; Bochantin & Cowan, 2008). Work-family conflict (WFC) is when work and family roles are incompatible (Greenhaus & Beutell, 1985), and studies have found that police officers experience some of the highest levels of work-family conflict (Dierdorff & Ellington, 2008; Hall, Dollard, Tuckey, Winefield, & Thompson; He, Zhao, Archbold, 2002). Stress, burnout, and WFC can, in turn, lead to lower well-being and satisfaction, which can be particularly problematic in policing. Officers with low levels of well-being and satisfaction might be disgruntled and may not be as good at following departmental policies and procedures, placing others in danger and increasing the likelihood of a miscarriage of justice (Armstrong, Atkin-Plunk, & Wells, 2015).

Policing is also an emotionally laborious profession. Emotional labor refers to modifying the expression of one's emotions in accordance with an organization's or interaction partner's display rules, or expectations for which emotions are expressed (Ashforth & Humphrey, 1993; Grandey, 2000). Officers are expected to remain calm and

level-headed, despite engaging with often angry or uncooperative civilians, thus they

must engage in surface acting and display emotions that they do not actually feel on a

regular basis as part of their job (Ashforth & Humphrey, 1993). These encounters are

stressful in and of themselves, yet the emotional labor requirements add an additional

source of stress, which can then lead to burnout (Ashforth & Humphrey, 1993).

Constantly modifying one's emotional expression can take a toll on officers, causing a

harmful spillover of stress and emotional fatigue from the workplace into one's home and

family life, creating WFC and strained family relationships (Bochantin, 2017). Several

studies (e.g. Grandey & Cropanzano, 1999; Patterson, 2000; Violanti, 1992; Violanti,

Marshall, & Howe, 1985), have investigated various coping strategies, such as distancing,

planful problem-solving, and seeking social support, that can help officers deal with job

and life stressors and reduce the amount of burnout and WFC. However, these coping

strategies do not directly address the emotional labor requirements of policing, potentially

making them less effective coping options. One way to help officers cope with the stress

of the job that has not been widely researched and that would more directly address the

emotional labor requirements of a profession such as policing is changing how officers

use emotion regulation strategies to reduce the experience of stress and its effect on

burnout and WFC.

Two emotion regulation strategies that are relevant for police officers are

reappraisal and suppression. Reappraisal refers to changing how one interprets an

emotionally evocative event in order to experience and express a more favorable

emotion, and has been found to relate to positive emotional, social, and psychological

outcomes (Gross, 1998a; Gross & John, 2000). Suppression refers to modifying the

expression of an emotion that has already been felt so one can conform to the emotional display rules of an organization or situation (Gross, 1998a). Whereas reappraisal is associated with positive outcomes, suppression has been associated with negative emotional, social, psychological, and physiological outcomes (e.g. Gross & John, 2000). Because officers are expected to express a calm and professional demeanor, despite the emotionally evocative nature of their job, they might engage in reappraisal and/or suppression in order to achieve the desired emotional expression, without knowing that one strategy might be more helpful than the other. Thus, if officers can be trained to use more reappraisal and less suppression, perhaps they will experience more positive outcomes and fewer negative outcomes.

Previous research has supported that emotion regulation strategies can be easily taught to individuals. One study used a ten-day self-training intervention that successfully taught individuals in people-facing roles how to engage in emotion regulation strategies by having them read about different strategies, imagine situations where they could employ the strategies, and then finally practice the strategies and reflect upon their use after each shift (Hülsheger, Lang, Schewem, & Zijlstra, 2015). This study found that the intervention was so effective in training reappraisal that participants were using reappraisal automatically after a few weeks, without consciously thinking about what they were doing (Hülsheger et al., 2015).

Interventions that can successfully reduce stress are critical in policing, particularly when one considers that a recent meta-analysis found that previous stress management interventions in policing were ineffective or inconclusive (Patterson, Chung, & Swan, 2012). Thus, there is a need for interventions that do actually work to reduce

stress in such a critical occupation. If emotion regulation strategies are found to influence the relationship between stress and negative outcomes, and given that emotion regulation strategies have been successfully taught to individuals through a relatively short training program (Hülsheger et al., 2015), this research could be used as the impetus to develop and offer training programs targeted towards officers to help them learn how to better regulate their emotions.

The purpose of the present study is to determine whether emotion regulation strategies can influence the relationship between stress and burnout and between stress and WFC. Specifically, this study is focused on how two emotion regulation strategies may differ in how they influence these relationships, and whether one strategy, reappraisal, might buffer the harmful effects of stress on burnout and WFC and reduce the spillover of stress across domains, whereas the other strategy, suppression, might actually exacerbate the harmful effects of stress. Lazarus and Folkman's (1987) transactional theory will be used as an organizing framework to test these relationships.

CHAPTER 2: HYPOTHESIS DEVELOPMENT

2.1 Stress in Police Officers

Stress is an important variable to consider in this research because the experience of stress is a daily reality in many occupations and is particularly prevalent within the context of policing (Violanti et al., 2006). Job stress is the "perception that environmental demands exceed the abilities of the individual" (LaRocco, House, & French, Jr., 1980, p. 203). Stress occurs in response to specific workplace events, and characteristics of those events can influence the severity of the stress experienced (Motowidlo, Packard, & Manning, 1986). Given the characteristics of police work, officers are at particularly high risk of experiencing stress-inducing events, and cortisol studies have demonstrated that officers do indeed have higher than average levels of cortisol, which indicates high levels of stress (Violanti et al., 2006). The three most stressful events that officers deal with are having a fellow officer killed on the job, having to kill someone while on duty, and dealing with the death or abuse of children (Spielberger, Westberry, Grier, & Greenfield, 1981; Violanti & Aron, 1995). Other stressors can include shift work, excessive paperwork and administrative duties, and low salary (Spielberger et al., 1981; Violanti & Aron, 1995). Family demands have also been listed as a stressor for police officers, suggesting that aspects of the home or family life are incompatible with the job of policing (Violanti & Aron, 1995).

Officers often do not recover from the stress they experience on the job before the end of their shift, meaning that they take their job stress home with them (Anderson, Litzenberger, & Plecas, 2002). This leads to a spillover of stress into their personal or home lives, increasing WFC and influencing the officer's relationships with spouses,

children, or friends (Griffin & Sun, 2017; Territo & Vetter, 1981). Indeed, the divorce

rate between heterosexual officers married to non-officers is as high as 75% (Kirschman,

2006). Work stress can also lead to destructive coping behaviors such as alcoholism, as

well as psychological issues (Menard & Arter, 2014; Terito & Vetter, 1981; Violanti et

al., 1985; Yuan et al., 2010). In one stratified random sample of police officers, 73% had

some level of PTSD symptoms and 16% had a critical level of depression (Violanti et al.,

2006). Other researchers found that 9% of officers who participated in their study

indicated they were engaging in suicidal ideation (Chopko, Palmieri, & Facemire, 2014).

These issues can be so severe that some officers have to leave the force, and the stress

and subsequent depression, alcoholism, suicidal ideation, and PTSD that occur as a result

of engaging in police work can also lead to suicide (Chae & Boyle, 2013; Territo &

Vetter, 1981; Violanti & Aron, 1995).

Clearly the stress that police officers experience can be harmful and significantly

impact their quality of life and both officers and police departments could benefit from

reducing the stress that is experienced. Because stress is defined as the perception that

one does not have the coping ability to deal with the demands of an event, it stands to

reason that increasing the use of effective coping strategies can increase the perception

that demands are within the individual's ability to handle, thereby reducing the

experience of stress. Although emotion regulation strategies could be classified as coping

methods, their utility in buffering the negative effects of stress on burnout and WFC has

not been tested.

2.2 Transactional Theory of Stress

One theory that can explain why emotion regulation strategies might influence the relationships between stress and negative outcomes, such as burnout and WFC, is the transactional (sometimes called appraisal) theory of stress (Lazarus & Folkman, 1987). According to transactional theory, when an event occurs, people make two appraisals of that event: does it threaten my well-being, and is there anything I can do to improve the interaction I am having with my environment or with this event (Lazarus & Folkman, 1987). If the appraisal is that the event is a threat and there is nothing that can be done to change the event, this can then result in stress, since the very definition of stress is the appraisal that an event or demand goes beyond a person's ability to cope (LaRocco, et al., 1980).

