EXAMINING THE RELATIONSHIP BETWEEN RACE-RELATED STRESSORS AND POST-TRAUMATIC STRESS DISORDER AMONG AFRICAN AMERICAN

MALE VIETNAM VETERANS

By

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dissertation of DAVID ZAMON WILLIAMS find it satisfactory and recommend that it be accepted.

Chair

EXAMINING THE RELATIONSHIP BETWEEN RACE-RELATED STRESSORS AND POST-TRAUMATIC STRESS DISORDER AMONG AFRICAN AMERICAN MALE VIETNAM VETERANS

Abstract

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It is estimated that 1,700,000 Vietnam War veterans have experienced "clinically serious stress reaction symptoms" (National Center for Post Traumatic Stress Disorder, 2005). Of this figure, all ethnic minorities (except for Japanese) reported the greatest life time prevalence of posttraumatic stress disorder (PTSD) compared to Whites (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, & Weiss, 1990). The National Vietnam Veterans Readjustment Study (NVVRS) found that African American Vietnam War veterans had greater exposure to war stressors and had more predisposing factors than Whites (Kulka et al., 1990). The Race-Related Stressor Scale (RRSS) is the only instrument that exists to measure race-related stressors that contribute uniquely and substantially to PTSD symptoms and generalized psychiatric distress in an ethnic minority Vietnam Veteran sample. A previous study found that race-related stressors account for a significant proportion of the variance in PTSD symptoms of Asian American Vietnam Veterans (Loo, Fairbank, Scurfield, Ruch, King, Adams, & Chemtob, 2001). Although African American Vietnam War veterans are one of the most frequently studied samples, no instrument exists to measure race-related exposure accounting for their PTSD symptoms.

There are two purposes of this study: Primary is to adapt and validate the RRSS using an African American Vietnam Veteran sample, and secondary is to examine the amount of variability the adapted RRSS accounts for in PTSD and generalized psychiatric distress symptoms. This new measure will be called the Vietnam Racial Stressor Scale for African American Vietnam Veterans (VRSS). The construct validity of the adapted RRSS will be examined by investigating the relationship between the VRSS, PTSD, and general psychiatric distress symptoms, controlling for military rank and exposure to combat. The temporal stability of the VRSS will be assessed using Cronbach's Alpha method. Results of the temporal stability of the VRSS will be compared to Loo et al., (2001) RRSS temporal stability for Asian American Vietnam War veterans. A general discussion of the temporal stability comparisons between the RRSS and its adaptations will suggest the generalizability of the RRSS with other Vietnam War veteran ethnic groups.

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CHAPTER 1

Introduction

"No event in American history is more misunderstood than the Vietnam War. It was misreported then, and it is misremembered now. Rarely have so many people been so wrong about so much. Never have the consequences of their misunderstanding been so *tragic*" (Nixon, 1985). The illusion of diversity in the United States military has been paid at the price of the psychological well-being of ethnic minority veterans. Historically, enlistment into the U.S. armed forces has served as the primary road to gain American citizenship and/or civil liberties for most ethnic minority groups. This forced integration has exposed the latent bigotry and racism that has materialized on the battlefield and home front. The irrevocable psychological damage of the racial atrocities of the Vietnam War has incited an outcry to the mental health community for the immediate delivery of behavioral health services to both military and civilian groups. No war before or since Vietnam has polarized our country and produced as many post-war "psychiatric casualties" (Brende & Parson, 1985). It has been estimated that 20% of all Vietnam veterans and 60% of all combat Vietnam veterans are psychiatric casualties (Karnow, 1983).

The Veterans Administration defines the Vietnam Era from August 5, 1964 to May 7, 1975, and included approximately 3,780,000 Americans (Brende et al., 1985). It is estimated that up to a staggering 1,700,000 Vietnam veterans have experienced "clinically serious stress reaction symptoms" (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, & Weiss 1990). Meanwhile, the diagnosis of a post-traumatic stress disorder did not become legitimized in the Western diagnostic system until 1980

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(American Psychiatric Association, 1980). Disparagingly, the lack of an acceptable diagnostic label delayed clinical treatments to Vietnam Veterans, allowing their symptoms to impair their personal, family, and social functioning. The National Vietnam Veterans Readjustment Survey (NVVRS) found that almost half of the Vietnam veterans suffering from PTSD have been arrested or in jail, 39.2% have a lifetime prevalence of alcohol use/abuse or dependence, 11% had been convicted of a felony, 40% have been divorced at least once (10% had two or more divorces). (Kulka et al.1990). Due to inadequate multicultural clinical training and awareness at this period, many Vietnam veterans of color were frequently misdiagnosed or refused treatments because their race-related trauma did not meet diagnostic criteria for PTSD. Instead, Vietnam veterans of color who received clinical services were mainly misdiagnosed as having schizophrenia, manic depression, anxiety or characterological disorders (Allen, 1986). The tendency of misdiagnosing afforded clinicians to label Vietnam veterans of color with pre-existing pathology, rather than recognizing the existence of their racially-related trauma.

Recently, there has been a cross-cultural effort to explore military race-related stressors that positively correlate with PTSD symptoms among military ethnic groups including: Japanese American Vietnam veterans and Asian and Pacific American Vietnam veterans (Loo & Kiang, 2003; Loo, 1994; Hamada, Chemtob, Sautner & Sato, 1988), Native American Vietnam veterans (Beals, Manson, Shore, Friedman, Ashcaft, Fairbanks, et al, 2002, Holm, 1992), Latino American and African American Vietnam veterans (Penk, Robinowitz, Black, Dolan, Bell, Dorsett, Amers, & Noriega (1989). There is suggestive evidence to demonstrate racial stressors to be a significant stressor for these ethnic groups that accounts significantly for their maladaptive post-war conditions ((Brende & Parson, 1985; Loo, Fairbank, Scurfield, Ruch, King, Adams, & Chemtob, 2001). Despite the evidence on this topic, some researchers still argue that ethnicity and racial stressors may not be a primary differentiating factor in the development of psychiatric distress (Ruef, Litz, and Schlenger (2000).

Minority Vietnam Veterans

Japanese American, Asian, and Pacific American Vietnam Veterans. The Japanese American Vietnam Veteran shared unique physical features with the Vietnamese, and experienced unique interpersonal and military stressors (Loo, 1994). Clinical case studies of Vietnam veterans demonstrate that Japanese Americans experienced ethnic-related stress associated with these shared racial features with the enemy. This identification created anxiety for both having to kill Vietnamese soldiers and being concerned for being mistaken by the enemy by fellow American soldiers (Kiang, 1991; Loo, 1994; Matsuoka, J., Hamada, R., Kilauano, W. & Coalson, R., 1992). Lifetime prevalence for PTSD in Japanese Americans is 9%. As a group, Asian American Pacific Islander Vietnam veterans (i.e. Chinese, Filipino, Korean, Japanese, Hawaiian, Chamorro, and Asian-mixed race) have been found to suffer from PTSD at a rate of 37% (Loo et al., 2001). The examination of this group's racially-related stressors is the first of its kind to establish a link between PTSD and race related stressors (Loo et al. 2001). The empirically based studies by Loo et al. (2001) have led to the creation of the Race Related Stressor Scale (RRSS) to measure race related stressors in military and war zones. The racial stressors experienced by this group serve as the basis of assessing race-related maladjustment in other ethnic minorities.

Native Indian Vietnam Veterans. At least 42,000 American Indians served in the Vietnam War, which is approximately 1.4 percent of the total number deployed. Their contribution to this war effort exceeded their aggregate U.S. population during this era which was 0.6 percent. This figure reflects one in every four draft-age Native American male serving in this war, compared with the one-in-twelve rate of Americans (Churchill, 1998). Often serving in elite positions in the Special Forces, Airborne and Ranger units, Native Americans more than tripled the norm for direct combat roles compared to their counterparts. In total, 36.5 percent of the Native Americans experienced heavy fighting translating to unusually high casualty rates from direct combat, exposure to Agent Orange and PTSD (Churchill, 1998). From the psychiatric casualties, the Pentagon admits Native Americans are representative in an estimated 60 percent of the racial minority Vietnam war PTSD cases (Matsakis, 1992). Most recently, legal efforts (Public Law 101-507) have resulted in the VA's National Center for PTSD to undergo the Matsunaga Study to assess the readjustment experience of American Indian, Japanese American, and Native Hawaiian veterans of the Vietnam War (National Center for Post Traumatic Stress Disorder, 2005). Their findings indicate that American Indian Vietnam veterans were among ethnic groups to have relatively high levels of PTSD coupled with high combat zone stress.

