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Durakovic, Asim

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The increase in the suicide rates of US service members and veterans since 2004 has become a cause for great concern for the Departments of Defense (DoD) and Veterans Affairs (VA). Research shows that providing emotional intelligence training can improve the resilience of US military personnel and help reduce problems such as suicide and PTSD.

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United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

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THE VALUE OF EMOTIONAL INTELLIGENCE TO HELP MITIGATE SUICIDE RATES IN THE U.S. MILITARY

AUTHOR:

LCDR ASIM DURAKOVIC, USN

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MMS Mentor Team and Oral Defense Committee Member: Jorge Benitez, Ph.D.
Approved: _____
Date: 5/6/21

MMS Mentor Team and Oral Defense Committee Member: Lt.Col. Misca Geter, USMC
Approved: _____
Date: 6 May 21

United States Marine Corps
Command and Staff College
Marine Corps University
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Approved: _____
Date: _____

Executive Summary

Title: The Value of Emotional Intelligence to Help Mitigate Suicide Rates in the U.S. Military

Author: Lieutenant Commander Asim Durakovic, United States Navy

Thesis: The US can reduce some of the mental health problems in the military if it provides better training in Emotional Intelligence to its military personnel.

Discussion: The increase in the suicide rates of US service members and veterans since 2004 has become a cause for great concern for the Departments of Defense (DoD) and Veterans Affairs (VA). The DoD and VA are continuing to wrestle with this problem and trying to treat the underlying cause(s) of suicide in service members and veterans. Research shows that providing emotional intelligence training can improve the resilience of US military personnel and help reduce problems such as suicide and PTSD.

Conclusion: Suicide has become a serious problem for the military in recent years and it does not seem to be getting any better, despite some effort such as the collaboration between the U.S. Army and (National Institute of Mental Health (NIMH). The data shows a valuable connection between the EI and reducing military suicide rates. The research also supports the recommendation of this study that by increasing EI training, the military can help decrease future suicides in both service members and veterans in a timely and cost-effective manner.

DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

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Preface

Almost 500 active-duty military members and ten times as many veterans die of suicide each year! The numbers alone are astounding and require our full attention and diligence in getting them down to zero suicides. It is understood that military personnel and by extension veterans, are under a tremendous amount of stress during their careers. We cannot forget that those people are human and that they need help when it comes to suicide problems because suicides rise from mental health problems and most people are not trained or equipped to deal with those problems on their own. We must do better as a society in protecting those who volunteered to protect us by joining the military. Anything less is unacceptable!

Thank you to my mentors, Dr. Jorge Benitez and Lieutenant Colonel Misca Geter, for your encouragement, advice, guidance, and assistance in making this paper possible.
Last, but most importantly, thank you to my wife, Tricia Fraser-Durakovic, for your advice and continuous support during this project.

I. Introduction

The increase in the suicide rates of US service members and veterans since 2004 has become a cause for great concern for the Departments of Defense (DoD) and Veterans Affairs (VA)[1]. The DoD and VA are continuing to wrestle with this problem and trying to treat the underlying cause(s) of suicide in service members and veterans. Research shows that increase in suicide rates signals more prevalent underlying mental health problems that were possibly exacerbated by the stress of combat.[2] Suicide in the military has become such a significant problem that it garnered attention from senior military officials. A 2018 Pentagon report revealed the rate of suicide among active-duty troops went up by a third over the 5-year period from 2013-2018 (24.8 per 100,000 in 2018, compared to 18.5 per 100,000 in 2013).[3] Former Secretary of Defense Mark T. Esper, told reporters that "every single" suicide is a tragedy, and that "I wish I could tell you we have an answer to prevent further, future suicides in the Armed Forces, we don't, we are caught up in what some call a national epidemic of suicide among our youth. And not just our youth, but it's something we continue to wrestle with."[4] Army Chief of Staff Gen. James McConville echoed the same sentiment in his response to the continuing rise in suicide among Army personnel by stating "We don't know what is causing this persistent rise, but we can say that it's been recognized by Army leadership at all echelons, and Army leadership is committed to solving and addressing this problem."[5]

Table 2. Age- and Sex-Adjusted Veteran Suicide Rate per 100,000 Population Members, 2005–2017

Year	Suicide Deaths	Average per Day	Veteran Population	Age-and-Sex-Adjusted Suicide Rate
2005	5,787	15.9	24,240,000	18.5
2006	5,688	15.6	23,731,000	17.6
2007	5,893	16.1	23,291,000	18.8
2008	6,216	17.0	22,996,000	20.6
2009	6,172	16.9	22,603,000	20.8
2010	6,158	16.9	22,411,000	21.4
2011	6,116	16.8	22,061,000	22.3
2012	6,065	16.6	21,765,000	22.4
2013	6,132	16.8	21,415,000	23.6
2014	6,272	17.2	21,029,000	25.0
2015	6,227	17.1	20,560,000	26.3
2016	6,010	16.4	20,170,000	25.7
2017	6,139	16.8	19,803,000	27.7

Figure 1.[6]

Veteran's suicide has been a far worse problem over the last 13 years as depicted in the chart above, with about 17 veterans committing suicide daily. The data reveals that current efforts are not sufficient for decreasing the suicide rates in current and veteran military personnel.