In order to manage stress, coping strategies can be employed to influence the appraisal of threats and one's ability to handle them effectively. Coping has been defined as the behaviors and thoughts one uses to manage situations that are appraised as stressful, and it includes methods that both regulate the emotional outcomes of experiencing threat appraisals and the relationship between the person and the demanding or stressful environment (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984; 1987). The goodness of fit between the appraisal of the situation and the chosen coping method can influence coping outcomes and whether or not the coping method is effective at reducing stress (Lazarus & Folkman, 1984; Perrewé & Zellars, 1999). If individuals use coping strategies that are not appropriate for the situation or that are typically found to be ineffective, then the body will respond to the perceived threat in a negative manner,

leading to poor psychological well-being and social functioning, as well as health concerns and somatic complaints (Lazarus & Folkman, 1987).

Building off of this theoretical framework, the line of reasoning for the variables included in this study is that working as a police officer, and therefore experiencing intense work events, will lead to appraisals that the situational demands are threatening and exceed coping abilities, causing high levels of stress within the officer. Stress can lead to many harmful outcomes, including burnout, negative emotional spillovers, a decrease in social functioning, and WFC (Byron, 2005; Lazarus & Folkman, 1987; Montgomery, Panagopolou, de Wildt, & Meenks, 2006). However, if appropriate coping strategies, such as reappraisal, are used, this could help buffer the negative effect of stress on negative outcomes. On the other hand, if ineffective coping strategies, such as suppression, are used, this could add a further stressor on the officers, increasing the harmful effect of stress on burnout and WFC.

2.3 Stress & Burnout

One well-established correlate of stress that could perhaps be reduced if appropriate coping methods are used is burnout. Burnout is defined as a "prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach, Schaufeli, & Leiter, 200, p. 397), and is identified by its three components of emotional exhaustion, cynicism or depersonalization, and personal achievement. Those who are experiencing burnout feel exhausted and depleted, and like they lack the psychological resources necessary to perform their job (Maslach & Jackson, 1981). Officers experiencing burnout tend to develop cynical attitudes towards those they serve, becoming calloused and indifferent towards others, and attempt to distance themselves

from others by viewing people as an object of their work rather than as unique individuals (Maslach & Jackson, 1981; Maslach et al., 2001). Personal achievement is the third facet of burnout, and while the measurement of personal achievement is worded to sound positive, those experiencing burnout are on the low end of the scale and tend to have feelings of inefficacy, unhappiness, and dissatisfaction about their ability to do their job (Maslach & Jackson, 1981).

Stress and burnout have a well-established relationship, with one meta-analysis suggesting that the correlation between role stress and emotional exhaustion is as high as .62 (Lee & Ashforth, 1996). Burnout can therefore be particularly prevalent in high stress occupations such as nursing and policing and is certainly problematic, especially when considering its components of emotional exhaustion and depersonalization. Emotional exhaustion could prevent officers from having the cognitive resources necessary to make the correct, often split-second, decisions required of police work. Feelings of cynicism or depersonalization might cause officers to treat civilians with disrespect, harming community-officer relations and leading to increased distrust between officers and the communities they are meant to serve. Although exhaustion and depersonalization might be the most harmful components of burnout for police officers, personal achievement, also called inefficacy, could be an issue as well if it causes officers to feel so poorly about their performance and capabilities that they leave the profession and the organization, causing precincts to lose the time and money they have invested in those officers, as well the wealth of experience those officers might have from their time on the force (Lynch & Tuckey, 2008; Wareham, Smith, & Lambert, 2013).

Burnout is also associated with many other negative outcomes. Individuals who are experiencing burnout are less productive and effective at work and have lower job satisfaction and organizational commitment, which can then lead to absenteeism and turnover (Maslach et al., 2001). Burnout is contagious in the work environment, with those who are experiencing burnout negatively impacting their coworkers and increasing the likelihood that others within the organization will also experience burnout (Maslach et al., 2001). Furthermore, burnout can also spill over into one's home life, leading to the experience of exhaustion, depersonalization, and a lack of feelings of personal achievement at home as well as at work (Burke & Greenglass, 2001). Finally, burnout relates to negative physical and mental health outcomes such as substance abuse, anxiety, and depression (Maslach et al., 2001). Clearly the experience of burnout can be detrimental to police officers, leading to harmful outcomes both on and off the job. This study is expected to replicate the previously well-established relationship between stress and burnout, but in the police profession specifically:

H1: Stress will be positively related to emotional exhaustion and

depersonalization and negatively related to personal achievement.

2.4 Stress & Work-Family Conflict

Not only do police officers deal with large amounts of stress and burnout, but they also experience heightened levels of work-family conflict (WFC; Dierdorff & Ellington, 2008). WFC has been defined as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). WFC thus "reflects the goodness of fit between work and family life" (Frone, Russell, & Cooper, 1992, p. 65) and suggests that participating in

one role can make it more difficult to participate in another (Byron, 2005; Greenhaus &
Beutell, 1985). Conflict can go in two directions, as work roles can interfere with family
roles (WIF), and family demands can interfere with work demands (FIW). This study will
focus on WIF. Although police officers might have their home or family life demands
conflict with their work demands, given the uniquely challenging characteristics of police
work, it is expected that work interfering with family will be much more common or
salient for officers than family interfering with work.

Researchers have established that job stress and WFC are related. A meta-
analysis conducted by Byron (2005) found that the correlation between job stress and
WIF was .48. Other studies have also supported the validity of stress in predicting WFC
(e.g. Armstrong, Atkin-Plunk, & Wells, 2015; Frone et al., 1992; Kelloway, Gottlieb, &
Barham, 1999), and Grandey and Cropanzano (1999) found that work role stress
predicted 18% of the variance in WFC. There are a few explanations for this connection
between stress and WFC. One is that job stress can spill over into the family life, leading
to WFC (Byron, 2005). Another is that stress depletes one's cognitive, emotional, and
physical resources, making it harder to have time and energy available for the other role
(Grandey & Cropanzano, 1999; Kelloway et al., 1999). Stress can also override a
person's ability to cope with their role demands, increasing conflict (Kelloway et al.,
1999).

WFC is an important variable to consider in this study because not only is WFC a
negative outcome of stress, but it can in turn lead to negative personal, familial, and
organizational outcomes. Some of the personal consequences of WFC are mental health
issues such as psychological distress and strain, depression, and anxiety (Allen, Herst,

Bruck, & Sutton, 2000; Amstad, Meier, Fasel, Elferine, & Semmer, 2011; Frone et al.,

1992; Janzen, Muhajarine, & Kelly, 2007; Netemeyer, Boles, & McMurrian, 1996). Life

distress and lower levels of life satisfaction and personal well-being have also been

associated with WFC (Amstad et al., 2011; Frone et al., 1992; Grandey & Cropanzano,

1999; Kossek & Ozeki, 1998). Individuals experiencing WFC tend to experience

negative health consequences, physical symptoms, somatic complaints, as well as

substance and alcohol abuse, which is already a prevalent issue in policing (Allen et al.,

2000; Amstad et al., 2011; Grandey & Cropanzano, 1999; Menard & Arter, 2014;

Netemeyer et al., 1996; Shockley & Allen, 2013). WFC is also related to emotional

exhaustion and burnout (Allen et al., 2000; Boles Johnston, & Hair, Jr., 1997). Besides

personal consequences, WFC can negatively affect one's family life. WFC can lead to

family distress and decreased marital and family satisfaction and performance (Allen et

al., 2000; Amstad et al., 2011; Frone et al., 1992).

