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## Effects of Life Events on the Onset of Delayed Post-Traumatic Stress Disorder in Aging Combat Veterans

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EFFECTS OF LIFE EVENTS ON THE ONSET OF DELAYED  
POST-TRAUMATIC STRESS DISORDER IN AGING  
COMBAT VETERANS

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A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Social Work

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by  
Meaghan Lindsay Martin

June 2014

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## ABSTRACT

This research examined life events that affect the onset of delayed Post-Traumatic Stress Disorder in aging combat veterans. A common result from experiencing combat trauma is Post-Traumatic Stress Disorder. There is a rapidly growing veteran population experiencing delayed onset Post-Traumatic Stress Disorder. The occurrence of additional life stressors may increase the likelihood that someone will develop Post-Traumatic Stress Disorder in response to a prior traumatic event. Participants of the study were combat veterans over the age of 65. Qualitative data were gathered from interviewing participants on life events they have experienced since combat exposure as well as Post-Traumatic Stress Disorder symptoms. Findings suggested that life events contribute to the delayed onset of Post-Traumatic Stress Disorder in aging combat veterans. Understanding the development and causes of delayed Post-Traumatic Stress Disorder will help social work practice develop and move forward with programs to improve the quality of life for aging veterans.

## DEDICATION

I would like to thank my family for all of their encouragement, support, patience, and understanding as I pursued my degree. I couldn't have done this without you. I love you all and appreciate all you have done to support me in this process.

For my husband for being by my side each step of the way. Thank you for being so patient and supportive during these past three years. For my daughter Chloe who brought me happiness each day.

For my mother who has inspired me to follow in her footsteps and pursue a career in social work. Thank you for your continuous help and guidance. For the memory of my father who passed on a strong desire to help others. I will always push myself to make an impact on the lives of others, as you did with so many. I hope I make you proud.

For my sister for her support and constant encouragement. I will always appreciate everything you've done. For my grandparents who have taught me that with patience and dedication anything is possible. Thank you for your reassurance and for instilling in me the values necessary to complete my education.

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## CHAPTER ONE

### INTRODUCTION

The study of delayed Post-Traumatic Stress Disorder (PTSD) is necessary because there are many men and women currently serving in the military and experiencing combat. There is an increase in the number of veterans needing medical care. Education on the effects of delayed PTSD can help to better the medical care of these aging veterans. Further research will help social workers come up with new methods to predict and treat the disorder.

#### Problem Statement

The problem studied was delayed onset PTSD in aging combat Veterans. Recent military involvement in Iraq and Afghanistan has focused attention on the health consequences of military service. There are many medical agencies as well as taxpayers that are concerned about the health of aging veterans. The public has become increasingly aware of the physical and emotional effects associated with military service. Post-Traumatic Stress Disorder is a common result of military combat. This has caused the public to become concerned about the effects of military service on aging veterans.

The need to understand delayed onset PTSD related to combat service is being emphasized. There is a rapidly growing veteran population in need of a variety of physical and mental health care services (Bedard & Deschenes,

2003). Previous research has focused on immediate onset PTSD. Studying delayed PTSD is important for social work practice because an increasing number of aging Veterans are experiencing delayed onset PTSD. It is crucial to do more research to understand the development of delayed PTSD.

Delayed PTSD is not fully understood. There have been a limited number of studies on delayed PTSD due to the fact that this condition is underreported. Studying delayed PTSD is becoming increasingly important because life expectancy is gradually rising. There are millions of aging war veterans that are at a high risk for delayed onset PTSD. Information on delayed PTSD is important in the attempt to both predict and treat PTSD.

Combat can be one of the most traumatic events a person can experience. A common result from experiencing combat trauma is PTSD. A person can develop PTSD after being exposed to a traumatic event. PTSD is described as “re-experiencing the traumatic event in nightmares and daytime imaging, by the avoidance of stimuli reminiscent of the event, and by persistent symptoms of increased arousal” (Solomon & Blumenfeld, 1995, p. 426). According to Solomon and Blumenfeld (1995), PTSD is often accompanied by depression, anxiety and difficulty in social functioning.

In some instances, the onset of PTSD is delayed. Delayed onset PTSD is when symptoms occur six months or more after the traumatic experience (Horesh, Solomon, Zerach, & Ein-Dor, 2011). Delayed PTSD can develop years after experiencing a traumatic event. Many combat veterans are now

seeking help for PTSD years after combat exposure (Solomon & Blumenfeld, 1995). Psychological effects are harder to diagnose than physical injuries. Psychological disorders often do not have physical effects and symptoms are harder to pin point.

The aging population has been observed developing delayed PTSD following a traumatic event that occurred many years ago. Research has shown that the experiencing life stressors might increase the possibility that someone will develop delayed PTSD after a traumatic incident. Major life changes such as the loss of a family member may cause symptoms of PTSD to appear.

#### Purpose of the Study

The purpose of the study was to examine the effects of life events on the delayed onset of PTSD in aging combat veterans. The study determined if life events experienced by an aging veteran are associated with the development of delayed PTSD. The veteran population is rapidly growing and a high number of veterans are at risk for delayed PTSD. Understanding the development and causes of delayed PTSD will help social work practice predict and treat the disorder.

The culture of the participants was considered. Many cultures have been in the military. Different cultures value different services and have different outlooks on mental health. Some cultures might not be willing to go to counseling while others cultures might take advantage of seeing a counselor.

Some cultures see a mental health diagnosis, such as PTSD, as a weakness. Some people might not get the help they need for fear of non-acceptance from their community, causing further problems such as depression or substance abuse.