Latino American Vietnam Veterans. Latinos are the fastest growing ethnic group in the nation and are projected to soon become the majority population in the United States of America (U.S. Bureau of Census, 2003). Data from the 1995 and 1996 U.S. Census Bureau indicates that Latinos had the highest number of people living below poverty. In a 1996 study conducted by the National Center for Educational Statistics (NCES). Latinos had the lowest expectation among the main ethnic groups of achieving a baccalaureate degree, limiting many of them to enlistment status (Diaz, 1999, p. 90). Diaz (1999), states that "Hispanics have the highest tendency to join the service among any of the ethnic groups" (p. 94). He sites survey data from the Youth Attitude Tracking Survey (YATS) that shows a high response rate by Latinos to value education, family, interest in traveling and high technology jobs, which consequently are the primary sources of information used by most military recruiters to recruit this group. Diaz (1999) also cites other exploitive tools that enable the military to successfully recruit from this group. He sites a study conducted by the Nielsen and Roslow Research Project in 1995 which"...concluded that 83 percent of Hispanics watched Spanish TV and could recall TV commercials 40 percent more accurately if they saw them in Spanish rather than English" (p. 96). Consequently, advertising to Latinos in Spanish has become a recent effective tool in increasing their (military) enlistment numbers. Over 170,000 Latino Americans fought in the Vietnam War. They were highly recruited and were overrepresented in combat zones. This group accounted for 3,070 Vietnam War casualties or 5.2% (Davidson, 1998) and had the highest life time prevalence rate of PTSD (28%) (Kulka et al. 1991).

Race-Related Stressor Scale

To establish the relationship between military race-related stressors and PTSD symptoms, Loo et al. (2001) developed a Race-Related Stressor Scale (RRSS) to measure exposure to Racism for Asian American Vietnam veterans. The RRSS is a 33 item self-report questionnaire and each item has a 5-point, Likert-response scale ranging from 0 to 4 ("never" to "very frequently"). The item development was based on several factors: (1)

Review of the literature on racially related stressors, (2) clinician and veteran interviews, and (3) focus groups regarding negative race-related experiences of minority veterans who served in the Vietnam War. High scores indicate the presence of negative racedrelated military experience (e.g. singled out for harsher treatment than other races of the same rank, treated by other Americans with racial hatred or hostility). A factorial analysis revealed 3 subscales: Racial Prejudice and Stigmatization, Bicultural Identification and Conflict, and Racist Environment. This scale was normed on 300 Asian American veterans participated. The Cronbach alpha for the full RRSS scale was .97 and Hierarchical regression analyses revealed that exposure to race-related stressors accounted for a significant proportion of the variance in PTSD symptoms and general psychiatric symptoms over and beyond, (20% and 19% respectively) than accounted for by combat exposure and military rank. Test-retest coefficients (r = .85) were based on a sample of 61 male veterans drawn from the full sample of 300. A positive and significant association was observed: with the Combat Exposure Scale score (r = .40, p = .001), between the RRSS total score and the Global Severity Index score of the Brief Symptom Inventory (r = .67, p = .001) and between the RRSS total score and the Mississippi Scale for Combat-Related PTSD scores was (r = .68, p = .001). The Mississippi Scale scores were also positively correlated with each of the 3 RRSS sub-scales. The RRSS total score was negatively correlated with military rank (r = -.37, p = .001). Their findings leave little doubt as to the veracity of previous studies (e.g. Kiang, 199; Loo, 1994, 1998; Loo, Singh, Scurfield, & Kilauano, 1998), and confirm the link between racially-related stressors and psychiatric functioning for Asian American Vietnam veterans.

A fundamental limitation to the RRSS is the restricted generalizability to other Vietnam veterans of color that share similar culturally related war experiences. Of the most important ethnic group to potentially benefit from an indiscriminate version of the RRSS, are African American Vietnam veterans, which were found to have one of the highest life-time prevalence rates of PTSD in the Vietnam War (13.7) (Kulka et al, 1990). Several other national studies consistently report these findings (Egendorf, Kadushin, Laufer, Rothbart, & Sloan, 1981; Penk, et al., 1989). In fact, even as a civilian group African Americans were recently found to be among the greatest risk for PTSD (Pierre & Mahalik, 2005). In a recent study, Klonoff, Landrine and Ullman (1999) demonstrated that racial discrimination is a predictor of Black psychiatric symptoms. In addition, Clark, Anderson, Clark, and Williams (1999) proposed a bio-psychosocial model of racism as a stressor for African Americans, displaying the relationship between perception of a racist environmental stimulus and psychological and physiological stress response that negatively influences health outcomes. Despite this widely published research that finds African Americans among the greatest risk for developing PTSD from racial stressors as both military personnel and civilians, there are no instruments that measure this relational phenomena for this psychologically vulnerable group.

Statement of the Problem

Conventional PTSD assessment measures are largely based on diagnostic criteria that often exclude the explicit mentioning of race-related stressors. Research has indicated that failure to assess for race-related stressor experiences could result in missing up to 20% of the veteran's PTSD symptoms (Loo et al., 2001). Unfortunately, most assessments that address PTSD are normed on white males, leaving multicultural

researchers to create culturally relevant ways of describing race-related stressors of PTSD for ethnic minority groups. Such terms include: Post colonial stress disorder (Duran & Duran, 1995), Post-traumatic demoralization (Brende & Parson, 1985), and Posttraumatic slave syndrome (proposed by Dr. Joy DeGruy-Leary of Portland State University) to name a few. The failure of most PTSD assessments, are their inability to capture the experiential complexities of the groups they describe. The RRSS is a psychometrically sound instrument and accounts for 20% of PTSD symptoms and 19% of general psychiatric symptoms of Asian American Vietnam Veterans (Loo et al. 2001). The success of this scale is largely due to the recognition of unique race-related stressors for Vietnam veterans of color in relation to their military cultural encounters. The RRSS is predicated on earlier works (Hamanda et al., 1987; Kiang 1991) and includes various categories of race-related stressors. The RRSS subscales include: (1) racial stigmatization, (2) bicultural identification and conflict, and (3) a racist environment (Loo et al., 2000). The Cronbach alpha for these sub-scales were: .97 Racial Prejudice and Stigmatization, .93 Bicultural Identification and Conflict, and .93 Racist Environment. In addition, the test-retest co-efficient for these subscales were: .84 for the Racial Prejudice and Stigmatization, .84 for the Bicultural Identification and Conflict, and .69 for the Racist Environment. I propose that these domains (subscales) are transferable in the creation of a modified version of the RRSS based on the shared thematic experiences of marginalized African Americans with Asian American Vietnam veterans. African American veterans of Vietnam experienced significant race-related stressors that mirror those of Asian Americans. Both groups experienced exclusion by their military peers based on their ethnic identification, social status and cultural differences. Black veterans

represented a distinct ethnic identification encompassing higher levels of racial consciousness than their white counterparts. The existence of racial tension is well documented as was expressed through graffiti, segregation, and fights (Carter, 1982; Wilson 1980). Critical incidents provoking this disharmony ranged from disproportionate recruitment of blacks, disproportionate representation of blacks in combat situations, inadequate training of blacks for combat and public protest of the war by black leaders (i.e. Dr. Martin Luther King Jr., Muhammed Ali and Malcolm X) (Allen, 1986).

Other racial stressors endured by African American Vietnam veterans included: being forced to endure military conditions which created a cultural conflict encompassing a language-cognitive classification system (referring to Asians as "gooks"); being encouraged to acquire an aggressiveness towards Asians; witnessing the dehumanization of the Vietnamese which created difficulty racially identifying with this culture; and perceiving and/or actual receiving life threats if refusing to kill the enemy (Loo et al., (2001; Figley & Leventman, 1980; Penk, Robinowitz, Black, Dolan, Bell, Dorsett, Amers, & Noriega (1989)). Yager (1984) discovered that 'blacks' were significantly more disturbed by the crimes towards the Vietnamese due to their inability to rationalize brutality. Consistent with the African American experience, Canive & Castillo (1997) suggested that Latino veterans also experienced psychological distress in combat conditions due to their cultural emphasis on familism and spirituality. The overarching racial stressors experienced by African Americans, Latino Americans, Native Americans, and Asian American Vietnam veterans, were their emotional identification and racial empathy with the Vietnamese culture predisposing them to psychological distress. Based on these similarities, it is my opinion that the RRSS subscales are relevant for African American Vietnam Veteran's cultural war zone racial experiences and would not pose negative consequences if used to assess their exposure to race-related stressors.