WFC can lead to many organizationally-relevant outcomes as well. Increased

WFC is related to decreases in job satisfaction, organizational commitment, absenteeism,

job performance, and career success (Allen et al., 2000; Amstad et al., 2011; Armstrong

et al., 2015; Boles et al., 1997; Kossek & Ozeki, 1998 Netemeyer et al., 1996). WFC has

also been related to both turnover intentions and actual turnover (Allen et al., 2000;

Amstad et al., 2011; Boles et al., 1997; Grandey & Cropanzano, 1999; Greenhaus,

Collins, Singh, & Parasuraman, 1997; Netemeyer et al., 1996). These organizational

outcomes are particularly impactful in policing when considering that decreases in job

performance in such a high-stakes field can have life or death results. Furthermore,

turnover in policing is also incredible costly, given the investment police departments

make in officer training and police academies (Lynch & Tuckey, 2008; Wareham et al., 2013). Police organizations also spend a lot of money to recruit and select qualified applicants (e.g. background checks, interviews, etc.), and turnover can mean that those investments are lost, as is the wealth of experience that officers might have achieved over their career (Wareham et al., 2013). Clearly WFC can lead to many harmful outcomes at both the individual and organization levels, and thus officers and police departments could benefit from reducing WFC.

There are three types of WFC to consider: time-based, strain-based, and behavior-based (Greenhaus & Beutell, 1985). Time-based conflict is when spending time in one role makes it difficult or impossible to spend time in the other role, such as when staying late at work makes you miss a child's soccer game (Greenhaus & Beutell, 1985). Behavior-based conflict is when behaviors that are appropriate or useful in one role would be ineffective in other role, such as police officers using interrogation tactics on a spouse (Greenahus & Beutell, 1985). Although these two types of conflict might be common in policing, the present study will focus on strain-based conflict, as this is the type that should relate most to stress since strain occurs as result of stress (Greenhaus & Beutell, 1985).

Strain-based conflict occurs when stress is experienced and produces strain in one role, which then influences a person's ability to perform the other role (Greenhaus & Beutell, 1985). For example, officers might be so preoccupied or exhausted after a shift that they are unable to engage with their family members or participate in familial activities. Experiencing stress, ambiguity, and conflict at work can increase the amount of strain and strain-based WFC (Greenhaus & Beutell, 1985). Strain is therefore particularly

relevant for the policing context, as officers are commonly placed in ambiguous, stressful situations, where they must make quick judgments to determine whether a civilian is a threat or not, and how to deal with a threat if it does materialize. Experiencing these stressful events while policing can then lead to spillover of that stress into the family domain, increasing strain-based WIF for police officers. Symptoms of strain include anxiety, depression, fatigue, tension, and irritability, all of which might negatively impact an officer's ability to meaningfully engage with their life outside of work. Thus, I argue that stress will be related to strain-based WIF in this study:

H2: Stress will be positively related to strain-based WIF.

2.5 Emotion Regulation Strategies as a Coping Method

Clearly stress, burnout, and WFC are challenging to experience in and of themselves, but they can also lead to a whole host of other negative outcomes. Given the harmful effects of stress, burnout, and WFC, it is important to investigate methods that can help people cope with these unfortunate realities. Previous research has investigated several different types of coping strategies used by police officers. One study looked at dissociation, a form of psychological avoidance where one separates from awareness one's thoughts or feelings of distressing event, which was associated with worse psychological adjustment (Aaron, 2000). He, Zhao, and Archbold (2002) looked at religion, social support, avoidance, yelling at loved ones, breaking things, and drinking as coping strategies and found that using more constructive coping strategies, such as praying for strength and developing a plan of action, were associated with more positive outcomes. Finally, Patterson (2003) investigated the use of problem-focused and emotion-focused coping and seeking social support and found that those who reported

greater levels of distress also reported greater use of coping strategies, but that ultimately the coping strategies did not significantly predict distress.

One coping strategy that has not been widely researched in the context of policing and that could potentially influence the relationship between stress and WFC, and ultimately reduce the harmful effects of stress, is emotion regulation. Emotion regulation strategies could be particularly useful because they can be trained (Hülsheger et al., 2015). As discussed by Gross (1998b), emotion regulation includes "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (p. 275). This definition also highlights that there is a difference between which emotions are experienced and which emotions are expressed (Roseman & Smith, 2001), which is consistent with the definitions of deep and surface acting in emotional labor research (Grandey, 2000). It is possible to experience or feel an emotion which one does not express, and it is also possible to express an emotion which one does not actually feel. For example, officers might feel sad or angry on the job, but choose to hide or to not express those emotions in front of the civilians that they are working with. Officers might also express happiness around their families that they perhaps do not actually feel after a long and difficult day at work (Bochantin, 2017). Indeed, Bochantin (2017) found that officers often use humor to cover some of the negative emotions they might experience after a difficult day on the job. Emotion regulation strategies can influence which emotions are experienced and which emotions are expressed (Gross, 1998b).

There are two main types of emotion regulation. One is antecedent-focused emotion regulation, which refers to strategies that seek to alter an emotional experience

before it occurs (Gross, 1998a). Antecedent-focused emotion regulation has been compared to deep acting from the emotional labor literature, where one changes their perception of a situation to actually produce the feeling they need to feel to conform to the organization's or audience's display rules (Grandey, 2000). The other type of emotion regulation strategy is response-focused emotion regulation, which helps people modify the expression of a felt emotion (Gross, 1998a). Response-focused emotion regulation has been compared to surface acting where people show emotions that they do not actually feel in order to not violate social or organizational display norms (Grandey, 2000). Although antecedent- and response-focused emotion regulation strategies help to regulate emotional experiences and/or expressions, they involve very different processes and have different implications for the person employing them.

Reappraisal. Antecedent-focused emotion regulation includes several different individual strategies. Two of the strategies, situation selection and situation modification, allow people to control the situation that elicits emotions, thereby leading to a more desirable emotional experience in whatever situation is chosen or modified. Attentional deployment, which involves directing one's attention either towards or away from various emotion-eliciting stimuli, is another antecedent-focused strategy (Gross, 1998a). The final antecedent-focused emotion regulation strategy is cognitive change or reappraisal, which is defined as "as interpreting potentially emotion-relevant stimuli in unemotional terms" (Gross, 1998a, p. 226). This involves changing how one evaluates or thinks about an emotional event before an emotion is actually experienced.

Some antecedent-focused emotion regulation strategies are more useful for policing than others. Indeed, situation selection, situation modification, and attentional

deployment are difficult or even impossible to use in the policing context. It is difficult for officers to select situations or have any level of control or autonomy over the situations they are involved with. If an officer receives a call, they typically cannot just ignore it, nor could they refrain from pursuing a perpetrator who just broke the law and still fulfill the requirements of their job. Modifying a situation is also typically unrealistic. If officers are responding to a child abuse call or fatality, for example, there is little they can do to change that situation to be less emotionally evocative. Attentional deployment may also be challenging for officers, as it is difficult to think about something less emotionally stimulating in the middle of handling an emotional situation that requires focus and attention.

However, cognitive change or reappraisal is both possible, and potentially beneficial, for officers to use to handle emotionally-charged situations. Rather than diverting attention away from the emotional stimulus, cognitive reappraisal involves changing how one interprets a stimulus and what meaning one wants to attach to it (Gross, 1998a; Gross, 1998b). In policing, this might mean choosing to reappraise a drunk and disorderly call and, instead of seeing an intoxicated person as unpredictable, threatening, or annoying, reframing the situation to think of it as dealing with an unruly toddler. Using this strategy allows officers to change what emotions they feel, and also which emotions are expressed. It allows them to regulate their emotions ahead of time so when they do express emotions, those emotions can be more acceptable based on organizational emotion norms (Grandey, 2000). Reappraisal influences emotional expressions by first modifying the actual emotion that is felt. Individuals can then authentically express the appropriate emotion for the situation because that is the emotion

they have influenced themselves to feel. For example, officers might use humor in the face of challenging situations on the force to reappraise how they think about the situation, allowing them to authentically express happiness rather than anger or sadness (Bochantin, 2017). Furthermore, using reappraisal has been found to relate to experiencing and expressing more positive emotion and less negative emotion, leading to an overall more enjoyable emotional life (Gross & John, 2003).