Participants of the study were combat veterans over the age of 65. Demographic characteristics for each participant included age, ethnicity, level of education, marital status, and whether or not the participants had children. Differences in education and income associated with military service may have an impact on health. Suicide rates might differ based on demographic characteristics. Social support may have an effect on the physical and mental health of aging veterans.

The type of research design used to address this study was qualitative data. Using participants as the data source provided the most beneficial information. Data was gathered from interviewing participants. The interview was provided to male combat veterans over the age of 65. A snowball method was used to find participants. Data was collected from 10 veteran participants. The interview focused on the following criteria: symptoms of PTSD, life events that have occurred since combat exposure and events that occurred immediately prior to the onset of PTSD. The veterans were able to identify their symptoms of PTSD. Veterans were also asked about their medical history and treatments.

### Significance of the Project for Social Work

Continuing to study delayed PTSD would be beneficial. The findings of delayed onset PTSD will potentially contribute to social work practice.

Research would help to reduce negative aspects of PTSD and would help find ways to treat delayed PTSD linked to combat. Social workers could help develop and move forward with programs to improve the quality of life for aging veterans.

Understanding delayed onset PTSD associated with combat would be beneficial. Many agencies are concerned about the psychiatric health of aging veterans. Social work practitioners could effectively provide clinical services to veterans. The cost of the medical care for veterans could be easily estimated in order to provide effective treatment resources. The findings would help progress social work practice as well as help to provide aging veterans with a better quality of life.

The present study examined the effects of life events on the delayed onset of PTSD in aging combat veterans.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

Combat veterans have experienced trauma during times in which they were forced to witness the injury and death of friends. The stresses of combat are associated with anxiety and depression. An area of continued interest has been PTSD among veterans. A growing number of veterans are experiencing delayed PTSD years after being involved in combat. The occurrence of life stressors that occur during normal aging, such as health decline, may increase the likelihood that someone would develop delayed PTSD after experiencing combat related trauma. Further research on the development and effect of life events on delayed PTSD will help to provide aging veterans with effective treatment services resulting in a better quality of life.

#### Post-Traumatic Stress Disorder

The development of PTSD began during World War I when symptoms were linked to combat (Nitto, 2011). It was first believed that individuals were experiencing symptoms due to physical damage resulting from exploding shells (Nitto, 2011). Observations after World War II showed that veterans were experiencing reactions to combat trauma (Nitto, 2011). Veterans with immediate reactions and those who developed reactions later in life developed similar symptoms (Nitto, 2011).

When an individual has been exposed to severe trauma such as combat, PTSD can develop. An individual must meet specific criteria in order to be diagnosed with PTSD. The individual must have been exposed to an event that caused extreme fear due to a threat of injury or death (Nitto, 2011). A person must experience symptoms including re-experiencing, avoidance, and dissociation (Nitto, 2011). All the symptoms must be present for more than 1 month and the symptoms must inhibit the individual's ability to function (Nitto, 2011).

The occurrence of PTSD is high among combat veterans. A link has been shown between PTSD and combat exposure. Not all combat veterans will develop PTSD; however, PTSD occurs in as many as 3 out of 5 combat veterans (Kaisman, 2003).

#### Delayed Post-Traumatic Stress Disorder

The life expectancy of individuals is continuing to rise, causing high numbers of combat veterans to be at risk of delayed PTSD. Delayed PTSD occurs when there has been at least 6 months between the traumatic event and the beginning of symptoms (Tull, 2011). Research has shown that the onset of symptoms can occur years after the experience of a traumatic event.

Combat is one of the most traumatic events a person can experience. Several years after experiencing war, many aging veterans are experiencing delayed onset PTSD. Delayed PTSD is not commonly diagnosed because it is

underreported. Research has shown that delayed PTSD occurs in almost a quarter of all PTSD cases (Tull, 2011).

Many military servicemen seem to function well in combat; however, at a later stage in life they develop delayed PTSD. Since the Vietnam War, it has become evident that many individuals are experiencing delayed PTSD (Solomon, 2001). It is believed that 830,000 combat veterans from the Vietnam War will experience symptoms of delayed PTSD (Nitto, 2011). Many Vietnam veterans are now beginning to seek treatment after a long delay in PTSD symptoms (Nitto, 2011).

#### Life Events and Stressors Leading to the Development of Delayed Post-Traumatic Stress Disorder

It has been suggested that numerous life events following combat can result in delayed PTSD. The role of life stressors on the development of delayed PTSD is being emphasized (Ruzich, Looi, Robertson, 2005). According to Ruzich, Looi and Robertson (2005), stressors in old age or physical illness may be the reason for the onset of delayed PTSD symptoms. In a study by Horesh, Solomon, Serach, and Ein-Dor (2011), stressful experiences throughout an individual's lifespan were connected with the delay in PTSD onset. Stressful events occurring after the war, such as the death of a loved one, may trigger a flashback of a traumatic event during combat and cause distress.

Experiencing combat is a substantial stressor that can cause symptoms years later. Normal events that occur during aging (death of a loved one, loss of a job) can bring back combat memories and unresolved grief (Kaisman, 2003). According to Kaisman (2003), many veterans from World War II were able to suppress combat memories by dedicating their lives to their work. When a veteran retires, he may not be able to cope with the suppressed memories which can lead to delayed PTSD.