The dearth of literature existing on the Latino American and Native American Vietnam veteran restricts the current focus of this study. Although both groups experienced racial stressors contributing to their postwar maladjustment, little empirically based studies document or demonstrate their combat experience or military related PTSD. Further research is required to accurately identify Latino American and Native American Vietnam Veterans' unique cultural stressors before a measurement can be created. In addition, these groups represent one of the greatest interracial complexities including numerous denominations, tribal affiliations and bi-cultural identities. More specifically, the experience of the Native American Vietnam veteran can be dependent on their tribal affiliation and acculturation to American values. Of the approximate 520 existing tribes in the United States, their experience can vary in accordance to their religious and native value system. Any measurement created for either one of these groups should account for variations in the expression of their ethnocultural postwar adjustment.

Purpose Statement

The purpose of this study is twofold: Primary is to examine the amount of variability the adapted RRSS accounts for in PTSD and generalized psychiatric distress, and secondary is to adapt and validate the RRSS using an African American Vietnam Veteran sample.

Implication and Importance

Although the RRSS was first validated using Asian American Vietnam Veterans, its implications for clinical application is limited without systematic replication with other samples of minority veterans. The prevention of mental illness in the most frequently studied group (African Americans) affected by racially-related stressors, is among the greatest social and scientific contribution that can be made. This study is important because knowledge of the extent to which racism adversely affects a person's psychological well-being would contribute to the clinical application of using the RRSS with these groups and other racially ethnic groups (both military and civilians). In addition, such findings will also suggest racially appropriate recommendations for therapeutic treatment interventions for racially diverse populations.

Operational Definitions

African American: This term implies culture rather than color (Nieto, 2004). (The term Black and African American are used interchangeably as referenced in the researched literature).

Black: This term more comprehensively includes people of African American descent from all around the world (Nieto, 2004).

Characterological Disorder: Personality disorders defined by the Diagnostic Statistical Manual IV.

Culture: The values; traditions; social and political relationships; and worldview created, shared and transformed by a group of people bound together by a common history, geographic location, language, social class, and/or religion (Neito, 2004).

Embrujado: Spanish word for hexed.

Ethnicity: Ethnic quality or affiliation of a group which is normally characterized in terms of culture (L.D. McCubbin, personal communication, October 12, 2005).

Gook Identification Theory: Parson (1984) defines this as "the conscious and unconscious emotional identification with the devalued, maligned, abused, and helpless aspects of the Vietnamese, then, was experienced by the soldier as killing and destroying aspects of himself" (p. 141). Psychological trauma African Americans experienced when killing an enemy (Vietnamese) they identified with ethnically, socially, and racially.

The Gook Syndrome: Term coined in 1980 by Leventman and Camacho, characterizing the latter phase of the Vietnam War as a racial encounter, where the "gook" or North Vietnamese, were the "bad guys," the enemy. The distinction between combatants and civilians became blurred.

John Henryism: Theory to explain the ethnic disparity in hypertension prevalence among African American males. The name of this theory derives from the slave legend John Henry, who was believed to have died from over-exhaustion after challenging and defeating a steam mill machine to a railroad-tract building contest. The basis of this theory suggests that high blood pressure results when low socioeconomic status (SES) African American males internalize their somatic reactions to psychosocial stressors (James, Hartnett, and Kalsbeek, 1983)

Latino: Relating to, or being a person of Latin American descent living in the U.S.; *especially* : one of Cuban, Mexican, or Puerto Rican origin (as defined by Merriam-Webster online Dictionary)

Manifest Destiny: "Future event accepted as inevitable in the mid-19th century expansion to the Pacific was regarded as the *Manifest Destiny* of the United States; broadly : an ostensibly benevolent or necessary policy of imperialistic expansion" (as defined by Merriam-Webster online Dictionary)

Negative Privilege: Privilege reserved for military service persons who received social, public and institutional criticism for their role in the Vietnam War.

Post Traumatic Stress Disorder (PTSD): An anxiety disorder characterized by a response to a severe trauma in which an individual experienced, witnessed, or was confronted by actual or threatened death, injury, or loss of physical integrity of self or others (Turner & Neal, 1991, p. 403). These events elicit responses of intense fear, helplessness, or horror and trigger three clusters of PTSD symptoms: re-experience of the trauma (nightmares, flashbacks, and intrusive thoughts), persistent avoidance of reminders of the trauma (avoidance of situations, numbing of general responsiveness, and

restricted range of affect), and persistent increased arousal (sleep difficulties, hypervigilance, and irritability). During World War I, PTSD was called shell shock, and during WW II, it was referred to as combat fatigue. During the Vietnam War, it was called the Post Vietnam Syndrome.

Psychiatric Casualties: A combatant who is no longer able to participate in combat due to a mental (as opposed to physical) debilitation.

Race: Physical characteristics such as skin color, facial features and hair type (L.D. McCubbin, personal communication, October 12, 2005)

Race-Related Stress/Distress: Chronic exposure to racism and oppression that has deleterious effects on the psychological and physical well-being of African Americans (Utsey, 1997).

CHAPTER 2

Literature Review

In this chapter, I will first provide a brief overview of the historical perspectives of African American involvement in the Vietnam War. Second, I will examine the motivational aspects for military enlistment for African Americans. Third, I will discuss some of the concerns of using post-traumatic stress disorder (PTSD) instruments with diverse groups. Fourth, I will present an overview of the risk factors that make African Americans uniquely vulnerable to stress. Fifth, I will review studies that provide support for the existence of racial differences in the development of military related PTSD. Finally, I will provide a chapter summary and concluding remarks highlighting the key points discussed in this body of literature.

Historical Perspectives of Black Involvement in the Vietnam War

The historical evolution of racial terms used to describe Americans of African decent has evolved to capture the cultural climate of different eras. During the era of the Vietnam War (August 5, 1964 to May 7, 1975) the literature refers to Americans of African decent as Black. This term captures the social and political incidences surrounding the Vietnam War that affected pro or anti feelings that have been associated with pre-morbid factors affecting racial-related stress issues (i.e. PTSD) (Parson, 1984; Clark et al, 1999). Feelings towards the Vietnam War was evident in the interracial division in the Black community to either follow the non-violent doctrines of Dr. Martin Luther King or the black separatist instructions of Muslim minister Malcolm X. This conflict underscored the opposing beliefs that racism and discrimination could be overcome by service in the military and the discrepancy of having to fight in a foreign war against people of color (Mullen, 1974).

At the onset of the Vietnam War, the very idea of sending Blacks off to fight for someone else's freedom, while they themselves were still under oppression, seemed contradictory to the Black community. To compound this dilemma further, the Civil Rights Act of 1963 leading up to the war created empathetic feelings of other racially oppressed groups while also reminding Blacks of the racial atrocities perpetuated against them by Whites. Dr. Martin Luther King Jr. points this out by saying, "So we have been repeatedly faced with the cruel irony of watching Negro and White boys on TV screens as they kill and die together for a nation that has been unable to seat them together at the same school (Byrant, 1983. p.5). Regardless of ones internal conflict about the Vietnam War, there were three decisions that war-eligible people needed to make (1) dodge the draft and war by enrolling in college, declaring yourself a conscious objector, or using political affluence (2) volunteer for the war (3) move to foreign territory and risk imprisonment (Brende and Parson, 1985).

Approximately 275,000 Blacks fought in the Vietnam War and made up 13% (or 7,241) of soldiers. The racial injustices of the Vietnam War were not adequately addressed by the medical or psychological community. In some cases African Americans were turned away from Veteran Administration hospitals, misdiagnosed with characterlogical disorders, abandoned by their own communities, and experienced intense psychological distress with having to kill an enemy with whom they racially identified with (Parson, 1984). Terry (1972) states, "...I have believed that America owed the black veterans of the era a special debt. There were no flags waving or drums beating.

But what can be said about the dysfunction of Vietnam veterans in general can be doubled in impact upon most blacks" (Terry, 1972, pp. 57).