Expressing more positive and less negative emotion can help individuals socially as well, and those who use reappraisal tend to be more well-liked by peers and have more close relationships than those who do not use reappraisal (Gross & John, 2003). Although it has never been tested, using reappraisal could therefore also potentially have an impact on family relationships, and perhaps reduce some tension within one's family life. For example, officers who use reappraisal might be able to experience and express greater positivity and less negativity, creating a warmer and more open family relationship. Furthermore, reappraisal is associated with higher life satisfaction, self-esteem, and optimism, as well a greater sense of autonomy and increased personal growth (Gross & John, 2000). Using reappraisal allows individuals to modify their emotional experiences and expressions to conform to organizational or social norms without feeling the cognitive depletion that is felt when using other forms of emotion regulation.

Given the benefits of using reappraisal as a coping strategy and the previous relationships found with using reappraisal and experiencing more positive outcomes (e.g. Gross & John, 2000; 2003), I would expect a similar pattern of relationships between reappraisal and burnout and strain-based WFC. If officers are able to cope effectively using reappraisal, they should experience less burnout, as coping should ensure that

resources will not be as depleted so officers will experience less emotional exhaustion and depersonalization, and greater personal achievement (Maslach & Jackson, 1981; Maslach et al., 2001). Effective coping strategies should also be associated with reduced WFC because officers who cope well should be able to deal with the demands of their work role and prevent the conflict from spilling over into their family life (Rotondo, Carlson, & Kincaid, 2003). Thus, the following hypotheses are proposed:

H3: Reappraisal will have a negative relationship with the emotional exhaustion and depersonalization facets of burnout and a positive relationship with the personal achievement facet of burnout.

H4: Reappraisal will have a negative relationship with strain-based WIF.

Besides expecting reappraisal to be directly related to decreases in burnout and strain-based WIF, I also anticipate that stress and reappraisal will have interactive effects on burnout, and WFC (see Figure 1). According to transactional theory, coping mechanisms can influence the appraisal of one's ability to cope with a threatening or demanding situation, buffering the effect that stress can have on well-being and psychological and social functioning (Lazarus & Folkman, 1987). For example, if a police officer responds to a domestic violence call (threatening/demanding situation), they will typically experience stress as a result of that demand threatening their personal well-being and the perception that they might struggle to cope with this call. However, if they engage in reappraisal and reframe that demand to be perceived in less emotional terms (e.g. think about how they are helping a couple in turmoil and potentially preventing future domestic violence occurrences), this can buffer the relationship

between the stress experienced and future negative outcomes such as burnout and WFC. Thus, the following hypotheses are proposed:

H5: Reappraisal will buffer the relationship between stress and burnout, such that greater use of reappraisal will weaken the relationship between stress and burnout.

H6: Reappraisal will buffer the relationship between stress and strain-based WIF, such that greater use of reappraisal will weaken the relationship between stress and strain-based WIF.

Suppression. Besides using reappraisal, officers have other emotion regulation strategies at their disposal to help them comply with emotional display rules. One strategy police officers can use to help them express the appropriate emotions when responding to emotionally laden events is to suppress how they feel. Suppression is the main response-focused ER strategy, and thus works to influence what felt emotions are actually expressed, rather than what emotions are felt to begin with (Gross, 1998a). In contrast to reappraisal, which influences which emotions are felt, suppression works after an emotion has already been experienced and reflects how individuals can consciously work to prevent expressing the emotions they feel (Grandey, 2000; Gross, 1998a). Suppression can be a useful strategy for police officers to employ in their line of work. For example, officers might feel anger when interacting with uncooperative or aggressive citizens, but expressing that anger might escalate a situation and prevent the officer from safely doing their job. Suppression thus allows officers to control their expression of an emotion to match what is appropriate for the situation or the organizational norms surrounding emotional expression (Grandey, 2000).

While using suppression can ensure that officers are demonstrating the appropriate emotions, suppression tends to come at a price. The research on suppression suggests that it has a negative impact on both short-term and long-term outcomes (Gross, 2002). In the short-term, using suppression can influence memory capability (Gross & John, 2003; Richards & Gross, 2000). Memory is decreased when suppressing an emotional reaction because suppression uses cognitive resources, depleting the cognitive resources that are left to engage in other cognitive tasks, such as remembering details of a situation or incident (Grandey, 2000; Richards & Gross, 2000). Since suppression reduces the cognitive resources available for other tasks, using this strategy on the job has implications for police officers who need all of their cognitive capacity to appropriately handle challenging, potentially life-threatening situations. Relying on suppression typically requires the use of more scripts, biases, or heuristics to help overcome the lack of available cognitive resources, which could perhaps lead to stereotyping or racial profiling (Richards & Gross, 2000). Furthermore, since suppression influences memory, officers using suppression might not remember the details of their interactions with witnesses or suspects, perhaps forgetting crucial details. Because using suppression adds an additional cognitive and emotional burden, it can deplete the resources officers have at their disposal to manage the difficulties of the job, increasing the chances that officers will experience burnout (Erickson & Ritter, 2001; Gross & John, 2003; Richards & Gross, 2000).

Although suppression is used to modify the expression of felt emotions, the use of suppression ultimately reduces the experience and expression of positive emotions, and those who use suppression also experience more negative emotions than those who do

not suppress (Gross & John, 2003). Thus it appears that those who engage in suppression are caught in a cycle where they suppress their emotions, increasing the experience of negative emotions, which are then suppressed. Suppression has also been linked to depression and lower life satisfaction, self-esteem, and overall well-being (Gross & John, 2003). Because using suppression leads to the experience of more negative emotions, this can again increase the likelihood that those who use suppression will experience burnout, as the experience of negative emotions has been found to predict burnout (Lemyre, Treasure, & Roberts, 2006). Thus, burnout can be expected to occur as a result of engaging in such an emotionally taxing coping strategy.

Using suppression inherently involves a level of inauthenticity, since people employing the strategy are consciously expressing an emotion they do not actually feel. Suppressors are thus aware that they are being inauthentic in their emotional responses, and the inauthenticity and the emotional dissonance of feeling emotions one cannot express can lead to experiencing burnout and negative health outcomes (Bakker & Heuven, 2006; Grandey 2000). Observers can perceive this inauthenticity, and those who use suppression have been found to lack emotional closeness and support from others and can be more avoidant in relationships (Grandey, 2000; Gross & John, 2003). Therefore, suppression can increase the chances that individuals will also experience WFC. Using suppression on the job might carry over into one's home life, causing officers to be more avoidant with family members or causing relationship issues if spouses or children perceive the officers' inauthenticity. The use of suppression on the job can also lead to the experience of strain that can then carry over into one's family life, preventing officers from being able to interact authentically, which influences the relationships that officers

have with their families (Allen et al., 2000; Amstad et al., 2011; Bakker & Heuven, 2006; Frone et al., 1992). Thus, the following hypotheses are proposed:

H7: Suppression is positively related to the emotional exhaustion and depersonalization facets of burnout and negatively related to the personal achievement facet of burnout.

H8: Suppression is positively related to strain-based WIF.

Besides expecting suppression to be directly related to increases in burnout and strain-based WIF, I also anticipate that stress and suppression will have interactive effects on burnout, and WFC (see Figure 2). Whereas using reappraisal, an effective coping strategy, is expected to buffer the relationship between stress and negative outcomes, suppression, an ineffective coping strategy, is expected to strengthen the relationship between stress and burnout and stress and strain-based WIF. Officers experiencing situations that are threatening and perceived to be outside of their ability to handle will continue to see the situation as threatening if they are using suppression, thereby increasing the stress that is experienced and strengthening the relationship between stress and negative outcomes of stress. This is because suppression itself is stressful to use, as it increases the emotional and cognitive demands placed on the users as they attempt to regulate their emotions (Richards & Gross, 2000). Users of suppression still experience the negative emotions elicited by a stressful situation and have the added burden of displaying an emotion they do not feel while also dealing with other stressors, such as managing uncooperative, aggressive, or even dangerous civilians. Because the use of suppression can be considered another stressor, I expect the use of suppression to

compound the effects of stress, strengthening the relationships between stress and negative outcomes:

H9: Suppression will moderate the relationship between stress and burnout, such that greater use of suppression will strengthen the relationship between stress and burnout.