Stressful events that occur after a war may remind the Veteran of the traumatic experiences of combat (Horesh, Solomon, Zerach, & Ein-Dor, 2011). Several researchers have determined that stressful events following a traumatic event were linked with delayed PTSD (Horesh, Solomon, Zerach, & Ein-Dor, 2011). Some individuals who experience combat trauma can experience a long period where they have no symptoms; however, following this period, they may encounter a stressful event that brings the trauma to the surface again (Horesh, Solomon, Zerach, & Ein-Dor, 2011). Debates continue between researchers regarding whether life events play a part in the onset of delayed PTSD.

#### Other Proposed Causes

Research has suggested that repressing emotions brought on by combat experience can cause delayed PTSD (Berger & Scharer, 2011). According to Berger and Scharer (2011), the military does not encourage expressing emotions. After combat, many individuals are able to repress the

negative emotions. Some research has suggested that as veterans age, they have less demands and more time to think about traumatic events they previously avoided leading to delayed PTSD (Berger & Scharer, 2011).

Researchers have suggested that a veteran's use of defense mechanisms such as denial or identifying with the victim could explain the delays in the development of PTSD (Berger & Scharer, 2011). Defense mechanisms and coping strategies that prevented the veteran from becoming affected by the traumatic event might not be as effective with age (Berger & Scharer, 2011).

### Depression and Suicide

It is common for veterans to report depression. According to Owens, Steger, and Whitesell (2009), if traumatic events are not dealt with, depression develops. The Department of Veterans Affairs acknowledges that suicide of veterans is a public health problem in need of a suicide prevention program (Owens, Steger, & Whitesell, 2009). Among veterans, suicide is usually associated with PTSD or substance abuse (Owens, Steger, & Whitesell, 2009). Many veterans have depressive disorders and are at a higher risk for suicide (Zivin, Kim, McCarthy, Austin, Hoggatt, & Waiters, 2007).

### Theories Guiding Conceptualization

The ecological perspective is the process that occurs over an individual's lifespan. The perspective emphasizes how individuals change

themselves and their environment, and how well they adapt to life demands (Harvey, 2008). A disruption in an individual's desired environment will cause stress (Harvey, 2008). From an ecological perspective, disruptions associated with life stressors can lead to the development of delayed PTSD. Recovering from combat requires the individual to develop resiliency. An individual's resiliency can be altered from a life stressor, and they may not be able to effectively adapt to their environment.

### Skepticism

Some researchers have expressed skepticism about whether delayed PTSD exists. Studies have been done to examine delayed PTSD in combat veterans; however, an agreement between researchers as to the prevalence of delayed PTSD has not yet been reached (Andrews, Brewin, Philpott, & Stewart, 2007).

When delayed PTSD became included in the DSM, the United States Veterans Administration accepted it as a disorder (Andrews, Brewin, Philpott, & Stewart, 2007). This led to a rise in benefit claims for the disorder by many veterans who were previously denied the opportunity (Andrews, Brewin, Philpott, & Stewart, 2007). According to Andrews, Brewin, Philpott, and Stewart (2007), within two years of the publication of DSM-III, there was public caution against accepting all claims of delayed onset as genuine because of the secondary gains involved.

Skeptics of delayed PTSD have questioned the existence of the diagnosis. Some clinicians have questioned the diagnosis, claiming that alcohol and drug abuse can be incorrectly diagnosed as delayed PTSD (Soloman, 2001).

### Limitations

Many studies on delayed PTSD are limited by several factors. Most of the research has been done on a small sample of case studies. A larger scale population of veterans would be more valuable. Researchers are unable to agree on the cause of the delay in PTSD or even the validity of the diagnosis. A disadvantage of many studies is the problem of memory reliability, especially when a long time has passed between the trauma and interview. Older veterans may be less likely to acknowledge that psychiatric symptoms exist. Veterans with psychiatric problems may be less likely to survive to old age.

### Further Research

Further research is needed to increase understanding of the cause, occurrence, and symptoms of delayed PTSD. A large number of combat veterans are experiencing delayed PTSD and are unable to lead well adjusted, fulfilling lives. The need for more research is becoming increasingly important as the aging veteran population continues to grow. Additional research will lead to an understanding as to the cause of the delay of PTSD symptoms.

Further research is needed due to the large number of veterans who are transitioning into a later stage of life and may develop symptoms of PTSD.

### Summary

The occurrence of life stressors may have an impact on the onset of delayed PTSD. Distress associated with normal life events such as the death of a loved one, retirement, or health decline can cause unresolved grief to surface. Stressful events following combat may lead to delayed PTSD.

## CHAPTER THREE

### METHODS

#### Introduction

The effects of delayed PTSD in aging combat veterans must be thoroughly researched in order to better assist these veterans to overcome the long term effects of this disorder. Of the many research methods available, the qualitative method of interviewing participants provided the most beneficial information. Loss of anonymity is one of the limitations in using interviewing, but this risk was overcome by ensuring confidentiality.

#### Study Design

The purpose of the study was to determine if life events experienced by an aging veteran are associated with the development of delayed PTSD. As the veteran population grows, a larger number of veterans are at risk for delayed PTSD. This research leads to a better understanding of the development of delayed PTSD which will help to progress social work practice in providing aging veterans with a better quality of life.

The research method that was used in this study was the qualitative approach. The design of this study focused on case studies of participants. Data was gathered from interviewing veterans. This approach allowed participants to describe life events and triggers of delayed Post-Traumatic Stress Disorder in their own words.

There are limitations of using this research approach. The research was done on a small sample of participants. A larger sample of veterans would be more generalizable. The study was done on aging veterans. Older veterans may be less likely to admit that symptoms exist.

