

2017

# Stress Management Training, Gender, Level of Stress, and Coping in Police Officers

Samantha Leigh Fields Salain  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Psychology Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Samantha Salain

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Sandra Rasmussen, Committee Chairperson, Psychology Faculty  
Dr. Kelly Schuller, Committee Member, Psychology Faculty  
Dr. Elisha Galaif, University Reviewer, Psychology Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2017

Abstract

Stress Management Training, Gender, Level of Stress, and Coping in Police Officers

by

Samantha Leigh Fields-Salain

MS, Walden University, 2015

BS, Kaplan University, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

College of Social and Behavioral Sciences

Walden University

June 2017

## Abstract

Stress has lasting and sometimes fatal effects on the law enforcement community, which can compromise the well-being of police officers. To date, there is little research on factors that influence the level of stress in police officers. The purpose of this quantitative, correlational study was to investigate the relationship of gender, used coping mechanisms, and levels of organizational and operational stress among police officers who have and have not received stress management training. Bandura's social learning theory and Lazarus and Folkman's theory of cognitive appraisal provided the theoretical foundation. Cross-sectional survey data from a convenience sample of 134 male and female police officers were collected using the Brief Cope, the Operational and Organizational Police Stress Questionnaire, and a demographic survey. An independent samples *t* test and multiple linear regression analyses were conducted to test the hypotheses. According to study findings, officers who received stress management training demonstrated a higher use of adaptive coping mechanisms compared to those who did not receive training. In addition, gender and use of maladaptive coping predicted level of stress among officers. Evidently, receiving stress management training was useful for these participating police officers, and these findings suggest that the training may have positive demonstrable effects for other police officers. This study promotes positive social change by increasing knowledge and awareness of the value that stress management has in reducing level of stress and use of maladaptive coping in police officers, thus empowering the psychological needs of officers while endorsing public safety at the individual and societal level.

Stress Management Training, Gender, Level of Stress, and Coping in Police Officers

by

Samantha Leigh Fields-Salain

MS, Walden University, 2015

BS, Kaplan University, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

College of Social and Behavioral Sciences

Walden University

June 2017

## Dedication

I dedicate this dissertation to the memory of my father, Homer Lee Fields, and mother, Genevieve Itress Fields, the two people who instilled in me that anything is possible. There is no doubt in my mind that without their sacrifices, love, encouragement, and support while on earth and beyond my quest for higher education would not have been possible. Essentially, it was their love which transcends through time and space that has allowed me to be the scholar I have become. Daddy, I kept the promise I made to you. I do hope that I made you proud.

To my husband, Mitchell Salain, I could not have done any of this without you. You were a touchstone of continuous encouragement and uninhibited love that was needed to help me succeed.

Lastly, in memory of my wonderful mastiff, Lou. You laid at my feet throughout most of my doctoral journey. Now, the memory of your companionship will continue to resonate in my heart.

## Acknowledgments

I would like to extend my sincere gratitude to my chairperson Dr. Sandra Rasmussen, methodologist Dr. Kelley Schuller, and URR Dr. Elisha Galaif for sharing their expertise, time, assistance, and mentorship during my doctoral dissertation journey. Without their guidance, the completion of this dissertation would not have been possible. The three of you never gave up on me and for that I am forever thankful. In addition, I would like to thank Dr. Thomas Edman and Dr. Zin Htway for the encouragement and mentorship that has allowed me to appreciate the true value quantitative statistics provide the field of psychology. Lastly, Dr. Sandra Caramela-Miller you taught me that my best can always be better and for that I am forever grateful.

To my friend and fellow doctoral candidate, Alessandre “Alex” Mazariegos. Thank you for the countless hours of listening to me discussing statistics and for the encouragement that allowed me to finish. What we once thought was impossible is possible. To my co-worker and friend Susan Wheeler. You are my biggest fan. To my high school teachers, Mr. Paul Bellamy and Mrs. Elain Crane, who demonstrated hard work and perseverance are necessary to succeed. The two of you left a footprint on my heart that has predicated my ability to understand anything is possible. Thank you for creating a solid foundation of knowledge for your students.

Lastly, to all the law enforcement personnel at Hall County Sheriff’s Office, White County Sheriff’s Office, City of Cumming Police Department, and Lumpkin County Sheriff’s Office who graciously assisted by participating in this study. I am truly

grateful for your participation and the way you shared your knowledge. I could not have completed this research without you.

## Table of Contents

List of Tables .....	vi
Chapter 1: Introduction to the Study .....	1
Introduction.....	1
Background.....	3
Problem Statement.....	6
Purpose of Study.....	9
Research Questions.....	10
Theoretical Framework.....	12
Nature of the study.....	14
Definitions.....	15
Assumptions.....	17
Scope and Delimitations .....	18
Scope.....	18
Delimitations.....	19
Limitations .....	20
Significance of Study.....	21
Summary .....	23
Chapter 2: Literature Review.....	26
Introduction.....	26
Literature Search Strategy.....	27
Theoretical Framework.....	27

Social Learning Theory.....	28
Theory of Cognitive Appraisal .....	30
Literature Review: Stress in Police Officers.....	32
Occupational and Operational Stress.....	33
Citizen Contact.....	34
Shift Assignment.....	35
Organizational Stress .....	36
Lack of Organizational Support.....	37
Perception of Negative Work Environment.....	38
Psychological Stress and Resilience .....	39
Physical and Mental Effects of Stress.....	41
Fatigue.....	41
Burnout .....	42
Posttraumatic Stress Disorder.....	43
Aggression and Excessive Use of Force.....	45
Adaptive and Maladaptive Coping... ..	46
Peer Support.....	47
Peer Influence and Stigma.....	48
Alcohol Use.....	50
Suicide.....	52
Transference of Stress to Family.....	54
Gender Differences.....	56

Stress Management Training.....	59
Transference of Stress to Family.....	59
Summary .....	65
Chapter 3: Research Method.....	67
Introduction.....	67
Research Design and Rationale .....	67
Methodology .....	72
Population.....	72
Sampling and Sampling Procedures.....	72
Procedures for Recruitment, Participation, and Data Collection.....	73
Instrumentation and Operationalization of Constructs .....	76
Brief COPE.....	76
Operational and Organizational Police Questionnaire.....	78
Data Analysis .....	80
Threats to Validity .....	83
Threats to External Validity.....	83
Threats to Internal Validity.....	84
Threats to Construct Validity.....	85
Ethical Procedures .....	85
Summary .....	86
Chapter 4: Results .....	88
Introduction.....	88

Data Collection .....	90
Descriptive Statistics.....	92
Assumptions.....	94
Hypothesis 1.....	98
Hypothesis 2.....	101
Hypothesis 3.....	104
Hypothesis 4.....	106
Summary .....	109
Chapter 5: Discussion .....	110
Introduction.....	110
Interpretation of Findings .....	112
Hypothesis 1.....	114
Hypothesis 2.....	116
Hypothesis 3.....	118
Hypothesis 4.....	120
Limitations of the Study.....	122
Recommendations.....	124
Recommendations for Future Research.....	125
Recommendations for Practice.....	126
Implications.....	127
Positive Social Change Implications.....	127
Methodological Implications.....	130

Theoretical Implications.....	130
Conclusions.....	131
References.....	134
Appendix A: Brief Cope Permission Letter.....	152
Appendix B: PSQ-Op;PSQ-Org Permission Letter .....	153
Appendix C: Demographic Survey.....	154
Appendix D: Letter to Participant.....	155
Appendix E: Histograms for Normality of Errors and Associated P Plots.....	156
Appendix F: Scatterplots for Assumption of Homoscedasticity.....	158
Appendix G: Scatterplots for Assumption of Linearity .....	159
Appendix H: t Test Assumption of Normality Histogram.....	162

## List of Tables

Table 1. Frequency Distribution: Gender .....	93
Table 2. Frequency Distribution: Length of Employment.....	93
Table 3. Frequency Distribution: Rank.....	94
Table 4. Frequency Distribution: Stress Management Training.....	94
Table 5. Collinearity Statistics .....	94
Table 6. Model Summary .....	95
Table 7. Statistics .....	97
Table 8. Levene’s Test for Equality of Variance.....	97
Table 9. Results of Independent Samples <i>t</i> test .....	100
Table 10. Descriptive Statistics.....	102
Table 11. Regression Analysis: ANOVA <sup>a</sup> for PSQ-OP .....	102
Table 12. Regression Analysis: Model Summary for PSQ-OP .....	103
Table 13. Multiple Linear Regression Model of Predictors of PSQ-OP .....	103
Table 14. Regression Analysis: ANOVA <sup>a</sup> for PSQ-ORG .....	105
Table 15. Regression Analysis: Model Summary for PSQ-ORG.....	105
Table 16. Multiple Linear Regression Model of Predictors of PSQ-ORG.....	106
Table 17. Regression Analysis: ANOVA <sup>a</sup> combined PSQ-OP and ORG .....	108
Table 18. Regression Analysis: Model Summary combined PSQ-OP and ORG.....	108
Table 19. Multiple Linear Regression Model of Predictors of PSQ-OP and PSQ.....	108

## Chapter 1: Introduction to the Study

In Chapter 1, I introduce the purpose, rationale, theoretical framework, and background of this research study. In addition, an overview of the research questions and hypotheses, nature of the study, definitions, assumptions, limitations, and delimitations will be delineated. Lastly, potential contributions of this study and their relation to advancements in social change will be provided.

### **Introduction**

Individuals employed in the law enforcement community are repeatedly exposed to stress due to the quasi-military nature of the occupation (Ménard & Arter, 2014; Noblet, Rodwell, & Allisey, 2009). Researchers have discovered that officers are subjected to operational stressors associated with exposure to critical incidents and unpredictable citizen encounters, as well as organizational stressors related to a lack of organizational or peer support (Brodie & Eppler, 2012; Noblet et al., 2009). Moreover, due to various operational, personal, and organizational stressors and the quasi-militaristic environment being interrelated, the likelihood of an individual to effectively exert control over stress can be jeopardized causing stress to be repressed or dismissed as a norm (Pagon, Spector, Cooper, & Lobnikar, 2011; Rodgers, 2011). When this occurs, individuals who ignore or fail to cope with and perceive stress negatively can succumb to physical and mental manifestations that prohibit their sense of self and wellbeing (Colligan & Higgins, 2005; Ménard & Arter, 2013). O'Hara, Violanti, Levenson, and Clark (2013) indicated that failing to identify and manage stress is a primary culprit in fueling suicidal behavior, a leading cause of preventable death among law enforcement

officers. To examine level of stress and use of adaptive coping mechanisms among male and female law enforcement professionals, the prevalence of level of stress and used coping mechanisms should be acknowledged by members of the law enforcement command staff (Pagon et al., 2011). Once acknowledged, providing personnel with stress management training as a requirement for yearly in-service training can be a necessary step in ensuring the mental and physical wellbeing of personnel.

Scholars have focused on stress within the law enforcement population, but have failed to account for the role that stress management training, gender differences, and coping mechanisms bestow on the level of stress in this population. Therefore, there is a gap in existing research involving the effectiveness of stress management training in law enforcement using quantitative methods to examine possible group (e.g., gender) differences (Daderman & De Colli, 2014; Gould, Watson, Price, & Valliant, 2013). Moreover, an additional gap in existing research concerns the need for further exploration involving the development and implementation of effective stress management interventions that are tailored to address gender-based needs (Basinska, Wiciak, & Daderman, 2014; de Terte, Stephens, & Huddleston, 2014; Morash, Kwak, & Haarr, 2006; O'Hara et al., 2013; Patterson, Chung, & Swan, 2014).

This study was needed to address both gaps and generated results that can be used to create positive social change in expanding understanding and furthering knowledge by signifying the need for law enforcement agencies and social entities to acknowledge the effects of stress by creating and implementing stress management training and interventions that are tailored to meet gender-specific needs. Moreover, stress

management training is advantageous in providing techniques that can be used by male and female law enforcement personnel to combat operational, personal, and organizational stress as well as encourage the creation, promotion, and execution of adaptive coping mechanisms that will reduce maladaptive behavior and increase psychological resilience within members of this population.

### **Background**

Law enforcement officers face stress daily due to the fast-paced, militaristic nature of their profession. Decisions must be made within seconds leaving little time to emotionally decompress and rejuvenate a person's level of psychological resilience (de Terte et al., 2014). The consistent introduction to an array of operational and organizational stressors interrelated with a lack of intervention allows vulnerable individuals to suffer adverse mental and physical effects that could be deterred with proper intervention and training. Scholars have explored the negative influence of stress and use of maladaptive coping mechanisms in the law enforcement profession. Steinkopf, Hakala, and Van Hasselt (2015) posited that the delivery of psychological intervention services, obtaining support from peers, developing affirmative wellness techniques, and maintaining positive emotions will decrease stress and increase psychological resilience and wellbeing when properly made assessable to officers. Moreover, Powell, Cassematis, Benson, Smallbone, and Wortley (2014) and Ma et al. (2015) cautioned that specific duty or shift assignments have been associated with occupational stressors that can influence stress and negate the use of adaptive coping mechanisms in officers who fail to process stress or are not provided with accessibility to adequate intervention.

The factors of departmental organization, supervision, policy, climate, use of excessive force, and lack of or underuse of stress management training are correlated with the use of maladaptive coping strategies (Daderman & De Colli, 2014; Neely & Cleveland, 2012; Tucker, 2015). These factors further demonstrate the need for mandatory intervention and training that is based on occupational stressors. Likewise, Basinska et al. (2014) and Gould et al. (2013) explained additional consequences associated with a lack of intervention and a person's failure to recognize and manage the relationship between stress, burnout, and coping are described as manifestations of dysfunctional psychological and somatic symptomology. Shift assignment has been associated with producing occupational and personal stressors that are related to posttraumatic stress symptomology and the use of passive coping skills (Ma et al., 2014).

Increased and unmanaged exposure to occupational stressors is related to adverse physical and psychological distress, aggression, and repressed anger (Hakan Can & Hendy, 2014). In addition, Chopko Palmieri, and Adams (2013) and Ménard and Arter (2013) posited that empirical evidence exists concerning the association of police stress and extensive alcohol use. Therefore, Baqutayan (2015) concluded that the adverse effects of stress and coping are best described using four distinct categories (e.g., contest the realities of the experienced stress, leave the stress to escape what is occurring, reduce distress by seeking social interaction, or accept the stresses the norm). An examination of these categories can reveal information that can be used to further understanding and allow the development of stress reduction programs. These programs or training modules

could be advantageous in allowing individuals to determine which coping methods are most suited to their individual needs (Baqtayan, 2015).

Kaiseler, Queirós, Passos, and Sousa (2014) explicated on the importance of appraisal of stress and coping and its relationship with work-related stressors and work engagement. Appraisal of stress is a factor in selecting coping mechanisms and maintaining locus of control over occupational stressors and the use of adaptive coping strategies in promoting positive work engagement among law enforcement officers (Kaiseler et al., 2014). The development of acute stress disorder and stress-induced anxiety are explained by Marchand, Nadeau, Beaulieu-Prévost, Boyer, and Martin (2015) and Renden et al. (2014) as extreme effects suffered by law enforcement personnel. Ill effects, roles of work related traumatic events, and the development of acute distress disorder in members of the law enforcement community influence high pressure decision-making and job performance in law enforcement officers.

As portrayed throughout media publications and broadcasts, members of the law enforcement community are being exposed to acts of deadly violence without social support from members of the public during routine and high-risk police-citizen encounters. Questions concerning perceived level of stress, as it relates to occupational and organizational stressors, decision making, and use of judgment capabilities are under scrutiny (Brown & Daus, 2015; Miller, 2015; Smoktunowicz et al., 2015). Therefore, additional research encompassing existing gaps in current research involving the effectiveness of stress management training using quantitative methods to examine possible group (e.g., gender) differences and the need for the development and

implementation of effective stress management interventions that are tailored to address gender-based needs within the law enforcement population are warranted. By examining the gaps, the potential research results can create positive social change by providing members of law enforcement agencies and society with the knowledge that will be useful in creating and implementing stress management training and interventions that are tailored to meet gender-specific needs as a component of yearly in-service training. Moreover, the results can be used to illustrate if stress management training is advantageous in providing techniques that can be used by male and female law enforcement personnel to combat occupational, personal, and organizational stress due to promoting the creation and execution of effective coping mechanisms that will reduce maladaptive behavior and increase psychological resilience. Lastly, the results can be used to demonstrate the degree to which officers seek and use stress management training as well as how stress management training, gender, and used coping mechanisms are related to level of operational stress and organizational stress in the population.

### **Problem Statement**

Within the United States, Gächter, Savage, and Torgler (2011) suggested that the cost associated with employee workplace stress is estimated to be somewhere between 30 and 44 billion dollars a year. However, in the police culture, Violanti et al. (2013) posited that stress that is related to operational and organizational stressors influences the longevity and physical and mental wellbeing of police officers. Violanti et al. discovered that the life expectancy for police officers is “significantly lower than the U.S. population, mean difference in life expectancy = 21.9 years; 95% CI: 14.5-29.3;  $p <$

0.0001” (p. 217). Hence, the potential for loss of life in members of the police culture is 21 times larger than members of society who are not affiliated with the profession (Violanti et al., 2013). In addition, Brandl and Smith (2013) hypothesized that stress, which is inherited from organizational and occupational stressors, may predicate officers to not only develop certain dysfunctional habits and attitudes, but also use maladaptive coping skills that can deteriorate their long-term mental and physical wellbeing. Police officers, when compared to the general population, are two times as likely of succumbing to alcohol-related liver disease and lung cancer due to extended use of maladaptive coping skills in response to the demands of the job (Brandl & Smith, 2013). Therefore, due to the stressful atmosphere of the law enforcement profession, there is a need to understand the relationship between stress management training, gender, level of stress, and used coping skills so assistance in managing stress and developing adaptive coping strategies can become commonplace (Steinkopf et al., 2015). For example, duty assignments in law enforcement can be considered passive-aggressive due to the militaristic nature of the occupation, complexity of duties, and various face-to-face encounters that evoke unpredictable and distressing acts of human behavior (Ma et al., 2015; Powell et al., 2014). Therefore, law enforcement personnel are subjected to many organizational and occupational stressors that are not experienced by other members of society (Craun, Bourke, Bierie, & Williams, 2014). Unmanaged stressors can produce stress and other forms of adverse mental and physical effects due to individualized struggles related to mediating emotions, lack of occupational support, or use of inappropriate coping mechanisms (Baqutayan, 2015; Basinska et al., 2014; Craun et al.,

2014). O'Hara, et al. (2013) and Bishopp and Boots (2014) claimed that a combination of stress and use of maladaptive coping behaviors is a primary factor in suicide among law enforcement personnel.

Within the law enforcement profession, exerting control in stressful situations can be jeopardized when personality traits negate appropriate action (Kaur, Chodagiri, & Reddi, 2013). Pagon et al. (2011) and Regehr, LeBlanc, Barath, Balch, and Birze (2013) concluded that increasing a person's level of control in stressful situations is a factor in determining the impact stress poses to an individual's mental and physical wellbeing. The adverse effects associated with perceived levels of distress, coping, locus of control, and the absence of social support have been related to psychological distress and physiological stress (Regehr et al., 2013). The use of maladaptive coping techniques and possessing a lack of control cause vulnerable individuals to switch off emotions, abuse alcohol and prescription drugs, and experience relational strain (Chopko et al., 2013; Fekedulegn et al., 2013). Therefore, the availability of training, formal debriefing, or intervention strategies that focus on occupational and personal stressors, the reduction of stress, and the development and use of adaptive coping skills are crucial in establishing psychological needs-based assistance (de Terte et al., 2014).

There are identifiable gaps in research concerning the effectiveness of prescribing and receiving mandatory stress management training in law enforcement using quantitative methods to examine possible group (e.g., gender) differences (Daderman & De Colli, 2014; Gould et al., 2013). Moreover, there is a significant gap that warrants further exploration involving the development and implementation of effective stress

management interventions to address gender-based needs, operational and personal stressors, and the development of effective coping mechanisms (Baqtayan, 2015; Powell et al., 2014). In this study, I attempted to address both gaps by demonstrating the usefulness and effectiveness of stress management training that is focused on operational and organizational stressors and gender-based needs among police officers. Lastly, the results may be used to demonstrate the degree to which officers seek and use stress management training as well as how stress management training, gender, and used maladaptive and adaptive coping mechanisms are related to the levels of operational and organizational stress in the population.

### **Purpose of the Study**

The purpose of this quantitative, correlational research study was to assess the relationship between the variables of gender, levels of operational and organizational stress, and used maladaptive and adaptive coping mechanisms among police officers who had received stress management training and officers who had not received stress management training. The independent variables were stress management training, gender, used maladaptive coping mechanisms, and used adaptive coping mechanisms. The dependent variables were level of operational stress, level of organizational stress, and a combined level of operational and organizational stress. The intent of this study was to examine the extent of the relationship between the variables of level of operational stress and level of organizational stress and used maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training. In addition, the effect of

gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' levels of organizational and operational stress was examined. The study was theoretically based on Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) cognitive appraisal theory. The statistical data collected were used to develop an understanding concerning the degree to which officers seek and use stress management training, as well as how stress management training, gender, and used coping mechanisms are related to level of stress in the population

### **Research Questions**

The following research questions and associated hypotheses were created based on a review of literature including the independent variables of stress management training, gender, used maladaptive coping mechanisms, and used adaptive coping mechanisms and the dependent variables of level of operational stress, level of organizational stress, and a combined level of operational and organizational stress among members of the law enforcement community.

Research Question 1 – Quantitative: What is the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, the Operational Police Stress Questionnaire (PSQ-Op), and Organizational Police Questionnaire (PSQ-Org)?

*H*<sub>0</sub>1: There will not be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers

who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a1</sub>*: There will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

Research Question 2 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op?

*H<sub>02</sub>*: There will not be not an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

*H<sub>a2</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

Research Question 3 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org?

*H<sub>03</sub>*: There will not be not an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

*H<sub>a3</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

Research Question 4 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org?

*H<sub>o4</sub>*: There will not be not an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a4</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

### **Theoretical Framework**

The theories selected to provide a theoretical base for this study were Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) theory of cognitive appraisal. Stress originates because of a response to a stressor or an environmental condition. Moreover, the development of stress occurs because of biological, cognitive, and behavioral/learned determinants (Schneiderman, Ironson, & Siegel, 2005). Conversely, coping skills are identified as cognitive responses that have

been reported to be created due to learned behavior and appraisal (Baqutayan, 2015). Based on these premises, the social learning theory was useful in examining the cognitive and behavioral aspects of stress and coping because, according to the theory, learning is a cognitive process that occurs in a social context due to the factors of observation and direct instruction (Bandura, 1971, 1977). Moreover, Bandura concluded that reciprocal determinism occurs due to the factors of cognition, the environment, and behavior mutually influencing each other. The management of stress and development of adaptive coping strategies can be influenced by the observations of others or because of environmental factors negating an individual's psychological resilience (de Terte et al., 2014).

Lazarus (1991) contended that stress is a two-way process involving the production of stressors and the response of the individual introduced to the stressor. Moreover, Lazarus suggested that there is a relational, motivational, and a cognitive aspect related to the appraisal of emotions. The motivational aspect of appraisal involves assessing goals and an evaluation of a situation to determine if the situation is relevant to the established goals. Likewise, the cognitive component includes an appraisal of the situation, involving its relevance and significance to an individual's life. Finally, the relational aspect suggests emotions are interrelated to the individual and their relationship with the environment (Lazarus, 1991).

In the theory of cognitive appraisal, Lazarus and Folkman's (1984) suggested that cognition and appraisal influence perceived coping ability, appraisal of perceived distress, and level of self-efficacy. Because coping and stress are considered a conscious

effort partially controlled by personality traits, the environment, or the nature of the stressful environment, the theory of cognitive appraisal was an amenable theoretical basis for this research study. Lazarus (1991) suggested that cognition and appraisal influence an individual's ability to perceive distress, how coping abilities are established and used, and level of self-efficacy. The use of this theory, in conjunction with the Bandura's social learning theory, provided guidance that was used to demonstrate the role that observation, environmental factors, appraisal, and cognitive processing played in the development of adaptive coping strategies and management of stress among male and female law enforcement officers.

### **Nature of the Study**

#### **Quantitative**

The primary purpose of this quantitative research study was to examine the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org. In addition, I examined the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org. The independent variables were stress management training, gender, and used maladaptive and used adaptive coping mechanisms. The dependent variables were level of operational stress, level of organizational stress, and a combined level of operational and organizational stress. The

target population was male and female police officer who have and have not received stress management training. The survey instruments used included the Brief COPE, PSQ-Op, and PSQ-Org. The Brief COPE was comprised of 28 items based on 14 scales, each of which assessed the degree to which the respondent used a coping strategy (Carver, 1997a). Moreover, the PSQ-Op and PSQ-Org were 20-item self-questionnaires that used a 7-point Likert type scale from 1 (*No stress at all*) to 7 (*A lot of stress*) to assess operational and organizational stressors within the police culture. Both measurements have been found to be highly reliable. A demographic questionnaire was used to collect data involving gender, age, length of employment, and rank. The questionnaire posed a yes or no question concerning if the participant has ever received stress management training. Lastly, data were collected from four law enforcement agencies located in Northeast Georgia in the form of self-administered surveys in paper format.

Data were analyzed by employing an independent samples *t* test and three multiple linear regression analyses. An independent samples *t* test was used to determine if there was a statistical significance between the means in two unrelated groups (Field, 2013). This type of analysis was used determine if the rejection of the null hypothesis or acceptance of the alternative hypothesis was feasible (Field, 2013). Field explained that the use of a multiple linear regression serves as a predictive analysis. Therefore, this analysis was used to explain the relationship between a continuous dependent variable and two or more independent variables.

### **Definitions**

The following terms were used in the research study:

*Brief COPE*: The Brief COPE, developed by Carver, is comprised of 28 items based on 14 scales, each of which assesses the degree to which the respondent uses a coping strategy (Carver, 1997a).

*Coping mechanisms*: A set of skills used to acknowledge or combat the effects of positive or negative stress (Colligan & Higgins, 2006). For this study, coping mechanisms referred to skills used by male and female police officers to acknowledge and manage the effects of distress associated with their profession.

*Gender*: The state of being biologically male or female.

*Operational Police Stress Questionnaire (PSQ-Op)*: The PSQ-Op, developed by McCreary and Thompson, is a 20-item, self-report questionnaire that uses a 7-point Likert scale to assess levels of operational stress (i.e., stressors associated with specific aspects of job assignments experienced by police officers while in the commission of their duties; McCreary & Thompson, 2013; Sagar, Karim, & Nigar, 2014).

*Organizational Police Questionnaire (PSQ-Org)*: The organizational PSQ-Op, developed by McCreary and Thompson, is a 20-item self-report questionnaire that uses a 7-point Likert scale to assess levels of organizational stress (i.e., stressors associated with the organization and culture within which officers perform their duties; McCreary & Thompson, 2013; Sagar et al., 2014).

*Self-efficacy*: An individual's belief in his or her ability to successfully accomplish tasks and/or implement and achieve goals when dealing with events that positively or negatively affect his or her life (Bandura, 1994; Ormrod, 2006). For this

study, self-efficacy referred to the ability to successfully acknowledge and implement steps to promote positive wellbeing and enhance self-worth.

*Stress*: The human body's physiological or biological response to an environmental condition which can negatively encumber an individual's physical or mental wellbeing (Colligan & Higgins, 2006).