H10: Suppression will moderate the relationship between stress and strain-based WIF, such that greater use of suppression will strengthen the relationship between stress and strain-based WIF.

CHAPTER 3: METHOD

3.1 Power Analysis

Prior to conducting the study, a power analysis using G*Power software was conducted to determine how many participants would be needed to test a correlation and to test a moderated multiple regression. To detect a correlation with a medium effect size (r = .30) with 80% power and α of .05, 64 participants were needed; however, to detect correlations with effect sizes of .20 or below, at least 150 participants were needed. Because interaction terms often produce small effect sizes (Aguinis, Beaty, Boik, & Pierce, 2005; Maxwell, 2004; Shieh, 2009), I ran a power analysis to determine how many participants would be needed to detect a small effect size for a change in R^2 in a moderated multiple regression. The results of this power analysis indicated that to detect a small effect size at 80% power with α of .05, I would need 395 participants.

3.2 Participants & Procedure

Participants for this study were police officers employed by a large southeastern city in the United States. A total of 81 police officers participated in the study. Eighty-seven percent of participants were male, ranging in age from 23 to 52 years old (M = 40, SD = 7.95). In terms of ethnicities, 80.3% were white, 11.3% were African American, 4.2% were Hispanic or Latino, 1.4% were Asian or Asian American, 1.4% were American Indian, and 1.4% were biracial or multiracial. Six percent of participants were single, 73% were married, 4% were engaged, and 17% were dating or in relationships. Nearly half of participants did not have any children (47%), 19% had one child, 21% had two, 9% had three, and 4% had four children. The average number of years working as a police officer was 16 (SD = 7.82), with the shortest tenure at less than a year and the

longest tenure at 28 years. Fifty-four percent of respondents were patrol officers, 29% were sergeants, 11% were lieutenants, 5% were captains, and 1% were majors. Participants were recruited based on their employment with the police department. They were given a link to an online survey where they indicated their consent to participant in the study before responding to measures relating to this study, as well as other health, relationship, and organizationally relevant variables.

3.3 Measures

Stress. Stress was assessed using a shortened, 4-item version of the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). This scale asked participants to indicate how often in the past month they have felt a certain way, ranging from 0 = almost never to 4 = very often. Example items included "In the last month, how often have you felt that you were unable to control the important things in your life," and "In the last month, how often have you felt that things were going your way." Positively worded items were reverse scored so that higher scores reflect higher levels of perceived stress. Although the shortened version of the scale was used in this study, the 4-item measure has received psychometric support in the literature with reliabilities ranging from .60 to .82 (Cohen & Williamson, 1988; Lee, 2012; Mitchell, Crane, & Kim, 2008). The Cronbach's alpha for this study was .84.

Burnout. Burnout was measured using the 22-item general version of the Maslach Burnout Inventory (Maslach & Jackson, 1981), which contains items reflecting each of the three dimensions of burnout: emotional exhaustion, depersonalization, and personal achievement. This measure asked participants to indicate how often they experienced each of the feelings described on a 7-point Likert scale ranging from 0 = never to 6 = every day. Items were slightly adapted to fit the context of policing by

referencing "citizens" rather than "my work" or "recipients." Examples items included "I don't really care what happens to some of the citizens I work with" (depersonalization), "I feel emotionally drained from my work" (emotional exhaustion), and "I deal very effectively with the problems of the citizens I work with" (personal achievement). The MBI has been found to have acceptable internal consistency, with reliabilities of each of the dimensions ranging from .72 to .89 in previous research (Maslach & Jackson, 1981). The Cronbach's alpha for the depersonalization, emotional exhaustion, and personal achievement subscales in this study were .83, .90, and .72 respectively.

Work-family conflict. Work-family conflict was assessed using the 18 item Work-Family Conflict Scale (Carlson, Kacmar, & Williams, 2000). This scale contains six factors, reflecting that each of the three types of conflict (time-based, strain-based, and behavior-based) can go in either direction (work interfering with family, family interfering with work). However, only the dimension reflecting strain-based work interfering with family was analyzed in this study. An example item from this scale is "I am often so emotionally drained when I get home from work that it prevents me from contributing to my family." Respondents indicated their agreement to each of the items using a 7-point Likert scale (1= strongly disagree; 7 = strongly agree). This scale has demonstrated appropriate internal consistency with reliabilities for each of the six dimensions ranging from .78 and .87 in previous studies (Carlson et al., 2000), and the Cronbach's alpha for strain-based WIF in this study was .90.

Emotion regulation. The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) was used to assess the habitual use of two emotion regulation strategies: reappraisal and suppression. The two strategies were given together in the same scale,

though CFAs have demonstrated that each strategy represents its own factor, and the

factors are independent and uncorrelated with each other (Gross & John, 2003; John &

Gross, 2004). The ERQ contains 10 items, 6 representing the reappraisal factor and 4

representing the suppression factor. Example items for the reappraisal factor include, "I

control my emotions by changing the way I think about the situation I'm in," and "When

I'm faced with a stressful situation, I make myself think about it in a way that helps me

stay calm." Example items for the suppression factor include, "I control my emotions by

not expressing them," and "I keep my emotions to myself." Participants responded to

these items using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). The

ERQ has demonstrated sufficient reliability evidence, with reported Cronbach's alphas

for the Reappraisal subscale of .79 and .73 for the Suppression subscale (Gross & John,

2003). The test-retest reliability for both scales after 3 months was .69 (Gross & John,

2003). The Cronbach's alpha found in this study for the reappraisal and suppression

subscales were .92 and .70 respectively.

Control Variables. Respondents were also asked to indicate their age, how many

children they have in their home, gender, and number of years working as a police

officer. These variables were assessed as control variables because previous research has

found that they relate to the central variables of interest. For example, Grandey and

Cropanzano (1999) found that age had an effect on WFC above and beyond the effect of

work role stress, thus controlling for age is necessary to determine the variance explained

by stress alone. Grandey and Cropanzano (1999) also found that number of children in

the home is related to stress, and Maslach & Jackson, (1985) found that number of

children in the home is related to burnout. Number of children in the home is also related

to WFC (Byron, 2005), as work might be perceived as interfering with family more if one has more demands in the family space for work to interfere with.

Gender can also influence WFC, as women might feel more conflict between their work and family roles given gender norms around who should spend more time on family-related tasks (Gutek et al., 1991). Gender has been found to relate to burnout, with men scoring higher on measures of depersonalization, and women experiencing more emotional exhaustion and less personal achievement (Maslach & Jackson, 1985). Finally, years of experience in policing is related to stress (Violanti & Aron, 1995), and may also be related to emotion regulation, as those who have been officers for longer periods of time might have learned to engage in emotion regulation strategies with fewer negative outcomes (i.e. reappraisal). Although these four demographic variables were assessed as control variables for this study because they were assumed to relate to IVs and DVs of interest, only those demographic variables that were actually found to significantly correlate with study IVs or DVs were included in each moderation analysis (Carlson & Wu, 2012). An explanation of which controls were included in which analyses is provided in the moderated multiple regression section below.

CHAPTER 4: RESULTS

4.1 Confirmatory Factor Analysis

Due to the small sample size of the study, it was not possible to conduct a confirmatory factor analysis (CFA) on every variable measured in the study to ensure they factored appropriately. Because the main analysis of this paper tested whether different emotion regulation strategies have different interactive effects on WFC and burnout, it was important to at least test the dimensionality of the emotion regulation measure to ensure that this study mirrors previous studies that found the emotion regulation measure to be made up of two factors: reappraisal and suppression (Gross & John, 2003; John & Gross, 2004). I used the Lavaan package in version 3.4.0 of RStudio software with maximum likelihood estimation to compare the fit of two models: (1) a one-factor model that includes both reappraisal and suppression; (2) a two-factor model comprising reappraisal (Factor 1) and suppression (Factor 2).