Black men were recruited in astonishing numbers and overrepresented exclusively in combat zones and battlefield frontlines (Bulter, 1980). These acts of intense military racial integration raised the question: was this progress the onset of the freedom promised of the efforts to continue America's genocide on Africans? A black Vietnam soldier answers this question by stating, "Word was going around, and it wasn't a quiet word, that blacks were being drafted for genocidal purposes. Just to get rid of us to eliminate the black male" (Goff, Sanders, and Smith, 1982, pp. 56).

African Americans that fought in the war have been described as being rejected twice (Brende and Parson, 1985). The first rejection was experienced by Black Americans while the second was felt by society at large. The Vietnam War was one of the most controversial wars fought on both the home front and the battle field and inspired both feelings of compassion and resentment for the enemy. The Vietnamese nationals were portrayed as poor racial minorities, while America was revered as a superpower. Blacks experienced a negative homecoming in multiple ways, ranging from being rejected for their participation in the war to being denied civil liberties they believed were promised to them before leaving to fight the war. For many Blacks returning home from Vietnam, they felt confused because they were disillusioned to believe they were fighting for South Vietnamese freedom but were called "losers" and referred to as "baby killers" by fellow Americans (Karnow, 1983). Believing that the war had little to do with either communism or democracy, many soldiers became socially reclusive and alienated and began to regard the Vietnam War as a political ploy to deceive soldiers in securing Soviet expansion in Southeast Asia (Brend and Parson, p.2).

Black soldiers who negatively appraised their actions in Vietnam were haunted by memories of atrocities of burning down villages and participating in a war that left 4 million Vietnamese people killed or wounded (Karnow, 1983). The Black-Vietnamese relationship reported by Yager, Lauger, and Gallops (1984), experienced guilt and intrapsychic pain caused by their racial identification of being similarly oppressed and discriminated against. Following the assignation of Dr. Martin Luther King Jr. in 1968 Black soldiers became angry and began to question their participation in the war even further. In Wallace Terry's Bloods: An Oral History of the Vietnam Way by Black Veterans (1984), Richard Ford III, a black soldier describes this period, "...after Martin Luther King died...She was saying, "Soul brother, go home. Whitey raping your mothers and our daughters, burning down your homes. What are you there for? This not your war. This war is a trick of the Capitalist empire to get rid of the blacks" (p.39). The assassination of Dr. Martin Luther King Jr. tested the Black soldiers' loyalty communally, socially, and on the battlefield. Dr. King's death incited a wave of Black consciousness to resist discriminatory acts for White America to which Whites responded back with burnings of the KKK type-crosses and flying of the confederate flag (Binkin and Eitelberg, 1982). Racial tension on the battle front mirrored a war within a war, as Black militancy resulted in administrative discharges given under less-than honorable circumstances (Brende and Parson, 1985, p. 144). These bad discharges often left Black veterans unemployable as reflected in the high unemployment rates among Blacks post-Vietnam.

Motivational Aspects for Military Enlistment for African Americans

Historically, Black Americans have served their country well and have fought in every American war. Black motivation to serve in the military has historically been noted to come from an ardent desire to prove themselves as worthy citizens (Brende and Parson, 1985, pp. 138). Their association between military rank and American ideals led them to believe that military service would earn them respect and personal freedom from discrimination. During the Vietnam War the military focused their campaign in areas with high populations of ethnic minorities. As pointed out in the *Report of the National Working Group on Black Vietnam Veterans* (1985) that, "...most of the affluent members of society who did not fail their physicals were able to secure deferments or able to secure special assignments as officers in the Air Force, Navy, and Coast Guard to avoid Vietnam combat" (p.6). Unfortunately, this loophole favoring the rich, left most of the fighting in Vietnam on the shoulders of Blacks, indigent White and other minorities. So, what then accounts for voluntary commitments to enlist from this group? One potential answer has been in the belief of an "American Dream." The military offers financial, educational and social opportunities. These recruiting devices have traditionally been embedded in the military's marketing ads and brochures. These recruitment efforts were often effective in appealing to underprivileged adolescents who aspired to one day provide for their families. Just as times have changed, so to, have the military's abilities to market to the demographic statistics of this minority group. Their vulnerabilities may make it easier to recruit from. Little is know concerning the marketing strategies of the military to Blacks in the Vietnam era that increased their motivation to enlist in the

Vietnam war. Therefore it is important to look at current marketing trends of the military to this group to gain an historical appreciation for the Black experience during Vietnam

Data from the 1995 and 1996 U.S. Census Bureau indicates that African Americans had one of the highest percentages of people living below poverty compared to all other racial ethnic groups. Inadequate education is one factor that can account for the low level of living for this group. This point is evidenced by the research finding a positive correlation between low level of education and poor living conditions (Brody, 1997b). African Americans battle unique social stressors that present unusual hardships in which the military offers solutions. Also it was eluded to "people of color" that military was one career option that had potential for leadership advancement. Alarmingly in 1991, homicide was the leading cause of death for African American males between 15 and 24 (Center for Disease Control and Prevention, 1991). Another interesting fact is that in 2003, under the 'Poverty Draft', the Pentagon spent close to, "\$4 billion targeting high-achieving low income youth with commercials, video games, personal visits, enlistment bonuses, and slick brochures" (American Friends Service Committee, 2005). These are some of the statistics that potentially drive the military's recruitment efforts. Whether African Americans are motivated by military educational incentives, vocational opportunities, or economic advancement, the military appears to be aware of their social and economic hardships. By being knowledgeable of the traits and characteristics of these racial consumers, the military has become very successful at increasing their enlistment numbers of these groups.

Concerns of PTSD instruments with Diverse Groups

Posttraumatic stress disorder is a pervasive disorder "...that develops following a psychologically stressful event that is outside the normal range of human experience" (Turner & Neal, 1991, p. 403). The vast majority of literature on this topic employs both quantitative and qualitative methodology in measuring the level of PTSD in diverse populations. Of the quantitative studies found, many consist of analyzing the results of psychological instruments among diverse groups. Among the many instruments utilized in the reviewed articles were: The Combat Experiences and Specific Stressor Questionnaire (Foy and Card, 1987; Penk, Robinowitz, Black, Dolan, Bell, Dorsett, Ames, and Noriega, 1989; Figley, 1978; Boulanger and Kadushin, 1986; Brett and Ostroff, 1985; Glesner, Greem, and Winget, 1981), Mississippi Scale for Combat-Related PTSD (Keane, Caddell, and Taylor, 1988; Schlenger and Kulka, 1988), Symptom Checklist 90-R, Brief Symptom Inventory (Kulka et al 1988; Spotzer and Williams, 1985), Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (Hathaway and McKinley, 1951; Keane, Malloy, and Fairbank, 1984; Butcher, Dahlstrom, Graham, Tellegne, Laemmer, 1989; Penk, Keane, Robinowitz, Fowler, and Bell, Finkelstein, 1988; Schlenger and Kulka, 1989) and Impact pf Event Scale (Horowitz, Wilner and Alvarez, 1979; Schwarzwald, Solomon, Weisenberg, Mikulincer, 1987). Researchers most frequently analyzed data from these assessments, using analysis of Variance (ANOVA), and multivariate analysis of variance (MANOVA). Populations usually consisted of military veterans of color, recruited from various Veteran Administration (VA's) outpatient units and military personnel derived from the U.S. armed services (Army, Air Force, Navy, and Marine National Guard active and reserve units). Research questions

consistently aimed to discover whether there were racial differences in PTSD experienced by military veterans and civilian populations. Gaps within these types of measurements include their representativeness of minority veterans (e.g., Foy and Card, 1987; Penk, et al., 1989; Figley, 1978; Boulanger and Kadushin, 1986; Brett and Ostroff, 1985; Glesner et al., 1981; Hathaway and McKinley, 1951; Keane et al., 1984; Butcher, et al. 1989; Penk et al., 1988; Schlenger and Kulka, 1989).

In their analysis of PTSD studies, Litz et al. (1988) concluded that none of the reviewed empirical investigations were adequate to measure of PTSD in minority groups. Furthermore, they suggest that many psychometrically based PTSD measures in existence include confounding influences (e.g. no mention of racial stressors, small and non-representative norm groups, and poor item development), which potentially compromise their psychometric integrity. Their conclusions for creating valid and reliable PTSD measures include (a) increasing the rigorous conditions in which PTSD measures are created, and (b) expanding culturally relevant diagnostic criteria in item development. The issue of the validity and generalizability of PTSD instruments may contribute to (1) misdiagnosing of African American Vietnam veterans, (2) inaccurate data negatively affecting reported PTSD prevalence rates among African American Vietnam veterans, and (3) methodological issues of studies that seek to measure racial differences among African American Vietnam veterans.