Potential bias could have been a problem in interviewing clients. The participant might have been influenced by the researcher. The participant may have wanted to please the researcher; which has the potential to sway the participant to respond to questions with answers they believe the researcher wants to hear, rather than the truth. The interviewer may have unintentionally influenced the participant by the way a question was phrased or the tone of voice that was used when administering the question.

### Sampling

Participants of the study were male combat veterans over the age of 65. The participants were hard to find, so a snowball sampling method was used. Data was collected from a sample of 10 veterans.

### Data Collection and Instruments

Data was gathered from interviewing participants. A quantitative analysis was done for demographic characteristics which included age, ethnicity, level of education, marital status, and whether or not the participant had children. The interview focused on life events that have occurred since combat exposure. The veterans identified life events and stressors they have

experienced. The participants rated the intensity of their symptoms. Veterans were also asked about their medical history and treatments. The interview was guided by general questions (Appendix A). Sub-questions were formed based on the participant's response to the general questions.

There are limitations to using the method of interviewing. Interviewing participants presents a loss of anonymity. The participants were seen in person and despite the reassurance of confidentiality, individuals might have been reluctant to participate.

The independent variable for this research was life events. The dependent variable was the onset of delayed PTSD in aging combat veterans. The measurement of the variables was based on the interview with the participants. The questions asked in the interview measured life events that occurred after combat exposure.

### Procedures

Data was gathered from interviewing participants. A snowball sampling method was used to find participants. General questions guided the interview. Data collection took place where the participant felt the most comfortable.

### Protection of Human Subjects

The confidentiality of the participants was protected. Direct identifiers that would allow someone to determine the participant's identity were not collected. The name of the participant was not used in the presentation of this

research. No information was collected that can link the participant to their interview. Participants were given an Informed Consent (Appendix B) explaining how confidentiality will be protected. A Debriefing Statement (Appendix C) was provided explaining who to contact with questions regarding the study. The participants were interviewed in a private room. The interviews were not conducted in open areas where other people were able to hear the participant's responses.

### Data Analysis

Information obtained during data collection was evaluated for themes that emerge. Data analysis was developed differently for each participant depending on what each individual revealed. Data was first prepared in transcript form. A written record was taken of the interviews as well as notes on nonverbal communication such as body language, laughing, or crying. The data was then reviewed and coded. Both similarities and differences in the responses were noted. Patterns in the data were distinguished.

The constant comparison method was used. Data with the same characteristics were put into the same category and were given the same code. Data with different characteristics were put into different categories and given different codes. All relevant categories of data were identified and labeled.

The ultimate goal was to identify any relationships between the major themes that emerged from the data. Logical interpretations of the themes that

remain consistent were developed. Consistency was ensured by documenting each step. Documentation controlled biases and preconceptions.

### Summary

Research conducted in this study examined the effects of life events on the onset of delayed PTSD. The information obtained by interviewing participants was examined. Similarities and differences that emerged from the data were identified and evaluated to show the relationship between life events and the onset of delayed PTSD.

## CHAPTER FOUR

### RESULTS

#### Introduction

The findings of this study regarding the effects of life events on the onset of delayed PTSD are presented in the following chapter. Demographic information is presented to provide information on the population studied. Statistical information gathered from the data collected is thoroughly detailed

## Presentation of the Findings

Table 1. Demographics

	Frequency N	Percentage %	Mean	Standard Deviation
<b>Age</b>				
65-83 Years	10		72.70	5.774
<b>Ethnicity</b>				
Caucasian	8	80		
Hispanic	2	20		
<b>Education Level</b>				
8th Grade	2	20		
High School	7	70		
Some College	1	10		
<b>Marital Status</b>				
Married	4	40		
Widowed	2	20		
Divorced	2	20		
Second Marriage	2	20		
<b>Children</b>				
No	1	10		
Yes	9	90		

This sample was comprised of male combat veterans (N = 10). The ages of the participants ranged from 65 years old to 83 years old; the average age was 72.7 (M = 72.70, SD = 5.774). The ethnicities of the participants consisted of Caucasian (N = 8, 80%) and Hispanic (N = 2, 20%). The education level of the participants were 8<sup>th</sup> grade (N = 2, 20%), high school (N = 7, 70%), and some college (N = 1, 10%). The marital status of the

participants were married (N = 4, 40%), widowed (N = 2, 20%), divorced (N = 2, 20%), and second marriages (N = 2, 20%). Nine participants (N = 9, 90%) had children and one participant (N = 1, 10%) did not have children.

Table 2. Duration of Military Service

	Mean	Standard Deviation
8-28 Years	16.80	6.941

Participant's duration of military service ranged from eight years to 28 years; the average time spent in the military was 16.8 years (M = 16.80, SD = 6.941).

Table 3. Duration of Combat

	Mean	Standard Deviation
1-4 Years	1.80	1.229

Participants duration of combat ranged from one year to four years; the average time spent in combat was 1.8 years (M = 1.80, SD = 1.229).

Table 4. Time Elapsed since Military Service

	Mean	Standard Deviation
25-44	34.90	6.190

The amount of time that has elapsed since last military service ranged from 25 years to 44 years; the average time that has passed was 34.9 years (M = 34.90, SD = 6.190).

Table 5. Amount of Time since Post-Traumatic Stress Disorder Diagnosis

	Mean	Standard Deviation
3-11	6.30	2.869

The amount of time that has passed since participants were diagnosed with PTSD ranged from three years ago to 11 years ago; the average amount of time it had been since diagnosis was approximately six years (M = 6.30, SD = 2.869).