Army Gen. Paul E. Funk II, who oversees the Army Training and Doctrine Command (TRADOC), has identified that a new approach is necessary. He suggested that all soldiers should see a behavioral professional once a year in his statement at the Army's 2020 Fires Conference "In my opinion, just like we have to go see the dentist, we all ought to have to see the behavioral health specialist once a year."[7] Emotional Intelligence (EI) training is one type of behavioral health assistance that can help individuals increase resilience which could then decrease the risk factors for suicide from high stress environments.[8] Providing military and veteran personnel with EI training will help improve current efforts to decrease the problem of suicide.

EI training can also help military leaders recognize when their personnel are struggling with mental health issues and could lead to early referrals and diagnosis of the illness. Research by Armstrong, Galligan, and Critchley, and a study by Hunt and Evans, have shown that proper EI training can help reduce the effects of military environment stress and could decrease the suicide rates.[9,10] This study will assess DoD and VA programs that are currently utilized to treat and handle suicide and PTSD cases and examine the evidence of the positive impact of EI training on mental health issues such as suicide rates and PTSD. Understanding what suicide is and handling it effectively, ultimately would help both military leaders and their personnel decrease the alarming rate amongst service members and veterans.

II. The Dual Crisis: Mental Health Issues and Suicide Rates

According to a study conducted by Hyman, Ireland, Frost and Cottrell, suicide rates went up in all the military services during the 2005-2007 timeframe.[11] This study also showed that there is a strong connection between mental health diagnosis and suicide.[12] "Mental health diagnoses, deployments (especially in 2007), mental health visits, Selective Serotonin Reuptake Inhibitor (SSRI) and sleep prescriptions, reduction in rank, enlisted rank, and separation or divorce were found to be consistently associated with suicide."[13] Although this study was started by the Army, it eventually included all services due to the increased numbers of suicides.

Suicide is also a problem that affects American society. The 2013 article by Nock, Deming, Fullerton, Gilman, Kessler, and Ursano, described suicide as "the 16th leading cause of death worldwide and the 10th leading cause of death in the U.S. general population, accounting for approximately 1.4% of all deaths."[14] According to National Institute of Mental Health (NIMH), the suicide affects every age group as indicated by the attached chart.

Leading Cause of Death in the United States (2018) Data Courtesy of CDC							
	Select Age Groups						
Rank	10-14	15-24	25-34	35-44	45-54	55-64	All Ages
1	Unintentional Injury 692	Unintentional Injury 12,044	Unintentional Injury 24,614	Unintentional Injury 22,667	Malignant Neoplasms 37,301	Malignant Neoplasms 113,947	Heart Disease 655,381
2	**Suicide 596**	**Suicide 6,211**	**Suicide 8,020**	Malignant Neoplasms 10,640	Heart Disease 32,220	Heart Disease 81,042	Malignant Neoplasms 599,274
3	Malignant Neoplasms 450	Homicide 4,607	Homicide 5,234	Heart Disease 10,532	Unintentional Injury 23,056	Unintentional Injury 23,693	Unintentional Injury 167,127
4	Congenital Abnormalities 172	Malignant Neoplasms 1,371	Malignant Neoplasms 3,684	**Suicide 7,521**	**Suicide 8,345**	CLRD 18,804	CLRD 159,486
5	Homicide 168	Heart Disease 905	Heart Disease 3,561	Homicide 3,304	Liver Disease 8,157	Diabetes Mellitus 14,941	Cerebro-vascular 147,810
6	Heart Disease 101	Congenital Anomalies 354	Liver Disease 1,008	Liver Disease 3,108	Diabetes Mellitus 6,414	Liver Disease 13,945	Alzheimer's Disease 122,019
7	CLRD 64	Diabetes Mellitus 246	Diabetes Mellitus 837	Diabetes Mellitus 2,282	Cerebro-vascular 5,128	Cerebro-vascular 12,789	Diabetes Mellitus 84,946
8	Cerebro-vascular 54	Influenza & Pneumonia 200	Cerebro-vascular 567	Cerebro-vascular 1,704	CLRD 3,807	**Suicide 8,540**	Influenza & Pneumonia 59,120
9	Influenza & Pneumonia 51	CLRD 165	HIV 482	Influenza & Pneumonia 956	Septicemia 2,380	Septicemia 5,956	Nephritis 51,386
10	Benign Neoplasms 30	Complicated Pregnancy 151	Influenza & Pneumonia 457	Septicemia 829	Influenza & Pneumonia 2,339	Influenza & Pneumonia 5,858	**Suicide 48,344**