*Stressors*: A set of factors or pressures that cause or contribute to stress (Colligan & Higgins, 2006). For this study, stressors (e.g., inappropriate leadership styles, increased workloads, being subjected to distressing experiences, fear of job loss due to perceived inefficiency, and poor communication systems within the organization) referred to pressures endured or experienced by male and female police officers thus their profession.

*Stress management*: Techniques used to control level of stress and improve coping ability.

*Stress management training (law enforcement related)*: Professionally recommended curriculum or training that identifies stressors and provides effective coping mechanisms that are based on proactive and reactive measures (Garner, 2008).

### **Assumptions**

Data were collected anonymously by to assigning ID numbers to each packet prior to dissemination and all responses were withheld. Confidentiality was assumed by to safeguarding the integrity of the data by storing it for a minimum of 5 years in a secure and locked safe. Furthermore, because it was assumed that guidelines were in place to ensure anonymity and confidentiality, I assumed that the participants provided factual

and honest answers based on valid reasoning and not based on the need to make a good impression when completing prescribed measurement tools and questionnaires. Consequently, social desirability bias and self-report bias was minimized. Moreover, all members of the research study were assumed to be willful participants who agreed to participate under their own freewill and were aware of their rights to decline participation at any time. I assumed that the data collection instruments (e.g., The Brief COPE, PSQ-Op, and PSQ-Org) used in the research study were reliable and valid based on their previous use within psychological research. It was assumed, based on providing instructions on how to answer the surveys, individuals would understand how to complete the surveys and the questionnaire provided in the study. Lastly, it was assumed that the study was biased due to the chosen sampling method (e.g., convenience sampling).

### **Scope and Delimitations**

#### **Scope**

Based on conducting an extensive literature review, level of operational stress and level of organizational stress, use of maladaptive and adaptive coping, gender and stress management training were key variables associated with members of the law enforcement population. Given the high degree of stress and burnout present in police officers, understanding the key variables was paramount. Moreover, it was also necessary to understand how to instill psychological-resilience as well as restore and maintain emotional wellbeing. There was limited quantitative research concerning the effectiveness of training based on gender and the effectiveness of training based on

occupational stressors and gender-based needs. To address these concerns, this research study was conducted by using quantitative methodology to examine the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org. In addition, I examined the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

The population for this research study was male and female police officers who were currently employed by four law enforcement agencies in Northeast Georgia who have and have not received stress management training. The use of nonprobability sampling (e.g., convenience sample) was used because this method of sampling is a common form of sampling used when conducting research that measures the relationship between variables (Dillman, Eltinge, Groves, & Little, 2002; Frankfort-Nachmias, Nachmias, & DeWaard, 2014). Participation was voluntary. The minimum targeted study population, as calculated by using G\*Power analysis software, was determined to be 129 participants. Lastly, data were collected by using a demographics questionnaire, the Brief COPE, PSQ-Op, and PSQ-Org.

### **Delimitations**

Delimitations of this study were limited to accessing the level of stress and use of coping mechanisms in police officers working in four agencies in Northeast Georgia who

were currently assigned to patrol and correctional duties. The study included 134 participants and may not reflect the thoughts, beliefs, and opinions of the entire police culture. Moreover, I did not focus on long-term effects of stress management training due to using a cross-sectional survey method for data collection. Implications for practitioners and researchers include the need for further research that replicates this research by using additional samples of police officers within various areas to further promote this study's research findings, validate results with objective data, and promote generalizability.

### **Limitations**

This research study was limited to examining gender, stress management training, operational level of stress, organizational level of stress, and used maladaptive and adaptive coping among four law enforcement agencies in Northeast Georgia. Therefore, police officers in other geographical regions may not mirror responses provided by the participants. Secondly, generalizability beyond the research study's sample was minimized as a result of using a convenience sample of participants. In addition, the four departments lacked a racially diverse population (departments are approximately 85 to 90% Caucasian), which posed limitations involving generalizability among race to occur. Concerning data collection, response rates may limit the ability to generalize results due to underreporting or overreporting if individuals are less than truthful and base results on their need to satisfy research participation requirements. Moreover, Frankfort-Nachmias and Nachmias (2008) explained that response bias can pose limitations in research. Response bias occurs when participants deny behavior due to the degree of a threat posed by questions included in surveys. Essentially, as the degree of threat in a posed question

increases, the likelihood for participants to provide fact-based answers will decrease. Conversely, Frankfort-Nachmias and Nachmias explained that limitations associated with self-reporting bias can occur if participants are unsure on how to answer questions or are trying to present themselves in a favorable light. Therefore, a reasonable measure that was employed to address limitations associated with response bias and self-reporting bias occurred by providing participants with a set of clear instructions and an explanation on how the participant's candor was invaluable to the research study. The final limitation identified involved confounding. Confounding, a concern in casual studies, occurs when an extraneous variable correlates with both the dependent and independent variables (McNamee, 2005). Therefore, to control for confounding variables, strategies were employed to monitor the scope of the research before, during, and after the statistical analysis phase. This measure was advantageous in ensuring confounding variables were addressed and eliminated due to their potential of impacting the results of the research.

### **Significance of Study**

Understanding the relationship between stress management training, gender, level of operational stress, level of organizational stress, and used maladaptive and adaptive coping mechanisms among police officers is a concern due to the adverse effects that unmanaged stress and maladaptive coping mechanisms have on the psychological and physiological wellbeing of male and female officers. Stress is a mitigating factor in the lives of many officers within the law enforcement profession and members of this community are reluctant to formally seek intervention (Taylor & Benell, 2010; Tucker, 2015; Violanti, 2014). Therefore, due to the adverse effects of stress, physical and mental

health issues, as well as inattentiveness, are a few of the side effects male and female officers endure (Violanti, 2006). Moreover, many psychological effects may go unnoticed, which can lead individuals to succumb to drug and alcohol abuse, to engage in acts of physical or verbal violence, and contemplate or commit suicide (Bishopp & Boots, 2014; Noblet et al., 2009).

Within the state of Georgia, law enforcement officers are not required to attend stress management training, which allows individuals to use their own devices to manage stress. Due to the stressful and high risk nature of the law enforcement profession and a lack of required training, there is a need for effective forms of psychologically-based interventions that are tailored to address gender-based needs (Basinska et al., 2014; de Terte et al., 2014). Based on the severity of understanding the relationship between stress management training, gender, level of operational stress, level of organizational stress, and used maladaptive and adaptive coping mechanisms among police officers, the implications for social change are plentiful. I addressed significant gaps in existing research involving to what level maladaptive and adaptive coping mechanisms and levels of operational and organizational stress are influenced by gender and the effectiveness in developing and implementing stress and coping interventions that address operational and personal stressors among police officers (Baqtayan, 2015; Daderman & De Colli, 2014; Gould et al., 2013; Powell et al., 2014). The goal of this study was to demonstrate the need for law enforcement officials to gain further understanding of the relationship between stress and maladaptive coping mechanisms by acknowledging the importance of

providing operational and organizational stress and coping training to personnel as well as the importance of identifying possible gender differences and needs.

It was hypothesized that the results of the research will add to existing literature involving levels of operational and organizational stress in police officers. Moreover, the research can lead to positive social change by providing insight in promoting a greater understanding of stress by demonstrating the need for law enforcement administrators to acknowledge the role that gender plays in operational and organizational stress management and the importance of implementing stress management training tailored to meet gender-based needs as a component of yearly in-service training. By doing so, police administrators can become a proactive part in assisting in the prevention of chronic stress by providing officers with necessary training useful in promoting their ability to mediate emotions, strengthen interpersonal relations, and empower their ability to exert control when faced with unpredictable and distressing acts of human behavior. The knowledge gained can be used to not only prevent chronic stress within the population, but it can foster the long-term importance in restoring and maintaining emotional wellbeing so high arousal emotions associated with occupational, organization, and personal stressors and social contacts can be effectively addressed (Basinska et al., 2014; Powell et al., 2014).

### **Summary**

Unmanaged or ignored stress can lead to adverse mental and physical effects, behavioral changes, and relational distress (de Terte et al., 2014; Kaur et al., 2013; Steinkopf et al., 2015; Violanti et al., 2013). Within the law enforcement profession, male

and female officers are assigned to complex duties that subject them to personal contacts that can produce stressors that evoke adverse mental and physical effects when individuals fail to mediate emotions and use maladaptive coping techniques (Basinska et al., 2014). Moreover, based on the militaristic environment of this profession, personnel are exposed to stressors that are not commonly prevalent in other occupations (Craun et al., 2014). de Terte et al. (2014) posited that being exposed to stressors predicates the ability to be psychologically resistant. This type of resistance allows individuals to recuperate from disturbing and distressing incidents due to remaining mentally stable and exerting control during the event. Kaur et al. (2013) explained that when a lack of intervention is present, exercising control when managing stress and using effective coping strategies can be jeopardized in vulnerable members of the law enforcement profession due to the personality traits of neuroticism, extraversion, and psychoticism negating inappropriate action.

Researchers have addressed the impact of stress management training on the members of the law enforcement community. However, there are identifiable gaps in research concerning the effectiveness of prescribing mandatory stress and coping training curriculum using quantitative methods to examine possible gender differences, as well as research involving the effectiveness of stress management interventions that address operational and personal stressors (Daderman & De Colli, 2014; Gould et al., 2013). If a relationship exists between the variables the knowledge gained would allow further understanding involving stress management training to flourish, which can promote psychological resilience and wellbeing throughout law enforcement agencies.

As previously indicated, in Chapter 1, I introduced the purpose, rationale, theoretical framework, and background of this research study. In addition, I provided an overview of the research questions and hypotheses, nature of the study, definitions, assumptions, limitations, and delimitations. To conclude Chapter 1, the potential contributions of this study and their relation to advancements in social change were provided. In Chapter 2, I present an examination of relevant research prevalent to this study. This research will be presented in five sections. An overview of the detailed search strategies employed to locate research for this study will be delineated. Moreover, a review involving the research study's theoretical framework and its relation to the identified variables of interest will be provided. Furthermore, an extensive literature review containing evidence concerning stress and coping, the importance of intervention (i.e., training curriculum), and gender and its relation to the constructs of stress and coping will be provided. Chapter 3 provides delineation for the study's research design and rationale. The population, recruitment, data collection, sampling methods, and instrumentation and operationalization of constructs are explored. In Chapter 4, I present the research study's results. Lastly, Chapter 5 provides an interpretation of the study's findings, addresses the limitations of the research, provides recommendations, discusses the results, and suggests implications for social change.

## Chapter 2: Literature Review

### **Introduction**

The law enforcement profession requires officers to perform complex duties and initiate personal contacts that can produce operational and organizational stressors. Stressors related to the law enforcement profession evoke adverse mental and physical effects when individuals fail to mediate emotions and use maladaptive coping techniques (de Terte et al., 2014; Steinkopf et al., 2015; Violanti et al., 2013). Moreover, when managing stress, exerting control and using effective coping strategies can be jeopardized in vulnerable individuals if personality traits negate appropriate action (Kaur et al., 2013). Based on existing research, less is known about using quantitative methods to examine the effectiveness of providing mandatory stress and coping training curriculum that addresses operational and personal stressors or the effect to which gender influences stress and coping. Therefore, there is a gap in understanding concerning the effectiveness of mandatory stress and coping training curriculum and the impact of gender has on members of the law enforcement community.

Chapter 2 begins with a delineation of the search strategies used to complete the review of literature. Secondly, a theoretical framework including Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) cognitive appraisal theory is discussed. The comprehensive review of literature associated with the research study's variables was then divided into five sections to help understand stress and coping among police officers in four Northeast Georgia law enforcement agencies: (a) causes of stress among police officers, (b) physical and mental effects of stress, (c) coping, (d) gender

issues, and (e) stress and coping intervention. Lastly, a summary of the chapter will be provided.

### **Literature Search Strategy**

While completing this comprehensive review, several strategies were used to select peer-reviewed journals and books that originated from multiple databases (e.g., PsycARTICLES, PsycINFO, PsycBOOKS, and SOCIndex). Key terms used in the search were *stress, distress, gender, coping mechanisms or skills, psychological resilience, law enforcement, police, wellbeing, training, stress management, stress prevention, and job stress*. The peer-reviewed articles referenced were deemed empirical articles, which provided systematic reviews and statistical data useful in strengthening this study. When selecting empirical literature to provide scientific breadth to the current study, a date range of 2003 to 2016 was selected. Some of the articles chosen were not in this parameter. Their usefulness predicated their inclusion due to enabling a theoretical perspective to be created that was advantageous in connecting theories to amenable variables of interest.

### **Theoretical Framework**

The theoretical review contains an assessment of the framework employed in the study, which involved Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) theory of cognitive appraisal. The theories of Bandura and Lazarus and Folkman have transcended through time to become pivotal theories used to explain human behavior. Specifically, the relevance of Bandura's social learning theory and Lazarus and Folkman's (1984) theory of cognitive appraisal, in explaining the role

observation, environmental factors, appraisal, and cognitive processing play in the development of adaptive coping strategies and management of stress among male and female law enforcement officers, is delineated.

### **Social Learning Theory**

Within society, being subjected to stress and determining how to manage it is viewed as a normal part of daily functioning. In the law enforcement community, the issue of stress has been a topic of discussion throughout the research community by exploring the effects of stress, causes for stress, use of coping mechanisms, and behavior among police officers. Dai, Frank, and Sun (2011) explained that police officers rationalize, cope, and react based on the totality of their learned life experiences, meaning that their behaviors can be positive or negative. In addition, Levenson (2007) and Gächter et al. (2011) concluded that the traditional, masculine, and always in control mindset that is projected throughout the law enforcement sector enables many officers to become reluctant to identify and address stress or ask for assistance in dealing with stress due to fear of being labeled as troubled or not fit for duty. Lastly, maintaining an image of control is paramount within law enforcement because the profession has been stereotyped as a masculine occupation where control, assertiveness, aggression, and dominance is commonplace (Barrett, Bergman, & Thompson, 2014; Gächter et al., 2011).

The social learning theory is based on the premise that learning and production of behavior is a cognitive process that occurs within a social context, meaning that individuals learn behaviors and elicit responses by observing others based on what appears to be socially acceptable (Bandura, 1971, 1977). Bandura (1971, 1977) believed

that if individuals were merely dependent on their own devices to learn the process would be precarious and require individuals to exert an extensive amount of effort. Therefore, he hypothesized that individuals learn behaviors through the direct observation of others, by means of mimicking, and/or due to being presented with modeled behavior. After years of successful research on this premise, the social learning theory was established, which is rooted in the historical context of psychology (Grusec, 1992). Moreover, the social learning theory has been referred to and used by many researchers as a bridge to incorporate behaviorist and cognitive learning theories because the theory is associated with the facets of attention, memory, and motivation (Bandura, 1986).

The general principles of the social learning theory include learning occurs and behavior is emulated because of observing the behaviors and outcomes of others, learning can occur without changing a person's behavior, and cognition (i.e., awareness) plays a role in learning and behavioral outcomes (Bandura, 1962, 1971, 1977). Attention, retention, reproduction, and motivation have been identified as factors that influence the process of learning and the production of behavior (Bandura, 1971). Bandura (1962, 1968, 1977) believed that there is a continuous series of reciprocal interactions between environmental, cognitive, and behavioral factors, which play a detrimental part in learning. Bandura (1986, 1989, 2001) believed that individuals are not reactive organisms and do possess the ability to actively alter their environment in a manner that is conducive to the individual's needs.

### **Theory of Cognitive Appraisal**

According to the cognitive appraisal theory, cognition and appraisal (i.e., a mental process by which individuals assess threats to wellbeing and if resources to meet the demand of the stressor are available) influence an individual's perceived coping ability, appraisal of perceived distress, and level of self-efficacy (Lazarus, 1991; Lazarus & Folkman, 1984). Lazarus (1991) focused on external demands and the impact these demands place on psychological stress by considering coping and stress as conscious efforts partially controlled by personality traits, the environment, or the nature of the stressful environment. The theory of cognitive appraisal relates to the current study because, due to the external demands from the militaristic nature of the law enforcement profession, police officers must appraise their surroundings and account for the potential impact the environment has on their wellbeing. In addition, officers must appraise, develop, and implement ways to cope with stressful situations that occur so their level of psychological resilience can be maintained. Effective appraisal can occur when afforded with needs-based psychological intervention and training that accounts for the importance of the appraisal process and identifies differences in how males and females appraise and developing coping strategies differently. Dai et al. (2011) acknowledged that police officers rationalize, cope, and react based on examining the totality of their learned life experiences, which allows their behaviors to promote positive or negative outcomes. During the cognitive appraisal phase, a person could conclude that it could be to be difficult to control how appraisal occurs because police officers' process stress

differently, and often they operate in a reactionary mode due to the constant threat of the unknown.

The social learning theory related to this study and its developed research questions because the theory has been used to explain behavior and development of stressors that predicate adverse reactions associated with police misconduct, use of deadly force against unarmed suspects, moral development, cognitive rationalization skills, and peer association within members of the police culture (Chappell & Piquero, 2004; Maskaly & Donner, 2015; Zavala, Melander, & Kurtz, 2014). Moreover, because Bandura stressed the importance of learned behavior in a social context, applying the theory to members of the law enforcement profession will provide a theoretical lens through which to examine differences in how male and female police officers conceptualize occupational and organizational stress, determine their use of coping mechanisms, and assess the degree to which stress management training is accepted and used within the population.

Lazarus and Folkman's (1984) theory of cognitive appraisal provided focus and theoretical support for examining how internal and external demands (i.e., organizational and occupational stressors) of the profession impact the development of psychological stress based on an individual's concept of appraisal and coping. Moreover, the was used to develop the research questions by providing a theoretical context useful in examining how level of stress associated with operational and organizational stressors created from the internal and external demands of the police profession influence male and female police officers. Based on internal and external demands of the profession, law

enforcement officers are placed in a position where the effective use of appraisal is paramount to ensure psychological resilience (de Terte et al., 2014). Within the appraisal process, officers must not only examine the impact that the environment has on their physical, physiological, and psychological well-being, but they must develop ways to cope with stressors so psychological resilience and wellbeing can be maintained or restored (de Terte et al., 2014). Dai et al. (2011) explained that within members of the law enforcement profession, the appraisal phase is difficult to control because individuals process stress differently due to constantly operating in a heightened-sense or reactionary mode, which influences the way coping occurs. Therefore, Dai et al. suggested that individual police officers react, manage, and cope with stress differently depending upon their life experiences causing coping behaviors to be positive or negative.

### **Literature Review: Stress in Police Officers**

Throughout the United States, Gächter et al. (2011) suggested that the cost associated with employee-endured workplace stress is estimated to be somewhere between 30 and 44 billion dollars a year. These figures include the health consequences of mental and physical disorders, alcohol abuse, destructive and vehement behavior, and decreased work performance. Stress that is associated with health consequences can originate from several factors and can be experienced by all individuals regardless of age, gender, or ethnicity (Baqtayan, 2015). Members of the law enforcement community are subjected to an environment of unpredictability that can cause a variety of psychosocial and psychological stressors that can evoke stress in members of this community (Sundaram & Kumaran, 2012). Not all stress is harmful. For example, some individuals

use stress to empower their need to exceed limitations; whereas, Baqutayan (2015) explained that for others, stress can be debilitating by causing negative effects that can limit the quality of mental and physical functioning. When this occurs, the effects of distress (e.g., feelings associated with anxiety, fear, agitation, or excessive worry) can occur. Individuals who work in an environment that involves direct and engaging interaction with people (e.g., law enforcement, education, and public administration) are more likely to become vulnerable to the effects of work-related stressors. Within these environments, stress could be best understood because of examining the environment, nature of the stressor, and the individual's vulnerability to stress.

### **Occupational and Operational Stress**

Occupational stress occurs when job demands exceed an individual's adaptive resources (Lazarus & Folkman, 1984). Within the law enforcement profession, increased exposure to occupational stress can contribute to low self-esteem, aggression, and health problems in individuals who fail to use appropriate coping mechanisms (Hakan Can & Hendy, 2014). To address how exposure to occupational stressors and adaptive and maladaptive coping mechanisms are related to positive and negative physical, mental, and interpersonal outcomes, Hakan Can and Hendy (2014) recruited 201 police officers (96% were male) to examine proposed effects. Participants were asked to complete the Law Enforcement Officer Stress Survey (LEOSS) as well as three additional measures that addressed health, self-esteem, and aggression to partners and significant others. Hakan Can and Hendy suggested that participants who experienced high levels of stress reported the use of unhealthy coping mechanisms related to repressed anger. Hakan Can

and Hendy concluded that programs should be developed that focus on anger management and anger expression so officers can be provided with assistance that can reduce the risks of negative effects associated with adverse physical and psychological manifestations and problematic interpersonal relationships.

Police officers are subjected to many stressors due to the nature of their profession (Ménard & Arter, 2013). Because of being exposed to stressors, patterns of thinking can be distorted prompting the use of maladaptive coping strategies (Ménard & Arter, 2013). The use of escape-avoidance coping mechanisms can become prevalent due to their role in providing partial assistance in mediating the immediate effect of the stressor (Ménard & Arter, 2013). Ménard and Arter (2013) also examined the relationship between demographics, coping mechanisms, alcohol consumption, traumatic symptomology related to posttraumatic stress, and social stressors. The authors posit a lack of or ineffective use of coping skills is associated with critical incident management, alcohol use, and is indirectly associated with symptoms related to posttraumatic stress. Regarding social stressors, the authors concluded that social stressors were not associated with alcohol use but were related to posttraumatic stress symptoms. Ménard and Arter suggested the development of cognitive-behavioral interventions and approaches that are geared toward modifying coping strategies would be useful in lessening the adverse effects of workplace stressors prevalent in the law enforcement profession.

**Citizen contact.** Law enforcement officers are subjected to various face-to-face encounters that can evoke disturbing aspects of human behavior. Faced with the uncertainty of the unknown, officers are expected to proceed to the next call for service

regardless of its nature and at times uncertain of the circumstances they will face (Ellrich & Baier, 2016). Because they respond to various calls for service that can range from nonlife threatening to deadly force encounters, officers can face elevated levels of emotional stress (Vonk, 2008). Because of experiencing such events, Craun et al. (2014) explained that vulnerable members of the law enforcement community are prone to developing secondary traumatic stress (STS). Craun et al., posited that within the law enforcement community, STS has been associated with increased protectiveness, irritability, feelings of emotional numbness, difficulty sleeping, and increased disgust with members of the public. To examine the stressors mentioned above, Craun et al. conducted a 3-year longitudinal panel survey of law enforcement officers to examine the factors that affect STS. Craun et al. determined that officers who rely on avoidance-based coping mechanisms experienced higher levels of anxiety and somatic symptomology.

**Shift assignment.** Shift work is a common factor in many professions. Within the law enforcement profession, shift work (i.e., an 8- to 12-hour night or day rotation schedule) has been deemed a significant occupational stressor that is related to stress, absenteeism, and metabolic disorders (Fekedulegn et al., 2013). Fekedulegn et al. (2013) used long-term work history data to compare the use of sick leave and the role of lifestyle factors among 464 officers who were assigned to either a day, night, or midshift schedule to estimate the incident rate of absenteeism and found that individuals assigned to night shift work are placed at a higher risk for sick-related absenteeism than those assigned to a day or midshift work schedule. Fekedulegn et al. explained that officers who were considered overweight and assigned to a night shift schedule were considered more than

likely to succumb to using sick leave than cohorts assigned to a day or midshift schedule. Fekedulegn et al. concluded that compared to other shift assignments, night personnel was more than likely to use 3 or more consecutive sick days.

### **Organizational Stress**

As previously stated, stress can affect law enforcement officers in many ways. Therefore, when stress is not handled in an adaptive manner emotional outbursts, violent acts, and aggressive behavior can occur. Neely and Cleveland (2012) reiterated that ineffective leadership styles and demands of public service had been identified as two prominent stressors within the law enforcement community. Based on this premise, research was conducted to examine the link between stress and police brutality. While framing their research study, the authors incorporated the stress and strain theory as their theoretical framework. The theory was used as a guide to explore the impact job-related stressors play in allowing officers to effectively complete their duties without acts of misconduct.

A convenience sample of 110 active law enforcement officers from the Atlanta Police Department was chosen to complete a set of surveys that were used to measure the relationship between external and internal stress, the impact of policy and procedures, leadership styles on the use of force, and organizational climate. The results of the study indicated that there was a connection between job stress and acts of police misconduct. Based on the results, it is reasonable to conclude that mandatory stress management training, that is geared to improve coping skills and stress management, is a productive

step forward in acknowledging and curtailing the negative effects of stress within the law enforcement community.

In continuation of examining stress and its relationship with violence, Queiros, Kaiseler, and DA Silva (2013) conducted a cross-sectional study including 274 male police officers. Specifically, it was the aim of the study to investigate whether burnout was a predictor of aggressivity by using self-reported measures. Per Queiros et al. (2013), “Regression analysis reveals that burnout, more than socio-demographic characteristics, predicts 13% to 22% of aggressivity” (p. 110). Essentially, based on the results suggested by Queiros et al., burnout (a product of negative stress) is a predictor of aggressivity; therefore, reiterating the need to acknowledge and prevent occupational stress and burnout so acts of violent behavior will not occur.

**Lack of organizational support.** Hassell, Archbold, and Stichman (2011) explain that a law enforcement’s infrastructure (i.e., organizational command staff) can determine the agency’s climate. For example, negative, controlling, authoritarian, or lackadaisical environments that do not encourage open lines of interpersonal relations or offer sufficient support to officers can become a primary factor in the development of internal work stressors (Hassell et al., 2011). Moreover, as previous research has indicated, the negative consequences of stress can contribute to a significant decline in physical and mental wellbeing. Research conducted on the law enforcement population has widely documented that law enforcement officers report low perceived behavioral control due to hazardous and volatile environmental conditions that have ultimately contributed to high levels of pressure and stress (Chopko et al., 2013). Given such

unstable conditions, it can be argued that law enforcement officers are subject to burnout caused by excessive stress. Within many police organizations, Chopko et al. (2013) explain there is little to no organizational or peer support available to reduce emotional repression. Due to the absence of such support, many individuals fail to seek assistance due to perceived stigmatization related to exhibiting help-seeking behaviors. It can reasonably be inferred that each of these variables increases the likelihood of law enforcement officers' utilization of unhealthy coping mechanisms, such as alcohol use, to combat the negative effects of stress.

**Perception of negative work environment.** Perceived high-risk organizational and personal factors vary greatly among male and female police officers. Not surprisingly, perceived stress is positively correlated with high-risk factors such as, low subjective social status, negative work environment, psychological demand, and use of emotion-focused coping, that negate positive health outcomes due to promoting stress and use of maladaptive coping mechanisms (Habersaat, Geiger, Abdellaoui, & Wolf, 2015). Therefore, these factors can significantly an individual's wellbeing, effectiveness in prescribing public safety and the perceptions of the police force by society. The quantitative research of Habersaat et al. (2015) explored the notion that specific combinations of risk factors, directly associated with the law enforcement job assignment, are culprits that can facilitate poor health and distress. Participants included 84 sworn law enforcement officers assigned to criminal, community, and emergency divisions. Individuals answered questionnaires that assessed perceived personal and organizational risk factors and mental and physical health indicators. Thus, it was

identified that personal factors and perceptions of work conditions were stressors that mitigated stress and use of maladaptive coping skills. The authors suggest stress-reduction interventions that do not target job-relevant sources of stress and do not account for law enforcement being a male-normative environment may demonstrate limited effectiveness in reducing health risks associated with police work due to individuals being reluctant to express or readily acknowledge known and experienced occupational stressors.