Table 6. Health Conditions

	Frequency N	Percentage %
Cancer	2	20
Diabetes	1	10
Difficulty Walking	2	20
Heart Problems	5	50
High Blood Pressure	6	60
Require Oxygen	2	20
Stroke	1	10

Participants were given the option to disclose as many health conditions as they felt necessary. Two (N = 2, 20%) participants reported having cancer; one participant (N = 1, 10%) reported diabetes; two participants (N = 2, 20%) reported difficulty walking; five participants (N = 5, 50%) reported heart problems; six participants (N = 6, 60%) reported high blood pressure; two participants (N = 2, 20%) reported requiring oxygen; one participant (N = 1, 10%) reported having a stroke.

Table 7. Medical Treatments Due to Major Illnesses

	Frequency N	Percentage %
Medication	8	80
Surgery	6	60
None	1	10

Participants were given the option to disclose as many types of treatments they had received for an illness. Eight participants (N = 8, 80%) reported receiving medication for major illnesses; six participants (N = 6, 60%) reported they received surgery; one participant (N = 1, 10%) reported receiving no treatment for a major illness.

Table 8. Support Received While Coping with Illnesses

	Frequency N	Percentage %
Spouse	6	60
Children	5	50
Extended Family	2	20
Friends	3	30

Participants had the option to discuss several areas of support. Six participants (N = 6, 60%) reported having support from their spouses; five participants (N = 5, 50%) reported having support from their children; two participants (N = 2, 20%) reported having support from extended family members; three participants (N = 3, 30%) reported having support from friends.

Table 9. Mental Health Conditions

	Frequency N	Percentage %
Depression	8	80
Anxiety	5	50
PTSD	10	100
Bipolar	1	10

Participants had the option to discuss more than one mental health conditions. Eight participants (N = 8, 80%) reported having depression; three participants (N = 5, 50%) reported having anxiety; ten participants (N = 10, 100%) reported having PTSD; one participant (N = 1, 10%) reported being bipolar.

Table 10. Treatments Received for Mental Health Conditions

	Frequency N	Percentage %
Medication	8	80
Therapy	6	60
No Treatment	1	10

Participants had the option to disclose more than one treatment received for a mental health condition. Eight participants (N = 8, 80%) reported

receiving medication; six participants (N = 6, 60%) reported receiving therapy; one participant (N = 1, 10%) reported receiving no treatment.

Table 11. Careers after Military Service

	Frequency N	Percentage %
Construction	3	30
Roofing	2	20
Gardener	2	20
Painter	2	20
None	1	10

Regarding the participants careers after military service, three participants (N = 3, 30%) reported doing construction; two participants (N = 2, 20%) reported roofing; two participants (N = 2, 20%) reported gardening; two participants (N = 2, 20%) reporting painting; one participant (N = 1, 10%) reported no careers.

Table 12. Duration of Time Spent in Career after Military Service

	Frequency N	Percentage %
5-15 Years	5	50
16-30 Years	4	40
Not Applicable	1	10

Regarding duration of time spent in career after military service, five participants (N = 5, 50%) reported spending a range of 5-15 years in a new career; four participants (N = 4, 40%) reported spending a range of 16-30 years in a new career; one participant (N = 1, 10%) reported not applicable because no new career was obtained after military service.

Table 13. Reason for End of Second Career

	Frequency N	Percentage %
Retirement	3	30
Quit	5	50
Laid Off	1	10
Not Applicable	1	10

When reporting the reason for the end of their second career, three participants (N = 3, 30%) reported retirement; five participants (N = 5, 50%) reported quitting; one participant (N = 1, 10%) reported being laid off; one participant (N = 1, 10%) reported not applicable because no new career was obtained after military service.

Table 14. Hobbies

	Frequency N	Percentage %
Travel	1	10
Golf	4	40
Games	3	30
Fishing	4	40
None	2	20

Participants had the option to discuss more than one interest when reporting their hobbies. One participant (N = 1, 10%) reported traveling; four participants (N = 4, 40%) reported golfing; three participants (N = 3, 30%) reported playing games; four participants (N = 4, 40%) reported fishing; two participants (N = 2, 20%) reported no hobbies.

Table 15. Preference of How to Spend Free Time

	Frequency N	Percentage %
Watch Baseball	6	60
Read	3	30
Camp	3	30
Poker	2	20
Watch Television	1	10

In regards to how they spend their free time, participants had the option to share as many applicable items as they felt necessary. Six participants (N = 6, 60%) reported watching baseball; three participants (N = 3, 30%) reported reading; three participants (N = 3, 30%) reported camping; two participants (N = 2, 20%) reported playing poker; one participant (N = 1, 10%) reported watching television.

Table 16. Socializing Preference

	Frequency N	Percentage %
Spend Time Alone	6	60
Socialize	4	40

Six participants (N = 6, 60%) reported preferring to spend time alone; four participants (N = 4, 40%) reported preferring to socialize with others.

Table 17. Experience Losing Family or Friends

	Frequency N	Percentage %
Parent Death	10	100
Sibling Death	5	50
Spouse Death	3	30
Friend Death	10	100
Child Death	1	10

Participants had the option to disclose as many deaths of family and friends as they had experienced. Ten participants (N = 10, 100%) reported experiencing the death of a parent; five participants (N = 5, 50%) reported experiencing the death of a sibling; three participants (N = 3, 30%) reported experiencing the death of a spouse; ten participants (N = 10, 100%) reported experiencing the death of a friend; one participant (N = 1, 10%) reported experiencing the death of a child.