Table 1 shows the results of these analyses. Considering all fit statistics, the two-factor model showed good fit to the data and fits the data better than the one-factor model, with better RMSEA, CFI, and TLI values, and a significantly lower chi-square value. All items in the two-factor model loaded reliably on their predicted factors, with the loadings ranging from .43 to .98. These results suggest that a two-factor model fits the data better than a one-factor model. Rather than reappraisal and suppression reflecting a single overall latent emotion regulation construct, reappraisal and suppression can be viewed as two separate factors or constructs. This is in line with previous research that has demonstrated that emotion regulation is made up of two factors (Gross & John, 2003; John & Gross, 2004).

4.2 Descriptive Statistics and Correlations

Means, standard deviations and zero-order correlations between study variables are included in Table 2. It is worth noting that while for most of the measures, the means were near the midpoint of the scale, the means for reappraisal and suppression were at the high end of the scale (4.98 and 4.08 respectively on a scale from 1-5). This suggests that the majority of officers frequently used both reappraisal and suppression, limiting the variability in these variables.

Hypotheses 1 and 2 suggested that stress would have a positive relationship with emotional exhaustion, depersonalization, and WFC, and a negative relationship with personal achievement. These hypotheses were supported in the correlational analysis, as perceived stress was positively correlated with emotional exhaustion ($r = .60$, $p < .01$), depersonalization ($r = .24$, $p < .05$), and strain-based WIF ($r = .37$, $p < .01$), and negatively correlated with personal achievement ($r = -.46$, $p < .01$). Hypotheses 3 and 4 predicted that reappraisal would have a negative relationship with emotional exhaustion, depersonalization, and strain-based WIF, and a positive relationship with personal achievement. Reappraisal was not significantly correlated with emotional exhaustion or strain-based WIF, thus Hypothesis 4 was not supported. However, reappraisal was significantly correlated with depersonalization ($r = -.26$, $p < .05$) and personal achievement ($r = .25$, $p < .05$) in the expected directions, providing partial support for Hypotheses 3. Hypotheses 7 and 8 predicted that suppression would be positively related to emotional exhaustion, depersonalization, and strain-based WIF, and negatively related to personal achievement. Suppression was not significantly correlated with any of these variables, thus hypotheses 7 and 8 were not supported.

4.3 Moderated Multiple Regression

Hypotheses 5 and 6 predicted that reappraisal would moderate the relationship between stress and each of the facets of burnout, and between stress and strain-based WIF. In order to test these hypotheses, hierarchical multiple regressions were conducted using mean-centered independent variables. The first step in conducting these analyses involved mean-centering perceived stress (PSS) and reappraisal by subtracting the mean of each respective scale from each observed value. The interaction term was then computed by multiplying the mean-centered values of PSS and reappraisal together. After IVs were mean-centered and the interaction term was computed, the moderation analyses were conducted in three steps (see Tables 3-6; note that separate regressions were conducted for each of the outcome variables).

First, controls variables were regressed on each of the outcome variables (emotional exhaustion, depersonalization, personal achievement, strain-based WIF). Gender was included as a control variable because it was significantly correlated with reappraisal ($r = .25$, $p < .05$), and number of children in the home was included because it was significantly correlated with PSS ($r = .27$, $p < .05$). For the analysis with depersonalization as the DV, age ($r = -.29$, $p < .05$) and number of years working as a police officer ($r = -.27$, $p < .05$) were also included as controls and they were both significantly correlated with depersonalization. After entering the control variables, the next step was to regress the mean-centered values of PSS and reappraisal onto each of the DVs. PSS and reappraisal accounted for 42% of the variance in emotional exhaustion ($p < .01$), 13% of the variance in depersonalization ($p < .01$), 22% of the variance in personal achievement ($p < .01$), and14% of the variance in strain-based WIF ($p < .01$).

The final step was to enter the interaction term of PSS and reappraisal into the regression models to determine if the interactive effect of PSS and reappraisal accounted for additional variance in each of the outcome variables. None of the interactive effects were significant, thus the interaction between PSS and reappraisal did not add additional explanation of variance in any of the outcome variables. Reappraisal did not buffer the relationship between stress and burnout and stress and strain-based WIF and therefore Hypotheses 5 and 6 were not supported.

Hypotheses 9 and 10 predicted that suppression would moderate the relationship between stress and each of the facets of burnout, and between stress and strain-based WIF, strengthening the relationship between stress and each of the outcome variables. In order to test these hypotheses, hierarchical multiple regressions were conducted using mean-centered independent variables. A similar process as used to test Hypotheses 5 and 6 was used to test Hypotheses 9 and 10. PSS and suppression were mean-centered and an interaction term was computed by multiplying the mean-centered values of PSS and suppression together. After IVs were mean-centered and the interaction term was computed, the moderation analyses were conducted in three steps (see Tables 7-10; note that separate regressions were conducted for each of the outcome variables).

First, controls variables were regressed on each of the outcome variables (emotional exhaustion, depersonalization, personal achievement, strain-based WIF). As with the previous moderation analysis, number of children in the home was included as a control because it was significantly correlated with PSS, and for the analysis with depersonalization as the DV, age and number of years working as a police officer were also included as controls as they were both significantly correlated with

depersonalization. After including the controls, the next step was to regress the mean-centered values of PSS and suppression onto each of the DVs. PSS and suppression accounted for 38% of the variance in emotional exhaustion ($p < .01$), 8% of the variance in depersonalization ($p = .054$), 20% of the variance in personal achievement ($p < .01$), and 14% of the variance in strain-based WIF ($p < .01$).

The final step in the analysis was to enter the interaction term of PSS and suppression into the regression models to determine if the interactive effect of PSS and suppression accounted for additional variance in each of the outcome variables. None of the interactive effects were significant, thus the interaction between PSS and suppression did not add additional explanation of variance in any of the outcome variables. Suppression did not strengthen the relationship between stress and burnout and stress and strain-based WIF and therefore Hypotheses 9 and 10 were not supported.

CHAPTER 5: DISCUSSION

5.1 Theoretical Implications

The primary purpose of this study was to test constructs within the transactional theory of stress (Lazarus & Folkman, 1987) and determine if emotion regulation strategies can influence the relationships between stress and negative outcomes within police officers. Previous research has suggested that the emotion regulation strategies of reappraisal and suppression have distinct outcomes (e.g. Brackett et al., 2010; Gross & John, 2000), thus it was expected that reappraisal would buffer the harmful effects of stress, whereas suppression would strengthen the relationship between stress and negative outcomes. Despite the previous research supporting these predictions, ultimately reappraisal and suppression did not significantly moderate the relationships between stress and each facet or burnout, nor stress and strain-based WIF.

There are several reasons why the moderation hypotheses were not supported. First, and most notably, with only 81 participants, the analyses were underpowered and unable to detect the small effect size one would expect for an interactive effect (Aguinis et al., 2005; Maxwell, 2004; Shieh, 2009). Second, there was not a lot of variability in responses to the reappraisal and suppression subscales. Most participants indicated that they frequently used both strategies, thus there were few members of the sample who represented the low end of the scale. If data with greater variability can be collected to reach the appropriate level of power to detect small interactive effects, it may be the case that reappraisal and suppression do, in fact, influence the relationship between stress and burnout and stress and WFC.

If it is found in future studies that reappraisal and suppression do influence the relationship between stress and burnout and stress and WFC, this will add to the burnout and WFC literatures by denoting key boundary conditions under which burnout and WFC will be experienced under conditions of high stress. It would also add to the emotion regulation literature by supporting the previous research that has found reappraisal to be associated with more positive outcomes and suppression to be associated with more negative outcomes (e.g. Gross & John 2000; 2003). Furthermore, given that reappraisal has been compared to deep acting and suppression has been compared to suppression in the emotional labor literature (Grandey, 2000), future studies including these variables could add to the emotional labor literature by investigating how each type of acting influences outcomes in police officers. Finally, it would add to the transactional theory literature as emotion regulation and suppression have not typically been investigated as coping methods within this framework (Lazarus & Folkman, 1987; Perrewé & Zellars, 1999).