CLRD: Chronic Lower Respiratory Disease

Figure 2.[15]

Unfortunately the detection, prediction, and prevention of suicide is a difficult task because most people naturally try to hide suicidal thoughts and behaviors to avoid the stigma associated with suicide.[16] The presence of a mental disorder in the past was among the most consistently reported risk factors for suicidal behavior, and psychological autopsy studies "reveal that 90–95% of the people who die by suicide have a diagnosable mental disorder at the time of their death."[17] There are two general types of psychological factors that may show susceptibility for suicide risk.

> "One, subjectively reported psychological factors that predict suicidal behaviors including personality traits, temperamental factors, and other cognitive affective states, such as impulsiveness, aggressiveness, and hopelessness. Two, a range of

objectively measured neurocognitive factors—primarily in the domain of executive functioning—have been found in suicidal behavior, including problems with decision-making, problem solving, cognitive control, and verbal fluency."[18]

By identifying these factors or combination thereof, we should be able to better identify personnel with the most likely suicidal behavior in the future.[19] Most suicidal behaviors were often preceded by stressful life events such as family/romantic conflicts, grief, and legal/disciplinary problems.[20] In a study of U.S. Army suicide decedents, researchers "found that among the most common stress related circumstances occurring prior to suicide death were intimate partner problems (44.6%) and military-related stress (41.1%)."[21]

Another significant stressor in military personnel that have been in combat is Traumatic Brain Injury (TBI) from widespread exposure to Improvised Explosive Devices (IEDs) and other blast injuries resulting in head trauma, which further increased the suicide risk.[22] In addition, a previous suicide attempt is the strongest predictor of future suicide attempt and those people are 40 times more likely to die from suicide in the future than those who do not have the same history.[23] Historically, the U.S. military suicide rate was lower than that of the general US population, but in 2008 the suicide rate of U.S. Army soldiers surpassed the rates of civilian population for the first time.[24]

The following chart shows the growth of suicide rates in U.S. Army personnel from 2004-09.

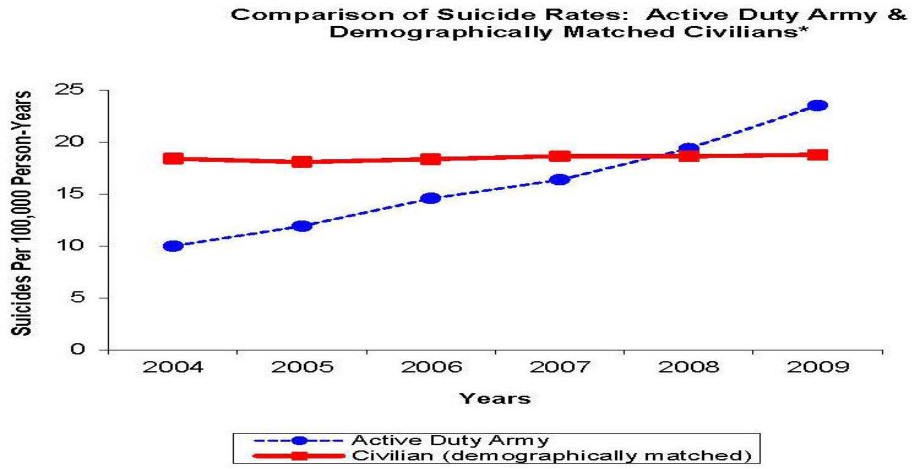

Figure 3.[25]

The Army decided that something had to be done to combat the increasing suicide rates among soldiers. The suicide rate increase led to a creation of partnerships between the military and National Institute of Mental Health to create programs to decrease the suicide rates (Army STARRS).[26] A study by Bachynski, Canham-Chervak, Black, Dada, Millikan, and Jones, found some significant evidence about U.S. Army suicide rates. "Suicide rates were higher among soldiers diagnosed with mental illness in the year before their suicide for all mental health disorders examined, findings that are consistent with studies in civilian and military populations."[27] These findings revealed that "mental health disorders rank as highest risk factors for suicide," further confirming the need for better treatment options for mental health disorders.[28] Additionally, the study showed that from 2004 to 2008, the suicide rates in the U.S. Army almost doubled.[29] The following chart shows the rate correlations among currently deployed, previously deployed, and never deployed U.S. Army personnel.