### **Psychological Stress and Resilience**

It is often said that members of law enforcement possess a distinct level of psychological resilience due to the demanding role played while protecting and serving the community. With this stated, within the law enforcement community, there are immediate short-term interventions that are only employed to address stress during critical incidents (Violanti, 2006). However, long-term effects of stress are seldom acknowledged by organizations causing the likelihood for resiliency to decrease. Moreover, as explained by Violanti (2006) police officers possess an increased risk of succumbing to the effects of negative stress and suicidal ideologies due to not fully recover from critical incidents.

Violanti (2006) further explicated that prior research studies on resiliency have determined that the recognition of long-term effects associated with traumatic events and the implementation of intervention strategies can elicit positive outcomes that can displace stress within the law enforcement community. Essentially, lack of acknowledgment concerning the ill effects of traumatic situations can influence officer

productivity, bias cultural climate, and enable distress. In addition, Violanti endorsed the use of a risk management framework, such as stress management training, to conceptualize distress in a manner that can boost resiliency and discourage the negative effects of stress. Based on this premise, it supports the aim of my research study by empowering the examination of the potential effects prescribing mandatory stress management guidelines has within male and female officers in the law enforcement community.

Hogh, Hansen, Mikkelsen, and Perrson (2012) speculate exposure to severe long-term stressors can evoke a lack of control and jeopardize the psychological wellbeing of susceptible individuals. The ability to recuperate from disturbing and distressing events or to remain mentally competent during a stressful or adverse situation is referred to as psychological resistance (de Terte et al., 2014). Based on this premise and due to limited research involving multidimensional frameworks, de Terte et al. conducted a research study that evaluated the outcomes of posttraumatic stress, health, and distress at three specific time points throughout the career of a law enforcement officer. The research study was comprised of 176 police officers that were entering the law enforcement profession as a recruit. Selected individuals were surveyed at the onset of their recruit training, at 12 months, and at the completion of 10 years of service. The authors evaluated a multidimensional model of psychological resilience which included the environment, feelings, thoughts, behaviors, and health practices. In addition to this model, the use of a three-part model of psychological resistance was used to examine

social factors, coping techniques, health practices, and level of optimism when faced with stress or adverse situations.

Research participants were asked by de Terte et al. (2014) to complete the Traumatic Stress Schedule (TSS), revised version of the Impact of Event Scale (ISE-R), Hopkins Syndrome Checklist (HSCL-21), and revised version of the Life Orientation Test (LOT-R). In addition, the authors provided participants with the Brief Resilient Coping Scale (BRCS), Mayor-Salovey-Caruso Emotional Intelligence Test (MSCEIT), the Health Practices Index (HPI), and the Social Support Scale. The results of the research suggest support from peers, positive wellness techniques, and emotions are related to a decrease in posttraumatic stress symptoms. Moreover, optimism and communal support were discovered to be factors that lesson psychological distress. Lastly, de Terte et al. explained that the use of effective coping behaviors, productive wellness techniques, and peer and community support was positively related to one's quality of health and the reduction of adverse outcomes associated with exposure to disturbing and distressing events. The authors suggest continuing research on this topic by utilizing multidimensional frameworks to further understanding of how optimism, effective coping techniques, productive wellness techniques, and peer and community support are necessary for promoting resilience and wellbeing.

### **Physical and Mental Effects of Stress**

#### **Fatigue**

Within the law enforcement community, Basińska and Wiciak (2012), Basińska et al (2014), and Senjo (2011) posit stress has been identified as a catalyst for fatigue and

burnout, both of which may impair the functioning of organizational and public safety. With this stated, despite this discovery, research indicates that members of the police culture continue to fail to acknowledge that long-term chronic fatigue causes serious performance and health related issues by endorsing the mentality of working more is beneficial for career success (Basińska & Wiciak, 2012; Senjo, 2011). Basińska and Wiciak examined long-term effects of chronic fatigue and its relationship with stress among police officers. Their results indicated that difficulty managing personal relationships, excessive use of sick time, issues with interpersonal relations, trouble utilizing effective use of judgment, and procedural mistakes are examples of adverse effects associated with long-term chronic fatigue and stress.

### **Burnout**

Burnout (i.e., loss of motivation and disengagement) is considered a psychological syndrome that includes emotional distress and exhaustion, depersonalization, and a sense of reduced personal accomplishment that is associated with policing (Basińska & Wiciak, 2012; Gould et al., 2013; Maslach, 2003; McCarty & Skogan, 2012). Moreover, Basińska and Wiciak (2012) explain burnout occurs because of excessive demands and ineffective or poor personal or organizational resources. Per Gould et al., increased levels of stress, burnout, absenteeism, and poor physical health are common occupational stressors that are prevalent among correctional officers. McCarty and Skogan, (2012) used a sample of 2,078 police officers to examine the effects of physical stress and burnout. Essentially, results indicated that at the completion of a two or three shift duty assignment, 27% of officers reported they experienced a form of

physical stress. Therefore, failure to recognizing adverse effects of burnout can place individuals at risk for experiencing a decrease in quality of life. Based on this premise, Gould et al. developed a research study to examine burnout and specific coping mechanisms used to mediate distress. The participants consisted of 208 correctional officers. Specifically, there were 130 males and 78 females. Gould et al. provided participants with the Brief COPE to examine coping strategies used and the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) to assess the psychological dimensions of burnout. Despite mostly utilizing adaptive coping techniques, results from both measures allowed the authors to conclude officers reported high levels of burnout.

### **Posttraumatic Stress Disorder**

The research of Bowler et al. (2012) proposes that after the events of September 11, 2001 reports of PTSD among police doubled suggesting that intervention strategies are essential in combatting negative mental health effects associated with exposure to traumatic events. Within the law enforcement community, Posttraumatic Stress Disorder (PTSD) has been identified as a serious condition that is considered a byproduct of stress (Bowler et al., 2012; Ménard & Arter, 2014). Prior research has demonstrated that police officers, communication officers, and other members of the law enforcement sector are subjected to stressors that are not present in most occupations due to the high-stress nature of the environment (Regehr et al., 2013). Therefore, allowing the likelihood for PTSD to flourish if stress related to traumatic or terrifying events is not properly acknowledged and addressed. Ménard and Arter (2014) and Ballenger et al. (2010)

conclude that research involving the police culture has provided inconsistent results concerning how gender is related to PTSD. However, there have been some general population samples that have indicated that rates of PTSD are higher among female officers than male officers. Moreover, per Ménard and Arter, this may occur because “policewomen may respond more like their male colleagues, suppressing emotional response to traumatic events in keeping with subcultural values to do so” (p. 311).

Due to emerging evidence on how exposure and response to critical incidents and social stressors predicate PTSD, Regehr et al. (2013) suggest research focused on examining the impact of psychological distress and physiological stress on wellbeing is necessary throughout the law enforcement community. To better understand the experiences related to psychological distress and physiological stress of perceived experiences in police communication officers, Regehr et al. conducted a research study that examined perceived levels of distress, coping, locus of control, and social support. The research population included 113 police communication officers who were voluntarily recruited from metropolitan and rural areas. Upon inclusion in the study, Regehr et al. provided participants a series of questionnaires to assess their levels of distress, coping, locus of control, and social support.

Based on conducting several statistical analyses, Regehr et al. (2013) determined the participants experienced high levels of posttraumatic stress, which appeared to be interrelated to years of service. Therefore, as years of service increases, levels of distress associated with PTSD increases causing problematic implications. Moreover, Regehr et al. explain emotion-focused coping mechanisms were discovered to be a robust indicator

of anxiety, PTSD, and depression. Conversely, social support and internal control were not correlated with physiological stress. Since coping mechanisms can be modified, Regehr et al. suggest developing programs and interventions that can be used to reduce job-related distress.

### **Aggression and Excessive Use of Force**

Unmanaged or improperly stress can lead to a variety of negative behavioral manifestations. For instance, adverse side effects associated with stress can result in poor emotional control, such as aggressiveness, violence, and emotional outbursts if no adaptive coping strategies are used to reduce such outcomes (Neely & Cleveland, 2012). It has been argued that ineffective coping skills combined with poor emotional control play a significant role in police brutality. Several factors contribute to stress, which can potentially increase the risk of behavioral outbursts for law enforcement officers. Per the authors, ineffective leadership style and excessive demands associated with public service are two stressors proposed to influence stress and hostile emotionality in this population. Applying the stress-strain theory as a theoretical framework, Neely and Cleveland (2012) examined the relationship between stress and police brutality to determine the extent to which leadership style, department policy, and the department climate influenced police officer stress and use of excessive force. Convenience sampling was used to select participants within the Atlanta Police Department, with a final sample consisting of 49 African-American and 45 Caucasian participants ( $N = 94$ ). Participants completed the Police Stress Survey, which measured how excessive force was influenced by leadership style, department policy, and department climate. The authors concluded

that the results revealed a significant relationship exists between the stressors mentioned above and use of excessive force.

### **Adaptive and Maladaptive Coping**

Within the law enforcement profession, the demands of police work subject individuals to situations that alter their level of mental and physical control (Anshel & Brinthaup, 2014). Therefore, the unpredictability of the profession predicates the effective use of coping strategies so emotional wellbeing can be maintained and restored. The term coping refers to how individuals respond to a situation. The process of coping serves as a mediator that allows an individual to exert a conscious effort to acknowledge and solve interpersonal problems related to the self, others, and the environment (Baqtayan, 2015). Moreover, Anshel and Brinthaup (2014) explain the use of a coping process is intended to improve and manage stress. The effectiveness of coping is dependent on the individual, the specific conflict, and circumstances.

As explained by Baqtayan (2015) researchers have developed four categories that are used to identify how individuals cope with stress: contest the realities of the experienced stress, leave the stress to escape what is occurring, reduce distress by seeking social interaction, or accept the stresses the norm. When accepting stressors as a norm, it can place individuals in a continuous state of emotional strain, which places them at risk for physical and psychological distress. Conversely, Baqtayan explains many individuals may not be aware that they are negatively influenced by stress. Therefore, the author concludes it is imperative to employ an adequate combination or a form of problem-focused or emotional-focused coping mechanisms to maintain or restore a sense

of self and wellbeing. Lastly, Baqutayan suggests the use of stress-reduction counseling programs can be advantageous in assisting individuals to develop and determine which coping methods are best suited to their needs.

Positively increasing one's level of control over occupational stressors allows individuals to determine successfulness in their work environment. Moreover, effectively increasing one's level control a can serve as a critical factor in determining the impact stressors have on one's physical and mental wellbeing (Pagon et al., 2011). The research of Pagon et al. (2011) examined the sources and outcomes of occupational stress in police managers as compared to managers not affiliated with the law enforcement profession. Specifically, data were collected from 267 police managers and 232 non-police managers. The participants were provided the Occupational Stress Indicator 2 (OSI2), Work Locus of Control Scale (WLCS), and the Scale of Work-Related Values. Based on a statistical analysis of the data collected from the prescribed measurements, the authors posit the results indicate increasing one's level of control when coping with stress reduces job-related stressors.

### **Peer Support**

Law enforcement officers are assigned to investigate crimes that can potentially evoke stressors that when left unmanaged can cause irreparable harm to one's sense of wellbeing (Powell et al., 2014). To continue research on coping strategies, the authors conducted a quantitative research study to examine how Internet child exploration investigators in Australia cope with stress related to their specific duties. The research study contained 32 participants who were provided a broadly constructed open-ended

anonymous survey that was completed telephonically. Powell et al. (2014) explain that after the data were collected and organized by theme the results suggested the use of informal briefing (i.e., sharing thoughts with coworkers, exchanging concerns, and utilizing off-color humor, was most used when coping with stressors). In addition, Powell et al. suggest participants described the use of switching off emotions and the practice of informal briefing as a coping mechanism that provided temporary relief. When asked about formal debriefing, the authors explain that the participants described its use as somewhat nonexistent because supervisors failed to provide long-term health-related monitoring to employees that was based on individual needs. Furthermore, Powell et al.

posit several participants disclosed that increased alcohol consumption was used as a coping mechanism. This research demonstrates the need to facilitate the development and application of needs-based intervention that encompasses the construction and use of effective problem-focused and emotional-focused coping mechanisms among law enforcement personnel.

### **Peer Influence and Stigma**

Within the police culture, officers are trained to maintain their emotions and are taught throughout their career that losing control of their emotions could jeopardize their career as well as question their ability to maintain order and control (Kirschman, 2007; Levenson, 2007). The added pressure to keep emotions in order can cause reluctance to seek assistance if openly acknowledging and discussing stressful events among peers is viewed as weak or a loss of control. Therefore, Corrigan, Druss, and Perlick (2014) explain that stigma (e.g., fear of being labeled due to believing beliefs, behaviors, or

attitudes are not socially acceptable) related to seeking and accepting mental health intervention for stress can predicate an officer's willingness to cope with and receive mental health services. Moreover, Karaffa and Koch (2016) posit peer influence can be a catalyst for public and self-stigma. Public stigma originates from perceived public attitudes and perception that are believed to apply to the individual (Karaffa & Koch, 2016). Whereas, Karaffa and Koch explain self-stigma involves "an individual's perception that his or her own behaviors or attitudes are not socially acceptable" (p. 761).

To identify the role public and self-stigma have on officer's ability to seek mental health intervention, Karaffa and Koch (2016) developed a research study that included a predominantly male sample of 248 sworn police officers from law enforcement agencies located in Texas and Oklahoma. The participants were asked to complete a 62-item survey pertaining to their attitudes toward seeking mental health intervention, mental health stigma, willingness to seek intervention, and perception of their peers' willingness to seek intervention. The results of the research study indicate public stigma and self-stigma was negatively correlated attitudes associated with intervention seeking behavior. In other words, individuals who possess attitudes associated with public or self-stigma endorse negative attitudes concerning seeking mental health intervention. Based on these results, the authors believe officers may be more likely to engage in mental health intervention if negative self-stigmatizing attitudes are replaced with positive beliefs concerning addressing stress and emotions are not signs of weakness and should be viewed as a normal physiological reaction to traumatic and stressful events (Karaffa & Koch, 2016).

Page and Jacobs (2011) and Pasciak and Kelly (2013) acknowledge seeking peer support is considered a primary coping mechanism for police officers which has been identified as a significantly correlated with operational and organizational sources of stress in police culture. Per the research of Levenson (2007) it was discovered that several law enforcement personnel fail to seek assistance for job related stress due to the fear of labeling. Thus, it was discovered that prolonged stress, related to direct occupational stressors, could cause poor job performance, health issues, increased absenteeism, relationship difficulties, and overall organizational dysfunction within susceptible individuals (Levenson, 2007). Therefore, it is critical for organizations to acknowledge the need to assess their officers in regards to long-term stress management by engaging in peer support and intervention. In support of this observation, Levenson reiterates this premise by echoing the importance peer support and critical incident stress management has on curtailing the negative effects associated with experiencing stressful events. Therefore, employing steps to curtail, maintain, and/or educate law enforcement officers on the psychological effects of workplace related stressors is paramount and can possibly occur if incorporated into regularly scheduled yearly departmental training.

### **Alcohol Use**

As previously stated, the effects of negative stress can cause several ill effects which prompt individuals to utilize an array of coping mechanisms. In addition, it is noted that due to the quasi-military nature of law enforcement's environment it limits an individual's control causing a degree of perceived work-related pressures and stress (Chopko et al., 2013). Based on this premise Chopko et al. (2013) conducted research

based on the relationship of stress and alcohol use within the law enforcement community. The total number of participants in the research sample was 193 (180 males and 13 females). The participants were obtained due to a method of convenience sampling that occurred within several law enforcement agencies located within the U.S. Midwest (Chopko et al., 2013). Moreover, each participant was provided with questionnaires addressing demographics and level of stress. In addition to the questionnaire, participants were prescribed the Alcohol Use Disorders Identification Test (AUDIT), Posttraumatic Stress Disorder Checklist-Specific (PCL-S), and the Patient Health Questionnaire (PHQ-9). Because of their research efforts, Chopko et al. conducted several regression analyses which concluded that 77.5% of the participants reported no risk of harmful alcohol use. However, the analysis did demonstrate a significant association between work-related stress and alcohol use. Essentially, these results empower the need for organizational acknowledgment that enables the encouragement of appropriate coping skills and healthy stress management techniques so the use of alcohol will not escalate into a level of use that is considered harmful.

To add breadth to the research results of Chopko et al. (2013) and to reiterate the severity of alcohol use as a coping mechanism, Leino, Eskelinen, Summala, and Virtanen (2011) conducted a research study concerning the associations between increased alcohol consumption and exposure to work related violence involving 1,734 participants. Results noted that exposure to violence, lack of training, and insufficient departmental resources were associated with an increase in alcohol consumption. Binary logistic regression analyses were used to determine the odds ratio pertaining to increased alcohol

consumption. The odds ratio increase for lack of debriefing was 6.9, 2.18 for a shortage of manpower, and 1.71 for failure to receive training for violent responses (Leino et al., 2011). Essentially, it was determined that individuals who failed to receive debriefing, worked during hours when the department endured a lack of manpower, and failure to receive training useful in handling violent situations appeared to utilize alcohol as a coping mechanism when dealing with intolerable emotions associated with adverse occupational and organizational stressors.

### **Suicide**

Throughout the general population in the United States, it has been identified that more than 40,000 individuals die by suicide each year (Centers for Disease Control and Prevention [CDC], 2015). Within the law enforcement profession, law enforcement personnel do not openly discuss stress and suicidal thoughts. One primary reason for the lack of discussion involves fear and perceived stigma associated with acknowledging the need for psychological assistance (O'Hara et al., 2013; Levenson, 2007). With this stated, O'Hara et al. (2013) conducted a research study that examined national police suicide rates. Based on the authors' analysis of data, personal and workplace stressors were two of the leading causes of suicide. Importantly, it was discovered that 96% of the officers that committed suicide between 2008 and 2012 allowed their psychological troubles to remain undetected due to disguising signs of distress. For this reason, O'Hara et al. and Rudd et al. (2015) stress the need for suicide prevention that is needs-specific and addresses any negative stigma associated with mental health intervention by promoting the importance of recognizing and effectively coping with stress at its onset.

Stanley, Hom, and Joiner (2016) conducted a systematic review of 63 quantitative research studies which examined data associated with suicidal thoughts, behaviors, and fatalities among members of the first responder community to identify “population-specific risk and protective factors” (p. 25). Based on the review, Stanley et al. (2016) suggest there is a heightened risk for suicide among first responders (e.g., police, fire personnel emergency medical technicians) and there is a dearth of research involving population-specific intervention research involving causes and prevention of PTSD and psychiatric consequences (i.e., suicidal thoughts and behaviors). Therefore, the authors conclude that interventions based on population-specific needs should be designed and implemented to reduce suicide risk within this population.

Lastly, Bishopp and Boots (2014) posit exposure to violence can have devastating effects on an individual. Within the law enforcement profession repeated exposure to negative psychological and physiological effects can have a lasting impact on officers. The authors surveyed 1,410 police officers from Texas to examine how strain associated with exposure to violence predicates suicide ideation. Based on the results it was determined that violent crime exposure was positively associated with suicide ideation, meaning 13% of the 1,410 respondents reported they possessed suicidal thoughts at some point in their career. Moreover, strain experienced in the police profession increased the odds of maladaptive thoughts by 99 percent (Bishopp & Boots, 2014). Essentially, Bishopp and Boots (2014) maintain that “male officers who report depression or job burnout are 114% and 43% greater odds of suicidal thoughts” than their female counterparts (p. 544). Therefore, when examining police behavior, response to stress, and

use of coping skills dismissing the importance of identifying gender and group differences may prohibit the discovery of critical information that can be used to further strengthen or restore officer safety, mental resilience, physical wellbeing, and job retention throughout the law enforcement sector.

### **Transference of Stress to Family**

Based on extensive literature reviews, the effects associated with the lack of acknowledgment of negative stress is not just limited to officers. The effects can be transferred to their family members. When this transference occurs, family members of police officers can be subjected to outbursts of anger and frustration that can lead to physical or verbal abuse. Based on this premise, Miller (2007) provided several solutions that can be used to address stress and curtail how it can negatively influence family relationships. In addition, he reiterated that scheduling and shift changes, organizational culture, and job commitment are predominant stressors within the law enforcement community that cause potential family related crises.

An important aspect located within Miller's (2007) article that was identified to be useful within my research study was the acknowledgment of training and problem recognition. Miller posits training and problem recognition within the organizational environment are crucial elements that should be employed to curtail maladaptive behavioral manifestations from occurring that can influence family relations. Therefore, it is important to reiterate that the negative effects of stress are not limited to those who are subjected to it. These effects can be disseminated inadvertently and purposefully onto others causing further distress. Moreover, Miller's representation reiterates the

importance of providing officers with mandatory stress management guidelines because problem recognition and intervention are two primary steps towards providing officers with a sense of support that encourages positive well-being.

For law enforcement officers, participation in the family role can become difficult due to balancing work and family responsibilities (Karaffa et al., 2015). Therefore, police work can create unique marital difficulties for many members of its population. Specifically, Karaffa et al. (2015) posit the police sub-culture tends to promote an “us-versus-them” mentality which predicates individuals to perceive work related peers as their only source of consistent support (p. 122). When this mentality is adopted, individuals fail to communicate their emotions openly which strain the necessary qualities (e.g., communication and openness) need to maintain healthy relationships. To address factors that add to stress and marital difficulty among police officers and their spouses, Karaffa et al. used a convenience sampling approach and 82 police officers and 89 spouses ( $N = 171$ ) volunteered to participate.

It was the aim of Karaffa et al. (2015) research to identify the perceived degree of conflict, perceived stress and sources of support, and perceptions of utilizing professional or non-professional support. Results, based on independent sample  $t$  tests and chi-squared tests, indicated that responses from officers did not significantly differ from spouses. However, per Karaffa et al. participants disclosed that missing family events (53.9%), giving most of their energy to the job (49.5%), yelling at members of the family (33%), being controlling and overbearing (16%), lack of interest in physical intimacy (16.8%),

and lack of departmental support (11%) were stressful factors that impacted the marital relationships of police officers.

### **Gender Differences**

Within society, Gächter et al. (2011) explain individuals gain information pertaining to gender identity similarly to ways they gain information for other forms of learned behaviour (e.g., observation, modeling, and being subjected to social and cultural norms). Over the past several years a host of research has been conducted on the police culture and its relationship with stress. However, many of them do not clearly examine gender's role in the relationship (Violanti et al., 2016). It has been stated many times that police work is considered a dangerous and stressful occupation for all members involved (Violanti, 2006; Ma et al., 2015). With this stated, per Violanti (2014) existing research has identified several sources of police work stressors (e.g., danger and risk, workload, shift assignments, organizational infrastructure, and lack of organizational support) that can negatively affect male and female officers. Based on the stressors, Hartley et al. (2011) maintain that in female officers being subjected to police stressors is associated with metabolic syndrome. In addition, the research of Yoo and Franke (2010) discovered that female officers possess higher levels of stress than their male counterparts. Lastly, research indicates female officers possess higher levels of cholesterol and diabetes more so than females not affiliated with the police culture (Yoo & Franke, 2010).

A notable research study by He, Zhao, and Archbold (2002) acknowledged that early research on law enforcement stress failed to examine stress across gender. Therefore, based on this gap in research He et al. (2002) performed a quantitative

research study to examine the physical and psychological impact of coping mechanisms, conflict, and work environment of male and female police officers. Surveys were provided to a convenience sample of volunteer participants from nine Baltimore Police Department precincts. The self-administered questionnaires contained questions concerning perceived stress, coping skills, health outcomes related to stress, and symptomology of physical and psychological stress. Specifically regarding coping skills, He et al. (2002) used two measurement tools to collect data concerning constructive and destructive mechanisms.

The results of statistical testing provided a significant gender difference in coping skills used across gender. For example, female officers (*SD* 2.35) used more constructive (i.e., positive) coping skills than male officers, *SD* 2.66 (He et al., 2002). Overall, results of the study reiterated the importance of providing mandatory stress management guidelines to both male and female officers who suffer negative divergent and convergent effects of stress related to workplace stressors, work-family conflict, and destructive coping skills. Therefore, improvements within these areas could occur once organizations enact stress management programs that assess physical and psychological stress (including internal and external stressors), monitor personnel for ineffective coping skill use, and enact a type of departmental intervention strategy. Violanti et al. (2016) reiterate the importance of exploring gender because there are a limited number of recent studies that have focused on gender differences and their relationship between police stress and health outcomes, thus prompting the opportunity to expand knowledge and understanding in this area.

Oweke, Muola, and Ngumi (2014) identify police work as being a physically and emotionally draining profession that can produce occupational stress. With this stated, previous studies on gender have determined that female officers report physical symptoms of stress whereas male officers report emotional effects (e.g., burnout). Moreover, male officers are reluctant in seeking assistance from peers due to believing they will be viewed as weak. Therefore, Oweke et al. suggest female officers are more likely to utilize emotion focused coping strategies where males are more likely to utilize problem focused strategies. Lastly, the authors speculate based on previous research that an abundance of research on police stress and its relation to gender focuses on males and females independently.

To address the relationship between gender and occupational stress among police officers, Oweke et al. (2014) conducted a research study including 105 participants (94 males and 11 females). Results indicated there was a significant relationship between gender and their level of occupational stress. Essentially, female police officers experience more stress when compared to their male counterparts. Oweke et al. explain differences can be attributed to police culture, due to its environment predicating a masculinized atmosphere where male officers are expected to suppress their emotions like society's traditional male gender role that advocates men are tough and do not display emotion or fear (Gächter et al., 2011).

Barrett, Bergman, and Thompson (2014) identify that women are generally under represented within the law enforcement profession. In general, society's views law enforcement as a masculine, male dominated profession (Gächter et al., 2011). Despite

this perception, the number of female officers is increasing subjecting them to the probability of facing barriers due to gender stereotypes (Chen, 2015). Specifically, Parnaby and Leyden (2011) postulate female officers are subjected to adapt within the male hegemonic police culture to avoid stressors associated with stereotyping and society's pre-established gender viewpoints of femininity and masculinity being interrelated to specific male and female gender role assignments. Therefore, since more female recruits are beginning to join this profession understanding differences in work experiences and barriers that are associated with gender is paramount in maintaining the physical and mental wellbeing of female officers (Barrett et al., 2014). To further explore this premise, the authors conducted a research study to explore and analyze relationships among gender role assignment, sexual orientation, and mentoring for female United States federal officers. Barrett et al. (2014) hypothesized that female officers who are masculine would receive more mentoring from their male counterparts. Surprisingly, results indicated that masculinity was positively related to the degree of peer monitoring received by female officers. Hence, it is reasonable to conclude that based on Barrett et al. (2014) findings female officers who presented masculine traits may experience less occupational stress than those females who are not masculine.

### **Stress Management Training**

#### **The Effects of Training on Stress Management**

Psychological and organizational support that is geared to address gender-based needs of police officers, the frequency of stress, and effective use of coping mechanisms is necessary in the law enforcement community so officers can effectively process

stressful and traumatic events (Violanti et al., 2016). Garner (2008) conducted a research study to examine if receiving a targeted program (e.g., a 16-hour “stress-inoculation training program”) would allow participants to effectively address and manage interpersonal conflict stress associated with criticism and criticism-prone situations (Garner, 2008, p. 243). The results of Garner’s study concluded participants who received the 16-hour training program did report an increased efficacy in handling interpersonal stress as well as a reduction in health complaints. Garner provided statistical results involving a between subjects’ multivariate analysis (MANOVA) of the dependent variables and a univariate analysis, which indicated a significant difference between groups. Based on these results, it is reasonable to conclude that providing guidelines to enable effective coping strategies and stress management is a primary step that can be used to cultivate positive results by increasing resiliency and efficacy in law enforcement personnel.