Although the interactive hypotheses were not supported in this study, some of the correlational hypotheses were supported. Perceived stress was significantly correlated with each facet of burnout and with strain-based WIF. This is in line with previous research that has found similar relationships between stress and burnout (Lee & Ashforth, 1996) and stress and WFC (Byron, 2005). Reappraisal was significantly correlated with the depersonalization and personal achievement facets of burnout, but not with emotional exhaustion or strain-based WIF. Unlike previous research that has found suppression to be correlated with harmful outcomes (Gross, 2002), this study did not find significant correlations between suppression and burnout or WFC. It is possible that the predicted

relationships between each emotion regulation strategy and burnout and WFC were not found because the study was underpowered, and thus not able to detect small effect sizes.

5.2 Practical Implications

Although the expected interactive effects were not found in this study, it is still worth further investigating these relationships. Because policing is such a high stress occupation, any coping strategy that could help relieve some of the negative outcomes that officers experience is worthy of pursuit. If future studies do find that reappraisal helps reduce the negative effects of stress and that suppression exacerbates the negative effects of stress, then that could provide a rationale for developing emotion regulation training programs to deliver to police officers to help them identify and use the appropriate emotion regulation strategies. Similar to a previous study that taught individuals how to use reappraisal, this training could involve teaching officers about how to use reappraisal, having them imagine scenarios where they might use reappraisal, and then allowing them to actually practice engaging in reappraisal on the job and reflect on their use of this strategy at the end of each shift (Hülsheger et al., 2015). Officers who do learn to cope with their emotions more effectively might then experience closer relationships, less WFC and burnout, and the availability of more cognitive resources to devote to their job (Gross & John, 2003; Maslach et al., 2001; Richards & Gross, 2000; Rotondo et al., 2003).

Despite the fact that the interactive effects were not found in this study, there were some significant relationships found between reappraisal and the depersonalization and personal achievement components of burnout. This suggests that officers who use more reappraisal also experience less depersonalization and greater feelings of personal

accomplishment. Although these findings are correlational and thus no causal claims can be made, it may be the case that if officers can be trained to use more reappraisal, they will experience less depersonalization and more personal achievement. Police precincts should consider training officers to use reappraisal or perhaps selecting officers who already use reappraisal on a regular basis, and see if they notice any decreases in depersonalization and increases in personal achievement. Because officers are known to experience such high levels of burnout, it is worth pursuing any forms of training that might help reduce burnout in officers (Goodman, 1990). Developing a selection tool to identify officers who already use high levels of reappraisal and low levels of suppression is another potential implication of this research, as doing so would allow precincts to choose officers from the beginning who use appropriate emotion regulation techniques and therefore are more likely to experience more positive outcomes.

5.3 Limitations & Future Directions

There are several limitations relating to the methodology of this study. The first is that the sample size was only 81 participants, and thus there was not adequate power to assess if interactive effects were present. As previously mentioned, moderation effects are typically small (Aguinis et al., 2005), so future studies should make sure that there is an adequate number of participants to determine if a small interactive effect is present. The second methodological limitation of the study is that the data were cross-sectional; thus no causal inferences pertaining to the study variables can be made. Future research should measure stress, emotion regulation, WFC, and burnout at different time points to lend support to causal inferences. An experience sampling methodology where emotion regulation strategies are assessed immediately following specific stressors may be

particularly enlightening in terms of understanding how these coping strategies work to reduce burnout or WFC on a daily or weekly basis. Another issue with the methodology of this study is that there may be common method bias, as participants responded to all study variables using similar survey measures. Future research should attempt to use different sources of data, such as asking spouses to rate WFC, using a measure of objective stressors in addition to a measure of perceived stress, or incorporating qualitative methods to triangulate findings (Jick, 1979).

Another avenue of future research would be to assess family interfering with work (FIW) variables. This study focused on strain-based WIF, but FIW could potentially be just as important and relevant for police officers (Violanti & Aron, 1995). While the work domain of policing can certainly produce stressors that carry over into the family domain, officers might also experience stressors arising from their family lives that influence their overall well-being, such as conflicts with spouses and caring for children or sick or aging family members (Byron, 2005; Violanti & Aron, 1995). These stressors could spill over into the job domain, distracting officers or making it harder for them to handle the demands of their job. It may be the case that emotion regulation strategies can be used to buffer the spillover of strain from the family domain into the work domain, allowing officers to have more cognitive resources available to focus on their jobs (Richards & Gross, 2000). Future studies should continue to use bi-directional measures of WFC and investigate coping strategies to help those in high-stress occupations deal with stressors arising from both the work domain and the family domain (Byron, 2005).

Finally, this study only looked at two coping strategies: reappraisal and suppression. Future research should investigate the use of multiple coping strategies in

conjunction. For example, it could be the case that using reappraisal and suppression together has different effects on outcomes like burnout and WFC than using reappraisal or suppression on its own. It could also be the case that using reappraisal on its own will not buffer the harmful effects of stress, but using reappraisal in conjunction with seeking social support, exercise, or humor, will help reduce burnout or WFC (Bochantin, 2017). Finally, mind-body interventions, such as mindfulness, yoga, and reflexology, may also work to reduce the harmful effects of stress and should be tested within the police occupation (Finger & Arnold, 2002; Wolever et al., 2012).

5.4 Conclusion

The purpose of this study was to determine whether the emotion regulation strategies of reappraisal and suppression moderate the relationship between stress and each facet of burnout, and stress and strain-based WFC. Ultimately, neither emotion regulation strategy significantly moderated the relationships between stress and negative outcomes. However, given the small sample size, the moderation analyses were underpowered, and thus future studies with larger sample sizes should continue to test these relationships to determine if an interactive effect is present. If emotion regulation is shown to be a useful coping strategy in high stress occupations such as policing, trainings that teach employees how to use emotion regulation strategies effectively could be implemented to help workers reduce the harmful effects of stress.

Table 1

Confirmatory Factor Analyses Model Fit Indices

Model	CFI	TLI	χ^2	*df*	Difference	RMSEA
One factor	.85	.80	107.88[a]	35		.16
Two factor	.95	.94	56.66[a]	34	51.22[a]	.09

Note. n = 81. The one-factor model includes reappraisal and suppression. The two-factor model comprises a reappraisal (Factor 1) and a suppression (Factor 2). CFI = comparative fit index; TLI = Tucker-Lewis index; Difference = difference in chi-square from the prior model; RMSEA = root-mean-square error of approximation.
[a]*p* < .05.

Table 2

Descriptive Statistics and Zero-Order Correlations Among Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	40.10	7.95	--										
2. Gender	--	--	-.33[b]	--									
3. Children in Home	1.04	1.20	.25[a]	-.27[a]	--								
4. Years as Police Officer	15.86	7.82	.93[b]	-.25[a]	.16	--							
5. PSS	1.86	.69	-.05	-.07	.27[a]	-.16	(.84)						
6. Reappraisal	4.98	1.13	-.15	.25[a]	-.09	-.17	.01	(.92)					
7. Suppression	4.08	1.11	.16	-.22	-.02	.12	.21	.22	(.70)				
8. WIF	3.91	1.67	.20	.01	.05	.10	.37[b]	-.01	.17	(.90)			
9. Emotional Exhaustion	2.15	1.30	-.08	-.05	.05	-.16	.60[b]	-.15	.22	.62[b]	(.90)		
10. Depersonalization	2.39	1.58	-.29[a]	-.09	-.16	-.27[a]	.24[a]	-.26[a]	.15	.24[a]	.55[b]	(.83)	
11. Personal Achievement	2.42	.91	-.19	.20	-.24[a]	-.12	-.46[b]	.25[a]	-.01	-.26[a]	-.41[b]	-.24[a]	(.72)

Note. n = 81. [a] p < .05. [b] p < .01 Gender is coded as 0=male, 1=female, 2=other. PSS = Perceived Stress Scale. WIF = strain-based work-interfering with family. Reliability coefficients are indicated in parentheses in the diagonal.