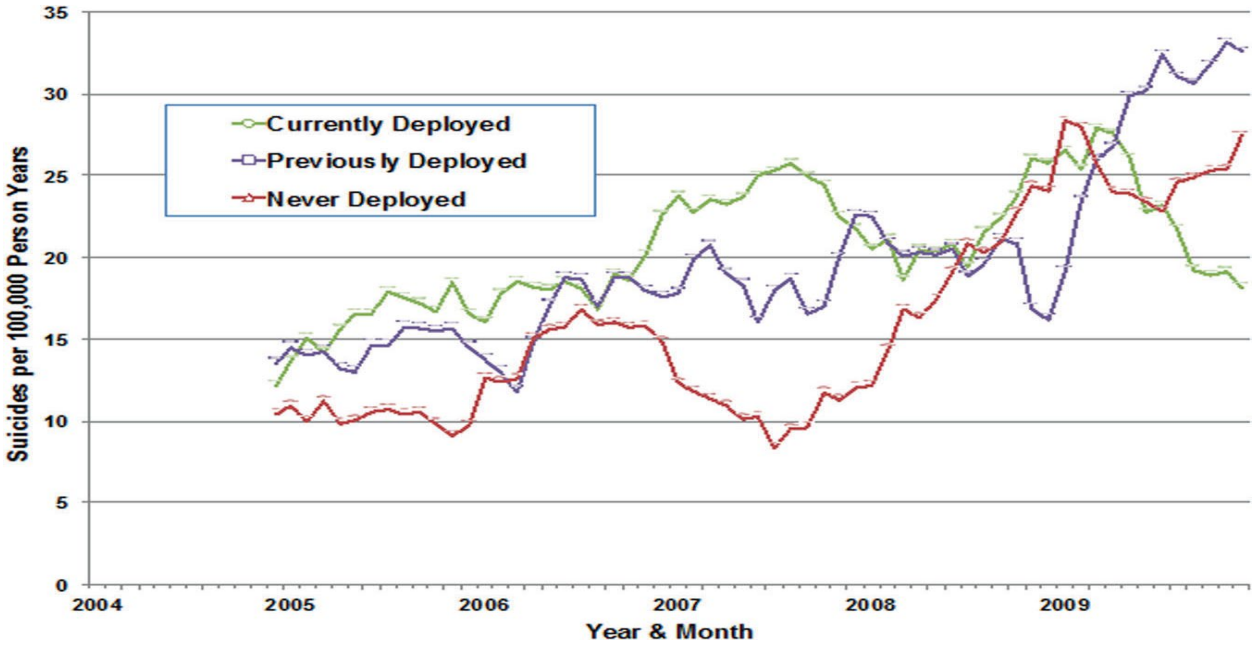

Figure 4.[30]

Veterans and service members who were part of Iraq and Afghanistan conflict had increased psychological disorders and suicide rates and a 2013 study by Finley, Bollinger, Noel, Amuan, Copeland, Pugh, Dassori, Palmer, Bryan, and M. Pugh, set out to examine how and why the mental health of service members and veterans from those conflicts became a great concern.[31] The study found that the most predictive suicide factor among veterans was presence of any psychiatric disorders or suicide attempts in the past.[32] PTSD and Traumatic Brain Injury (TBI) have also been identified as high-risk factors for suicide even when other factors were not present.[33] This study only covered veterans enrolled in Veterans Affairs healthcare system who returned from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), but it shows trends associated with the deployment to combat zones and suicide rates among veterans.[34] It also indicate that the VA has placed increased emphasis on improving clinical care for PTSD and TBI to combat the psychological issues that these servicemembers face when they return from deployments in combat zones. The study added that depression and substance abuse are also significant factors related to suicides and attempts.[35]

It seems to be a common occurrence that military personnel who served in a combat environment are more likely to have PTSD related issues after they return from those combat deployments. That was confirmed in a study by Ghaffarzadegan, Ebrahimvandi, and Jalali, who stated that "11% to 20% of US military personnel who served in Iraq and Afghanistan have diagnosed or undiagnosed PTSD."[36] The authors concluded that PTSD is a multi-organization challenge, affecting not only the military members, but also their families, colleagues, communities, and neighborhoods.[37] The study further discussed the barriers that servicemembers face when trying to get help for PTSD range from long delays for treatment at VA hospitals, and current policies that shuffle the patients between organizations depending on the stage of their illness.[38] It can be concluded that the VA has to clarify its policies for treatment of combat veterans and that its policies regarding their treatment need to be streamlined.