Overview of PTSD Risk Factors for African American Males

"Further evidence for the problem of racism...is provided by Proctor's (1988) observation that Nazi "scientists" closely studied Americans' attitudes and policies toward African Americans, for possible application to their genocidal policies toward the European Jewish community" (Marsella, Friedman, Gerrity, Scurfield, pp. 219). Fifty years ago African Americans received their civil rights and were permitted to sit in the front seats on public transits. Research has found that racial oppression is a chronic psychosocial stressor that impairs the physical and psychological health of minorities (Utsey & Ponterotto, 1996; J.S. Akbar, 1996; J.L. Jackson, 1990; White & Parham, 1990). To complicate this issue further, psychological impairment has become harder to accurately diagnose in African Americans, partly because some symptoms of disorders have survival qualities in a racist society. Such cultural survival characteristics are frequently misdiagnosed by psychiatrist as severe pathology (Adebimpe, 1981).

The issue of risk factors among African American males is salient because it helps explain the limited amount of research on this subject. Researchers that do studies on the prevalence of PTSD among African American males face confounding issues such as pre-morbid conditions that makes it difficult to report generalizable findings. Due to pervasive racial injustices in employment settings (Brenner, 1976), medical settings (The National Medical Association news article, 1993), health care systems (Jones, 1981), educational systems (Hacker, 1992; Kozol, 1991), and financial institutions (Marantz, 1989), African Americans' cultural and social adaptive coping mechanisms are often compromised, making them psychologically and physiologically vulnerable to the consequences of stress. This is evident from the studies linking racial stressors to a myriad of physiological ailments for African American men, including: cirrhosis, cardiovascular disease, high blood pressure, stroke, and hypertension (McCord and Freeman, 1990; Krieger and Sidney, 1996). These significant medical findings have led researchers to coin the term "John Henryism" to explain the racial disparity in hypertension prevalence among African American males (James, Hartnett, and Kalsbeek, 1983). The name of this theory derives from the slave legend John Henry, who was believed to have died from over-exhaustion after challenging and defeating a steam mill machine to a railroad-tract building contest. The basis of this theory suggests that high blood pressure results when low SES African American males internalize their somatic reactions to psychosocial stressors. In addition to these racially induced medical vulnerabilities experienced by African American men, the psychological consequences of racism are just as devastating for them. African American males have gone from possessing the lowest rates of suicide of any demographic group in 1980 (Gray, 1981) to surpassing the suicide rate of Caucasian males 1993, an increase of 233% (National Research Council, 1989; West, 1993). The rapid increase in violence, environmental stressors and economic disparities may help explain the dramatic increase in suicide among African American males (Center for Disease Control and Prevention, 1991).

African American males are more likely to live alone (approximately 24%) and less likely to live with a spouse compared to Caucasian males (approximately 52 ; Administration on Aging, 2000). This type of isolation can lead to depressive symptoms, social isolation, and an increased tendency to internalize stressors. Socially, African Americans are more likely to live in poverty, and make up about 40% of the homeless population (Kramerow et al., 1999); are 50% more likely to drop out of counseling after the second session compared to 30% of White Americans (Sue, 1977); have a lower life expectancy when living in urban environments, experience culture-bound syndromes and tend to report somatic complaints (Pearson, 1994); are more likely to go to prison than to college (Prothrow-Smith, 1991); and experience social hardships providing for their families (Anderson, 1990). In 1991, homicide was the leading cause of death for African American males between ages 15 and 24 (Center for Disease Control and Prevention, 1991). A figure that has caused some scholars to refer to the Black male as the new "endangered species" (Dembo,1988; Connor,1988). These statistics on African American males comes from a wide range of dates and represents a stable trend that continues today.

In 2004 the Institute of Medicine of the National Academies issued a comprehensive report on racial and ethnic disparities, and reconfirmed previous data indicating disproportionate death rates among African American men due to racial inequalities. As of 2004 data, the leading cause of death for African Americans between the ages of 25 and 44 was AIDS (Henry J. Kaiser Family, Foundation, 2004). In 2004 it was also estimated that African American males were seven times more likely than White males and three times likely than Latino males to contract AIDS (McKenzie, 2004). Although African American male death rates for cardiovascular disease, heart disease, and prostate cancer exceed White males, there is evidence to show a modest decline in these statistics (U.S. Department of Health and Human Services, 2004). As these rates decline, new research is emerging to account for supportive and protective factors in the African American community. Over the last decade, there are more positive media portrayals of African American men, established nationwide unity forums (e.g. million man march), higher academic attainment for Black men, and increased economic initiatives targeted at this group (Barna Research, 2004). Research data from 2003 showed that 92% of African Americans reported praying to God in comparison to 82% of White adults nationwide (Barna Research, 2004). African Americans are approximately

twice as likely as are whites to report that they are "searching for meaning and purpose in life" (58 percent to 28 percent, respectively). In addition, research has found that African Americans are significantly more likely to have read from the bible during the week than whites (61% versus 42%) and attend church more frequently than Whites (53% versus 43%) (Barna Research, 2004). These protective factors may serve as an adaptive protective mechanism that helps explain the decreasing death rates among African American men.

PTSD symptoms have been observed in African American male youths as early as age seven (Fitzpatrick and Badizar, 1993). These researchers reported that 70% of the children surveyed for their study were victims of violence (e.g. house breaks, sexual assault, and knife and gun attacks), while 43.4% witnessed a murder. In a similar study on violence 75% of African American male youths reported watching someone shot, stabbed, robbed, or killed (Shakoor and Chalmers, 1991).

Racial Differences in Military Related PTSD

Military involvement is commonly recognized as a choice that many United States (U.S.) citizens embark on every year. Military's high social status and national recognition attracts diverse populations to enlist in protecting American ideology and principles. But for many U.S. soldiers, military involvement has been conceptualized as a means to contribute to the racial equality and social justice that was not afforded to them because of slavery and historical injustices. Laufer, Brett, and Gallops (1985) described the unique relationship African Americans had with Vietnamese military personnel, and suggested that this particular relationship was fostered by similar experiences of racial discrimination. These researchers suggest that cultural factors can predispose minority groups to psychologically stressful events that are outside their normal range of racial experiences. These cultural factors include an intense religious faith and believe in the supernatural, an internal identification as a "minority", and a deep affinity with other underrepresented groups. Of the trauma-specific stressors, military combat has often remained mystified in the literature, due to its covert and poorly publicized nature. The legacy of racism and cultural differences between veterans of color and Caucasian male veterans suffering from posttraumatic stress disorder, has received significantly less attention than other conditions experienced by these populations (Robins & Regier, 1991).

Of the few empirical studies that exists on examining racial differences among military veterans and PTSD, a study referred to as the "Legacies of Vietnam Study" (Egenorf, Kadushin, Laufer, Rothbart, & Sloan, 1981), was among the first pioneering studies to reveal clinical differences in PTSD among racial minorities and European American combat veterans. Specifically, this longitudinal study surveyed American Veterans on their combat related experiences over several years and found that forty percent of African American Vietnam veterans remained stressed for many years after the war, compared to 20 percent of European American combat veterans. Also, this empirical study found a difference in African Americans' conceptualization of the Vietnam War, and noted that many of these soldiers opposed the war and had conflicted feelings concerning its cause. War experiences are of particular significance because relatively little is known concerning the emotional and psychological impairment experienced by racially different soldiers. Of the limited information existing on this topic, researchers consistently agree that Asian American Vietnam Veterans (Loo, Scurfied, King, Fairbanks, Ruch, & Adams 2001), Latino military veterans (Canive, & Castillo, 1997), and African American Vietnam Veterans (Allen, 1986) suffer PTSD at higher rates than White Veterans.