Table 3

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Reappraisal on Emotional Exhaustion

Model		b	S.E.	R^2	ΔR^2
Stage 1				.00	.00
	(Intercept)	2.24[b]	.23		
	Children in Home	.04	.14		
	Gender	-.13	.49		
Stage 2				.42[b]	.42[b]
	(Intercept)	2.40[b]	.18		
	Children in Home	-.16	.11		
	Gender	.05	.39		
	PSS	1.20[b]	.18		
	Reappraisal	-.24[a]	.11		
Stage 3				.43[b]	.01
	(Intercept)	2.41[b]	.18		
	Children in Home	-.15	.11		
	Gender	-.03	.40		
	PSS	1.14[b]	.19		
	Reappraisal	-.25[a]	.11		
	IX	-.18	.15		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Reappraisal. PSS and Reappraisal are centered at the mean.

Table 4

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Reappraisal

on Depersonalization

Model		b	S.E.	R^2	ΔR^2
Stage 1				.14[a]	.14[a]
	(Intercept)	5.69[b]	1.83		
	Children in Home	-.19	.16		
	Gender	-1.16	.59		
	Age	-.07	.07		
	Years as Officer	.01	.07		
Stage 2				.27[b]	.13[b]
	(Intercept)	6.22[b]	1.74		
	Children in Home	-.29	.16		
	Gender	-.89	.57		
	Age	-.10	.07		
	Years as Officer	.03	.07		
	PSS	.64[a]	.27		
	Reappraisal	-.35[a]	.16		
Stage 3				.27[b]	.00
	(Intercept)	6.15[b]	1.81		
	Children in Home	-.29	.16		
	Gender	-.87	.59		
	Age	-.09	.07		
	Years as Officer	.03	.07		
	PSS	.65[a]	.27		
	Reappraisal	-.35[a]	.16		
	IX	.04	.22		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Reappraisal. PSS and Reappraisal are centered at the mean.

Table 5

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Reappraisal

on Personal Achievement

Model		b	S.E.	R^2	ΔR^2
Stage 1				.08	.08
	(Intercept)	4.29[b]	.16		
	Children in Home	-.15	.09		
	Gender	.40	.14		
Stage 2				.29[b]	.22[b]
	(Intercept)	4.21[b]	.14		
	Children in Home	-.05	.09		
	Gender	.29	.30		
	PSS	-.58[b]	.14		
	Reappraisal	.15	.09		
Stage 3				.29[b]	.00
	(Intercept)	4.21[b]	.14		
	Children in Home	-.05	.09		
	Gender	.28	.09		
	PSS	-.58[b]	.15		
	Reappraisal	.15	.09		
	IX	-.01	.12		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Reappraisal. PSS and Reappraisal are centered at the mean.

Table 6

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Reappraisal

on Strain-Based WIF

Model		b	S.E.	R^2	ΔR^2
Stage 1				.00	.00
	(Intercept)	3.95[b]	.30		
	Children in Home	.08	.18		
	Gender	.11	.62		
Stage 2				.14[b]	.14[b]
	(Intercept)	4.09[b]	.28		
	Children in Home	-.07	.17		
	Gender	.12	.60		
	PSS	.92[b]	.28		
	Reappraisal	-.03	.17		
Stage 3				.15[b]	.01
	(Intercept)	4.10[b]	.28		
	Children in Home	-.06	.17		
	Gender	.03	.61		
	PSS	.84[b]	.29		
	Reappraisal	-.04	.17		
	IX	-.23	.23		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Reappraisal. PSS and Reappraisal are centered at the mean.

Table 7

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Suppression

on Emotional Exhaustion

Model		b	S.E.	R^2	ΔR^2
Stage 1				.00	.00
	(Intercept)	2.21[b]	.21		
	Children in Home	.05	.13		
Stage 2				.38[b]	.38[b]
	(Intercept)	2.39[b]	.17		
	Children in Home	-.13	.11		
	PSS	1.17[b]	.19		
	Suppression	.06	.12		
Stage 3				.39[b]	.01
	(Intercept)	2.36[b]	.17		
	Children in Home	-.14	.11		
	PSS	1.11[b]	.20		
	Suppression	.07	.11		
	IX	.16	.16		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Suppression. PSS and Suppression are centered at the mean.

Table 8

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Suppression

on Depersonalization

Model		b	S.E.	R^2	ΔR^2
Stage 1				.09	.09
	(Intercept)	4.49[b]	1.76		
	Children in Home	-.13	.17		
	Age	-.04	.07		
	Years as Officer	-.02	.07		
Stage 2				.17	.08
	(Intercept)	5.39[b]	1.75		
	Children in Home	-.21	.17		
	Age	-.08	.07		
	Years as Officer	.03	.07		
	PSS	.59[a]	.29		
	Suppression	.15	.17		
Stage 3				.18	.01
	(Intercept)	5.18[b]	1.78		
	Children in Home	-.21	.17		
	Age	-.07	.07		
	Years as Officer	.02	.07		
	PSS	.52	.31		
	Suppression	.16	.17		
	IX	.16	.24		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Suppression. PSS and Suppression are centered at the mean.
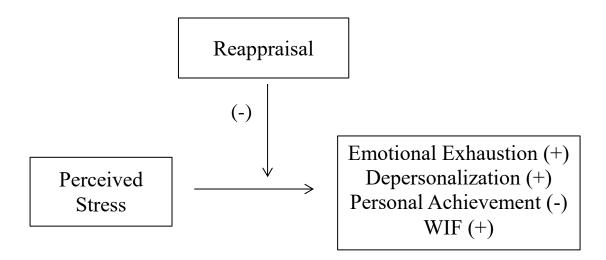
Table 9

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Suppression on Personal Achievement

Model		b	S.E.	R^2	ΔR^2
Stage 1				.06[b]	.06[b]
	(Intercept)	4.37[b]	.14		
	Children in Home	-.18[a]	.09		
Stage 2				.26[b]	.20[b]
	(Intercept)	4.27[b]	.13		
	Children in Home	-.08	.08		
	PSS	-.61[b]	.15		
	Suppression	.11	.09		
Stage 3				.27[b]	.01
	(Intercept)	4.25[b]	.13		
	Children in Home	-.08	.08		
	PSS	-.66[b]	.15		
	Suppression	.12	.09		
	IX	.13	.12		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Suppression. PSS and Suppression are centered at the mean.
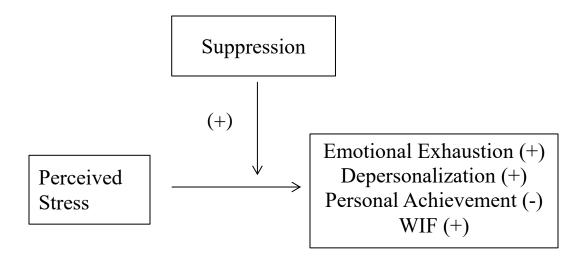
Table 10

Hierarchical Model of Interactive Effects of Mean-Centered PSS and Suppression

on Strain-Based WIF

Model		b	S.E.	R^2	ΔR^2
Stage 1				.00	.00
	(Intercept)	3.97[b]	.27		
	Children in Home	.07	.17		
Stage 2				.15[b]	.14[b]
	(Intercept)	4.10[b]	.25		
	Children in Home	-.07	.16		
	PSS	.88[b]	.29		
	Suppression	.11	.17		
Stage 3				.15[b]	.00
	(Intercept)	4.10[b]	.26		
	Children in Home	-.07	.17		
	PSS	.87[b]	.30		
	Suppression	.11	.17		
	IX	.02	.24		

Note. $N = 81$. [a] $p < .05$; [b] $p < .01$. b = unstandardized regression weight; ΔR^2 = Change in R^2 from prior model. PSS = Perceived Stress Scale. IX = Interaction Term, PSS*Suppression. PSS and Suppression are centered at the mean.

Figure 1. Model of hypotheses involving reappraisal. This figure illustrates the relationships predicted in hypotheses 1-2, 5-6.

Figure 2. Model of hypotheses involving suppression. This figure illustrates the relationships predicted in hypotheses 1-2 and 9-10.

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