A post deployment screening to identify military members who may need mental health services became mandatory in 1997 across the DoD, with Post Deployment Health Assessment (PDHA) creation soon after.[39] "A two-part process consisting of mental and physical health screening proximal to return from a deployment and followed by a face-to-face discussion with medical provider (not a mental health provider)," identified significant process discrepancies.[40] This led to the creation of Post Deployment Health Re-Assessment (PDHRA) that was conducted between 90 and 180 days post deployment and it captured the soldiers whose PTSD symptoms fell in that timeframe, compared to immediate screening that missed many symptoms.[41] After the screening, the soldiers met with a mental health provider and this made a significant difference in PTSD diagnosis and treatments.[42]

Military operations are very stressful and intense periods where many individuals are exposed to danger and stress throughout their careers.[43] A 2015 study by Lin, Vaisvaser, Fruchter, Admon, Wald, Pine, Bar-Haim, and Hendler, was "able to delineate the relationship between trait anxiety level, attentional threat bias tendency, brain activity in stress-related nodes and severity of PTSD symptoms."[44] Trait anxiety refers to the stable tendency to attend to, experience, and report negative emotions such as fears, worries, and anxiety across many situations. The attentional bias describes our tendency to focus on certain elements while ignoring others. Research has shown that many different factors can bias our attention, from external events and stimuli (such as a perceived threat to our safety) to internal states (such as hunger or sadness). Additionally, the study found that soldiers with attentional threat avoidance tendency were likely to exhibit fewer PTSD symptoms than soldiers with a vigilance bias tendency.[45] This study recommends that future research should focus on PTSD-related brain markers and specifically consider individual differences in trait anxiety level and threat bias tendencies .[46] Individuals with threat avoidance bias showed enhanced hippocampal activity with fewer PTSD symptoms which could be used as a measuring model for PTSD symptoms severity and subsequent treatment.[47]

This study also suggests that under challenging stressful circumstances, such as intense military training, "attentional threat biases may assist all individuals to cope with stress and provide protection from the development of psychopathology."[48] However, it found that "trait anxiety interacts with threat bias to affect PTSD symptom severity and in low anxious individuals both threat biases may be sufficient for adaptive coping with prolonged stress."[49] In high anxious individuals, "disproportionate attention to threat causes increased PTSD symptoms, while redirection of attention away from threat can have a protective effect."[50] This means that

high anxious individuals can increase their PTSD symptoms by focusing too much attention toward a threat, and decrease their PTSD symptoms by not focusing on the threat itself.

III. Emotional Intelligence

Emotional intelligence (EI) can be described as handling our emotions intelligently as opposed to letting emotions cloud our judgment or impair our rational thinking. There are four main pillars to EI: self-awareness, self-management, social awareness, and relationship management. The most important pillar is self-awareness, because it is necessary to master self-awareness in order to achieve success with other elements of EI.[51] Of the remaining pillars, social awareness and relationship management are the most important for military leaders to assess which individuals may be vulnerable to suicidal thoughts. For many, EI is an unknown concept, yet when utilized effectively, it shows significant improvement on how we register and manage stress. Incorporating EI into military training could enhance servicemembers' and veteran's ability to regulate stress.

EI starts with accurately perceiving one's own thoughts and emotions and intelligently managing them in the moment.[52] Understanding why we react to situations is a powerful tool to becoming more self-aware, which is the first foundational skill upon which the other parts of EI build. Self-Management is when a person understands why they feel the way they do in certain situations or around certain people, and stay flexible and redirect any negative behavior into positive behavior.[53] Social Awareness then plays upon these two by giving a person the ability to accurately pick up on and understand emotions in other people.[54] According to Bradberry & Greaves, "listening and observing are the most important elements of social awareness"[55] furthermore, to do this effectively, the clinician needs to stop talking and truly focus on the person in front of them. In essence, this very tool will help military leaders and mental

healthcare providers to accurately pick up on the cues of those at higher risk for mental health illness and suicide.

Relationship Management is effectively managing one's own emotions and those of others in order to improve relationships.[56] In fact, the very definition involves being able to clearly communicate with people and successfully handling conflict.[57] Again, mental healthcare providers need to master this as they deal with many different types of people, cultures, and backgrounds both with other providers and patients. During stressful times, this skill is particularly useful in managing those weaker in this skill who lack the skills of self-awareness and self-management.[58] Military leaders that successfully manage EI skills will have an advantage when it comes to handling and understanding the personal problems of their servicemembers. Helping service members manage problems before they become overwhelmed and resort to self-harm, substance abuse, and family violence is paramount.