Most of the research comparing PTSD symptoms across ethnic and racial groups has been conducted with war veterans. Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, and Weiss (1990) National Vietnam Veterans Readjustment Study (NVVRS) is one of the most comprehensive studies on this topic. This Congressionally mandated study was conducted between 1986 and 1988, resulting in over 3,016 veterans interviewed using a stratified random sample to examine Black, Latino, female, male and White Vietnam war zone veterans. Their results support previous findings offered by the Legacy Study, and demonstrate that Blacks and Latinos were significantly more likely to have PTSD (20.6% and 27.9% respectively) compared to their White counterparts (13.7%). Since the NVVRS established nationally recognized precedence with their findings, other studies have attempted to examine this phenomenon further. When studying the prevalence of other psychiatric disorders among Vietnam veterans, Jordan, Schlenger, Hough, Kulka, Weiss, and Fairbank (1991) found similar findings, indicating that Latinos and Blacks reported more general psychiatric disorders, specifically, 25.7% of Latinos and 20.2% of Blacks met criteria for at least one psychiatric disorder compared to 16.2% of Whites/Others. Both Latino and Black Vietnam veteran groups demonstrate higher lifetime rates for generalized anxiety disorder (22.4% and 17.2% respectively) compared to Whites (13.2%). One of the confounding issues with the Legacy Study, NVVRS, and similar studies that sought to replicate these findings is that

these studies have limited the term "minority" to Blacks and Latinos, omitting groups such as Native American, Asian American, and Vietnamese American.

While the aforementioned empirically based studies similarly note that Black and Latino Vietnam Veterans achieve higher rates of PTSD, these studies fail to explain and interpret the reasons for these findings. One explanation for this is that too few researchers have devoted sufficient efforts to differentiate between African American and Latino racially related stressors in the Vietnam War and the pre-morbid conditions influencing their vulnerability to PTSD. Yager et al. (1984) conducted a study examining problems associated with the war experience of men of the Vietnam Generation. Their national sample included 1,342 (860 Whites, 399 Blacks, and 84 Latinos) men of military age during the Vietnam War. Their findings showed that violent experiences in Vietnam War were associated with a variety of behavioral and emotional problems. These premorbid factors included substance abuse and arrests, suggesting a possible predisposition to the devastating interpretation of violence. When pre-service background factors were statistically controlled for, there was an association between combat exposure, drinking, arrest rates and generally nonviolent convictions. The participants who experienced warrelated atrocities reported more stress symptoms and greater use of heroin and marijuana than did other veterans. Interestingly, these combat veterans who experienced warrelated atrocities did not differ much from non-combat veterans. These findings mirror the NVVRS in that it found almost half of the Vietnam veterans suffering from PTSD had been arrested or in jail, 39.2% gave a lifetime prevalence of alcohol use/abuse or dependence, 11% had been convicted of a felony, and 40% have been divorced at least once (10% had two or more divorces; Kulka et al., 1990). These findings make it very

difficult to provide the proper context to interpret research findings on racial differences in PTSD rates, leading many researchers to dismiss the importance of racially-related stressors in producing PTSD in minorities and focus more attention on pre-morbid factors (i.e. substance abuse, education, and law violations).

To date, there are limited empirically based studies that account for the variance of racially related stressors in producing PTSD among racial and ethnic minority veterans. The one study that comes close to establishing the unique contribution of racial stressors to PTSD was the Penk, Robinowitz, Black, Dolan, Bell, Dorsett, Ames, & Noriega, (1989) study of ethnicity and rates of PTSD among Black, White and Latino veterans who differed in the degree of exposure to combat in Vietnam. The significance of this study is that Penk et al. (1989) chose to control for combat veterans' level of combat exposure. Penk et al. (1989) chose to use combat veterans (of varying races) who were seeking treatment for additional disorders. Using the Minnesota Multiphasic Personality Inventory (MMPI-2) scales *F*, one, three, six, and eight, Penk et al. (1989) found that Blacks endorsed greater symptoms, somatization, histrionic traits, paranoid ideation, and disturbed thinking than Whites. They concluded that minority status and ethnicity might be one contributing factor in the development of PTSD symptoms.

The inability to make the distinction between life stressors and racial stressors in producing PTSD has questioned the legitimacy of minority Vietnam veterans' PTSD symptoms, causing many researchers to attribute their psychiatric distress to life-style factors rather than racial stressors related to war. An example of this misattribution of racial trauma to life stressors is Norris' (1992) study. He measured the lifetime prevalence and frequency of trauma and the impact of 10 potentially traumatic events in a sample of 1,000 adults from southeastern cities. Although the sample was diverse (half white and half black), it failed to include racial stressors. As a result, it also failed to replicate earlier findings of higher lifetime prevalence of PTSD for blacks than whites. Consequently, whites reported a higher lifetime exposure of traumatic experiences (e.g. death, sexual assault, motor vehicle crash). Due to the pre-morbid factors complicating the distinction between the importance of racial stressors and general life stressors in producing PTSD, researchers have begun to conduct studies often finding that whites experience a higher lifetime prevalence of PTSD than minority groups. These studies discount and often omit racial stressors in their study and instead measure low producing stressors for minority groups (that are not culturally relevant). Few studies ever measure racially-related incidents involving the verbal, physical or psychological stressors of racism and prejudice. Racial stressors can be hard to define and subjectively appraised, making it difficult to measure. When racial stressors are measured minorities consistently exhibit greater PTSD rates (Jordan et al., 1991; Laufer et al., 1985; Loo et al. 2001).

Penk, Robinowitz, Black, Dolan, Bell, Dorsett, Ames, and Noriega's (1989) study examining Black, White and Latino veterans differing in the degrees of exposure to combat in Vietnam, revealed that adjustment scores among racial groups comparable in combat exposure, were similar for Whites and Latinos; Blacks, however, scored significantly higher on both PTSD symptoms and on MMPI scales. Their study used 60 Latino, 280 Black, and 430 White male veterans admitted to a Drug or Alcohol Dependence Treatment Program at a VA in Dallas, Texas (substance abuse is a common PTSD response and is a form of avoidance behavior that assists in distracting intrusive symptoms). Subjects were required to take the MMPI Form R as well as the Vietnam Veterans Survey. It was hypothesized that Latinos would not differ from Blacks and that both groups would score higher than Whites, particularly under the heavy combat exposure condition. Their findings suggest that minority status alone does not account for higher maladjustment among Vietnam veterans. Rather, implications for future studies must include war related experiences of racial groups. These implications support the assertion that exposure to aversive stimuli does not account for change alone, but interpretation of the experience is what determines psychological impairment. Similar to the Legacy Study, cognitive appraisal and interpretation of war related experiences were found to be most salient for minority veterans.

Similar to Penk et al. (1989), Green, Grace, Lindy, and Leonard (1989) studied the differences in race related response to combat stress. Unlike the Penk and associates (1989) focus on exposure, this study looked at the differences in pre-service stressors and outcome variables in a community sample of 181 war veterans. Subjects were recruited from a variety of referral sources, and were required to take several instruments which included the Combat Experiences and Specific Stressor Questionnaires, Combat Roles Questionnaire, Childhood Trauma index, Impact of Event Scale, Psychiatric Evaluation Form, and the Symptom Checklist 90-R. The authors compared mean differences on the aforementioned instruments, in response to combat stress by race. Their results include that Black and White non-officers were demographically similar before starting military service, but once enlisted, Blacks were more likely to report higher levels of many of the stressor variables, including general combat, artillery, injury, and exposure to grotesque death. Also, their results found different war experiences for Blacks than for Whites,

involving more intense combat experiences and directly experiencing racially-based problems. In addition, Blacks scored higher on both the Symptom Checklist 90-R, and the Psychiatric Evaluation form, and reported higher levels of childhood trauma than Whites. Green et al. (1990) also found that minorities displaying PTSD symptoms were more likely to be unemployed more often than Whites, and are more likely to be divorced or separated than Whites. Their subjects were systematically recruited from a variety of sources and ranged from those seeking treatment to those not seeking treatment for PTSD. To achieve their results they measured subjects' military history, analyzed specific stressors and first account witnessing of grotesque disfiguring and mutilation deaths, and used a test-retest reliability to study a random sub-sample of veterans retested six months following their original study. Validity was established by comparing the stressor means between two groups: (a) soldiers who had military occupational specialty (MOS) during their period of service and (b) soldiers whose MOS indicated a support function. These findings support Kulka et al. (1990), which suggests that comorbid factors accompany PTSD diagnoses for minorities.