Table 18. Anticipation of Death

	Frequency N	Percentage %
Death Anticipated	10	100
Death Unexpected	6	60

Regarding experiences of deaths that were expected and unexpected, participants had the option to choose more than one answer. Ten participants (N = 10, 100%) reported experiencing the death of someone where it was expected; six participants (N = 6, 60%) reported experiencing the death of someone where it was not expected.

Table 19. Strategies Used to Cope with Death

	Frequency N	Percentage %
Avoidance	5	50
Support From Spouse	3	30
Talk About Feelings	2	20

Regarding coping with death, five participants (N = 5, 50%) reported avoiding thinking or talking about the death; three participants (N = 3, 30%) reported support from spouse; two participants (N = 2, 20%) reported talking to someone about their feelings.

Table 20. Occurrence of Death of Friends or Family Members

	Frequency N	Percentage %
After Military Service	10	100
During Military Service	10	100
Before Military Service	3	30

Participants had the option to discuss the occurrence of more than one death of a friend or family member. Ten participants (N = 10, 100%) experienced a death after their military service; ten participants (N = 10, 100%) experienced a death during their military service; three participants (N = 3, 30%) experienced a death before their military service.

Table 21. Outlets for Expressing Thoughts and Emotions

	Frequency N	Percentage %
Discuss Thoughts	3	30
Keep it to Themselves	4	40
Yell	3	30

Regarding outlets for expressing thoughts and emotions, three participants (N = 3, 30%) reported discussing thoughts with others; four participants (N = 4, 40%) reported keeping it to themselves; three participants (N = 3, 30%) reported yelling.

Table 22. Communication with Family or Friends

	Frequency N	Percentage %
Communication with Family	7	70
Communication with Friends	5	50
No Communication	2	20

Regarding communication with family or friends participants had the option to discuss communication with multiple people. Seven participants (N = 7, 70%) reported having communication with family; five participants (N = 5, 50%) reported having communication with friends; two participants (N = 2, 20%) reported no communication with family or friends.

Table 23. Major Life Events that Occurred Prior to Post-Traumatic Stress

Disorder Diagnosis

	Frequency N	Percentage %
Spouse Illness	2	20
Death	6	60
Deteriorating Health	4	40
Retirement	2	20
None	2	20

Participants were able to discuss more than one major life event that occurred prior to the diagnosis of PTSD. Two participants (N = 2, 20%) reported experiencing a spouse illness; six participants (N = 6, 60%) reported experiencing a death; four participants (N = 4, 40%) reported experiencing deteriorating health; two participants (N = 2, 20%) reported experiencing retirement; two participants (N = 2, 20%) reported experiencing no major life events.

Table 24. Post-Traumatic Stress Disorder Symptoms

	Frequency N	Percentage %
Anger	8	80
Nightmares/Sleep Problems	6	60
Depression	4	40
Anxiety	3	30
Fear	2	20

Participants had the option to list as many symptoms related to PTSD as necessary. Eight participants (N = 8, 80%) reported anger; six participants (N = 6, 60%) reported nightmares and sleep problems; four participants (N = 4, 40%) reported depression; three participants (N = 3, 30%) reported anxiety; two participants (N = 2, 20%) reported fear.

Table 25. Severity of Post-Traumatic Stress Disorder Symptoms

	Frequency N	Percentage %
5	4	40
6	2	20
8	4	40

Regarding severity of PTSD symptoms, four participants (N = 4, 40%) reported a severity of five; two participants (N = 2, 20%) reported a severity of six; four participants (N = 4, 40%) reported a severity of eight.

Table 26. Methods for Coping with Combat after Military Service

	Frequency N	Percentage %
Drank Alcohol	8	80
Smoked Cigarettes	7	70
Avoidance of Thoughts About Combat	9	90

Regarding coping with combat after military service, participants had the option to list as many coping methods as necessary. Eight participants (N = 8, 80%) reported drinking alcohol; seven participants (N = 7, 70%) reported smoking cigarettes; five participants (N = 9, 90%) reported avoiding thoughts about combat.

Table 27. Substance Abuse Treatment Received

	Frequency N	Percentage %
Substance Abuse Treatment Received	2	20
Substance Abuse Treatment Not Received	8	80

Two participants (N = 2, 20%) reported receiving substance abuse treatment; eight participants (N = 8, 80%) reported they did not receive substance abuse treatment.

Table 28. Methods Utilized to Transition into Civilian Life

	Frequency N	Percentage %
Working	6	60
Raising a Family	3	30
Counseling	1	10

Regarding transitioning into civilian life, six participants (N = 6, 60%) reported working as a means to transition; three participants (N = 3, 30%) reported that raising a family assisted them in transitioning, and one participant (N = 1, 10%) reported receiving counseling.

#### Summary

Chapter Four presented the results of the study regarding the effects of life events on the onset of delayed PTSD. Demographic information was provided as well as detailed statistical information compiled from collected data.

## CHAPTER FIVE

### DISCUSSION

#### Introduction

The findings of this study are discussed in the following chapter. Limitations of the study are presented and thoroughly discussed. Recommendations for future social work research, practice, and policy in relation to male combat veterans with delayed onset PTSD are described.

#### Discussion

The study sampled a population of 10 male combat veterans over the age of 65 who had a delayed PTSD diagnosis. The average age of the participants sampled was 72 years old. A majority of the participants consisted of Caucasian males. There was an under representation of other ethnicity respondents. The education level of the participants ranged from eighth grade to some college and 70% had a high school education level. Over half of the participants were currently married and 90% had children.