Stress training is only effective as the course material presented allows it to be. In addition, longitudinal or repeated sessions of training allow repetition, which can empower the use of effective techniques resulting in positive practices. In support of these observations, Oliver and Meier (2009) conducted research using paired samples *t* test (pretest/posttest design) to measure the efficiency of stress management training within law the enforcement profession by examining anxiety, repeated level of stress, and behaviors. The sample contains 664 officers who initially received a period of training involving stress management techniques. However, 20% (n = 132) received a follow-up survey (posttest) within 1 to 18 months following the receipt of training (Oliver & Meier,

2009). Based on the research, it was discovered the stress management training does have an immediate impact on reducing levels of officer stress. However, when training was not regularly administered a diminished return of stress was discovered (Oliver & Meier, 2009).

Law enforcement officers are subjected to several stressors due to the complexity of their assigned duties. Kaur et al. (2013) conducted cross-sectional research to examine the relationship of personality traits and coping mechanisms to stress among law enforcement personnel. Regarding personality traits, the authors explain the traits of neuroticism, extraversion, and psychoticism were associated with psychological stress in law enforcement personnel. Moreover, two predominate coping methods, negative distraction and denial/blame, were identified to be significant factors in promoting stress. Interestingly, Kaur et al. posit the results of the research study indicate the importance in recognizing maladaptive coping methods and replacing them with effective coping skills (e.g., meditation, exercise, and peer and family support). Essentially, individuals who utilize maladaptive coping skills are more likely to develop psychological distress when faced with occupational stressors. Lastly, the authors explain based on examining the data collected from the General Health Questionnaire 28 (GHQ-28) approximately 53 of the 150 participants were discovered to be suffering from the effects of psychological distress at the time of the research study.

Within the law enforcement profession, ignored and unmanaged job-related stress can lead to burnout and fatigue. Both factors can greatly influence functioning and affect public safety (Basinska et al., 2014). Basinska et al. (2014) conducted a research study

examining the relationship between job-related emotions, fatigue, and burnout in law enforcement personnel. Results indicate low arousal negative emotions are related to stress and dysfunctional psychological and somatic symptomology (Basinska et al., 2014). Moreover, a primary and practical implication posed by Basinska et al. entails the acknowledgment and need to organize and implement effective interventions in the workplace that will assist members of law enforcement to acknowledge and address adverse workplace stressors. An important limitation of this research involves the need to examine further gender differences as they relate to managing stress.

Stress has been a topic of concern in the law enforcement profession for several years. However, Tucker (2015) explains there is a plethora of evidence that suggests stress intervention remains underutilized within the law enforcement profession. Importantly, failing to intervene and not providing intervention causes several irreparable consequences. Based on data collected from 673 police officers, Tucker examined factors that influenced willingness to participate and utilize interventions and support. The research results reinforce the need for the creation and prescription of training on police stress. Per Tucker, the usefulness of stress training has been identified to positively influence officers to utilize stress intervention techniques that will promote positive wellbeing. Lastly, it is suggested that further research is needed to facilitate understanding of factors that influence willfulness in the use of services to alleviate underutilization among law enforcement personnel.

Due to the stressful nature of the law enforcement profession, law enforcement personnel are at risk for mental and physical problems, which demonstrate the need for

psychological intervention (Steinkopf et al., 2015). Specifically, stressors related to the occupation and the use of maladaptive coping techniques are specific factors that place officers at risk for stress-related distress. Based on this premise, Steinkopf et al. (2015) conducted a review of mental health problems associated with at-risk individuals, current intervention techniques used, factors that predicate the need for psychological intervention, and the use of motivational interviewing to determine necessary improvements of psychological services utilized in the law enforcement profession. Because of examining the factors above, Steinkopf et al. conclude when members of the law enforcement community fail to receive interventions that are related to stress management and mental wellbeing there is a likelihood that both the officer and the community is at risk. Based on these findings, it is reasonable to conclude there is usefulness in providing stress management training curriculum geared to reduce stress and promote the development of adaptive coping techniques.

The law enforcement profession is considered by many to be one of the most stressful occupations due to its heightened risk of safety and wellbeing. Employing deadly force, witnessing the death of a partner, or experiencing a personal attack have been identified as primary stressors that can be faced by police officers daily (Daderman & De Colli, 2014). Moreover, lack of organizational support, extensive shift work, and poor public perceptions are subsequent stressors that can promote stress among personnel. Daderman and De Colli (2014) posit individual characteristics, such as personality traits, play a vital role in how an individual copes with difficult and stressful

experiences. These stressors if left unmanaged can place an individual under undue stress, which can lead to maladaptive behaviors and psychological dysfunction.

Daderman and De Colli (2014) explain failing to acknowledge stressors or employing maladaptive coping strategies allows individuals to remain stressed. To understand the significance of sense of coherence (SOC) and how it relates to coping resources used by police officers in stressful situations, the authors conducted a research study to examine SOC and the coping resources used by 101 (29 female and 71 male) Swedish police officers. Participants were provided the Orientation to Life Questionnaire (SOC-29) and the Coping Resource Inventory (CRI). Results of both measurements indicate manageability was an important component of SOC. Based on this discovery Daderman and De Colli contribute the factor of manageability as an important due to officers being provided stress management as a form of mandated training.

Lastly, failing to provide stress management intervention services to officers serves as an injustice that can lead to an excessive amount of workplace related and personal struggles. The research of Patterson et al. (2014) suggests stress within the law enforcement profession not only influences job placement it affects officers at a personal level. Specifically, officers who are incapable of successfully managing stress are prone to exhibiting maladaptive behaviors and adverse personality traits that can lead to self-destructiveness. Based on a meta-analysis conducted by Patterson et al. there is a need for rigorous research studies that focus on evaluating the usefulness and efficiency of stress management training and intervention. Moreover, the authors recommend research on stress management intervention should focus on explicit types of stress and the specific

type(s) of stress should be disclosed in the study. Lastly, it is suggested that the collection of quantitative data can be used to contextualize an individual's experiences when provided with stress management intervention.

### **Summary**

The review of literature provided a solid foundation for this research study. Based on the intensiveness of the review, the review indicated that stress is prevalent within the law enforcement profession and coping mechanisms vary causing the likelihood for negative psychological and physiological effects to occur when individuals negate intervention (Basińska & Wiciak, 2012; de Terte et al., 2014; Kaur et al., 2013; Steinkopf et al., 2015; Violanti et al., 2013). However, the review of literature provided confirmation of gaps in existing literature with respect to the need for utilizing quantitative methods to examine the effectiveness of prescribing mandatory stress and coping training curriculum in law enforcement by examining possible group (e.g., gender) differences and the need for the further exploration involving the development and implementation of effective stress management interventions that address specific organizational and personal stressors and effective coping mechanisms (Basinska et al., 2014; de Terte et al., 2014; O'Hara et al., 2013; Patterson et al., 2014).

Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) cognitive appraisal theory will be advantageous in providing a theoretical lens useful in understanding how members of the law enforcement profession identify and acknowledge stressors and determine coping mechanisms. In addition, the theories allow the roles of observation, environmental factors, appraisal, and cognitive processing to be

applied to this population. Essentially, biological, cognitive, and behavioral/learned determinants associated with the premises of both theories play a pivotal role in how members of the police culture identify and process the stressors they are subjected to in their occupations. With this stated, additional research involving male and female police officers will add to the existing literature on this population by providing further understanding of the usefulness in mandating stress management training and identifying the distinct differences in how male and female police officers address organizational and operational stressors. Moreover, results can expound upon how these differences are related to level of operational and organizational stress and use of maladaptive and adaptive coping strategies so individuals in this population can be provided with interventions useful in maintaining their psychological wellbeing so they can effectively serve the public.

Chapter 3 provides a delineation of the research study's design, rationale, and methodology, (i.e., information pertaining population, sampling and sampling procedures, procedures for recruitment, participation, and data collection). Furthermore, instrumentation and information involving threats to validity, operationalization of constructs, and data analysis will be presented that will connect existing gaps in literature to the research study's chosen methodology.

## Chapter 3: Research Method

### **Introduction**

Chapter 3 includes an overview of the research methods that were used in the study. The research design and rationale, methodology, population, sampling procedures, recruitment, participation, and data collection will be discussed. Lastly, an explanation of the instruments, threats to validity, operationalization of constructs, and data analysis will be presented.

The purpose of this quantitative, correlational research study was to explore the relationship between gender, levels of operational and organizational stress, and used maladaptive and adaptive coping mechanisms among police officers who have and have not had stress management training. The study's sample of male and female law enforcement officers was approximately 134. The sample size was derived from using the G\*Power software program. All participants were adults over the age of 18-years-old who were police officers who have and have not received stress management training. Walden Institutional Review Board (IRB) approval, # 01-10-17-0357766, was obtained prior to conducting research.

### **Research Design and Rationale**

The following research questions and associated hypotheses were created based on a review of literature including the independent variables of stress management training, gender, used maladaptive coping mechanisms, and used adaptive coping mechanisms and the dependent variables of level of operational stress, level of

organizational stress, and a combined level of operational and organizational stress among members of the law enforcement community.

Research Question 1 – Quantitative: What is the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, the PSQ-Op, and PSQ-Org?

*H<sub>0</sub>1*: There will not be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a</sub>1*: There will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

Research Question 2 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op?

*H<sub>0</sub>2*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

*H<sub>a2</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

Research Question 3 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org?

*H<sub>03</sub>*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

*H<sub>a3</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

Research Question 4 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org?

*H<sub>04</sub>*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a4</sub>*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of

organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

A quantitative, correlational research design was chosen to assess the relationship between variables. Moreover, this design approach was advantageous to this study because participants were not randomly assigned to groups, there was no manipulation of the independent variables, and a cross-sectional survey data collection was used. Based on the chosen design and its connection to the research questions and hypotheses, statistical analyses involving an independent samples *t* test and three multiple linear regression analyses were used to examine the research questions and hypotheses. An independent samples *t* test was used to determine if there was statistical significance between the means in two unrelated groups as well the results were used to determine if the rejection of the null hypothesis or acceptance of the alternative hypothesis was feasible (Field, 2013). The use of a multiple linear regression served as a predictive analysis. Therefore, this analysis was used to explain the relationship between a continuous dependent variable and two or more independent variables.

The use of the cross-sectional survey data collection method appeared amenable because participants were asked to complete three Likert scale measurement tools and a demographic questionnaire at one specific point in time (Creswell, 2014). Moreover, this design choice was warranted due to its effectiveness in providing a “numerical description of trends, attitudes, or opinions” of a sample population (Creswell, 2014, p. 155). The time needed to fill out the survey packet was approximately 30 minutes. All

measurement tools were tested for reliability and validity and has been used in several research studies on stress and coping.

The use of correlational research has been used throughout psychological research (Creswell, 2014). The survey method remains a popular form of research due to the ease of response and it being time efficient. In addition, correlational research involving survey data collection in police culture has been used to advance knowledge by demonstrating the relationship between police officers and harmful stressors. McCreary and Thompson (2006a) conducted research concerning the relationship between stress and health in the law enforcement profession. Based on their correlational research efforts, McCreary and Thompson developed a reliable measure that continues to be useful within the law enforcement profession to assist in the explanation of organizational and occupational stressors that plague members of this diverse community. Oweke et al. (2014) advanced knowledge in the discipline by conducting correlational research involving the relationship between gender and specific and levels of occupational stress among police constables in Kenya. Oweke et al. explained that there was a significant relationship between gender and level of occupational stress. Lastly, Gould et al. (2013) advanced knowledge in the discipline by using correlational research to examine the relationship between burnout and coping in correctional officers and were successful in explaining the effect of burnout on coping in this population.

## **Methodology**

### **Population**

The target population for this research study was male and female police officers. Because there were a vast number of male and female police officers employed at hundreds of metro and rural agencies located throughout the state of Georgia, a distinction was created for this study so a more clearly defined and accessible population could be procured. Therefore, the target population for this research study was approximately 134 male and female police officers who were selected, based on convenience sampling, from four law enforcement agencies in Northeast Georgia. The target population included individuals over the age of 18-years-old who were currently employed in the law enforcement profession who have and have not received stress management. Participation in the research study was completely voluntary and no compensation was paid to the individuals who participated.

### **Sampling and Sampling Procedures**

Nonprobability sampling designs include convenience, purposive, and quota sampling methods (Dillman et al., 2002; Frankfort-Nachmias et al., 2014). The most common nonprobability sampling method that is used to measure the relationships among variables is convenience sampling. Because I examined the relationship between variables and a population of potential participants were conveniently assessable to me, a convenience sample from four Northeast Georgia law enforcement agencies was used. The sample size included male and female police officers over the age of 18-years-old

who were employed at four Northeast Georgia law enforcement agencies that have and have not received stress management training.

A power analysis was calculated by using G\*Power statistical software to determine the appropriate sample size based on the research study's chosen statistical analyses. Based on selecting an independent samples *t* test and multiple linear regressions to analyze if there was an effect between the independent variables on the dependent variables and assuming a 95% confidence interval,  $\alpha$  (error of probability) = 0.05, medium effect size of 0.15, and power (1- $\beta$  error probability) = 0.95, the approximate minimum sample size calculated by G\*Power was 129 (Faul, Erdfelder, Lang, & Buchner, 2007). Therefore, a minimum total of 134 participants were recruited for inclusion in the study.

### **Procedures for Recruitment, Participation, and Data Collection**

Multiple law enforcement agencies in the Northeast Georgia were receptive to the idea of research that could be used to assist in understanding officer wellbeing. Therefore, the sampling frame identified for this study was actively employed male and female law enforcement officers who were employed in Northeast Georgia by four law enforcement agencies (e.g., Hall County Sheriff's Office, City of Cumming Police Department, White County Sheriff's Office, and Lumpkin County Sheriff's Office). Three other agencies were approached and were asked for their cooperation in the study in the event a robust sample was not obtained from the previously mentioned agencies. Inclusion to the study involved voluntary commitment, willingness to provide informed consent, and being actively employed as a sworn officer assigned to patrol and

correctional functions. Exclusion criteria included all individuals who had been employed with or under the direct supervision of me, nonsworn personnel, individuals who were unable to provide informed consent, and participants who failed to adhere to the research study's intent and scope of confidentiality and anonymity.

Based on the inclusionary and exclusionary tenants that I established, four Northeast Georgia law enforcement agencies did agree to allow me to have access to officers at departmental shift change meetings. During this time, the tenants of the research study were introduced to the potential voluntary participants. After the introduction of the research, I provided sealed participation packets to all officers present at the briefing and left additional packets for those who were absent with command staff personnel. These packets contained a welcome letter explaining informed consent, anonymity, confidentiality, minimal risks, right to decline participation, and how and where to return completed packets. In addition to the welcome letter, a demographic questionnaire and following measurement tools (e.g., the Brief COPE, PSQ-Op, and PSQ-Org) were included. Upon voluntary completion, participants were instructed to place completed survey documents in the envelope and place them in a secure and locked container provided by me. Because data collection occurred anonymously, obtaining consent occurred because of implicit endorsement, meaning rather than requiring a signed consent form participants who agreed to participate and acknowledge consent will demonstrate their implicit endorsement of consent by completing and returning the survey. The packets were picked up weekly (i.e., every Friday afternoon after 7:00 PM) for 3 weeks or until the sample of 134 packets were procured from the four agencies. By

using this procedure of recruitment and by employing the data collection method, participation and data collection was dependent on the successful use of convenience sampling which can pose issues associated with bias that was considered in this research. However, despite controlling for bias, the use of convenience sampling is considered a prominent methodological choice that is employed when examining the relationship between variables (Dillman et al., 2002).

Data collection occurred due to employing a survey method that contained interval scales. The participants were asked to complete a demographic questionnaire and the Brief COPE, PSQ-Op, and PSQ-Org. All measurements had been used in several research studies involving stress and coping and are a reliable and valid measurements based on internal consistency, test-retest reliability, and validity (Gould et al., 2013; Hakan Can & Hendy, 2014; McCreary & Thompson, 2006a). The Brief COPE is comprised of 28 items based on 14 scales, each of which assesses the degree to which the respondent uses a specific coping strategy (Carver, 1997a). The PSQ-Op and PSQ-Org were created to measure operational and organizational stress among law enforcement personnel. The PSQ-Op measures occupational stressors (i.e., shift assignments, exposure to traumatic events, public contacts, and etc.) associated with police officers in the capacity of their assigned duties. Whereas, the PSQ-Org measures stressors associated with organizational climate and behavior (i.e., perceived lack of leadership, shortage of manpower, and lack of resources, and etcetera) associated with the law enforcement profession. Both measures consist of 20 questions that are based on a Likert scale (McCreary & Thompson, 2006b). The time needed to complete each questionnaire is

approximately 15 to 20 minutes per questionnaire. All questionnaires were administered to participants in self-administered paper format. Lastly, gender, age, work experience, organizational responsibility, and whether the participant has or has not received stress management training was voluntarily collected by administering a demographic questionnaire. The data collected were used to examine the relationship among gender, stress management training, level of stress, and used coping mechanisms. At the completion of data collection, I transferred responses to an SPSS spreadsheet. Lastly, due to participation being anonymous, data being collected based on self-administration, and participants receiving a thank you for participation letter in the survey packet there was no need for debriefing or follow up with the participants. Once the research study is completed and endorsed by the university, a copy of the research and its findings will be provided to the law enforcement agencies who took part in the research so commanding officers can share the results with their subordinates.

### **Instrumentation and Operationalization of Constructs**

#### **Brief COPE**

The measurement tool chosen for the research study was Brief COPE. It examined perceived coping ability, appraisal of perceived distress, and level of self-efficacy; all are factors that can influence the dependent variables of level of operational stress, level of organizational stress, and a combined level of operational and organizational stress and the independent variables of utilized maladaptive coping mechanisms and utilized adaptive coping mechanisms among police officers. The Brief COPE is comprised of 28 items based on 14 scales, each of which assesses the degree to

which the respondent utilizes a specific coping strategy (Carver, 1997b). Moreover, C. S. Carver published the Brief COPE in 1997. It is free for use to examine mental health, personality, social support, and stress and coping. Importantly, the measurement is written in several languages. Administration of the instrument takes approximately 10 minutes to administer and 6 to 30 minutes to complete. Essentially, Brief COPE can be administered to male or female respondents who are between the ages of 18-65+ years old. Respondents rate items on a 4 point Likert scale (e.g., 1 being "I haven't been doing this at all" to 4 being "I've been doing this a lot") (Carver, 1997b, p. 94). Per Carver (2007), scales included within Brief COPE are as follows: "(1) Active Coping, (2) Planning, (3), Positive Reframing, (4), Acceptance, (5) Humor, (6) Religion, (7) Using Emotional Support, (8) Using Instrumental Support, (9) Self-Distraction, (10) Denial, (11) Venting, (12) Substance Use, (13) Behavioral Disengagement, and (14) Self-Blame" (p.1). Moreover, each of the 14 scales are comprised of 2 items. Total scores range from a minimum of 2 (minimum) to a maximum of 8 (Carver, 2007). Essentially, higher scores indicate an increased utilization of the specific coping strategy used.

Concerning validity and reliability of the Brief COPE the instrument has been extensively used in psychological research involving level of stress and coping in members of the law enforcement community (Hartley, Violanti, Mnatsakanova, Andrew, & Burchfiel, 2013; Kaiseler et al., 2014; Maran, Varetoc, Zedda, & Ieraci, 2015); the instrument's creator Carver (1997a) reported reliability is between 0.50 and 0.90 for all the various dimensions included on the instrument. Specifically, the Brief COPE's alpha coefficient is recorded as 0.86, respectively. In addition, O'Dwyer, Moyle, Zimmer-

Gembeck, and De Leo (2013) posits the internal consistencies (Cronbach's alpha) associated with the three subscales in Cooper, Katona, and Livingston (2008) original study were reported as "0.72, 0.84 and 0.75" (O'Dwyer et al., 2013, p. 1184). Per Cooper et al. (2008), test-retest reliability over a year was demonstrated for the three subscales as  $r = 0.58$ ,  $r = 0.72$ ,  $r = 0.68$ ,  $p < 0.001$ . However, "change in burden score over 2 years correlated with change in problem-focused and dysfunctional ( $r = 0.33$ ,  $r = 0.32$ ;  $p < 0.01$ ) subscales, indicating sensitivity to change, but not with change on the emotion-focused scale" (Cooper et al., 2008, p. 838). Lastly, in both studies adequate predictive validity was discovered (Cooper et al., 2008; O'Dwyer et al., 2013).

Lastly, guided by the work of Cooper et al. (2008), O'Dwyer et al. (2013) adopted for use three subscales labeled as emotion-focused, problem-focused, and dysfunctional coping strategies. The subscales were used in Cooper et al. research study. Analysis results for the subscales are as follows:

- Brief COPE\_Emotion-focused: Non-Suicidal  $M = 14.39$  (5.19), Suicidal  $M = 12.91$  (5.67),  $t$  ( $df$ ) = 1.35 (118),  $p = 0.180$ , 95% CI = -0.70, -3.66,
- Brief COPE\_Problem-focused: Non-Suicidal  $M = 10.18$  (4.20), Suicidal  $M = 9.59$  (3.83),  $t$  ( $df$ ) = 0.69 (118),  $p = 0.489$ , 95% CI = -1.09, 2.27; and
- Brief COPE\_Dysfunctional: Non-Suicidal  $M = 8.28$  (4.27), Suicidal  $M = 11.28$  (5.16),  $t$  ( $df$ ) = -3.21 (118),  $p = 0.002$ , 95% CI = -4.85, -1.15 (O'Dwyer et al., 2013, p. 1184).

**Operational Police Stress Questionnaire (PSQ-Op) and Organizational Police Stress Questionnaire (PSQ-Org)**

McCreary and Thompson (2006a) posit stress, physical health, and psychological well-being have received a plethora of attention allowing research results to provide a positive correlation for the negative effects of stress and diminished physical and mental health. Moreover, the authors explain operational and organizational stressors are catalysts for stress and are often overlooked in the workplace. When negative effects of operational and organizational stress are endured by employees, it predicates a reduction in productivity, increases absenteeism, causes burnout, and fuels employee turnover (McCreary & Thompson, 2006a). Therefore, McCreary and Thompson maintain the relationship between stress and health is particularly troublesome for individuals employed in high stress occupations (i.e., law enforcement).

Based on McCreary and Thompson's (2006a) extensive research efforts concerning the relationship between stress and health in the law enforcement profession, it was their vision to develop reliable measurements useful within the law enforcement profession. Therefore, the PSQ-Op and PSQ-Org were created to measure operational and organizational stressors associated with policing. Per Sagar et al. (2014) organizational stress includes stressors associated with the organization and culture within which officers perform their duties. Conversely, occupational stress refers to stressors associated with specific aspects of job assignments experienced by police officers while in the commission of their duties (Sagar, Karim, & Nigar, 2015). The PSQ-Op and PSQ-Org are 20-item self-questionnaires that utilize a 7 point Likert type scale from 1 (*No stress at all*) to 7 (*A lot of stress*). Both were found to be highly reliable. The PSQ-Op and PSQ-Org have been rewritten in several languages and extensively used in

previous studies to measure stressors within the police culture (Irniza, Emilia, Saliluddin, & Nizam Isha, 2014). Both measurements are advantageous to this research because each can measure the level of stress (DV) experienced by police officers at an organizational and operational level. To a breadth to the aspects of validity and reliability, the PSQ-Op and PSQ-Org are found to be highly reliable with alphas  $> .90$ , corrected item-total correlations are between  $.40$  and  $.60$ , and both measurements are positively correlated,  $r = .50$  or less as compared to other stress measures (McCreary & Thompson, 2006a; Sagar et al., 2014; Sagar et al., 2015; Taylor & Bennell, 2010). Moreover, the PSQ-Op and PSQ-Org demonstrate construct validity because frequency ratings are positively correlated (McCreary & Thompson, 2006a).

### **Data Analysis**

This research study used a quantitative correlational research design involving the use of an independent samples  $t$  test and three multiple linear regression analyses. IBM SPSS Statistics 21 software program was used to complete data analyses. Any missing data were entered with 999 to deter the presence of outliers. An outlier analysis was completed to ensure the integrity and cleanliness of data. All assumptions related to the chosen statistical analyses was addressed to ensure the validity of the results. The questionnaires used for measurement of the variables provided data that were analyzed using an independent samples  $t$  test and three multiple linear regression analyses. The research questions and hypotheses were written to endorse the use of all analyses.

When conducting psychological research, it is important for the variables to be clearly defined and presented in concrete and measurable terms (Cozby, 2009).

Therefore, the independent variable of stress management training was operationally defined as training used to address stressors associated with the police culture and coping techniques that assist in alleviating negative effects of stress. Specifically, the training involves a uniform introduction to concepts that are related to specific organizational and operational stressors (e.g., perceived lack of support, inconsistency in organizational structure, and exposure to authoritarian supervision, traumatic events, and adverse public contacts) and insight that is deemed useful in the development of adaptive coping techniques considered advantageous in restoring psychological resilience. Moreover, the independent variable was considered a dichotomous variable. Secondly, the independent variable of gender is considered dichotomous and is operationally defined as the state of being male or female. Thirdly, the independent variable of utilized adaptive coping mechanisms (i.e., seeking peer or social support and implementing positive reinterpretation to develop personal growth) was considered an interval variable and is operationally defined as the development of techniques that aid useful in the restoration of one's physical and mental wellbeing by decreasing one's perceived level of stress. Lastly, the fourth independent variable, utilized maladaptive coping mechanisms (i.e., selected coping techniques that merely reduce perceived levels of stress), was considered an interval variable and is operationally defined as coping techniques that do not increase functioning because the process acts as a catalyst that maintains and strengthens the adverse effects of a stressor.

The first dependent variable of level of operational stress was considered an interval variable and is operationally defined as stressors associated with the daily

operational functions (e.g., work schedules, shift assignment, clerical, public image and perception issues, health, and etcetera) of police officers. The second dependent variable of level of organizational stress was considered an interval variable and is operationally defined as stressors associated with the daily operational functions (schedules, shift assignment, clerical, public image and perception, health, and etcetera) of police officers. Lastly, the third dependent variable, a combined level of operational and organizational stress, was considered an interval variable and is operationally defined as a combined level of stress associated with the organizational and operational demands of being a police officer.

Determining statistical testing is a crucial element in research. Completing an examination of the type of variables created, as well as identifying the number of independent and dependent variables can ensure appropriate statistical analyses are selected (Mertler & Vannatta, 2002). The statistical analyses chosen for this research study included an independent samples  $t$  test and three multiple linear regression analyses. An independent samples  $t$  test was used to examine  $H_{a1}$ , which was described there will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org. This choice appeared appropriate due to its usefulness in determining statistical significance between the means in two unrelated groups as well as its ability to determine if the rejection of the null hypothesis and acceptance of the alternative hypothesis is feasible (Field, 2013).

The use of a multiple linear regression was employed to examine  $H_{a2}$ , there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op,  $H_{a3}$ , there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org, and  $H_{a4}$ , there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training in police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

Both choices appeared appropriate due to the independent samples  $t$  test's usefulness in determining if there is statistical significance between the means in two unrelated groups and if the rejection of the null hypothesis or acceptance of the alternative hypothesis was feasible (Field, 2013). Moreover, the use of multiple linear regressions served as a predictive analysis allowing for the delineation of the relationship between one continuous dependent variable and two or more independent variables to be articulated.

## **Threats to Validity**

### **Threats to External Validity**

External validity pertains to the degree results can be generalized to the target population (Creswell, 2014). With this stated, a primary threat to external validity was generalization (Pearl & Bareinboim, 2014). Within this research study, threats to generalization were minimized because of using a convenience sample of participants.