IV. Benefits of EI Training in the Military

Understanding the stress that servicemembers are facing, EI can help military leadership recognize and be better equipped to act upon issues in a timely manner. EI training can also help leaders stay focused and absorb critical information during the interactions with their service members. This alone can help get to the real problem at hand. This involves the active listening skill outlined in social awareness. Using the relationship management EI skill would ensure that leaders have "clear communication and effective handling of conflict,"[59] even in most difficult situations. Through application of EI training, both military leaders and service members can better handle the stressful military environment. Every service member that goes through EI training can become more resilient to the factors that lead to suicide and PTSD and can learn proper coping skills when faced with a stressful situation. EI training also helps military leaders

better assess their personnel and identify earlier and with more accuracy any individual behavior that is strongly connected to suicide and PTSD.

PTSD is a frequent mental health diagnosis associated with higher risk of suicide in military personnel and typically goes along with other comorbidities (the simultaneous presence of two or more diseases or medical conditions in a patient) such as depression, anxiety, and bipolar disorder.[60] Mismanagement of this can lead to poor coping mechanisms such as alcohol and or drug abuse, further elevating the risk of suicide. Therefore, it is critical to establish EI training now to teach servicemembers proper coping skills when stress occurs and assist leadership in being able to better read their personnel and provide earlier and more effective assistance.

V. Previous Attempts to Reduce Suicide and PTSD

In 2011, US Army implemented an intensive training in emotional resiliency to all 1.1 million of its soldiers. Journalist Carey Benedict of New York Times spoke to Gen. George W. Casey, Army's Chief of Staff about the program, and Gen. Casey said "the mental effects of repeated deployments, rising suicide rates in the Army, mild traumatic brain injuries, and post-traumatic stress had convinced commanders that we need a program that gives soldiers and their families better ways to cope."[61] The article suggests that people can manage stress by thinking in terms of their psychological strength and by applying new vocabulary and not think the worst-case scenario. Instead of being reactive, the Army decided to be proactive in battling the suicide and PTSD. The very essence of this training is rooted in the fundamentals of EI.

The 2008 Army STARRS program mention earlier, was succeeded in 2015 by the STARRS-LS (Study to Assess Risk and Resilience in Servicemembers — Longitudinal Study), a multi-study project aimed at identifying risk and resilience factors for suicidal behavior and

related mental and behavioral health issues in U.S. Army Soldiers.[62] A study by Hoffman, Taylor, Campbell-Sills, Thomas, Sun, Naifeh, and Kessler, included data from longitudinal follow-up studies of soldiers throughout their Army careers and as they transitioned back to civilian life. This research helpted to better understand when and where to address the important mental and behavioral health issues that servicemen faced.[63] This study concluded that "poorer impulse control and quicker response times on an emotion recognition measure were significantly and independently associated with increased odds of lifetime suicide attempts and that impulsivity most strongly predicted past and future suicide attempts."[64] Unfortunately, the Army has not been very transparent about the results of these studies and their current status. This will be a valuable area for future study once the Army makes its multiple studies accessible to the public.

VI. Benefits of Increasing EI training in the Military

Understanding how to incorporate EI with other military training is key to addressing the suicide and PTSD crisis that the military is facing. A 2011 study by Armstrong et al., indicates that people with poor emotional self-awareness "typically fail to respond to rising stress levels until distress is fully blown," while people with high emotional self-awareness are just the opposite.[65] The study found evidence that people that lack self-control will likely resort to anti-social behavior such as substance abuse in response to personal distress.[66] The study concluded that those with higher levels of Emotional Self-Awareness, Self-Control, Self-Management, and Emotional Expression were less likely to suffer from life event-distress.[67] The evidence shows that EI training that improves the emotional self-awareness of US military personnel can therefore help address this key causal factor to dangerous behavior.

In addition, a 2020 article by Zea, Zankar, and Isna, "highlights the importance of EI and the role of Human Resource Development (HRD) professionals that can assist military personnel's transition to civilian careers."[68] The research from multiple sources examined so far shows that if EI is used in military services it can help HRD personnel create a supportive working environment for military servicemembers.[69] Furthermore, the study reviewed nine studies on role of the EI in the military contexts and further found that "EI was a positive predictor of military job performance,"[70] and that "EI had a positive relationship on perceived and actual leadership effectiveness."[71] The study concluded that proper EI training in the military would better equip military personnel to "effectively manage stress, traumatic situations, and their transition to civilian life."[72]

In addition, a study by Hunt and Evans, found that individuals with higher EI scores were more likely to use a monitoring (processing) strategy, while individuals with lower EI scores resorted to a blunting (avoidance) strategy.[73] Additionally, there was a strong link between EI and trauma in their findings, and they discovered that "more emotionally intelligent people are more likely to be able to deal effectively with situations in their environment without becoming distressed."[74] This is where resilience becomes key. The study specifically suggested the use of EI scales in the "selection of individuals for jobs which involve stressful situations, such as the armed forces."[75] The study emphasized that EI should not be used primarily as a tool for eliminating people that are at risk, but rather to identify the people who may need additional training to obtain the skills required for effective handling of traumatic situations.[76] Goleman confirmed in his book *Emotional Intelligence* that EI can be increased through effective training.[77] The study concluded that EI can be increased with proper training, and that

individuals with higher EI were more likely to have less symptoms regarding trauma-related issues.[78]