Declining health conditions were reported by 100% of the participants. The most common health conditions reported were high blood pressure and heart problems. High blood pressure was reported by 60% of the participants and 50% reported heart problems. The significance of declining health conditions is made evident in an article focusing on physical illness and delayed PTSD. The study done by Ruzich, Looi, and Robertson (2005),

discussed that stressors in old age such as physical illness may be the reason for the onset of delayed PTSD symptoms. The findings of the study support the suggestion that declining health may lead to the onset of delayed PTSD.

All participants included in the study had a PTSD diagnosis. At least one other mental health condition was reported in 100% of the participants. The most common mental health diagnoses reported were depression and anxiety. Depression was reported in 80% of the participants. Anxiety was reported in 50% of the participants. In an article by Owens, Steger, and Whitesell (2009), veterans commonly report depression. According to Owens, Steger, and Whitesell (2009), depression will develop in combat veterans if the traumatic events are not dealt with properly. The evidence discussed above supports the findings of this study.

A new career was established after military service by 90% of the participants. Of these 90%, a career in manual labor was chosen by 100% of the participants. The length of time spent in this new career ranged from 16-30 years for 40% of the participants. Ultimately, 50% of the participants quit working and 30% retired. In an article by Kaisman (2003), it was suggested that combat memories can resurface following the loss of a job. A possible reason for this is many veterans suppress combat memories by dedicating their lives to their work, and when the veteran is no longer working, he may not be able to cope with the combat memories.

When discussing hobbies, a majority of the participants discussed hobbies that can be done individually. Golfing was reported by 40% of participants, fishing was reported by 40% of the participants, and 20% of the participants disclosed having no hobbies. Preferring to spend time alone was reported by 60% of the participants. A possible cause of this is the high prevalence of depression in the participants. According to Berger and Scharer (2011), individuals with depression prefer to spend time alone rather than socialize with others. Spending time alone may cause the veteran to think more about traumatic events which can lead to the onset of delayed PTSD (Berger & Scharer, 2011).

Participants were asked about their experiences with the death of family or friends. The death of a parent had been experienced by 100% of the participants. The death of a friend had been experienced by 100% of the participants. The death of a sibling had been experienced by 50% of the participants. Of these experiences, 100% of the participants had experienced at least one death that was anticipated, and 60% had experienced at least one death that was unexpected. When dealing with death, 50% of the participants reported coping with the death by avoiding feelings. When asked about outlets for expressing thoughts and emotions, 40% reported keeping their thoughts to themselves. At least one death during their military service was experienced by 100% of the participants. At least one death after military service was experienced by 100% of the participants. Kaisman (2003) describes normal

events that occur as an individual ages such as the death of a loved one can bring back combat memories. The death of a loved one may remind the veteran of the traumatic experiences of combat (Horesh, Solomon, Zerach, & Ein-Dor, 2011).

The participants discussed major life events that occurred shortly before their PTSD diagnosis. The death of a family member or friend was reported by 60% of the participants. Deteriorating health was reported by 40% of the participants. Retirement was reported by 20% of the participants. A possible cause for this is stressful events may lead to the onset of delayed PTSD. An article by Horesh, Solomon, Zerach, and Ein-Dor (2011) links stressful events following a traumatic event with delayed PTSD. The occurrence of life stressors might increase the possibility that an individual will develop delayed PTSD following a traumatic event. Major life changes such as experiencing a death, deteriorating health, or job loss may cause symptoms of delayed PTSD to appear. Individuals who experience combat trauma can experience a long period where they have no symptoms; however, following this period, they may encounter a stressful event that brings the trauma to the surface again (Horesh, Solomon, Zerach, & Ein-Dor, 2011).

The participants discussed methods for coping with combat after military service. Drinking alcohol was reported by 80% of the participants. Smoking cigarettes was reported by 70% of the participants. Avoiding thoughts about combat was reported by 90% of the participants. Research has

suggested that repressing emotions brought on by combat experience can lead to the onset of delayed PTSD (Horesh, Solomon, Zerach, & Ein-Dor, 2011). According to Berger and Scharer (2011), the military does not encourage expressing emotions. After combat, many individuals continue to repress negative emotions. As veterans age, defense mechanisms and coping strategies that prevented the veteran from becoming affected by the traumatic event might not be as effective (Berger & Scharer, 2011).

#### Limitations

This study is limited by several factors. Memory liability posed a problem because a large amount of time had passed between combat and the interview with the participants. Recall on PTSD symptom severity and time of onset for PTSD symptoms can change over time and are subject to exaggeration. Recall of symptom onset many years ago is likely to involve a certain degree of imprecision.

A limitation of this research project was the sample size of the study. The sample size was only ten participants. A larger scale population of veterans would be of more value. The findings of the study might have been influenced by the small sample size.

Another limitation was a majority of the population sampled were Caucasian males. Other ethnicity respondents are under represented. The combination of an under represented diverse ethnic population and the small

sample size might have effected the findings of this study resulting in difficulties being generalized.

### Recommendations for Social Work Practice, Policy and Research

Further additional research is needed to increase understanding of the cause, symptoms, and onset of delayed PTSD. Further research is needed due to the large number of veterans who are transitioning into a later stage in life and may develop delayed PTSD. Further research will help social workers come up with new methods to predict and treat the disorder.

There are a limited number of studies due to the fact that delayed PTSD is underreported. It is crucial to do more research to further understand the development of delayed PTSD. In order to confirm the findings of this study, it is important to use a large sample population. Participants of different cultures need to be included in research so the results can be generalized.

Continuing to study delayed PTSD would be beneficial. Research would help to reduce negative aspects of delayed PTSD and would assist in finding ways to treat the disorder. Understanding delayed PTSD would lead social workers to provide effective clinical services to veterans.