Moreover, it has been identified that generalization may be effected due to volunteer bias. Volunteer bias is known to reduce the homogeneity of the sampling group and the population of interest. Therefore, this bias can threaten the external validity of the research by making generalizability difficult. Furthermore, the use of a convenience sample also threatens external validity due to posing difficulty in generalizing the specificity of variables.

### **Threats to Internal Validity**

When conducting research, several threats to internal validity can occur (Slack & Draugalis, 2001). For example, selection bias can occur if inadequate representation of the population occurs. Steps to minimize the threat will occur by utilizing a large representative sample size. Mortality threat can occur if individuals seek to drop out of the study or fail to return surveys (Slack & Draugalis, 2001). Instrumentation could cause a threat to internal validity if participants interpret questions differently or do not clearly understand the questions posed on the survey. This was addressed by providing clear and concise written instructions to the participants. A statistical regression threat may occur if a nonrandom sample from a population is used. Moreover, additional threats to internal validity involve self-report bias and response bias. Specifically, Frankfort-Nachmias and Nachmias (2008) explain response bias occurs when participants deny behavior due to the degree of threat posed by questions. Essentially, as the degree of threat in a posed question increases the likelihood for participants to provide fact based answers decreases. Therefore, limitations associated to self-reporting bias can occur if participants are unsure on how to answer questions or are trying to present themselves in a favorable light.

Lastly, a major threat to internal validity is confounding. The prospect of confounding was addressed by employing statistical control of confounding factors due to utilizing a multivariable regression analysis (Hak, Verheil, Grobbee, Nichol, & Hoes, 2002).

### **Threats to Construct Validity**

Construct validity refers to the degree a test measures what it intends to measure and is reflective of the concepts and theoretical assumptions (Frankfort-Nachmias et al., 2014). Alpha coefficients ranged from .64 to .82 and construct validity was expressed as reliable for the Brief COPE (O'Dwyer et al., 2013). Concerning the PSQ-Op and PSQ-Org, the alpha coefficient was between .90 and .93, meaning the PSQ-Op and PSQ-Org possessed high construct validity (McCreary & Thompson, 2006a; Sagar et al., 2014; Sagar et al., 2015; Taylor & Bennell, 2010).

### **Ethical Procedures**

To address ethical considerations in this research study, each participant was provided written documentation of informed consent. This document explained the purpose, nature, confidentiality, risks, procedure, the right to decline or withdrawal from the study, and the duration of the research. Moreover, the participants were provided a subject's bill of rights that clearly explained the participants' specific rights and responsibilities during the research. Furthermore, minimizing risk was addressed due to the design of the research not posing the anticipated likelihood or probability of harm that is no greater than risks normally encountered by an individual in their normal existence or encountered when participants are engaging in research that involves any physical or psychological assessments. The ethical element of confidentiality was addressed due to

safeguarding the integrity of the data by storing it for a minimum of 5 years in a secure and locked safe. To protect the anonymity of the participants, individuals were not being asked to provide their names, survey packets was numbered prior to the dissemination to the participants, an identification number was placed on each survey document, consent was considered implied due to completing and returning the surveys, and any other identifying characteristics of the participants was withheld. Lastly, participants could withdraw from the study at any time without penalty.

### **Summary**

The purpose of this research study was to examine the relationship between the variables of gender, utilized maladaptive coping mechanisms, utilized adaptive coping mechanisms, levels of operational and organizational stress among male and female police officers who have and have not has stress management training. The participants in this study were over the age of 18 male and female police officers that were gainfully employed by four Northeast Georgia law enforcement agencies. Ethical concerns for collection of data, minimizing risk to participants, rights associated with participation, confidentiality and anonymity was safeguarded by employing ethical procedures that followed the American Psychological Association and the Walden University Institutional Review Board for Ethical Standards in Research. Lastly, statistical analyses utilizing SPSS 21 software were conducted to analyze the relationship between variables. Specifically, an independent samples *t* test and multiple linear regression analyses were used to examine the research questions:

- what is the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org;
- what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op;
- what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org; and
- what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

An independent samples *t* test appeared appropriate due to its usefulness in determining if there is statistical significance between the means in two unrelated groups comparing (Field, 2013). A regression analysis appeared appropriated due to its effectiveness in examining the effect of stress management training, gender, and utilized maladaptive and adaptive coping mechanisms in police officers' level of operational stress and level of organizational stress (Field, 2013). Lastly, Chapter 4 will provide an in-depth discussion on data collection, analysis and results.

## Chapter 4: Results

### Introduction

The purpose of this study was to evaluate the relationship between the variables of gender, stress management training, used maladaptive and adaptive coping mechanisms, level of operational stress, level of organizational stress, and combined level of operational and organizational among police officers. The research questions and hypotheses are listed below.

Research Question 1 – Quantitative: What is the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, the PSQ-Op, and PSQ-Org?

*H<sub>0</sub>1*: There will not be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a</sub>1*: There will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

Research Question 2 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op?

*H<sub>0</sub>2*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

*H<sub>a</sub>2*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op.

Research Question 3 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org?

*H<sub>0</sub>3*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

*H<sub>a</sub>3*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org.

Research Question 4 – Quantitative: What is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org?

*H<sub>0</sub>4*: There will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

*H<sub>a</sub>4*: There will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org.

Chapter 4 will provide information on the data analysis process and its associated research findings. This chapter was organized into four sections that were labeled introduction, data collection, results, and summary. Based on the organization of the chapter, an introduction, overview of data collection procedures, delineation of the analysis of data collected from four questionnaire/survey instruments, and a summary of the findings are presented.

### **Data Collection**

A combined total of 275 potential participants were asked to take part in the research study. After data collection, a response rate of 49% was obtained. Specifically,  $N = 134$  was the total number of voluntary participants who were recruited from the four Northeast Georgia law enforcement agencies (e.g., Hall County Sheriff's Office, White County Sheriff's Office, Lumpkin County Sheriff's Office, and the City of Cumming Police Department). There were no discrepancies in the previously developed data collection methodology. All potential participants were introduced to the research study

at departmental shift change meetings. During this time, the tenants of the research study were explained to the potential voluntary participants. After the introduction, potential participants were provided participation packets. The packets contained a welcome letter explaining informed consent, anonymity, confidentiality, minimal risks, right to decline participation, and how and where to return completed packets. In addition to the welcome letter, a demographic questionnaire and the measurement tools (i.e., Brief COPE, PSQ-Op, and PSQ-Org) were included in each participant packet. Data collection began January 18, 2017 and continued to February 10, 2017. There were 275 packets distributed between the four agencies and 134 were collected. Within the collected packets, one participant did not complete the Brief COPE questionnaire. This was coded 999, missing data. Lastly, the number of participants,  $N = 134$ , number exceed the minimum sample size of 129, as calculated based on a G\*Power analysis.

The target population was adult male and female police officers who had and had not received stress management training. The use of nonprobability sampling (e.g., a convenience sample) was used because this method of sampling is a common form of sampling used when conducting research that measures the relationship between variables (Dillman et al., 2002; Frankfort-Nachmias et al., 2014). Based on the results of the data collected, males,  $n = 98$ , were represented in the sample almost three to one as compared to their female counterparts,  $n = 35$ . Moreover, within the sample, there were  $n = 48$  who had received stress management training and  $n = 86$  who had not received stress management training.

Regarding the representativeness of the sample to the population, convenience sampling was used to minimize threats to generalization. Previous studies conducted with police officers by Chopko et al. (2013), Daderman and De Colli (2014), Oweke et al. (2014), Gould et al. (2013), and Hakan Can and Hendy (2014) displayed similar representativeness of the sample. For example, in all studies, the percentage of male participation ranged from 63% to 94%, whereas female participation ranged 6% to 37%. For this study, the Hall County Sherriff's Office, City of Cumming Police Department, Lumpkin County Sheriff's Office, and White County Sheriff's Office had an estimated total of 275 certified police officers who are assigned to either uniformed patrol duties or correctional functions. The results of the descriptive analysis of the research study's sample indicated males,  $n = 99$ ; 73.9%, and females,  $n = 35$ ; 26.1%. Therefore, the result, in comparison to previous samples, suggests the sample is appropriate and representative of the population of interest.

### **Descriptive Statistics**

An analysis of collected demographics data was conducted to define the characteristics that were associated with the research study's sample population. Based on the analysis, there were no missing demographic data. The first demographic question directed participants to select their gender (e.g., male or female). Based on the frequencies analysis conducted (Table 1) males,  $n = 99$ ; 73.9%, and females,  $n = 35$ ; 26.1%, were represented in the sample. The second demographic question asked participants to define their length of employment (Table 2). Most participants,  $n = 51$ ; 38.1%, were employed 5 to 10 years. The third demographic question gathered

information on the assigned rank of the participants (Table 3). Most participants,  $n = 99$ ; 73.9% defined their rank as officer. Lastly, the fourth and final demographic question asked participants if they have attended stress management training (Table 4). The results of the analysis indicated  $n = 48$ ; 35.8% of the participants have received stress management training and  $n = 86$ ; 64.2% have not received stress management training.

Table 1

*Frequency Distribution: Gender*

Gender	<i>N</i>	Percent
Male	99	73.9
Females	35	26.1
Missing	0	0.0
Total	134	100.0

Table 2

*Frequency Distribution: Length of Employment*

Length	<i>N</i>	Percent
Less than 1 Year	5	3.7
1 to 4 Years	32	23.9
5 to 10 Years	51	38.1
11 to 15 Years	19	14.2
16 to 20 Years	17	12.7
More than 20 Years	10	7.5
Total	134	100.0

Table 3

*Frequency Distribution: Rank*

Rank	<i>N</i>	Percent
Officer	99	73.9
Officer 1 <sup>st</sup> Class	3	2.2
Corporal	6	4.5
Sergeant	18	13.4
Lieutenant	4	3.0
Captain	2	1.5
Sheriff or Chief	1	0.7
Total	134	100.0

Table 4

*Frequency Distribution: Stress Management Training*

	<i>N</i>	Percent
No	86	64.2
Yes	48	35.8
Missing	0	0.0
Total	134	100.0

**Examination of Assumptions for Statistical Analyses**

When choosing statistical analyses, each assumption associated with the analysis must be investigated prior to using it so the integrity of data reporting can be maintained. I used an independent samples *t* test and three multiple linear regression analyses to statistically analyze the research questions. The following assumptions were associated with the use of a multiple regression: additivity and linearity, independence of errors, homoscedasticity, no perfect multicollinearity, normality of errors, and standardized residuals (Field, 2013). The assumption of multicollinearity was assessed by examining the VIF values from the regressions' coefficients<sup>a</sup> output provided within the SPSS analysis. A review of the VIF values (Table 5) did not indicate the presence of

multicollinearity due to the values for gender, stress management training, BC\_Maladaptive, and BC\_Adaptive not exceeding the prescribed value of 10.

Table 5

*Collinearity Statistics*

Variable	VIF
Gender	1.125
Stress Management Training	1.163
BC_Maladaptive	1.216
BC_Adaptive	1.39

The assumption of independence of errors was determined by reviewing scores of the Durbin-Watson test (Table 6) for autocorrelation. The results for the three regressions fell within the Durbin and Watson (1951) acceptable range of 1.50 – 2.50. This result suggests errors are reasonably independent.

Table 6

*Model Summary*

Model 1	Durbin-Watson
PSQ_OP_MEAN	1.783
PSQ_ORG_MEAN	2.071
PSQ-OP and ORG	1.998

The normality of errors assumption was evaluated by examining histogram provided within the SPSS output. The histograms for each regression (see Appendix E) did not display skewed distribution, meaning the assumption was met. The assumptions of homoscedasticity and linearity were evaluated in all three regressions due to examining scatterplots (see Appendix F) provided in SPSS analysis. The examination did not indicate a distinct pattern of funneling, meaning heteroscedasticity was not present in

any of the regression analyses. Regarding the assumption of linearity, an examination was conducted using the partial regression plots (see Appendix G) provided within the SPSS output. There was no indication of non-linearity present within any of the analyses. Finally, residuals were examined by reviewing the casewise diagnostics output for all regressions. There were no cases discovered to possess a standardized residual exceeding the value of 3, meaning there were no outliers in the data.

Concerning the use of an independent samples *t* test, the following assumptions were examined: the dependent variable should be measured on a continuous scale, the independent variable should consist of two categorical and independent groups, independence of observations should be observed, homogeneity of variances should be present, and normal distribution of the dependent variable to each group of the independent variable is observable should be assessed and met (Field, 2013). The first assumption of independence was met due to the research design. Based on the design of the research study, it allowed for the data to be randomly and independently sampled, meaning the assumption was met. Secondly, the assessment of scale of measurement was met due to the dependent variable being measured on a continuous scale. Thirdly, the assumption of normality was examined (see Appendix H) by reviewing the histogram and the skewness and kurtosis statistic (Table 7). One of the results (BC\_Maladaptive) were not in the range of +1.00 and -1.00, meaning there is skewness which is not considered an acceptable range of measurement (Field, 2013). Lastly, the assumption for the equality of variance (Table 8) was met due to the results of the Levene test indicating a *p* value greater than .05.

Table 7

*Statistics*

Variables	<i>N</i>	Skewness	Kurtosis
PSQ_OP_MEAN	134	.060	-.683
PSQ_ORG_MEAN	134	.118	-.453
BC_Maladaptive	133	1.092	1.522
BC_Adaptive	133	.437	.417

Table 8

*Levene's Test for Equality of Variances*

Variables	<i>F</i>	Sig	<i>t</i>	<i>df</i>
PSQ_OP_MEAN	.213	.645	-.603	132
PSQ_ORG_MEAN	2.067	.153	-.239	132
BC_Maladaptive	1.366	.245	.014	131
BC_Adaptive	1.186	.278	-4.122	131

Note:  $p > .05$

**Hypothesis 1**

It was hypothesized that there will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org. An independent samples *t* test was performed to analyze the hypothesis. The variables stress management training, utilized maladaptive coping mechanisms (i.e., BC\_Maladaptive) and utilized adaptive coping mechanisms (i.e., BC\_Adaptive) scores were used as independent variables and mean scoring for levels of operational (i.e., PSQ\_OP\_MEAN) and organizational stress (i.e., PSQ\_ORG\_MEAN) were selected as dependent variables.

To address the research question of what is the effect of occupational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org, an independent samples *t* test was conducted to evaluate if there is a statistically significant difference between the mean levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have and have not received stress management training. Based on conducting the analysis (Table 9), one of the four results yielded statistical significance.

The results of the independent samples *t* test indicated there was a significant difference in the mean scores of BC\_Adaptive coping and receipt of stress management between the two groups,  $t(131) = -4.12$ , 95% C.I. (-.703, -.247),  $p = .001$ , two-tailed. Specifically, the results suggested that within this group, individuals who received stress management training ( $M = 2.30$ ,  $SD = 0.67$ ,  $n = 48$ ) had a statistically different and higher mean score for use of adaptive coping mechanisms than compared to those individuals who did not attend stress management training ( $M = 1.82$ ,  $SD = 0.62$ ,  $n = 85$ ). Regarding the examination for mean scores of PSQ\_OP\_MEAN the results indicated  $t(132) = -6.03$ , 95% C.I. (-.535, .285),  $p = .548$ , two-tailed, meaning the analysis was not statistically significant. Moreover, individuals that did not have stress management training ( $M = 3.21$ ,  $SD = 1.173$ ,  $n = 86$ ) experienced a lower mean score for PSQ\_OP\_MEAN than compared to those individuals who did attend stress management training ( $M = 3.33$ ,  $SD = 1.112$ ,  $n = 48$ ).

The examination for mean scores of PSQ\_ORG\_MEAN indicated,  $t(132) = -2.39$ , 95% C.I. (-.483, .379),  $p = .812$ , two-tailed, meaning the analysis was not statistically significant. Furthermore, individuals that did not have stress management training ( $M = 3.21$ ,  $SD = 1.166$ ,  $n = 86$ ) experienced a lower mean score for PSQ\_ORG\_MEAN than compared to those individuals who did attend stress management training ( $M = 3.36$ ,  $SD = 1.283$ ,  $n = 48$ ). The final comparison was an examination for mean scores of BC\_Maladaptive. The results indicated,  $t(131) = .014$ , 95% C.I. (-.145, .147),  $p = .989$ , two-tailed, meaning the analysis was not statistically significant. Within this group, individuals who did not have stress management training, ( $M = 1.52$ ,  $SD = .445$ ,  $n = 85$ ), appear to have experienced the same mean level of BC\_Maladaptive when compared to those individuals who did attend stress management training ( $M = 1.52$ ,  $SD = .334$ ,  $n = 48$ ). Lastly, concerning the null hypothesis, there will not be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org, it can be rejected based on the results of the analysis.

Table 9

*Results of Independent t test*

Variables	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i>
PSQ-Op and Stress Training NO	86	3.21	1.17	-0.60	.548
PSQ-Op and Stress Training YES	48	3.33	1.11		
PSQ-Org and Stress Training NO	86	3.31	1.17	-0.24	.812
PSQ-Org and Stress Training YES	48	3.36	1.28		
BC Maladaptive and Stress Training NO	85	1.52	0.45	0.01	.989
BC Maladaptive and Stress Training YES	48	1.52	0.33		
BC Adaptive and Stress Training NO	85	1.82	0.62	-4.12	.000*
BC Adaptive and Stress Training YES	48	2.30	0.67		

*Note: p < .05\**

**Hypothesis 2**

It was hypothesized there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op. To test the hypothesis, a multiple linear regression analysis was completed. The independent variables of gender, stress management training, utilized maladaptive coping mechanisms (i.e., BC\_Maladaptive) and utilized adaptive coping mechanisms (i.e., BC\_Adaptive) scores were used as independent variables and mean scoring for level of operational stress (i.e., PSQ\_OP\_MEAN) was selected as a dependent variable. A multiple linear regression analysis was conducted to test if the independent variables, otherwise known as

predictors, significantly predict an effect in the level of operational stress in police officers. Descriptive statistics for the variables are presented in Table 10.

To approach the research question of what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op, a multiple linear regression analysis was conducted to evaluate the predictors of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on PSQ\_OP\_MEAN (i.e., level of operational stress). The results of the ANOVA provided a significant fit of data,  $F(4, 128) = 4.04, p = .004$  (Table 11). The  $R^2$  value of 0.08 associated with this regression model suggests that the model accounts for 8% of the variation in level of stress, which means that 92% of the variation in level of operational stress cannot be explained by the variables alone. The Adjusted  $R^2 = .08$  in Table 12 illustrates a reduction from the unadjusted  $R^2$  value of .112, meaning the model may not generalize well.

In terms of the predictors, gender significantly predicted an effect in PSQ\_OP\_MEAN, ( $b = .62, \beta = .24, t = 2.70, 95\% \text{ C.I. } (.166, 1.075), p = .008$ ), meaning gender is a predictor of level of operational stress. The predictor variable of have you had stress management training did not significantly predict an effect, ( $b = -0.02, \beta = -.01, t = -0.09, 95\% \text{ C.I. } (-.442, .405), p = .932$ ), meaning stress management training is not a predictor of level of operational stress. BC\_Maladaptive, utilized maladaptive coping mechanisms, did not significantly predict an effect, ( $b = 0.42, \beta = .15, t = 1.63, 95\% \text{ C.I. } (-.089, .937), p = .150$ ), meaning BC\_Maladaptive is not a predictor of level of

operational stress. The last predictor, BC\_Adaptive, utilized adaptive coping mechanisms, did not significantly predict an effect, ( $b = 0.93$ ,  $\beta = .06$ ,  $t = 0.59$ , 95% C.I. (-.238, .424), 1.075),  $p = .578$ ), meaning BC\_Adaptive is not a predictor of level of operational stress. The confidence interval associated with the regression analysis does not contain 0, which means the null hypothesis, there will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Org., can be rejected. The results of the multiple linear regression are presented in Table 13.

Table 10

*Descriptive Statistics*

Variable	Mean	SD	N
PSQ_OP_MEAN	3.26	1.150	133
PSQ_ORG_MEAN	3.34	1.204	133
PSQ-OP and ORG COMBINED	3.30	1.093	133
Gender	1.26	.442	133
Stress Management Training	1.36	.482	133
BC_MALADAPTIVE	1.52	.407	133
BC_ADAPTIVE	1.99	.676	133

Table 11

*Regression Analysis: ANOVA<sup>a</sup>*

Model	SS	df	MS	F	p
1 Regression	19.563	4	4.891	4.040	.004 <sup>b</sup>
Residual	154.941	128	1.251		
Total	174.504	132			

Note: <sup>a</sup>Dependent Variable: PSQ\_OP\_MEAN. <sup>b</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive

Table 12

*Regression Analysis: Model Summary<sup>b</sup>*

Model	R	R Square Adjusted	R Square	Std. Error of the Estimate
1	.335 <sup>a</sup>	.112	.084	1.100

Note: <sup>a</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive. <sup>b</sup>Dependent Variable: PSQ\_OP\_MEAN

Table 13

*Multiple Linear Regression Model of Predictors of PSQ\_OP\_MEAN*

Model	B	SE B	$\beta$	t	p
Constant	1.68	.485		3.45	.001
Gender	0.62	0.23	.24	2.70	.008*
Stress Training	-0.02	0.21	-.01	-0.09	.932
BC_Maladaptive	0.42	0.26	.15	1.63	.105
BC_Adaptive	0.09	0.17	.06	0.59	.578

Note:  $p < .05^*$

**Hypothesis 3**

It was hypothesized there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org. To test the hypothesis, a regression analysis was completed. The variables of gender, stress management training, BC\_Maladaptive and BC\_Adaptive scores were used as independent variables and mean scoring for level of organizational (i.e., PSQ\_ORG\_MEAN) was selected as a dependent variable. A multiple linear regression analysis was conducted to test if the predictors, significantly predict an effect in the level of organizational stress in police officers.

To approach the research question of what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org, a multiple linear regression analysis was conducted to evaluate the predictors of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on level of organizational stress. The results of the ANOVA provided a significant fit of data (Table 14),  $F(4, 128) = 6.24, p < .001$ . The  $R^2$  value of 0.16 associated with this regression model suggests that the model accounts for 16% of the variation in level of stress, which means that 84% of the variation in level of organizational stress cannot be explained by the variables alone. The Adjusted  $R^2 = .14$  in Table 15 illustrates a reduction from the unadjusted  $R^2$  value of .16, meaning the model may not generalize well.

In terms of the predictors, gender significantly predicted an effect in PSQ\_ORG\_MEAN, ( $b = .75, \beta = .27, t = 3.19, 95\% \text{ C.I. } (.283, 1.207), p = .002$ ), meaning gender is a predictor of level of organizational stress. The predictor variable of have you had stress management training did not significantly predict an effect ( $b = -0.05, \beta = -.22, t = -0.02, 95\% \text{ C.I. } (-.477, .384), p = .832$ ), meaning stress management training is not a predictor of level of organizational stress. BC\_Maladaptive, utilized maladaptive coping mechanisms, did significantly predict an effect ( $b = 0.76, \beta = .26, t = 2.86, 95\% \text{ C.I. } (.233, 1.277), p = .005$ ), meaning maladaptive coping is a predictor of level of organizational stress. The last predictor, BC\_Adaptive, utilized adaptive coping mechanisms, did not significantly predict an effect, ( $b = -0.05, \beta = -.03, t = -0.27, 95\% \text{ C.I. } (-.382, 1.075), p = .291$ ), meaning BC\_Adaptive is not a predictor of level of

organizational stress. The confidence interval associated with the regression analysis does not contain 0, which means the null hypothesis, there will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org, can be rejected. The results of the multiple linear regression are presented in Table 16.

Table 14

*Regression Analysis: ANOVA<sup>a</sup>*

Model 1	SS	df	MS	F	Sig
Regression	31.223	4	7.806	6.238	.000 <sup>b</sup>
Residual	160.180	128	1.251		
Total	191.403	132			

*Note:* <sup>a</sup>Dependent Variable: PSQ\_ORG\_MEAN. <sup>b</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive

Table 15

*Regression Analysis: Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.404 <sup>a</sup>	.163	.137	1.119

*Note:* <sup>a</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive <sup>b</sup>Dependent Variable: PSQ\_ORG\_MEAN

Table 16

*Multiple Linear Regression Model of Predictors of PSQ\_ORG\_MEAN*

Model	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	1.41	.493		2.85	.005
Gender	0.75	0.23	.27	3.19	.002*
Stress Training	-0.05	0.22	-.02	-0.21	.832
BC_Maladaptive	0.76	0.26	.15	2.86	.005*
BC_Adaptive	-0.05	-0.03	.06	-0.27	.789

Note:  $p < .05^*$

**Hypothesis 4**

It was hypothesized there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org. To test the hypothesis, a multiple linear regression analysis was completed. The variables of gender, stress management training, BC\_Maladaptive scores and BC\_Adaptive scores were used as independent variables and a combined mean scoring on the PSQ-OP and PSQ COMBINED was selected as a dependent variable. A multiple linear regression analysis was conducted to test if the predictors significantly predict an effect on police officers' combined levels of organizational and operational stress.

To approach the research question of what is the effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org, a multiple linear regression analysis was conducted to evaluate the predictors of gender, use of maladaptive and adaptive coping mechanisms,

and stress management training on combined levels of organizational and operational stress. The results of the ANOVA provided a significant fit of data (Table 17),  $F(4, 128) = 5.94, p < .001$ . The  $R^2$  value of 0.16 associated with this regression model suggests that the model accounts for 16% of the variation in level of stress, which means that 84% of the variation in level of organizational stress cannot be explained by the variables alone. The Adjusted  $R^2 = .13$  in Table 18 illustrates a reduction from the unadjusted  $R^2$  value of .16, meaning the model may not generalize well.

In terms of the predictors, gender significantly predicted an effect on PSQ-OP and PSQ COMBINED, ( $b = .68, \beta = .28, t = 3.21, 95\% \text{ C.I. } (.262, 1.104), p = .002$ ), meaning gender is a predictor of an individual's combined level of operational and organizational stress. The predictor variable of have you had stress management training did not significantly predict an effect, ( $b = -0.03, \beta = -.01, t = -0.16, 95\% \text{ C.I. } (-.425, .360), p = .870$ ), meaning stress management training is not a predictor for combined level of organizational and operational stress. BC\_Maladaptive, utilized maladaptive coping mechanisms, did significantly predict an effect, ( $b = 0.59, \beta = .22, t = 2.45, 95\% \text{ C.I. } (.114, 1.065), p = .015$ ), meaning maladaptive coping is a predictor of an individual's combined level of operational and organizational stress. The last predictor, BC\_Adaptive, did not significantly predict an effect, ( $b = 0.02, \beta = .02, t = 0.15, 95\% \text{ C.I. } (-.283, .331), p = .878$ ), meaning BC\_Adaptive is not a predictor of an individual's combined level of operational and organizational stress. The confidence interval associated with the regression analysis does not contain 0, which means the null hypothesis, there will not be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress

management training on police officers' combined levels of organizational and operational stress as measured by the Brief COPE, PSQ-Op, and PSQ-Org, can be rejected. The results of the multiple linear regression are presented in Table 19.