Another study in 2016 by Johnson and Blanchard, found that anxiety is an important mediator "between emotion regulation and stress perception, and between emotion regulation and symptom reporting."[79] Ability to identify emotions and to repair unpleasant moods was correlated with lower stress levels and fewer symptom reports.[80] The study further concluded that relationship between stress, depression, and anxiety are important factors and that both patients and mental health counselors need to fully understand them to obtain the best treatment results.[81] Additional work by Nikolajzcak and Luminet, suggests that individual with higher EI are able to have lesser physiological stress response and higher psychological coping skills than those with lower EI.[82] This is where the foundation of self-awareness comes in, which is key to understanding the other three pillars of EI. These findings will be particularly useful when it comes to mental health treatment of military veterans that are leaving the service.

An additional study in 2015 by Oden, Lohani, McCoy, Crutchfield, and Rivers, found that effectively managing emotions (self-management) is crucial for laying the foundation of positive relationships (relationship-management), both of which can be developed through proper EI training.[83] One option would be to include EI training in a scenario based training environment which the military seems to favor as an effective method of training. "Scenario based training is generally accepted as a successful method for imparting knowledge and skills to improve situation awareness and decision-making."[84] The study concluded that high levels of EI are directly related to positive outcomes such as "improved decision-making, establishment of positive relationships, and strong leadership."[85] These are all valuable skills for the military and provide more reasons for increasing EI training to military personnel.

According to Goleman, "the most effective leaders are alike in one crucial way: they all have a high degree of what has come to be known as emotional Intelligence."[86] He further suggests the importance of IQ and technical skills are quite relevant, but he points out that they are merely entry level or "threshold capabilities" requirements for executive positions.[87] Despite having the best training in the world and analytical mind with many smart ideas, without EI they still will not make a great leader.[88] His studies found direct ties between emotional intelligence and measurable positive results.[89] Furthermore, he concluded that EI resides in our limbic system, the one that governs feelings and impulses, and not in our neocortex that governs analytical and technical learning, yet most current behavioral training is targeting our neocortex instead of limbic system, which is not helping to learn EI and needs to change immediately.[90]

Looking further into the activities of the VA, a study by Bernecker, Zuromski, Curry, Kim, Gutierrez, Joiner, Kessler, Nock, Rudd, and Bryan showed that "Cognitive Behavioral Therapy (CBT) is the psychological treatment with the most consistent meta-analytic evidence for reducing suicide attempts."[91] They discovered that CBT is most effective when targeting suicide attempts alone, and not in conjunction with other mental health problems.[92] Due to the unpredictable demands of military service, such as frequent deployments, the study found that Brief CBT (BCBT) is one such suicide-focused CBT, and its "brevity and flexibility enable it to accommodate the unpredictable demands of military service."[93] During the study they calculated that BCBT is a cost-effective intervention for active-duty soldiers with recent suicidal crises. But they also estimated that BCBT would not be cost-effective for all service members reporting suicidal ideation due to increased cost of training and monitoring throughout the DoD.[94] The study concluded that the additional cost to train mental healthcare service providers would cost approximately $1910-2250 per patient, and could be easily offset by 23 averted attempts and 3

suicide deaths per 100 patients when compared to traditional treatment.[95] A 2015 study by Masjedi, Taghavizadeh, Azadi, Hosseinzadeh, and Koushkestani concluded that the CBT had a clear impact on the improvement of the emotional intelligence.[96]

Getting help for mental health problems is a problem itself, and many service members still have a negative stigma associated with it. Sgt. Maj. of the Army Michael Grinston, who spoke Sept. 30, 2020, at the Fires Conference, described it as the "huge stigma" that continues to discourage soldiers from getting help. Thus, even though senior leaders are talking about it, it does not seem to be getting down to the lowest rank personnel.[97] Army Chief of Staff Gen. James McConville echoed this sentiment, and discussed what the Army is doing to help suicide prevention efforts by working on better leader visibility tools, new awareness materials and an updated squad leader development course.[98] His statement, "We don't expect you to be behavioral health specialists, but we do expect you to identify soldiers going through rough times and ... [enable] them to get the help they need,"[99] is a step in the right direction to get those soldiers in need of mental health, the help they need before it is too late.