Examples of comorbid disorders that frequently occur with PTSD are substance abuse, depression and anxiety. PTSD is an anxiety disorder, and has also been studied by Neal and Turner (1991). In their study of anxiety disorders with African Americans, they attributed this high prevalence of PTSD to unequal war conditions Black soldiers faced along with intrusive images of guilt resulting from witnessing abusive violence against other minority soldiers (Vietnamese). Consistent with these findings, Penk and Allen (1991) presented similar qualitative data demonstrating differential rates of PTSD for American minorities serving in Vietnam. They found that Blacks were more dissatisfied with post-military conditions and suggest that this dissatisfaction could have induced their residual affects of war experiences. Further, these authors found that compared to Whites rates of PTSD among Latinos were over two times higher (i.e. 27% to 12%). Minorities in general rated experiencing higher PTSD symptoms (e.g. disturbing memories, nightmares, flashbacks, loss of interest, detachment, irritability, and trouble concentrating). Their findings are consistent with Green et al's (1990) findings, which also found that minorities indicated receiving significantly lower employment status, more trouble in marriage, more time in jail, more violent acts, more alcohol and drug problems, and more physical health problems.

Canive and Castillo's (1997) literature review on Latino Veterans diagnosed with PTSD, examined specific predisposing features of Latino veterans to PTSD. Canive and Castillo (1997) discovered through analyzing archival data, that Latinos were the second largest American minority in Vietnam, with over 19% Latino Vietnam Veterans killed or wounded, and had a 29% incidence rate of meeting diagnostic criteria for PTSD at some point in their adult lives. In their qualitative study they found that Latino veterans when interviewed in English were rated as having greater psychopathology, than when interviewed in their native language. Interestingly, they also found that Latino veterans with PTSD expressed their symptoms through somatization (Kleinman, 1986; Escobar, Canino & Rubio-Stipec, 1992). Jenkins (1988) suggests that Latino patients may mask their PTSD symptomatology by reporting irritability, inability to concentrate, and dizziness. These culture bound symptoms may be unique for Latinos, in that they might explain their illness in terms of the supernatural. Similarly, Koss-Chioino and Canive (1993) suggests that being hexed or "embrujado" serves to explain a wide variety of symptoms. In addition, culturally appropriate measures for Latinos with PTSD need to consider issues pertaining to their language, familism, spirituality, self-disclosure, and cultural explanations of illness. The authors recommend that Latino veterans are more receptive towards advice rather than insight-oriented therapy and should be included in the negotiation of their treatment.

Frueh, Smith and Libet's (1996) study measuring racial differences on psychological measures in combat veterans seeking treatment for PTSD examined 206 combat veterans at a VA outpatient PTSD treatment program. The patients completed the Beck Depression Instrument, Mississippi Scale for Combat-Related PTSD, MMPI-2 and the Dissociative Experiences Scale (DES). After computing descriptive statistics for the entire sample on each of the four self-reported measures, the researchers used a single MANOVA which revealed that Black subjects MMPI-2 raw scale scores for validity and distress indices (F-K index (validity scales), and Scales 2 (depression), 4(psychopathic deviate), 6 (paranoia), 7 (psychasthenia), and 9 (hypomania) were significantly higher than Whites. Also, Black veterans achieved significantly higher DES scores than White veterans. Limitations of this study reveal that little is known about test-taking attitudes in PTSD populations (regardless of race) or of the role of socioeconomic status in predisposing military personnel to PTSD.

Fontana (1996) found no significant differences between Blacks and Whites on any of the clinicians' improvement ratings. Fontana (1996) used the qualitative method of longitudinal assessment to examine the relationship of racial group membership and also measured outcomes, four, eight, and twelve months after entry into a program for veterans seeking treatment for war-related PTSD. Using 122 Blacks and 403 Whites from six geographically diverse sites they did not observe any consistent differences between racial groups (Black vs. Whites) in improvement (psychometric change or clinician's ratings). Epidemiological studies of trauma are consistent with their findings concerning the prevalence of PTSD in racial groups. For example, Frueh, Brady, and de Arellano (1989) conducted a study to derive quantitative findings concerning racial differences in epidemiology of combat veterans with PTSD. Their quantitative study revealed that Blacks and Latinos were shown to have higher rates of PTSD. They also found that differential rates of PTSD between racial groups maybe a function of differential rates of traumatic stressors and other pre-existing conditions.

While there are few non-Vietnam studies on racial and gender differences in PTSD, literature addressing this topic is scarce and poorly documented. Of the few Sutker, Davis, Uddo, & Ditta's (1995) studied the most diverse racial and gender mix of American troops stationed in Desert Storm. Their study included 912 military personnel who underwent psychological debriefings and evaluations within one year of war-zone return. Of the 912 participants, 63% were White, 28% were African American, 8 % were Latino, 1 % were Asian American and Native American, 14% were women and 9% were officers. The participants were divided into 653 war-zone deployed and 259 stateside duty military personnel. Participants were given the BDI, State Anxiety scale (A-scale), State-Trait Anxiety Inventory (STAI), State Anger Scale (STAS) and the Depression, Anxiety, and Hostility subscales of the Brief Symptom Inventory (BSI). Comparisons on the psychological distress between troops deployed to war zones and those assigned duty stateside revealed significant differences on two measures of depression; an index of state anxiety, and checklist of somatic complaints. ANOVAs with dependent variables of deployment status, ethnicity, and gender revealed two main effects. Minority troops reported more depression than White troops on the BDI, regardless of war zone assignment and were also classified as depressed according to BDI scores. Limitations of this study reveal that pre-war trauma was not accounted for and stateside duty military personnel was not assessed for PTSD symptoms.

Lastly, there have been advances in hospital research at Veteran's Administration Hospitals (VA). One such study includes, White and Faustman (1989) who retrospectively examined concurrent diagnoses from the discharge summaries of a group of combat veterans (61 Black, 34 Latino, and 61 White) hospitalized at a VA psychiatric unit with the diagnosis of PTSD. Their results showed that 31% of Blacks and 32% of Latino veterans had higher rates of depression than their White counterparts (18%). These findings suggest that the development and expression of PTSD in racial minorities is influenced by unique factors that may not be included in formal diagnostic criteria.

To support the implication of racial PTSD stressors, Butts' (2002) survey of African American Vietnam veterans war experiences at a VA hospital, cited racial discrimination as one type of stress that produces psychic trauma frequently associated with symptoms consistent with a diagnosis of PTSD in this population. One explanation of these findings implies that ethnic minorities may experience traumatic events very intensely due to socio-historical stressors that have eroded their psychological coping mechanisms. Racial differences in the internalization of stressors can provide important suggestions to help explain how PTSD manifests itself uniquely in racial minorities.

Allen's (1986) clinical report at a VA hospital on PTSD among Black Vietnam Veterans is based on his professional experience of over 15 years as a psychiatrist working with African American veterans. In his report, he descriptively explains how cultural factors can predispose African American veterans to PTSD. These factors include racism, unfair treatment conditions of Black soldiers and pre-existing sociopolitical experiences of being racially marginalized.

Summary and Conclusions

In 1981, the "Legacy Study" provided the first evidence that African American War combat veterans suffered a higher PTSD prevalence rate when compared to veterans of European descent (Egendorf et al., 1981), but failed to offer an empirically based explanation for their findings. Instead, researchers have suggested that racial stressors may account for the differential rates of PTSD experienced by African Americans (Yager and Laufer, 1984; Lauger, Brett, and Gallops, 1985; Goff, Sanders, and Smith, 1982; Kulka et al., 1990; Allen, 1986; Parson, 1990; Penk and Allen, 1991).

There are several conceptual issues that limit this research. First, the data on the Vietnam War is reported from multiple viewpoints making it difficult to come to a clear consensus on dates, time frames, and racial perspectives. Second, researchers often vacillate between using the terms 'Black' and 'African Americans' which creates confusion concerning the nature of the racial stress. Third, articles make no effort to differentiate between the persons with whom they reference as being Black. This term includes individuals of African decent and may be used in a military sense to describe people of darker skin. Potential problems from misclassifying race can lead to over or under reporting of death rates, enlisted numbers and casualties. Lastly, the research on this topic does not clarify what is meant as a "casualty." It is unclear if casualties include fatalities, injuries or mentally related diagnosis.

To date, researchers use three main methods to explore this area, which include qualitative data, epidemiological data of racial vulnerability and empirical data gained from self-report inventories. Despite the progress gained from these methods, relatively little empirical work demonstrates the existence of a racial difference in combat related PTSD. A flaw in these two method approaches are that neither epidemiological data or self-report inventories offer a comprehensive understanding of the relevant racial issues that predispose African Americans to PTSD. Even the anecdotal reports concerning the racial nuances of African American's socioeconomic and sociopolitical statuses are antiquated and fail to account for the enormous social changes made in society. Studies that do address racial differences in combat related PTSD limit the term "minority" to Blacks and Latinos, omitting groups such as Native American, Asian and Vietnamese Americans. This narrow view of racial groups automatically confounds research endeavors in this topic and does not allow studies to be compared because of differential definitions regarding racial classification of the subject pool. By only looking at select groups, researchers run the risk of generalizing their findings from African American and Latino samples to other racial and ethnic groups. Such generalizations is not representative of racial differences in PTSD, but rather reflects trends in African American and Latino groups.