Table 17

*Regression Analysis: ANOVA<sup>a</sup>*

Model 1	SS	df	MS	F	Sig
Regression	24.675	4	6.169	5.939	.000 <sup>b</sup>
Residual	132.958	128	1.039		
Total	157.633	132			

*Note:* <sup>a</sup>Dependent Variable: PSQ-OP and ORG COMBINED. <sup>b</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive

Table 18

*Regression Analysis: Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.39 <sup>a</sup>	.157	.130	1.019

*Note:* <sup>a</sup>Predictors: Gender, Have you had Stress Management Training, BC\_Maladaptive, and BC\_Adaptive. <sup>b</sup>Dependent Variable: PSQ-OP and PSQ COMBINED

Table 19

*Multiple Linear Regression Model of Predictors of PSQ-OP and PSQ COMBINED*

Model	B	SE B	$\beta$	t	p
Constant	1.54	.449		3.43	.001
Gender	0.68	0.21	.27	3.21	.002*
Stress Training	-0.03	0.20	-.01	-0.16	.870
BC_Maladaptive	0.59	0.24	.22	2.45	.015*
BC_Adaptive	0.02	0.16	.02	0.15	.878

*Note:*  $p < .05^*$

### Summary

Police officers who have received stress management training,  $n = 48$ , demonstrated a higher mean score for use of adaptive coping mechanisms than compared to those officers who did not receive stress management training,  $n = 86$ . Therefore, stress management training significantly influences the use of adaptive coping mechanisms in this population. Moreover, based on the linear regression analyses gender did act as a predictor for an officer's individualized and combined level of operational and level of organizational stress. Lastly, concerning the individualized and combined levels of operational and organizational stress the use of maladaptive coping mechanisms served as a predictor, meaning use of maladaptive coping can influence combined levels of operational and organizational stress in the population. Lastly, the variables of stress management training and utilized adaptive coping mechanisms did not serve as a predictor for individualized or combined levels of organizational and operational stress in this population.

Chapter 5 includes an introduction, a discussion involving the interpretation of the research findings, a delineation of the limitations of the study, recommendations for further research, implications for social change, and a conclusion are presented.

## Chapter 5: Discussion

### **Introduction**

Within the police culture, stress that is related to operational and organizational stressors influences the longevity and physical and mental wellbeing of police officers (Violanti et al., 2013). This type of environment may decrease the life expectancy of police officers. Violanti et al. (2013) posited that the potential for loss of life in members of the police culture is 21 times larger than individual who are not employed in the profession. Moreover, stressors that are inherited from organizational and occupational stress may predicate police officers to not only develop certain dysfunctional habits and attitudes, but also use maladaptive coping skills that can deteriorate their long-term mental and physical wellbeing (Brandl & Smith, 2013). Brandl and Smith (2013) explained that police officers, when compared to the general population, are two times as likely of succumbing to alcohol-related liver disease and lung cancer due to extended use of maladaptive coping skills in response to the demands of the job. Due to the stressful atmosphere of the law enforcement profession, there is a need to understand the relationship between stress management training, gender, level of stress, and used coping skills so assistance in managing stress and developing adaptive coping strategies can become commonplace (Steinkopf et al., 2015).

The purpose of this research study was to evaluate the relationship between the variables of gender, stress management training, used maladaptive and adaptive coping mechanisms, and level of operational stress, level of organizational stress, and combined levels of operational and organizational stress among police officers. Previous

researchers have discovered that officers are subjected to operational stressors associated with exposure to critical incidents and unpredictable citizen encounters as well as organizational stressors related to a lack of organizational or peer support (Brodie & Eppler, 2012; Noblet et al., 2009). This type of exposure can negate the use of adaptive coping mechanisms in officers who fail to adequately process stress or lack accessibility to adequate stress management intervention or training (Ma et al., 2015; Powell et al., 2014). This study was designed to investigate gaps in existing research involving the effectiveness of stress management training using quantitative methods to examine possible group (e.g., gender) differences, as well as to examine the effectiveness of stress management on levels of operational and organizational stress and the use of adaptive and maladaptive coping mechanisms.

I found that police officers who had received stress management training demonstrated a higher mean use of adaptive coping mechanisms compared to officers who did not attend stress management training. Additionally, within this population, gender and use of maladaptive coping mechanisms influenced the officers' individualized and combined levels of operational and organizational stress. However, the variables of stress management training and use of adaptive coping mechanisms did not predict an effect on police officers' individualized or combined levels of operational and organizational stress in the sample population.

The subsequent sections of Chapter 5 include an interpretation of the research study's findings, an explanation of limitations associated with the study,

recommendations of future research, and a delineation for the potential for social change. The chapter concludes with a conclusion.

### **Interpretation of Findings**

In this study, I focused on examining stress, gender differences, used coping mechanisms, and effectiveness of stress management training among police officers. The study was developed to gain an understanding of the effectiveness of stress management training, as well as how stress management training, gender, and used maladaptive and adaptive coping mechanisms are related to levels of organizational and operational stress among police officers. de Terte et al. (2014) explained that the consistent introduction to an array of operational and organizational stressors interrelated with a lack of intervention allows vulnerable police officers to suffer adverse mental and physical effects that could be deterred with proper intervention and training. Based on this premise, I developed a research study on the effect of stress management training, gender, and use of maladaptive and adaptive coping mechanisms on police officers' individualized and combined levels of organizational and operational stress. The effectiveness of stress management training was evaluated by examining the effect of operational level of stress and organizational level of stress and the use of maladaptive and adaptive coping mechanisms among police officers who had received stress management training and officers who had not received stress management training.

Previous research was lacking on the effectiveness of stress management training among police officers and how gender, stress management training, and used coping mechanisms influence the level of stress in this population. Therefore, a novel set of

research questions and hypotheses were created. The research questions and associated hypotheses successfully predicated the data and analysis process. Data were collected based on voluntary participation. Participation eligibility included voluntary commitment, willingness to provide informed consent, and being actively employed as a sworn officer assigned to patrol and correctional functions. Exclusion criteria included any individuals who had been employed with or under the direct supervision of me, nonsworn personnel, individuals who were unable to provide informed consent, and participants who failed to adhere to the research study's intent and scope of confidentiality and anonymity. Per the chosen inclusionary and exclusionary factors of participation, it was my goal to solicit unbiased participants who had performed police functions that exposed them to operational or organizational stressors and have and have not received stress management training. Data were collected weekly from law enforcement agencies who employed officers who met the criteria for participation. Therefore, it was reasonable for me to conclude that participants met the criteria for inclusion in the study. However, because the research was based on volunteerism and anonymity, these facets prohibited the verification of credentials.

The theories selected to provide a theoretical guide for this study were Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) theory of cognitive appraisal. Due to the fast-paced and militaristic nature of the law enforcement profession, police officers are faced with operational and organizational stressors that produce negative stress. Based on the exposure, officers are forced to make decisions within seconds leaving little time to identify and manage stress, emotionally decompress,

or rejuvenate their level of psychological resilience. Moreover, Per O'Brien and Wilson (2011) stated that impetuous interactions can occur within the police subculture if officers rely on the appraisal of environmental factors, instinctive emotions, and learned experience to formulate their decisions.

Stress originates because of a response to a stressor or an environmental condition, and the development of stress occurs as a result of biological, cognitive, and behavioral/learned determinants (Schneiderman et al., 2005). Therefore, within the police subculture, the management of stress and development of adaptive coping strategies could be influenced by the observations of others or because of environmental factors negating the maintenance or restoration of an individual's psychological resilience (de Terte et al., 2014). Conversely, regarding the theory of cognitive appraisal it is suggested cognition and appraisal influence perceived coping ability, appraisal of perceived distress, and level of self-efficacy. Baqutayan (2015) claimed that coping skills can be identified as cognitive responses that are created due to learned behavior and appraisal. With this stated, Bandura's (1971, 1977) social learning theory and Lazarus and Folkman (1984) theory of cognitive appraisal were used to reveal the role observation, environmental factors, appraisal, and cognitive processing played in the development of adaptive coping strategies and management of stress among male and female law enforcement officers.

### **Hypothesis 1**

The first hypothesis stated there will be an effect in the levels of operational and organizational stress and use of maladaptive and adaptive coping mechanisms among

police officers who have received stress management training compared to officers who have not received stress management training as measured by the Brief COPE, PSQ-Op, and PSQ-Org. The results of the independent samples t test indicated there was a significant difference in the use of adaptive coping skills between officers who received stress management training compared to officers who did not receive stress management training. Specifically, the results suggest officers who received stress management training utilized adaptive coping mechanisms more so than officers who did not receive stress management training. Therefore, the results demonstrate the effectiveness of stress management training as it relates to empowering the use of adaptive coping mechanisms such as acceptance, obtaining emotional and religious support, practicing positive reframing, and utilizing humor, planning, and acceptance in male and female officers. Importantly, these factors can improve psychological resilience and wellbeing. Regarding law enforcement training, the results endorse the need for law enforcement agencies to provide stress management training geared to enable adaptive coping strategies to all officers so psychological resilience, interpersonal functioning, and encounters with public safety can be positively maintained. Moreover, results suggest the prescription of stress management training is effective in deterring the use of maladaptive coping skills associated with an increase in low arousal negative emotions and dysfunctional psychological and somatic symptomology associated with the negative effects of operational and organizational stressors (Basinska et al., 2014).

In Chapter 2 it was reported that within the law enforcement profession failing to provide or accept stress management training serves as an injustice that can lead to an

excessive amount of workplace related and personal struggles. Furthermore, the chapter depicted the role of appraisal and how utilizing ineffective learned behavior and the observations of others can lead individuals to fail to acknowledge the need of intervention. Moreover, Bandura's (1971, 1977) social learning theory posits behavior is learned through observational learning and modeling. Stress management training that introduces adaptive coping mechanisms and their benefits of their use can introduce police officers to modeled behavior that demonstrates the effective use of appraisal useful in ensuring positive wellbeing and psychological resilience (de Terte et al., 2014). The results of this research study are consistent with results provided by Tucker (2015) who maintains the usefulness of stress management training has been identified to positively influence officers to utilize stress intervention techniques that will promote positive wellbeing. In addition, the research of Garner (2008) and Steinkopf et al. (2015) suggested the receipt of stress management training increases one's efficacy in maintaining a healthy level of stress by contributing to the use of adaptive coping mechanisms that reinstate psychological resilience.

## **Hypothesis 2**

The second hypothesis stated there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of operational stress as measured by the Brief COPE and PSQ-Op. The results indicate gender did influence level of operational stress in police officers. However, stress management training and use of maladaptive and adaptive coping mechanism did not influence level of operational stress in officers. Lazarus and Folkman (1984)

identified males and females consider and appraise stressors differently. For example, women possess the tendency to consider stressors as more threatening than their male counterparts (Lazarus & Folkman, 1984). Specifically, within this study officers (males and females) did appraise operational related stressors (i.e., exposure to traumatic events, assignment to shift work, demands of overtime, personal health, limitations to family and social life, and stigma associated with citizen encounters) in a manner that influenced their level of operational stress, meaning operational aspects of their job influenced their overall wellbeing. Moreover, receiving or not receiving stress management training and the use of maladaptive or adaptive coping skills did not appear to influence level of stress in the population. Finally, the results demonstrate the importance for law enforcement agencies, when developing and implementing training, to acknowledge gender differences and how these differences relate to the appraisal of an officer's work environment and identified operational stressors. Exploring the potential impact of gender when developing training may provide officers with a well-rounded array of skills useful in decreasing the level of operational stress identified and endured by officers. This knowledge can prove useful in increasing officer morale and mental and physical health, decrease the development of stigma associated with citizen encounters, and provide successful coping strategies useful when exposure to a traumatic event occurs.

In Chapter 2, the research of Oweke et al. (2014), He et al. (2002), Habersaat et al. (2015), Tucker (2015), and Garner (2008) revealed gender influenced level of stress and causes differences in the utilization of coping skills, use of coping techniques were influenced by operational stressors, and stress intervention remained underutilized within

the law enforcement profession resulting in higher levels of stress and continued use of maladaptive coping skills. Moreover, the findings of this study were consistent with the results in Chapter 2 and suggest the need for police organizations to identify the role gender plays in predicting level of operational stress. Essentially, organizations, when constructing stress management training interventions, should consider including techniques that encompass appraisal of stressors based on intergrading male and female perspectives of appraisal and coping. In addition, the findings support Lazarus and Folkman's (1984) theory of cognitive appraisal's premise that gender, being male or female, allows men and women to react and consider stressors differently. Lastly, regarding the aspects of Bandura's (1971, 1977) social learning theory, coping behaviors are vicariously, explicitly, and implicitly demonstrated through observing others. Therefore, it can be concluded based on the findings that police officers may choose to mimic behaviors or select coping mechanisms that are associated with the behavioral expectations influenced by their peers (Karaffa & Koch, 2016).

### **Hypothesis 3**

The third hypothesis stated there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' level of organizational stress as measured by the Brief COPE and PSQ-Org. The results indicated that gender and use of maladaptive coping mechanism did influence level of organizational stress in police officers. However, stress management training and use of adaptive coping mechanism did not influence level of organizational stress in officers. Specifically, within this study officers (males and females) appraised organizational

related stressors (i.e., exposure to bureaucracy of leadership and supervision, lack of training and resources, favoritism, dealing with co-workers, inconsistency in leadership, accountability, and other facets of organizational demands associated to the profession) in a manner that influenced their level of stress and wellbeing. Surprisingly, receiving or not receiving stress management training and use of adaptive coping skills did not influence level of organizational stress in the population. However, the use of maladaptive coping mechanisms (i.e., denial, self-distraction and blame, substance use, venting, and acts of behavioral disengagement) were indicated by officers as factors that influenced their level of organizational stress. Therefore, it can be concluded gender, being male or female, and exposure to organizational stress may predicate officers to not only develop certain dysfunctional habits and attitudes, but also utilize maladaptive coping skills that can deteriorate their long-term mental and physical wellbeing. Finally, the results demonstrate the importance for law enforcement agencies, when developing and implementing training, to acknowledge how gender and use of maladaptive coping influence the appraisal of organizational stressors associated with the work environment and how the stressors relate to level of organizational stress in officers. Exploring the potential impact of gender and use of maladaptive coping skills when developing and implementing training may provide officers with a well-rounded skillset useful in decreasing their level of organizational stress and use of maladaptive coping skills. In addition, examining these factors will allow greater flexibility in accommodating the psychological needs of officers. Lastly, understanding gender and the effects of maladaptive coping skills can prove useful in increasing morale and personal health,

while decreasing the development of stigma associated with citizen encounters and provide successful coping strategies useful when exposure to a traumatic event occurs.

Lastly, the results of this research study are consistent with the results in Chapter 2. Specifically, the results of He et al. (2002) stated female officers appraised stress differently and used more constructive (i.e., positive) coping skills than male officers. In addition, the research of Steinkopf et al. (2015) solidified the results of this research due to concluding that a lack of psychological intervention services prohibits the maintenance of positive emotions which decrease stress and increase psychological resilience and wellbeing. Moreover, the research of Powell et al. (2014) and Ma et al. (2015) provided consistency in the results by maintaining stressors in the police profession can influence level of stress by negating the use of adaptive coping mechanisms in officers who fail to process stress or lack stress management intervention. Finally, Lazarus and Folkman's (1984) cognitive appraisal theory continues to provide a solid theoretical basis for the results in this study due to providing explanation on why gender predicates an individual's process of appraisal and coping. Moreover, Bandura's (1971, 1977) social learning theory provides clarity on the importance of modeling, observation, and vicarious learning has on selecting coping mechanisms. The result for hypothesis 3 appears grounded in both theories.

#### **Hypothesis 4**

The fourth hypothesis stated there will be an effect of gender, use of maladaptive and adaptive coping mechanisms, and stress management training in police officers' combined levels of organizational and operational stress as measured by the Brief COPE,

PSQ-Op, and PSQ-Org. The results indicate gender and use of maladaptive coping mechanism does influence combined levels of operational and organizational stress in police officers. However, stress management training and use of adaptive coping mechanism did not influence combined levels of operational and organizational stress in officers. Comparable to the results of hypothesis 3, the results for hypothesis 4 suggest police officers appraised stressors related to combined levels of organizational and operational stress in a manner that influenced their level of stress and wellbeing. Moreover, receiving or not receiving stress management training and use of adaptive coping skills did not influence combined levels of operational and organizational stress in the population. However and similar to the results of hypothesis 3, the use of maladaptive coping mechanisms were indicated by officers as factors that influenced their level of stress. Therefore, it can be concluded gender, being male or female, and exposure to combined operational and organizational stressors may predicate officers to develop dysfunctional coping habits. Moreover, the use of maladaptive coping skills can deteriorate an individual's long-term mental and physical wellbeing. Lastly, when considering the element of police training the results demonstrate the importance for law enforcement agencies to acknowledge how gender and use of maladaptive coping influence the appraisal of operational and organizational stressors associated with the work environment as they relate to combined levels of operational and organizational stress in officers. By exploring the potential impact of gender and use of maladaptive coping skills when developing and implementing training, trainers will be equipped with flexibility in accommodating the psychological needs of officers and officers can be

provided with a well-rounded skillset useful in decreasing adverse effects associated with combined levels of operational and organizational stress empowered by the use of maladaptive coping skills.

Finally, the results of this research study are consistent with results of Oweke et al. (2014), He et al. (2002), Habersaat et al. (2015), Tucker (2015), Garner (2008), Steinkopf et al. (2015), Powell et al. (2014) and Ma et al. (2015) who determined gender influences level of stress and causes difference in utilization of coping skills, female officers use more constructive (i.e., positive) coping skills than male officers, the use of coping techniques are influenced by operational and organizational stressors, stress intervention remains underutilized within the law enforcement profession resulting in higher levels of stress and continued use of maladaptive coping skills, and a lack of psychological intervention services prohibits the maintenance of positive emotions that are used to decrease stress and increase psychological resilience and wellbeing. Moreover, the results align with Lazarus and Folkman (1984) cognitive appraisal theory and Bandura's (1971, 1977) social learning theory because both theories have identified males and females consider and appraise stressors differently and choice of coping styles occur in part due to the effect modeling, observation, and vicarious learning has on learned behavior.

### **Limitations of the Study**

This research study was limited to examining the variables of gender, stress management training, level of operational stress, level of organizational stress, combined levels of operational and organizational stress, and utilized maladaptive and adaptive

copied among four law enforcement agencies in Northeast Georgia. Therefore, police officers in other geographical regions of the United States may not mirror responses provided by the participants. Secondly, the number of participants were  $N = 134$ , which could be considered small since the recommended G\*power analysis calculated a recommended sample size of 129. Additionally, due to the size of the sample, it compromises external validity. Thirdly, based on the design of the research generalizability beyond the research study's sample was minimized due to using a convenience sample of participants, meaning results may differ based on the chosen sampling method. Lastly, females were underrepresented,  $n = 35$ , which minimizes the ability to generalize to other females in the target population.

Fourth, research had to rely on the honesty of the participants to gain factual responses. Therefore, limitations regarding data collection may have involved under or over reporting results, meaning response rates may limit the ability to generalize results due to the participant's under-reporting or over-reporting results. Unfortunately, if individuals are less than truthful and base results on their need to satisfy research participation requirements it will cause data to become skewed. An additional limitation involves response bias. Response bias involves denying behavior due to the degree of a threat posed by questions included in surveys. It is unknown if this occurred. Moreover, self-reporting bias was another limitation addressed in this research study. Both self-reporting bias and response bias were addressed due to collecting the data anonymously and by providing the participants with clear instructions that included an explanation on

how the participant's honesty was invaluable to the research study. Given the limitations, findings should not be generalized to the larger population of police officers.

Lastly, construct validity and reliability were labeled as limitations in the study. The instruments used to collect data were the Brief COPE, PSQ-Op, and PSQ-Org. The Brief COPE's alpha coefficient is recorded as 0.86, respectively, meaning the instrument possesses high levels of construct validity. The PSQ-Op and PSQ-Org are found to be highly reliable with alphas  $> .90$ , meaning both instruments possess high levels of construct validity. Based on comparing the measurements' alpha coefficients to Nunnally (1978) acceptable criterion for an alpha coefficient, .70 and above, it can be concluded that all instruments successfully measured projected constructs.

### **Recommendations**

There is little research on the effectiveness of stress management training among police officers. In addition, research is lacking on how gender differences and utilized maladaptive and adaptive coping mechanisms influence the level of operational and occupational stress in this population. Therefore, to examine these gaps this research study examined the relationship gender, use of maladaptive and adaptive coping mechanisms, and stress management training on police officers' combined and individualized levels of organizational and operational stress. In addition, a between groups comparison was conducted to examine the effectiveness of stress management training on officers' operational and organizational level of stress and use of maladaptive and adaptive coping mechanisms. The results of the research were used to orchestrate recommendations that are presented in the following section.

### **Recommendations for Future Research**

Further research into the present study is recommended to expand the understanding of the how effectiveness of stress management training, gender differences and utilized maladaptive and adaptive coping mechanisms influence the level of operational and occupational stress among a larger sample of police officers due to stigma associated with the acknowledgement and reporting of stress among police officers. Specifically, within the current study there may have been issues with under reporting due to preconceived notions or fear of stigma; thus, prompting a recommendation for the examination of stigma. A second recommendation involves conducting further research that is geared to examine if gender differences influence the frequency of a stressor and the interaction gender differences, rating a stressor, and frequency have on level of stress among police officers.

Thirdly, it is recommended to conduct a longitudinal research study. Longitudinal research could benefit this population due to the potential results enriching the understanding of how changes in coping and stress management influence the level of stress in the population over a period of time. Moreover, results could provide the identification of additional sources of stress and different responses to stress, which could be useful in the development of intervention practices that meet the mental needs of officer by presenting sound psychological outcomes useful in enriching long-term psychological resilience. Fourthly, within the law enforcement profession, being subjected to stressors interrelated with how an individual appraises and subsequently copes with stress can produce a number adverse behaviors, i.e., alcohol and substance

abuse, transference of stress to family, suicide, and death (Bowler et al., 2013; Chopko et al., 2013; Miller, 2007; Stanley et al. 2016). In addition, comorbidity, the extent to which two conditions occur simultaneously in a population, heightens the burden of adverse effects associated with mental and physical effects of stress (Bowler et al., 2016).

Therefore, it is suggested to conduct further research that examines the significance of comorbidity in police officers, as well as the impact confounders (i.e., alcohol use, aggression and anger, substance abuse, suicidal thoughts, depression, burnout, fatigue, and etcetera) have on the level of stress in the population.

Lastly, it is recommended to conduct qualitative phenomenological research geared toward examining the direct and lived experiences of police officers. This approach appears amenable in explaining how stress management training, gender, and utilized maladaptive and adaptive coping mechanisms influence daily struggles with operational and organizational stress among police officers. Importantly, the development of themes that originated from the officers' lived experiences could provide insight on the effectiveness of stress management training, role of gender, and use of coping direct effect stress in their daily lives.

### **Recommendations for Practice**

As indicated by the results of this research study, within members of the law enforcement community the receipt of stress management training impacted the use of adaptive coping mechanisms. In addition, gender and use of maladaptive coping were discovered to be significant predictors of individualized and combined level of operational and organizational stress. Therefore, it is important for members of the law

enforcement community and members of their command staff to identify the usefulness of stress management training and how the training can assist in the development of adaptive coping mechanisms beneficial in decreasing stress. Moreover, it is recommended for police organizations to construct stress management training that acknowledges gender-based differences pertaining to how males and females identify stressors and use cognitive assessment to choose coping strategies that may be considered maladaptive and prolong or promote negative stress. Lastly, it is recommended for police officers and their organizations to dismiss any stigma associated with seeking assistance by acknowledging the long-term ill effects of stress that are prevalent when subjected to traumatic and stressful events.

In closing, it is recommended for administrative law enforcement personnel, i.e., sheriffs, police chiefs, and in-line supervisors, to establish an attentive relationship with officers to recognize the warning signs of stress. An important part of intervention is identification (de Terte et al., 2014; Violanti et al., 2013). Identifying the use of maladaptive coping strategies and discovering gender differences within their organizations can promote organizational support. Therefore, the results of this research study can be used to encourage organizational support while endorsing the development of preventive services that can be used to identify at risk officers.

## **Implications**

### **Positive Social Change Implications**

Within any group of people, change occurs when attitudes are positively altered so the acceptance of change becomes warranted. Within the police subculture, a public

acknowledgement of stress is many times viewed as a weakness causing individuals to negate acknowledging the signs and symptoms of negative stress (Corrigan et al., 2014; Karaffa & Koch, 2016). The research of Corrigan et al. (2014) discovered the power of stigma in the police subculture. Specifically, stigma associated with seeking or accepting assistance associated with stress prevention greatly predicated an officer's willingness to cope with and receive mental health services. Therefore, allowing police officers to become silent victims of stress.

This research study provides the means to enact positive social change by providing ways for policy makers, command staff members, police officers, and society to recognize the importance stress management training, gender, use of maladaptive and adaptive coping mechanisms have on a police officer's level of operational and occupational stress. Understanding these facets can promote acceptance, open lines of communication, and enhance longevity in the lives of police officers. Additionally, the results can add to existing literature involving levels of operational and organizational stress in police officers so interventions can be introduced that can assist the population in acknowledging the benefit of stress management training and use of adaptive coping skills have on an officer's level of stress and overall wellbeing. Moreover, the research can endorse positive social change within the police subculture by demonstrating the need for law enforcement administrators and policy makers to acknowledge the role gender plays in operational and organizational stress management and the importance of implementing stress management training tailored to meet gender-based needs as a component of yearly in-service training. By doing so, police administrators and policy

makers can become a proactive part in assisting in the prevention of chronic stress by providing officers with necessary training useful in promoting their ability to mediate emotions, strengthen interpersonal relations, and empower their ability to exert control when faced with unpredictable and distressing acts of human behavior. Essentially, employing preventative and proactive steps to address stress within the organization can address high arousal emotions and stressors that are associated with the use of maladaptive coping mechanisms and operational and organization stressors can be effectively identified and addressed so an officer's mental and physical wellbeing can flourish. After all, when officers feel emotionally stable and psychological resilience is restored, interpersonal relations between staff and the community can flourish. Lastly, when officers fail to acknowledge the effects of stress or use maladaptive coping skills, the strain endured can be transferred to family members and society once officers engage in overly aggressive policing tactics that result in excessive use of force during citizen encounters or subject family members to domestic disputes that are predicated by stress and strain of the workplace (Karaffa et al., 2015; Miller, 2007). Therefore, the overall finding of this research will improve human and social conditions by acting as a catalyst useful in changing society's perceptions of law enforcement stress by increasing understanding of how operational and organizational stressors are different as compared to stressors identified in non-law enforcement professions. This difference occurs in part due to the militaristic nature of the profession, under-utilization of stress management training, and use of maladaptive coping techniques. These factors pose a likelihood for operational and organizational stressors to create health risks that jeopardize the mental

and physical stability of officers as well as continue to raise the rate of suicide in this profession (Bishopp & Boots, 2014; O'Hara, et al., 2013).

### **Methodological Implications**

The research study utilized a quantitative correlational design. It was the primary aim of the study to assess the relationship between the variables of gender, levels of operational and organizational stress, and utilized maladaptive and adaptive coping mechanisms among police officers who have received stress management training and officers who have not received stress management training. The sample population was  $N = 134$ , which can be viewed as small. However, the design choice was appropriate and allowed me to statistically explore the study's research questions by endorsing the choice of statistical analyses that were successful in examining the mean score and statistical significance between variables. The results of this research suggest independent samples  $t$  tests and multiple linear regression analyses were suitable statistical tests for assessing relationships between the identified variables in this study.