The DoD needs to invest in EI training for all military members starting with the initial recruit training (boot camp), follow on technical schools, and as they advance through the ranks. In order for the military to truly benefit from EI training, it needs to be taught throughout the full career path. The DoD already does a commendable job of providing regular and long term training on issues such as leadership, sexual assault prevention and response, cyber awareness, suicide awareness, counterintelligence, and many others. But EI training seems to be missing. Since these other types of training are mandatory (annually), many service members complete them just to check off the list of something that must be done, and usually do not spend enough time to fully understand the training itself.

Furthermore, the military does a lot of reactionary training vice proactive training regarding whenever they have an incident, especially suicide incident in a unit or a command. Generally, the unit will hold a stand down, whole unit training regarding the issue at hand following an incident. Such training serves a purpose, but it appears to be a reaction to the incident and may miss the mark of why the training was conducted in the first place. To be more proactive and less reactive, the military needs to do EI training at every opportunity, especially as service members advance in ranks, as those advancements carry greater responsibility and generally include a larger number of personnel under the leadership and care of the newly promoted service member.

VII. Conclusion

Suicide has become a serious problem for the military in recent years and it does not seem to be getting any better, despite major efforts such as the collaboration between the U.S. Army and NIMH. The number of servicemembers with PTSD and other mental health problems related to continuous war since early 2000's is certainly not helping. If these servicemembers and veterans do not receive the required help with their mental health disorders, the suicide rate will continue to be a problem. Adding in the much-needed benefits of EI training among military leaders and servicemembers will help diminish these problems and enhance resilience. Involvement from senior military officials is crucial in encouraging service members and veterans to get help for mental health issues as early as possible and before it is too late.

All the studies examined in this manuscript help us understand the problem of suicide in service members and veterans that is happening right now. According to Bradberry, EI is a fundamental building block that all leaders should learn. Furthermore, they should apply that knowledge to better understand their personnel and identify mental health problems early enough

and get them the proper professional help they need. The Army STARRS program sought to identify risks and resilience factors in mental health that service members and veterans are facing. This program continued for years and had multiple studies aimed at helping service members and veterans battle the suicide issues. These studies confirmed that suicide and PTSD were a problem and recommended that further studies are needed to effectively combat suicide and PTSD issues. The opposite is also true. Failure to improve EI training brings negative results. For example, Armstrong et al., concluded that poor EI leads to slow recognition of issues until it becomes too late, and issues are fully blown and present an unsurmountable task to the service members affected. Zea et al., highlighted the importance of EI training and how Human Resources personnel can deal with veterans more effectively through that training.

The data also shows a valuable connection between EI and reducing military suicide rates. Hunt et al., discovered those with higher EI scores were less likely to commit suicide. Goleman concluded in his book that the EI of individuals can be increased with proper training. The Johnson et al., study found that providing mental health training to military personnel is very important when it comes to preventing suicides. Nikolajczak et al., explained that those with higher EI reported lesser physiological stress response and at the same time higher psychological coping skills. Oden et al., found that effective management of emotions (self-management) is crucial for laying the foundation of positive relationships (relationship-management), both of which can be developed through proper EI training. Goleman showed that effective leaders have a high degree of EI. Bernecker et al., study found that CBT is most consistent meta-analytic evidence for reducing suicide attempts. The study concurs that BCBT is recommended for military members due to its brevity (12 weeks average treatment plan), and to counter the

unpredictable nature of military service, such as frequent deployments or reassignments that would make longer treatment options difficult.

And lastly, senior military officials are realizing that something must be done about this problem because it continues to persist. With active-duty annual suicides hovering around 500 and veterans' suicides exceeding 5,000 (for the last 10-15 years' timeframe), something new must be done to battle this problem.[100] Acting Army Secretary Ryan McCarthy wanted soldiers to get the help they need and urged them to do so in his statement that "Seeking help is not a sign of weakness; it is a sign of strength," and "All of us are responsible for the care and safekeeping of our teammates and their families, and for being there for one another and encouraging those in need to get help."[101] Marine Corps Commandant Gen. David Berger had the same message for the Marines in his statement that "just as we talk about physical fitness, marksmanship, training and education – Marines must also be comfortable discussing life's struggles, mental wellness and suicide."[102]

It is clear that the sources in this research have a common thread: current efforts to reduce suicide rates of service members and veterans have not been sufficient and a new approach is urgently needed. There is also consensus that more training is needed for all involved parties, including current service members, veterans, mental health providers that treat them, and to military leaders that can refer their service members to get help and to help erase the stigma associated with both suicide and mental health in the military. The research also supports the recommendation of this study that if properly applied, EI can provide significant benefits to the military. In other words, by increasing EI training, the military can help decrease future suicides in both service members and veterans in a timely and cost-effective manner.

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