Further research on the development and effect of life events on delayed PTSD will help provide aging veterans with effective treatment services. These services would result in a better quality of life for combat veterans. This research can be utilized in the field of social work in order to

create programs that provide combat veterans services for PTSD. Social workers could help develop and move forward with programs to improve the quality of life for aging veterans. The application of this study will assist in treating the effects of combat on veterans. The aging veteran population is increasing in size and it is imperative that assistance is provided for these veterans.

### Conclusions

The preceding chapter discussed limitations and recommendations for future social work research, practice and policy were thoroughly discussed. The findings of the research on the effects of life events on the onset of delayed PTSD were explored. The study found that stressful life events may lead to the onset of delayed PTSD. The possibility that an individual will develop delayed PTSD in response to a prior traumatic event may be increased with the occurrence of additional life stressors.

APPENDIX A  
GENERAL INTERVIEW QUESTIONS

## **GENERAL INTERVIEW QUESTIONS**

- What is your age?
- What is your ethnicity?
- What is your highest level of education?
- What is your marital status?
- Do you have children?
- What are their ages?
- How close are you to them?
- How long were you in the military?
- Which war were you in?
- How long were you in combat?
- How long has it been since your last military service?
- When were you diagnosed with Post-Traumatic Stress Syndrome?
- Describe how your health has been since your military term ended?
- Have you undergone any medical treatments due to major illnesses?
- How did you cope with the illness? Did you have support from family and friends?
- What are your mental health conditions?
- What kinds of treatments did you receive to overcome the diagnosis?
- Can you tell me about any careers you had after your military service?
- How long were you in this career?
- How did this career end (ex. retirement, laid off, quit)?
- What hobbies have you developed since retirement?
- How do you spend your free time?
- Do you prefer to socialize with others or spend time alone?

- Describe any experiences you have had with losing any members of your family or friends?
- Were you prepared to deal with their death or was it unexpected?
- How did you cope with the death?
- How long after your military service did the death occur?
- What are your outlets for expressing your thoughts and emotions?
- Do you have an open line of communication with a family member or friend to help you to cope with every day stressors?
- Can you remember any major life events that occurred soon before you were diagnosed with Post-Traumatic Stress Syndrome?
- Tell me about your symptoms related to PTSD?
- On a scale of 1-10 how severe do you rate your symptoms?
- How did you cope with the difficulties of combat during and after military service (ex. substance abuse)?
- Did you receive any substance abuse treatment?
- After military service, how did you transition back into civilian life (ex. counseling, support groups)?

Developed by Meaghan Martin

APPENDIX B  
INFORMED CONSENT

## INFORMED CONSENT

The study in which you are being asked to participate is designed to investigate the effects of life events on the delayed onset of Post-Traumatic Stress disorder in aging combat veterans. This study is being conducted by Meaghan Martin under the supervision of Dr. Rosemary McCaslin, Professor of Social Work, California State University, San Bernardino. This study has been approved by the School of Social Work Sub-Committee of the Institutional Review Board, California State University, San Bernardino.

**PURPOSE:** The purpose of the study is to determine if life events experienced by an aging veteran are associated with the development of delayed Post-Traumatic Stress Disorder.

**DESCRIPTION:** If you take part in this study you will be interviewed and asked questions about life events that have occurred since combat exposure. Please read this consent form completely and sign (with only an "X") if you agree to the terms.

**PARTICIPATION:** Participation in this study is voluntary; refusal to participate will involve no penalty. If you feel uncomfortable in answering a question, you may discontinue participation at any time without penalty.

**CONFIDENTIALITY OR ANONYMITY:** Your confidentiality will be protected. Your privacy is important to me, so I will not record identifying information. Please do not include name or contact information on this document. Direct identifiers that would allow someone to determine your identity will not be collected. Your name will not be used in the presentation of this research. You will be interviewed in a private area where you cannot be overheard.

**DURATION:** Participating in this interview will take approximately 45 minutes.

**RISKS:** There are no foreseeable risks from participating in this interview. There might be some discomfort with the questions asked during the interview. If for any reason you feel uncomfortable during the interview, you can stop the interview at any time.

**BENEFITS:** Your contribution in this interview will help further the research on the development and causes of delayed Post-Traumatic Stress Disorder. The findings will progress social work practice to help provide aging veterans with a better quality of life.

**CONTACT:** For any questions in regards to this study or participant's rights please contact: Dr. Rosemary McCaslin (909) 537-5507 or [rmccaslin@csusb.edu](mailto:rmccaslin@csusb.edu)

**RESULTS:** Results can be obtained at the library at California State University, San Bernardino after September 2014.

**CONFIRMATION STATEMENT:** I have read and understand the above information and agree to participate in your study.

**SIGNATURE:** Please mark an "X" do not put your name.

Mark \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX C  
DEBRIEFING STATEMENT

**STUDY OF THE EFFECTS OF LIFE EVENTS ON THE ONSET OF  
DELAYED POST-TRAUMATIC STRESS DISORDER IN AGING COMBAT  
VETERANS DEBRIEFING STATEMENT**

**DEBRIEFING STATEMENT**

Thank you for completing this study, conducted by Meaghan Martin, an MSW student at California State University, San Bernardino. This study you have just completed was designed to investigate the effects of life events on the onset of delayed Post-Traumatic Stress Disorder in aging combat veterans. Your participation is appreciated. If you have any questions about the study, please feel free to contact Dr. Rosemary McCaslin at (909) 537-5507. Results of this study can be obtained at the library at California State University, San Bernardino after September 2014.

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