### **Theoretical Implications**

Bandura's (1971, 1977) social learning theory and Lazarus and Folkman's (1984) theory of cognitive appraisal guided the research study's design and analysis. Within law enforcement, police officers are dependent on learned behavior, observations of others, and appraisal when completing assigned duties. When occupational and operational stressors interact with an officer's prescribed duty, the management of stress and development of adaptive coping strategies could be influenced by the observations of others or because of environmental factors negating the maintenance or restoration of an

individual's psychological resilience (de Terte et al., 2014). Conversely, Lazarus and Folkman conclude appraisal can influence perceived coping ability, appraisal of perceived distress, and level of self-efficacy. Baqutayan (2015) suggests coping skills can be identified as cognitive responses that are created due to learned behavior and appraisal. In this research study, police officers who received stress management training exhibited a higher use of adaptive coping skills than police officers who did not receive stress management training. Gender and use of maladaptive coping mechanisms both predicted levels of stress among officers. Therefore, the results from this research study imply stress management training is useful in endorsing the use of adaptive coping skills and gender and use of maladaptive coping skills are indicators that are useful in predicting level of stress in police officers.

### **Conclusions**

Based on the militaristic nature of the law enforcement profession, complexity of assigned duties, and various face-to-face encounters that evoke unpredictable and distressing acts of human behavior, officers are often subjected to stressors that enable operational and organizational stress to flourish (Powell et al., 2014; Ma et al., 2015). Violanti et al. (2013) posit stress related to operational and organizational stressors is a primary factor that influences the longevity and physical and mental wellbeing of police officers. Moreover, the research of Violanti et al. discovered the potential for loss of life in police officers is 21 times larger than members of society that are not affiliated with the profession. Importantly, past research has acknowledged that protecting the psychological wellbeing of officers is sometimes over looked. Therefore, the

identification of stress and availability of interventions are paramount to ensure the quality and longevity of life in members of the law enforcement community.

Existing literature has focused on stress of within the law enforcement population, but has failed to extensively account for the role stress management training, gender differences, and use of maladaptive and adaptive coping mechanisms bestow on the level of operational and organizational stress in this distinct population (Basinska, et al., 2014; Daderman & De Colli, 2014; de Terte et al., 2014; Gould et al., 2013; Morash et al., 2006; O'Hara et al., 2013; Patterson et al., 2014). Therefore, the purpose of this research study was to evaluate the relationship between the variables of gender, stress management training, utilized maladaptive and adaptive coping mechanisms, and individualized and combined level of operational stress and organizational stress among police officers. The research questions and their associated hypotheses provided understanding on the importance of acknowledging use of coping mechanisms, level of stress, gender, and effectiveness of stress management training in this population. Data were collected utilizing valid and reliable measurements that yielded scaled responses useful in providing statistical inferences.

The results of this research cautions police officers and agencies to identify stressors early, promote problem recognition, and endorse the acceptance of intervention, all of which are crucial steps toward erecting a sense of support that will encourage positive wellbeing. Findings indicate officers who have received stress management demonstrated a higher mean score for use of adaptive coping mechanisms than compared to officers who did not receive stress management. Essentially, it can be concluded that

stress management training was useful in promoting adaptive coping skills. Gender and utilized maladaptive coping mechanisms were identified as predictors for individualized and combined levels of operational and organizational stress. Moreover, the results of this research have increased existing knowledge and improved awareness on the value of stress management training, the role of gender, and use of maladaptive and adaptive coping mechanisms have on the levels of operational and occupational stress among police officers. It is hoped this study will lead to policy changes regarding training and additional research that will further increase knowledge useful in maintaining the emotional and psychological wellbeing of police officers.

## References

- Anshel, M. H., & Brinthaupt, T. M. (2014). An exploratory study on the effect of an approach-avoidant coping program on perceived stress and physical energy among police officers. *Psychology, 5*(1), 676-687. doi:10.4236/psych.2014.57079
- Ballenger, J. F., Best, S. R., Metzler, T. J., Wasserman, D. A., Mohr, D. C., Liberman, A., . . . Marmar, C. R. (2010). Patterns and predictors of alcohol use in male and female urban police officers. *The American Journal on Addictions, 20*(1), 21-29. doi:10.1111/j.1521-0391.2010.00092.x
- Bandura, A. (1962). Social learning through imitation. In M. R. Jones (Ed.), *Nebraska symposium on motivation*. Lincoln, NB: University of Nebraska Press.
- Bandura, A. (1968). A social learning interpretation of psychological dysfunctions. In P. London & D. L. Rosenhan (Eds.), *Foundations of abnormal psychology*. New York, NY: Holt, Rinehart & Winston.
- Bandura, A. (1971). *Social learning theory*. New York, NY: General Learning Corporation.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Baqutayan, S. S. (2015). Stress and coping mechanisms: A historical overview. *Mediterranean Journal of Social Sciences, 6*(2), 479-488. doi:10.5901/mjss.2015.v6n2s1p479
- Barrett, C. L., Bergman, M. E., & Thompson, R. J. (2014). Women in federal law

enforcement: The role of gender role orientations and sexual orientation in mentoring. *Sex Roles*, 71(1), 21-32. doi:10.1007/s11199-014-0388-2

Basińska, B. A., & Wiciak, I. (2012). Fatigue and professional burnout in police officers and firefighters. *Internal Security*, 4(2), 265-273. Retrieved from <http://internalsecurity.wspol.eu/free-sample/fatigue-and-professional-burnout-in-police-officers-and-firefighters>

Basinska, B. A., Wiciak, I., & Daderman, A. M. (2014). Fatigue and burnout in police officers: The mediating role of emotions. *Policing: An International Journal of Police Strategies & Management*, 37(3), 665-680. doi:10.1108/PIJPSM-10-2013-0105

Bishopp, S. A., & Boots, D. P. (2014). General strain theory, exposure to violence, and suicide ideation among police officers: A gendered approach. *Journal of Criminal Justice*, 42(6), 538-548. doi:10.1016/j.jcrimjus.2014.09.007

Bolger, N. (1990). Coping as a personality process: A prospective study. *Journal of Personality and Social Psychology*, 59(1), 525-537. Retrieved from <http://www.columbia.edu/~nb2229/docs/bolger-jpsp-1990.pdf>

Bowler, R. M., Harris, M., Li, J., Gocheva, V., Stellman, S. D., Wilson, K., Alper, H.,...Cone, J. E. (2012). Longitudinal mental health impact among police responders to the 9/11 terrorist attack. *American Journal of Industrial Medicine*, 55(1), 297-312. doi:10.1002/ajim.22000

Bowler, R. M., Kornblith, E. S., Li, J., Adams, S. W., Gocheva, V. V., Schwarzer, R., &

- Cone, J. E. (2016). Police officers who responded to 9/11: Comorbidity of PTSD, depression, and anxiety 10-11 years later. *American Journal of Industrial Medicine*, 59(1), 425-436. doi:10.1002/ajim.22588
- Brandl, S. G., & Smith, B. W. (2013). An empirical examination of retired police officers' length of retirement and age at death: A research note. *Police Quarterly*, 16(1), 113-123. doi:10.1177/1098611112465611
- Brodie, P. J., & Eppler, C. (2012). Exploration of perceived stressors, communication, and resilience in law-enforcement couples. *Journal of Family Psychotherapy*, 23(1), 20-41. doi:10.1080/08975353.212.654082
- Brown, S. G., & Daus, C. S. (2015). The influence of police officers' decision making style and anger control on responses to work scenarios. *Journal of Applied Research in Memory and Cognition*, 4(3), 294-302.  
doi:10.1016/j.jarmac.2015.04.001
- Carver, C. S. (1997a). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100. doi:10.1207/s15327558ijbm0401\_6
- Carver, C. S. (1997b). Brief COPE inventory. *PsycTests*, doi:10.1037/t04102-000
- Carver, C. S. (2007). *Brief COPE*. Retrieved from <http://www.psy.miami.edu/faculty/ccarver/scIbrCOPE.html>
- Centers for Disease Control and Prevention. (2015). Injury prevention & control: Data & statistics (WISQARSTM). Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>

- Chappell, A. T., & Piquero, A. R. (2004). Applying social learning theory to police misconduct. *Deviant Behavior*, 25(1), 89-108. doi:10.1080=01639620490251642
- Chen, R. H. (2015) Women in policing: In relation to female police officers' level of motivation toward the career, level of stress, and attitude of misconduct. *Sociological Imagination: Western's Undergraduate Sociology Student Journal*, 4(1), 1-18. Retrieved from <http://ir.lib.uwo.ca/si/vol4/iss1/3>
- Chopko, B. A., Palmieri, P. A., & Adams, R. E. (2013). Associations between police stress and alcohol use: Implications for practice. *Journal of Loss and Trauma*, 18(5), 482-497. doi:10.1080/15325024.2012.719340
- Colligan, T. W., & Higgins, E. M. (2006). Workplace stress. *Journal of Workplace Behavioral Health*, 21(2), 89-97. doi:10.1300/J490v21n02\_07
- Cooper, C., Katona, C., & Livingston, G. (2008). Validity and reliability of the Brief COPE in carers of people with dementia: The LASER-AD study. *The Journal of Nervous and Mental Disease*, 196(11), 838-843.  
doi:10.1097/NMD.0b013e31818b504c
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, 15(2), 37-70. doi:10.1177/1529100614531398
- Cozby, P. C. (2009). *Methods of behavioral research* (10th ed.). New York, NY: McGraw-Hill Publishing Company.
- Craun, S. W., Bourke, M. L., Bierie, D. M., & Williams, K. S. (2014). A longitudinal

- examination of secondary traumatic stress among law enforcement. *Victims & Offenders*, 9(3), 299-316. doi:10.1080/15564886.2013.848828
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Daderman, A. M., & De Colli, D. (2014). The significance of the sense of coherence for various coping resources in stress situations used by police officers in on-the-beat service. *International Journal of Occupational Medicine and Environmental Health*, 27(1), 3-15. doi:10.2478/s13382-014-0227-2
- Dai, M., Frank, J., & Sun, I. (2011). Procedural justice during police-citizen encounters: The effects of process-based policing on citizen compliance and demeanor. *Journal of Criminal Justice*, 39(1), 159-168. doi:10.1016/j.jcrimjus.2011.01.004
- de Terte, I., Stephens, C., & Huddleston, L. (2014). The development of a three part model of psychological resilience. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 30(5), 416-424. doi:10.1002/smi.2625
- Dillman, D. A., Eltinge, J. L., Groves, R. M., & Little, R. J. A. (2002). Survey response in design, data collection, and analysis. In D. A. Dillman, J. L. Eltinge, R. M. Groves, & R. J. A. Little (Eds.). *Survey nonresponse*. New York, NY: John Wiley and Sons, Inc.
- Durbin, J., & Watson, G. S. (1951). Testing for serial correlation in least squares regression, II. *Biometrika*, 38(1-2), 159-179. doi:10.1093/biomet/38.1-2.159
- Ellrich, K., & Baier, D. (2016). The influence of personality on violent victimization—A

study on police officers. *Psychology, Crime & Law*, 22(6), 538-560.

doi:10.1080/1068316X.2016.1168424

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(1), 175-191. Retrieved from <http://www.gpower.hhu.de/>

Fekedulegn, D., Burchfiel, C. M., Hartley, T. A., Andrew, M. E., Charles, L. E., Tinney-Zara, C. A., & Violanti, J. M. (2013). Shiftwork and sickness absence among police officers: The BCOPS study. *Chronobiology International*, 30(7), 930-941. doi:10.3109/07420528.2013.790043

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage Publications.

Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2014). *Research methods in the social sciences* (8th ed.). New York, NY: Worth Publishers.

Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York, NY: Worth Publishers.

Gächter, M., Savage, D. A., & Torgler, B. (2011). Gender variations of physiological and psychological strain amongst police officers. *Gender Issues*, 28(1), 66-93. doi:10.1007/s12147-011-9100-9

Garner, R. (2008). Police stress: Effects of criticism management training on health. *Applied Psychology in Criminal Justice*, 4(2), 244-259. Retrieved from [http://dev.cjcenter.org/\\_files/apcj/4\\_2\\_5%20Garner.pdf](http://dev.cjcenter.org/_files/apcj/4_2_5%20Garner.pdf)

- Gould, D. D., Watson, S. L., Price, S. R., & Valliant, P. M. (2013). The relationship between burnout and coping in adult and young offender center correctional officers: An exploratory investigation. *Psychological Services, 10*(1), 37-47. doi:10.1037/a0029655
- Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology, 28*(5), 776-786. Retrieved from <http://eric.ed.gov/?id=EJ453420>
- Habersaat, S. A., Geiger, A. M., Abdellaoui, S., & Wolf, J. M. (2015). Health in police officers: Role of risk factor clusters and police divisions. *Social Science & Medicine, 143*(1), 213-222. Retrieved from <http://dx.doi.org/10.1016/j.socscimed.2015.08.043>
- Hak, E., Verheil, T. J. M., Grobbee, D. E., Nichol, K. L., & Hoes, A. W. (2002). Confounding by indication in non-experimental evaluation of vaccine effectiveness: The example of prevention of influenza complications. *Journal of Epidemiology & Community Health, (56)*12, 951-955. doi:10.1136/jech.56.12.951
- Hakan Can, S., & Hendy, H. M. (2014). Police stressors, negative outcomes associated with them and coping mechanisms that may reduce these associations. *Police Journal, 87*(3), 167-177. doi:10.1350/pojo.2014.87.3.676
- Hartley, T. A., Burchfiel, C. M., Fekedulegn, D., Andrew, M. E., Knox, S. S., & Violanti, J. M. (2011). Associations between police officer stress and the metabolic syndrome. *International Journal of Emergency Mental Health, 13*(4), 243–256. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4734368/>

- Hartley, T. A., Violanti, J. M., Mnatsakanova, A., Andrew, M. E., & Burchfiel, C. M. (2013). Military experience and levels of stress and coping in police officers. *International Journal of Emergency Mental Health, 15*(4), 229-239. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4734366/#R8>
- Hassell, K. D., Archbold, C.A., & Stichman, A.J. (2011). Comparing the workplace experiences of male and female police officers: examining workplace problems, stress, job satisfactions and consideration of career change. *International Journal of Police Science & Management, 13*(1), 37-53. doi:10.1350/ijps.2011.13.217
- He, N., Zhao, J., & Archbold, C. A. (2002). Gender and police stress: the convergent and divergent impact of work environment, work-family conflict, and stress coping mechanisms of female and male police officers. *Policing: An International Journal of Police Strategies & Management, 25*(4), 687-708. doi:10.1108/1363951021045063
- Hogh, A., Hansen, A. M., Mikkelsen, E. G., & Persson, R. (2012). Exposure to negative acts at work, psychological stress reactions and physiological stress response. *Journal of Psychosomatic Research, 73*(1), 47-52. doi:10.1016/j.jpsychores.2012.04.004
- Irniza, R., Emilia, Z. A., Saliluddin, S. M., & Nizam Isha, A. S. (2014). A psychometric properties of the Malay-version police stress questionnaire. *Malaysian Journal of Medical Sciences, 21*(4), 42-50. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4418113/>
- Kaiseler, M., Queirós, C., Passos, F., & Sousa, P. (2014). Stress appraisal, coping, and

- work engagement among police recruits: An exploratory study. *Psychological Reports, 114*(2), 635-646. doi:10.2466/01.16.PR0.114k21w2
- Karaffa, K. M., & Koch, J. M. (2016). Stigma, pluralistic ignorance, and attitudes toward seeking mental health services among police officers. *Criminal Justice and Behavior, 43*(6), 759-777. doi:10.1177/0093854815613103
- Karaffa, K., Openshaw, L., Koch, J., Clark, H., Harr, C., & Stewart, C. (2015). Perceived impact of police work on marital relationships. *The Family Journal: Counseling for Couples and Families, 23*(2), 120-131. doi:10.1177/1066-480714564381
- Kaur, R., Chodagiri, V. K., & Reddi, N. K. (2013). A psychological study of stress, personality and coping in police personnel. *Indian Journal of Psychological Medicine, 35*(2), 141-147. doi:10.4103/0253-7176.116240
- Kirschman, E. (2007). *I love a cop: What police families need to know* (2nd ed.). New York, NY: Guilford Press.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist, 46*(8), 819-834. doi:10.1037/0003-066X.46.8.819
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publications.
- Leino, T., Eskelinen, K., Summala, H. & Virtanen, M. (2011). Work related violence, debriefing and increased alcohol consumption among police officers. *International Journal of Police Science and Management, 13*(2), 149-157. doi:10.1350/ijps.2011.12.2.229
- Levenson, R. J. (2007). Prevention of traumatic stress in law enforcement personnel: A

cursory look at the roles of peer support and critical incident stress management.

*The Forensic Examiner*, 16(3), 16-19. Retrieved from

[http://search.proquest.com.ezp.waldenulibrary.org/docview/](http://search.proquest.com.ezp.waldenulibrary.org/docview/207656366?accountid=14872)

[207656366?accountid=14872](http://search.proquest.com.ezp.waldenulibrary.org/docview/207656366?accountid=14872)

Ma, C. C., Andrew, M. E., Mnatsakanova, A., Hartley, T. A., Fekedulegn, D., McCanlies,

E., . . . Burchfiel, C. M. (2014). Police stress and posttraumatic stress disorder:

The role of coping. *Annals of Epidemiology*, 24(9), 687.

doi:10.1016/j.annepidem.2014.06.030

Ma, C. C., Andrew, M. E., Fekedulegn, D., Gu, J. K., Hartley, T. A., Charles, L. E., . . .

Burchfiel, C. M. (2015). Shift work and occupational stress in police officers.

*Safety and Health at Work*, 6(1), 25-29. doi:10.1016/j.shaw.2014.10.001

Maran, D. A., Varetto, A., Zedda, M., & Ieraci, V. (2015). Occupational stress, anxiety

and coping strategies in police officers. *Occupational Medicine*, 65(6), 466-473.

doi:10.1093/occmed/kqv060

Marchand, A., Nadeau, C., Beaulieu-Prévost, D., Boyer, R., & Martin, M. (2015).

Predictors of posttraumatic stress disorder among police officers: A prospective

study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(3), 212-

221. doi:10.1037/a0038780

Maslach, C. (2003). *Burnout: The cost of caring*. New York, NY: Major Books.

Maskaly, J., & Donner, C. M. (2015). A theoretical integration of social learning theory

with terror management theory: Towards an explanation of police shootings of unarmed suspects. *American Journal of Criminal Justice*, 40(2), 205-224.

doi:10.1007/s12103-015-9293-7

McCarty, W. P., & Skogan, W. G. (2012). Job-related burnout among civilian and sworn police personnel. *Police Quarterly*, 16(1), 66-84. doi:10.1177/1098611112457357

McCreary, D. R., & Thompson, M. M. (2006a). Development of two reliable and valid measures of stressors in policing: The operational and organizational police stress questionnaires. *International Journal of Stress Management*, 13(4), 494-518.

doi:10.1037/1072-5245.13.4.494

McCreary, D. R., & Thompson, M. M. (2006b). Police stress questionnaires. *PsycTests*,

doi:10.1037/t00338-000

McCreary, D. R., & Thompson, M. M. (2013). *The operational police stress questionnaire (PSQ-Op)*. Retrieved from

<http://www.midss.org/sites/default/files/psq-op.pdf>

McNamee, R. (2005). Regression modeling and other methods to control confounding.

*Occupational & Environmental Medicine*, 62(7), 500-506.

doi:10.1136/oem.2002.001115

Ménard, K. S., & Arter, M. L. (2013). Police officer alcohol use and trauma symptoms:

Associations with critical incidents, coping, and social stressors. *International*

*Journal of Stress Management*, 20(1), 37-56 20p. doi:10.1037/a0031434

Ménard, K. S., & Arter, M. L. (2014). Stress, coping, alcohol use, and posttraumatic

stress disorder among an international sample of police officers: Does gender matter? *Police Quarterly*, 17(4), 307-327. doi:10.1177/1098611114548097

Mertler, C. A., & Vannatta, R. A. (2002). *Advanced and multivariate statistical methods: Practical application and interpretation* (2nd ed.). Los Angeles, CA: Pyrczak Publishing.

Miller, L. (2007). Police families: Stresses, syndromes, and solutions. *American Journal of Family Therapy*, 35(1), 21-40. doi:10.1080/01926180600698541

Miller, L. (2015). Why cops kill: The psychology of police deadly force encounters. *Aggression and Violent Behavior*, 22(1), 97-111. doi:10.1016/j.avb.2015.04.007

Morash, M., Kwak, D., & Haarr, R. (2006). Gender differences in the predictors of police stress. *Policing: An International Journal of Police Strategies & Management*, 29(3), 541-563. doi:10.1108/1369510610684755

Neely, P., & Cleveland, C. S. (2012). The impact of job-related stressors on incidents of excessive force by police. *American Journal of Health Sciences*, 3(1), 63-74. doi:10.19030/ajhs.v3i1.6755

Noblet, A., Rodwell, J., & Allisey, A. (2009). Job stress in the law enforcement sector: Comparing the linear, non-linear and interaction effects of working conditions. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 25(1), 111-120. doi:10.1002/smi.1227

Nunnally, C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

Oliver, W. M. & Meier, C. A. (2009). Considering the efficacy of stress management

- education on small-town and rural police. *Applied Psychology in Criminal Justice*, 5(1), 1-25. Retrieved from [http://dev.cjcenter.org/\\_files/apcj/5\\_1\\_1%20Oliver\\_Meier.pdf](http://dev.cjcenter.org/_files/apcj/5_1_1%20Oliver_Meier.pdf)
- O'Brien, D. T., & Wilson, D. S. (2011). Community perception: The ability to assess the safety of unfamiliar neighborhoods and respond adaptively. *Journal of Personality & Social Psychology*, 100(4), 606-620. doi:10.1037/a0022803
- O'Dwyer, S. T., Moyle, W., Zimmer-Gembeck, M., & De Leo, D. (2013). Suicidal ideation in family carers of people with dementia: A pilot study. *International Journal of Geriatric Psychiatry*, 28(11), 1182-1188. doi:10.1002/gps.3941
- O'Hara, A. F., Violanti, J. M., Levenson, Jr., R. L., & Clark, Sr., R. G. (2013). National police suicide estimates: Web surveillance study III. *International Journal of Emergency Mental Health and Human Resilience*, 15(1), 31-38. Retrieved from <http://www.omicsonline.com/open-access/currentissue-international-journal-of-emergency-mental-health-and-human-resilience.pdf>
- Oweke, J. A., Muola, J., & Ngumi, O. (2014). Relationship between gender and levels of occupational stress among police constables in Kisumu county, Kenya. *Journal of Humanities and Social Science*, 19(11), 21-26. Retrieved from <http://iosrjournals.org/iosr-jhss/papers/Vol19-issue11/Version-3/C0191132126.pdf>
- Page, K. S., & Jacobs, S. C. (2011). Surviving the shift: Rural police stress and counseling services. *Psychological Services*, 8(1), 12-22. doi:10.1037/a0021796
- Pagon, M., Spector, P. E., Cooper, C. L., & Lobnikar, B. (2011). Managers in suits and

managers in uniforms: Sources of stress and occupational outcomes. *International Journal of Police Science and Management*, 13(3), 211-222.

doi:10.1350/ijps.2011.13.3.245

Parnaby, P. F., & Leyden, M. (2011). Dirty Harry and the station queens: A mertonian analysis of police deviance. *Policing and Society*, 21(3), 249-264. doi:

10.1080/10439463.2011.556733

Pasciak, A. R., & Kelley, T. M. (2013). Conformity to traditional gender norms by male police officers exposed to trauma: Implications for critical incident stress debriefing. *Applied Psychology in Criminal Justice*, 9(2), 137-156. Retrieved from [http://dev.cjcenter.org/\\_files/apcj/apcjspring%202013pasciak.pdf\\_1384785868.pdf](http://dev.cjcenter.org/_files/apcj/apcjspring%202013pasciak.pdf_1384785868.pdf)

Patterson, G. T., Chung, I. W., & Swan, P.W. (2014). Stress management interventions for police officers and recruits: A meta-analysis. *Journal of Experimental Criminology*, 10(4), 487-513. doi:10.1007/s11292-014-9214-7

Pearl, J., & Bareinboim, E. (2014). External validity: From do-calculus to transportability across populations. *Statistical Science*, 29(4), 579-595. doi:10.1214/14-sts486

Powell, M., Cassematis, P., Benson, M., Smallbone, S., & Wortley, R. (2014). Police officers' strategies for coping with the stress of investigating internet child exploitation. *Traumatology: An International Journal*, 20(1), 32-42.

doi:10.1037/h0099378

Queiros, C., Kaiseler, M., & DA Silva, A. L. (2013). Burnout as predictor of aggressivity

among police officers. *European Journal of Policing Studies*, 1(2), 110-135.

Retrieved from [https://repositorio-](https://repositorio-aberto.up.pt/bitstream/10216/70088/2/90814.pdf)

[aberto.up.pt/bitstream/10216/70088/2/90814.pdf](https://repositorio-aberto.up.pt/bitstream/10216/70088/2/90814.pdf)

Regehr, C., LeBlanc, V. R., Barath, I., Balch, J., & Birze, A. (2013). Predictors of physiological stress and psychological distress in police communicators. *Police Practice & Research: An International Journal*, 14(6), 451-463.

doi:10.1080/15614263.2012.736718

Renden, P. G., Landman, A., Geerts, S. F., Jansen, S. M., Faber, G. S., Savelsbergh, G. P., & Oudejans, R. D. (2014). Effects of anxiety on the execution of police arrest and self-defense skills. *Anxiety, Stress & Coping: An International Journal*, 27(1), 100-112. doi:10.1080/10615806.2013.810213

Rudd, M. D., Bryan, C. J., Wertenberger, E. G., Peterson, A. L., Young-McCaughan, S., Mintz, J., . . . Bruce, T. O. (2015). Brief cognitive-behavioral therapy effects on post-treatment suicide attempts in a military sample: Results of a randomized clinical trial with 2-year follow-up. *American Journal of Psychiatry*, 172(5), 441-449.

doi:10.1176/appi.ajp.2014.14070843

Sagar, M. H., Karim, A. R., & Nigar, N. (2014). Factor structure for organizational police stress questionnaire (PSQ-Org) in Bangladeshi culture. *Universal Journal of Psychology*, 2(9), 265-272. doi:10.13189/ujp.2014.020901

Sagar, M. H., Karim, A. R., & Nigar, N. (2015). Psychometric properties of the Bangla version operational police stress questionnaire. *Journal of the Indian Academy of Applied Psychology*, 41(2), 242-250. Retrieved from

[https://www.academia.edu/15713108/ Psychometric\\_Properties\\_of\\_the\\_Bangla\\_Version\\_Operational\\_Police\\_Stress\\_Questionnaire](https://www.academia.edu/15713108/Psychometric_Properties_of_the_Bangla_Version_Operational_Police_Stress_Questionnaire)

Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress and health: Psychological, behavioral, and biological determinants. *Annual Review of Clinical Psychology, 1*(2), 607-628. doi:10.1146/annurev.clinpsy.1.102803.144141

Senjo, S. R. (2011). Dangerous fatigue conditions: A study of police work and law enforcement administration. *Police Practice & Research, 12*(3), 235-252. doi:10.1080/15614263.2010.497659

Slack, M. K., & Draugalis, J. R. (2001). Establishing the internal and external validity of experimental studies. *American Journal of Health-System Pharmacy, 58*(1), 2173-2184. Retrieved from [http://wp.vcu.edu/radres/wp-content/uploads/sites/2550/2012/10/ Establishing-the-internal-and-external-validity-of-experimental-studies.pdf](http://wp.vcu.edu/radres/wp-content/uploads/sites/2550/2012/10/Establishing-the-internal-and-external-validity-of-experimental-studies.pdf)

Smoktunowicz, E., Baka, L., Cieslak, R., Nichols, C. F., Benight, C. C., & Luszczynska, A. (2015). Explaining counterproductive work behaviors among police officers: The indirect effects of job demands are mediated by job burnout and moderated by job control and social support. *Human Performance, 28*(4), 332-350. doi:10.1080/08959285.2015.1021045

Stanley, I. H., Hom, M. A., & Joiner, T. E. (2016). A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. *Clinical Psychology Review, 44*(1), 25-44. doi:10.1016/j.cpr.2015.12.002

- Steinkopf, B. L., Hakala, K. A., & Van Hasselt, V. B. (2015). Motivational interviewing: Improving the delivery of psychological services to law enforcement. *Professional Psychology: Research & Practice, 46*(5), 348-354.  
doi:10.1037/pro0000042
- Sundaram, M. S., & Kumaran, M. J. (2012). Occupational stress and coping strategies among grade 1 police constables. *International Journal of Business Management & Economic Research, 3*(4), 579-589. Retrieved from [http://www.ijbmer.com/docs/volumes/vol3issue4/ijbmer\\_2012030403.pdf](http://www.ijbmer.com/docs/volumes/vol3issue4/ijbmer_2012030403.pdf)
- Taylor, A., & Benell, C. (2010). Operational and organizational police stress in an Ontario police department: A descriptive study. *The Canadian Journal of Police and Security Services, 4*(4), 223-234. Retrieved from [https://www.researchgate.net/publication/242111567\\_Operational\\_and\\_Organizational\\_Police\\_Stress\\_in\\_an\\_Ontario\\_Police\\_Department\\_A\\_Descriptive\\_Study](https://www.researchgate.net/publication/242111567_Operational_and_Organizational_Police_Stress_in_an_Ontario_Police_Department_A_Descriptive_Study)
- Tucker, J. M. (2015). Police officer willingness to use stress intervention services: The role of perceived organizational support (POS), confidentiality and stigma. *International Journal of Emergency Mental Health and Human Resilience, 17*(1), 304-314. Retrieved from [http://digitalcommons.wcupa.edu/crimjust\\_facpub/4](http://digitalcommons.wcupa.edu/crimjust_facpub/4)
- Violanti, J. M. (2014). Introduction to special issue: Police stress and trauma: Recent perspectives. *International Journal of Mental Health and Human Resilience, 15*(4), 213-215. PMID: 24707584
- Violanti, J. M. (2006). The police: Perspectives on trauma and resiliency. *Traumatology,*

12(3), 167-169. doi:10.1177/1534765606296998

- Violanti, J. M., Fekedulegn, D., Hartley, T. A., Charles, L. E., Andrew, M. E., Ma, C. C., & Burchfiel, C. M. (2016). Highly rated and most frequent stressors among police officers: Gender differences. *American Journal of Criminal Justice, 41*(1), 1-18. doi:10.1007/s12103-016-9342-x
- Violanti, J. M., Fekedulegn, D., Hartley, T. A., Andrew, M. E., Gu, J. K., & Burchfiel, C. M. (2013). Life expectancy in police officers: A comparison with the U.S. general population. *International Journal of Emergency Mental Health and Human Resilience, 15*(1), 217–228. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4734369/>
- Vonk, K. (2008). Police performance under stress. *Law & Order, 56*(10), 86-90. Retrieved from <http://search.proquest.com.ezp.waldenulibrary.org/docview/197256551?accountid=14872>
- Yoo, H., & Franke, W. D. (2010). Stress and cardiovascular disease risk in female law enforcement officers. *International Archives of Occupational & Environmental Health, 84*(3), 279-286. doi:10.1007/s00420-010-0548-9.
- Zavala, E., Melander, L. A., & Kurtz, D. L. (2014). The importance of social learning and critical incident stressors on police officers' perception of intimate partner violence. *Victims & Offenders, 1*(1), 51-73. doi:10.1080/15564886.2014.890688

## Appendix A. Brief Cope Permission Letter

DEPARTMENT OF  
**PSYCHOLOGY**  
COLLEGE OF ARTS & SCIENCES  
UNIVERSITY OF MIAMI

DEPARTMENT PEOPLE GRADUATE UNDERGRADUATE HOW TO APPLY COMMUNITY OUTREACH RESEARCH

## People

**Faculty**  
**Alumni**  
**Directory**

***Self-Report Measures Available:***

All of these scales are being made available here for use in research and teaching applications. All are available without charge and without any need for permission. Please do not write to me requesting a letter of permission, because this is all you will get. Download or print them from the linked pages.

- [LOT-R \(a measure of optimism-pessimism\)](#)
- [COPE \(the full version of our measure of coping\)](#)
- [Brief COPE \(an abbreviated version of the COPE\)](#)
- [BIS/BAS scales \(measures of the sensitivity of incentive and aversive motivational systems\)](#)
- [MAQ \(a measure of adult attachment qualities\)](#)
- [MBA \(a measure of investment in body image as a source of feelings of self-worth\)](#)
- [ATS \(a measure of generalization, overly high standards, and self-criticism\)](#)
- [Benefit Finding \(a measure of finding benefit in the experience of having breast cancer\)](#)
- [QLACS: Quality of Life in Adult Cancer Survivors \(a new QOL measure for long-term survivors\)](#)
- [MOSSES \(a measure of emotional and cognitive effects of self-stigmatization\)](#)

## Appendix B. PSQ-Op; PSQ-Org Permission Letter

Request to use the PSQ-Op in Doctoral Research ay Walden University

Inbox x



**Samantha Salain** <samantha.salain@waldenu.edu>  
to donmcreary

11:40 AM (8 hours ago) ☆



Dr. McCreary,

My name is Samantha Salain and I am a doctoral student at Walden University. I would like to seek permission to use the PSQ-Op in my proposed research on the relationship between level of stress and utilized coping mechanisms among police officers. The research questions I pose are as follows:

1. What is the relationship between level of stress and utilized coping mechanisms among police officers who have received stress management training and officers who have not received stress management training as measured by the Brief COPE and the Operational Police Stress Questionnaire (PSQ-Op)?
2. What is the relationship between gender and level of stress and utilized coping mechanisms in police officers who have and have not received stress management training as measured by the Brief COPE and the Operational Police Stress Questionnaire (PSQ-Op)?

Walden requires students to receive written notification of permission. I believe the PSQ-Op would be advantageous and do appreciate the opportunity to utilize it in my research. Lastly, thank you for conducting research that greatly assists members of the law enforcement community.

Thank you,

Samantha Salain  
[Samantha.salain@waldenu.edu](mailto:Samantha.salain@waldenu.edu)  
[706-300-7184](tel:706-300-7184)

**Don McCreary**  
to me

1:36 PM (6 hours ago) ☆



Samantha, of course you can use the PSQ measures in your research. On an aside, you may want to consider also using the Organizational PSQ -- research with the PSQ measures show that organizational stressors are higher and often more problematic for officers. This fits with the abundance of research in the occupational health psychology field that shows organizational barriers are often the stressors with the highest impact.

Good luck.

Don McCreary, PhD  
Adjunct Professor of Psychology (Brock & Carleton Universities)  
Fellow, American Psychological Association  
Owner, DRM Scientific Consulting  
Toronto, Canada  
LinkedIn: <https://ca.linkedin.com/in/don-mccreary-ph-d-85a6a195>

## Appendix C: Demographic Survey

**DEMOGRAPHIC SURVEY**

1. What is your gender?
  - Male
  - Female
2. How long have you been employed as a sworn law enforcement officer?
  - less than 1 year
  - 1-4 years
  - 5-10 years
  - 11-15 years
  - 16-20 years
  - More than 20 years
3. What is your rank?
  - Officer
  - Officer 1<sup>st</sup> Class
  - Corporal
  - Sergeant
  - Lieutenant
  - Captain
  - Major or Deputy Chief
  - Sheriff or Chief
4. Have you received stress management training?
  - Yes
  - No

## Appendix D: Letter to Participant

## WALDEN UNIVERSITY

Researcher: Samantha Leigh Fields-Salain

**Title of Study:** Stress Management Training, Gender, Level of Stress, and Coping in Police Officers

Dear Potential Participant,

I am a doctoral student who attends Walden University. Currently, I am completing a dissertation research project as part of my degree requirements. I would like to take the opportunity to personally invite you to participate in a survey research study that will explore the relationship between stress management training, gender, level of stress, and coping in police officers. The focus of this research is to demonstrate the degree to which officers seek and utilize stress management training as well as how stress management training, gender, and utilized coping skills are related to level of stress in the population.

Inclusion to the study will involve voluntary commitment, willingness to provide informed consent, and being actively employed as a sworn officer assigned to patrol and/or correctional functions. Exclusion criteria will include all individuals that have been employed with or under the direct supervision of the researcher, non-sworn personnel, individuals who are unable to provide informed consent, and participants who fail to adhere to the research study's intent and scope of confidentiality and anonymity.

If you choose to participate in this anonymous study it will require a one-time completion of three brief surveys and a demographic questionnaire. Please complete the surveys and the questionnaire independently. Completing these documents should take approximately 30 minutes. Within the packet that you will be provided, there will be a consent form that will clearly explain the procedure, voluntary nature of the study, risks and benefits of being in the study, privacy, contacts and questions, and a statement on obtaining consent. After reviewing this document, if you feel you understand the study well enough to participate, please indicate your consent by returning a completed survey. To protect your privacy, no consent signature is requested.

Thank you for your time and service to our community.

Sincerely,

Samantha Leigh Fields-Salain

## Appendix E: Histograms for Normality of Errors and Associated PPlots

Figure 1.1.

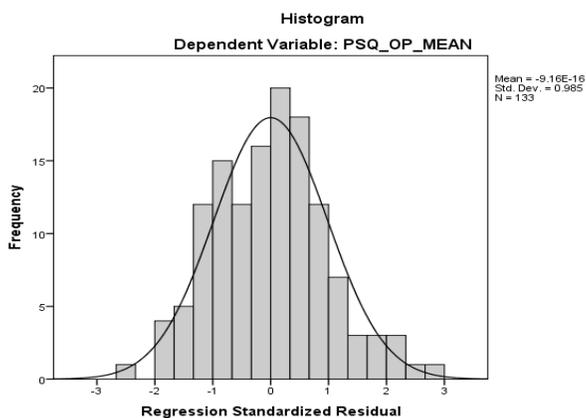


Figure 1.2.

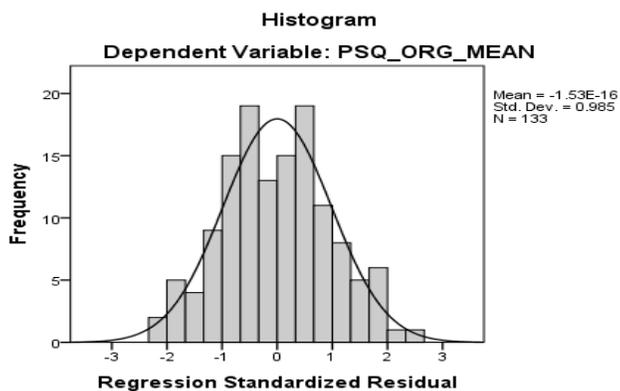


Figure 1.3.

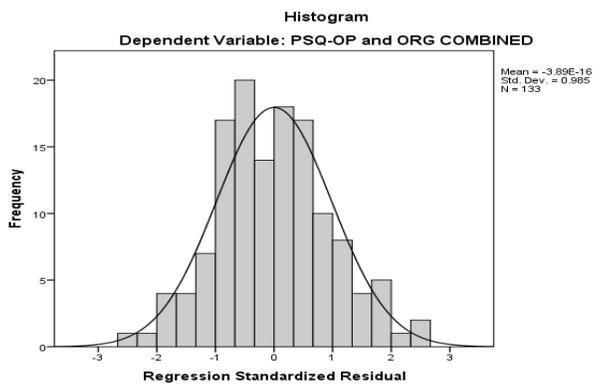


Figure 1.4.

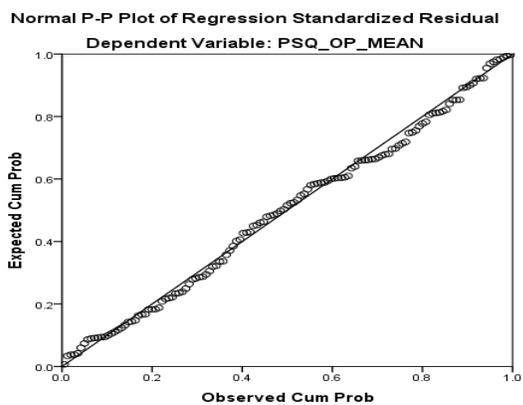


Figure 1.5.

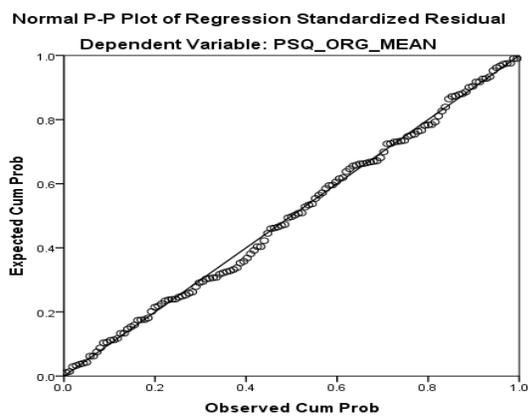
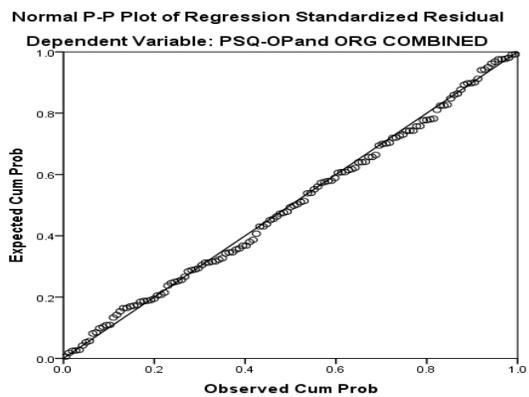


Figure 1.6.



## Appendix F: Scatterplots for Assumption of Homoscedasticity

Figure 2.1.

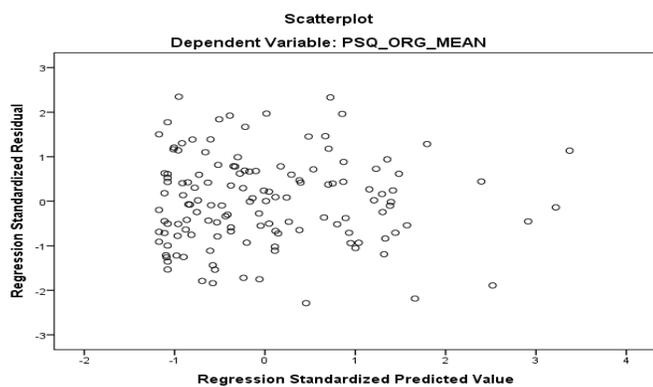


Figure 2.2.

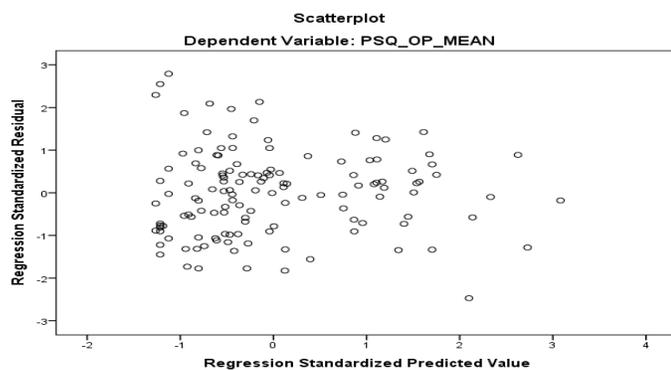
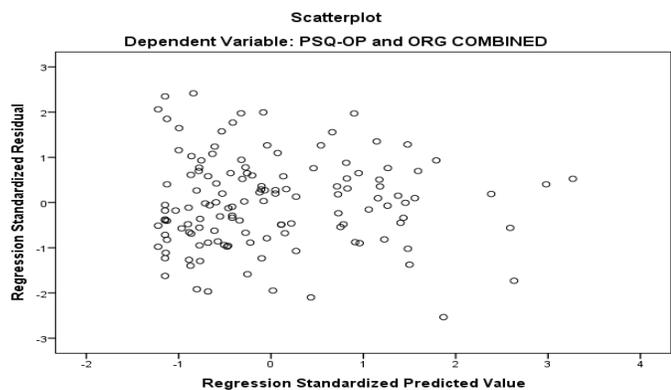


Figure 2.3.



## Appendix G: Scatterplots for Assumption of Linearity

Figure 3.

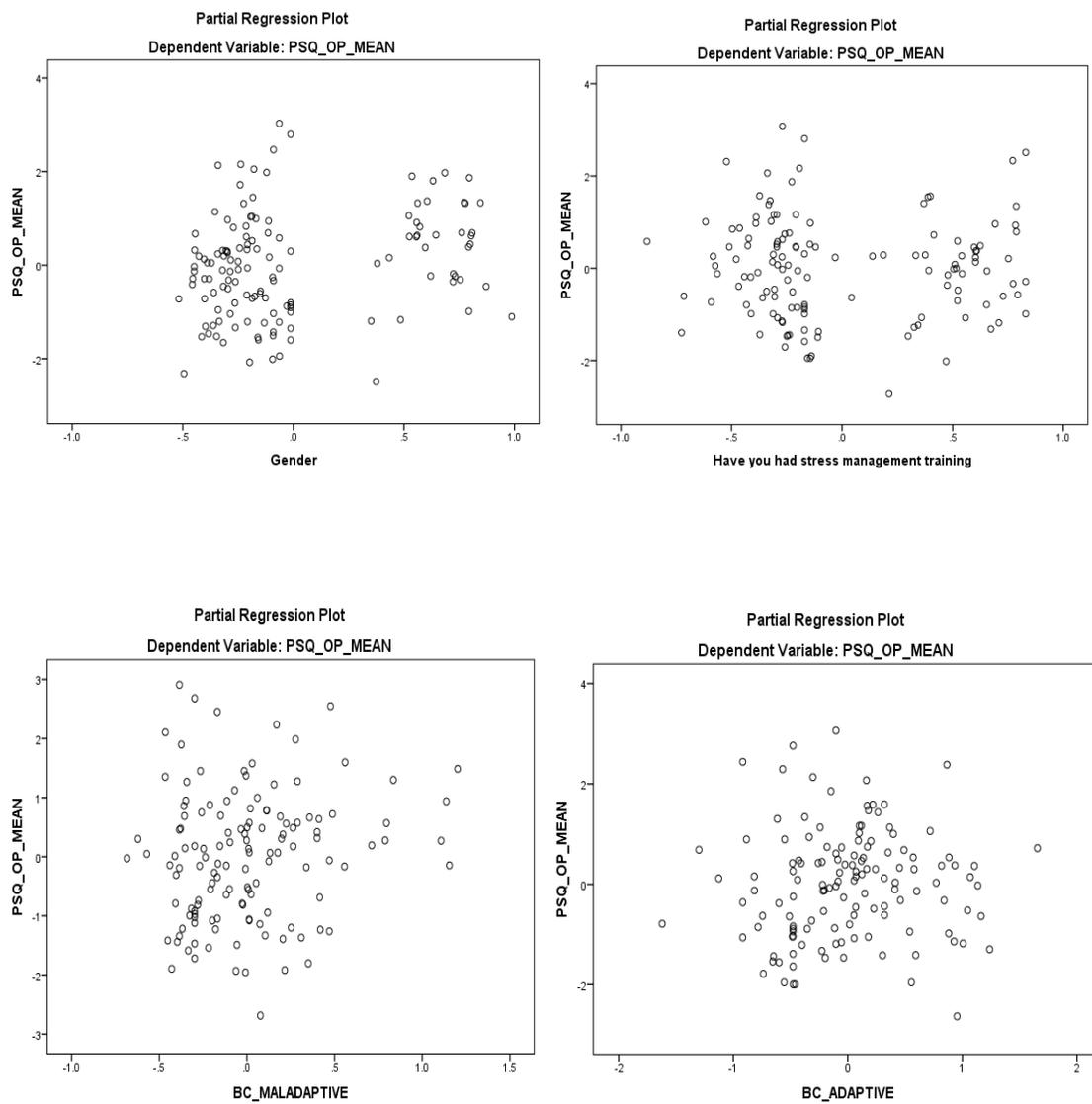


Figure 4.

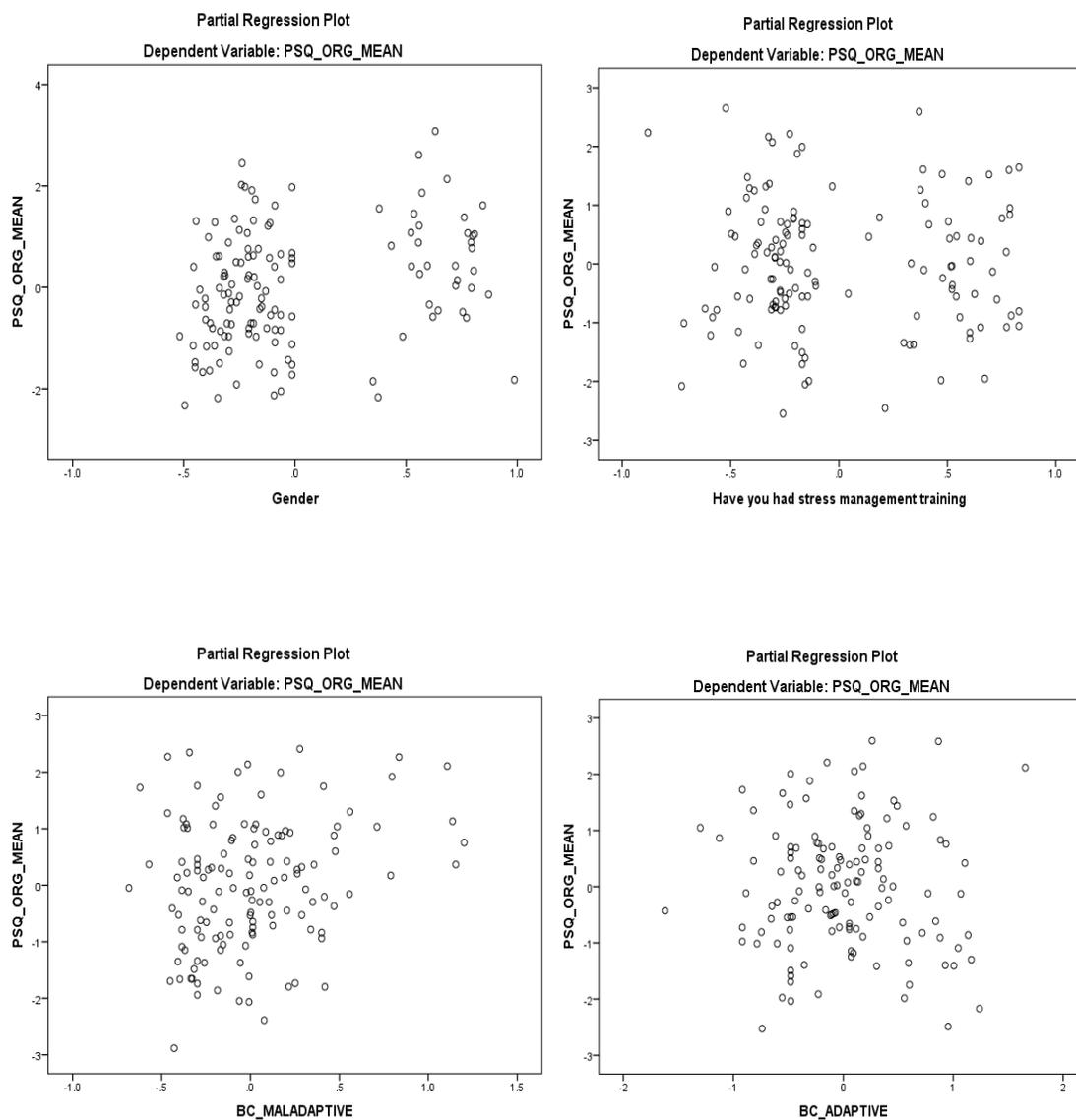
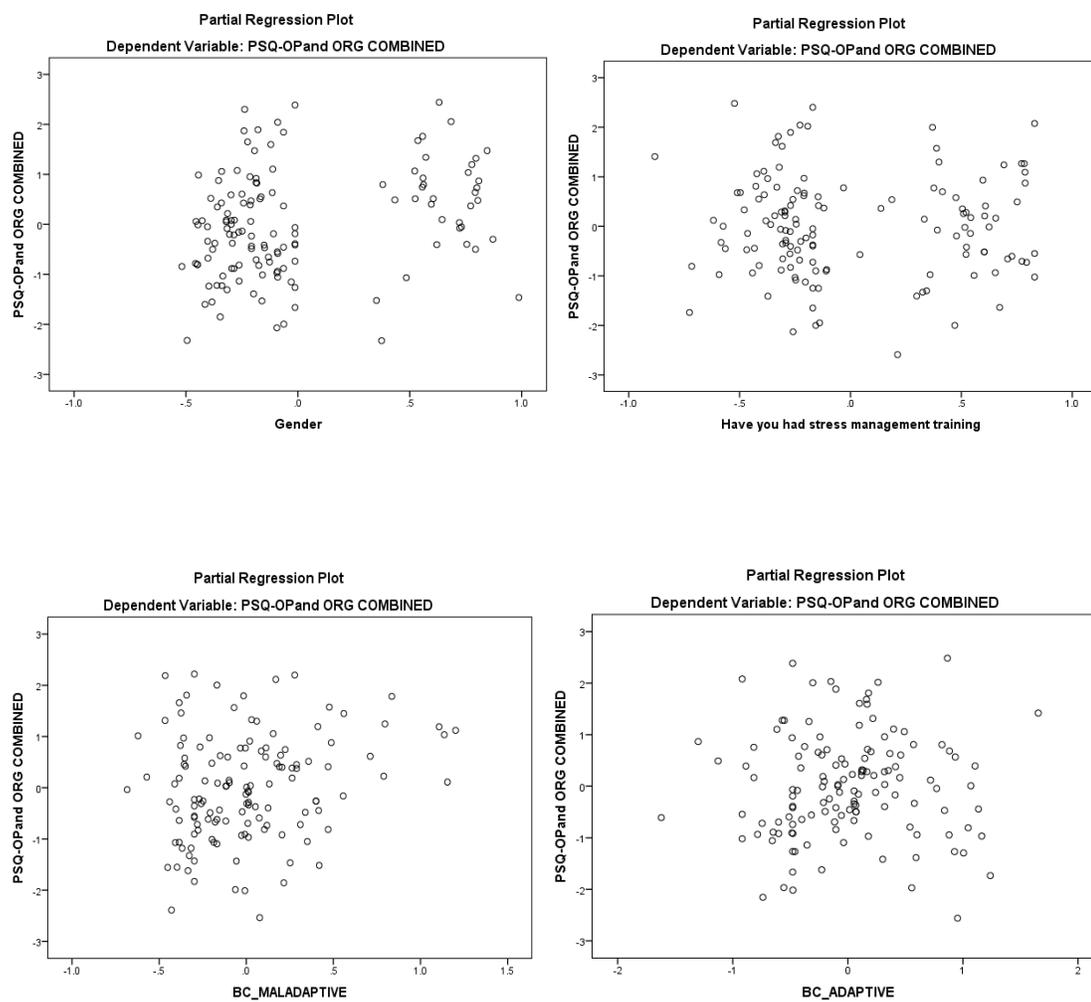


Figure 5.



Appendix H: *t* Test Assumption of Normality Histogram

Figure 6.