Epidemiological studies of mental disorders have found that minorities experience higher rates and levels of psychopathology than Caucasians (Robin & Regier, 991). Racial differences in PTSD have been studied less frequently than other conditions. The research examining PTSD tends to focus on war veterans rather than civilian populations. These studies almost exclusively compare racial groups to Caucasians (i.e. African American, Latino American to Caucasians), which limits generalizability to other racial groups. This methodological flaw may account for the overwhelming inconsistency that finds both racial differences and no racial differences in PTSD. Of the research that finds no racial difference, racial stressors were not accounted for. But when racial stressors are accounted for, there seems to be a clear racial difference. A major limitation of epidemiological studies is that they do not account for interracial group differences, specific cultural differences in the expression of PTSD, or different pre-exposure characteristics in racial samples used. When pre-exposure characteristics are taken into account, significant racial differences in PTSD prevalence rates between racial groups are dramatically reduced or disappear (MacDonald, Chamberlain, & Long, 1997; Beals, Gurley, & Manson, 1996). In addition to these limitations, epidemiological studies have a tendency to collapse all minority veterans in one group. This is evidenced by Sutker, Davis, Uddo, and Ditta's (1995) assessment of differences in racial and gender psychological distress in Persian Gulf Troops. When faced with the issue of having insufficient numbers for separate analysis, these researchers chose to include all minorities in one group and made no attempts to control for pre-existing conditions or prior trauma in any of their racial samples.

Quantitative data from studies using clinical interviews and self-report inventories also have methodological limitations. These limitations include: lack of a control group, small sample sizes, unstructured interview procedures, lack of adequate control or comparison groups, and lack of procedural specificity. More specifically, studies using clinical interviews to measure symptom manifestation in racial groups do not control for psychiatric comorbidity or degree of combat exposure (e.g., Escobar, Randolph, Puente, Spiwak, Asamen, Hill & Hough, 1983; Mueser & Butler, 1987). This is an important factor to account for, as previous studies find high rates of psychiatric comorbidity for all combat veterans with PTSD regardless of race (e.g., Keane & Wolfe, 1990; Sireles, Chen, Messing, Besyner, & Taylor, 1996). Other similar studies of outpatient populations using this method rely on staff consensus rather than reliable procedures to produce a diagnosis (Frueh et al, 1996; 1997). Conceptual issues inherent in using selfreport PTSD inventories include: exaggeration of symptom report, questionable recollections of critical incidents, and lack of cultural sensitive psychometric measures of PTSD. Furthermore, current PTSD measures lack the ability to detect for relevant cultural themes for specific racial or ethnic groups. A potential remedy for this limitation would be to offer a reliable racial stressor scale (specific to the racial group) in conjunction with the PTSD instruments. Although research in this field tends to report racial differences in combat-related PTSD, none of the studies reported effect sizes in these differences. This limitation mistakenly leads other researchers to conclude that the statistical differences are large enough to be relevant for clinicians and researchers. A remedy to this issue could be to include a power analysis to examine the effect sizes. There is an important distinction between epidemiological studies (e.g., NVVRS: Kulka et al, 1990) and clinical studies (e.g. Frueh, Smith and Barker, 1996). This difference is that epidemiological studies tend to include community-based populations, whereas clinical studies tend to be conducted with veterans voluntarily seeking evaluation of treatment within the VA system and may be subject to a variety of external forces (e.g. disability compensation seeking, psychological or medical treatment seeking). Therefore it is assumed that epidemiological studies are more representative of Vietnam veterans.

Data from these types of studies must be interpreted carefully as epidemiological studies tend to show racial differences in PTSD among veterans, while most clinical studies report less prominent findings among veterans of color.

At best, researchers only speculate about the origin of this psychological epidemic that appears to be culturally related. There has been little research to address this phenomenon and fewer services afforded to African American Vietnam veterans. What is known from the research is that American minorities who fought in the Vietnam War experienced hardships never seen before or since by American culture. These experiences highlighted the zeitgeist and cultural climate of that era. While little research is devoted towards examining the racial differences in PTSD, there is a broader body of literature on PTSD among the general Vietnam generation. Yager, Laufer and Gallops' study of military age men during the Vietnam War included 1,342 subjects, all qualitatively interviewed, six to fifteen years after the veterans in the sample left the service. Their findings show that violent experiences in war were associated with a variety of behavioral and emotional problems, such as drinking, arrests/convictions, and drug-abuse. The most interesting finding of this study is that veterans, who experienced no combat and did not take part in any atrocities, did not differ significantly from nonveterans. Yager et al. (1984) study implies that men of the Vietnam generation experienced similar problems regardless of combat involvement, which suggests that the Vietnam War was not solely experienced on the field and that the general cultural experience of the war had secondary affects on non-military populations. This finding is consistent with literature on secondary affects of experiencing traumatic events. These effects include, knowing someone who has been affected by a traumatic event, watching

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someone experience a traumatic event, and learning of someone experiencing a traumatic event (Carroll, 1983; Davidson & Foa, 1991).

Trend analysis of this research field shows gaps in the literature due to two reasons. First, the opportunity to produce this research comes in response to the occurrence of war. Military and public interests in PTSD, combat, and group comparisons of psychiatric disorders appear to be most salient during and after the time of combat. The relevance of this research reflects major resurgences during and post: Vietnam War, Gulf-War, Operation Desert Storm, and 9/11 (War on Terrorism). In accordance with this war-related time connection, there appears to be a new interest in PTSD and group comparisons. Loo et al. (2001) appears to be at the forefront of this kind of literature and has created a Race-Related Stressor Scale (RRSS) to account for the variance of race-related trauma in veterans of colors' psychiatric and PTSD symptoms. The second factor affecting the paucity and frequency of literature in this field is financial resources. Consistent with the occurrence of war come the viability to fund research and create service programs for military veterans affected by war. The consistent evidence demonstrating the racial effects of PTSD calls for immediate interventions programmatically, socially, and psychologically. Research in this field appears to be associated with program development which relies on finances. These finances seem to be generated after the effects of War are demonstrated. This kind of reactionary response is consistent with the publication dates of the literature in this field. Further trend analysis supports a racial focus in this research area due to a recent interest in military diversity and professional multicultural competence. It is therefore predicted that after

the War in Iraq the therapeutic and research community will take a greater interest in producing literature to respond to the racial diversity of returning veterans with PTSD. *Hypotheses*

The following ten hypotheses were created to help investigate the VRSS' psychometric properties. Each hypothesis was designed to help clarify the relationship between race-related stressors and pathological symptoms (i.e. PTSD and general psychiatric) in an African American Vietnam Veteran sample.

Hypothesis 1: A significant positive relationship will exist between perceived racial prejudice and stigmatization, and PTSD symptoms in African American Vietnam Veterans.

Hypothesis 2: A significant positive relationship will exist between bicultural identification and conflict, and PTSD symptoms in African American Vietnam Veterans.

Hypothesis 3: A significant positive relationship will exist between exposure to a racist environment and PTSD symptoms in African American Vietnam Veterans.

Hypothesis 4: A significant positive relationship will exist between race-related stressor total scale scores and PTSD symptoms in African American Vietnam Veterans.

Hypothesis 5: A significant positive relationship will exist between perceived racial prejudice and stigmatization, and general psychiatric symptoms in African American Vietnam Veterans.

Hypothesis 6: A significant positive relationship will exist between bicultural identification and conflict, and general psychiatric symptoms in African American Vietnam Veterans.

Hypothesis 7: A significant positive relationship will exist between exposure to a racist environment and general psychiatric symptoms in African American Vietnam Veterans.

Hypothesis 8: A significant positive relationship will exist between race-related stressor total scale scores and general psychiatric symptoms in African American Vietnam Veterans.

Hypothesis 9: Exposure to race-related stressors experienced by African American Vietnam Veterans will predict general psychiatric symptoms over and above the effects of combat exposure and military rank.

<u>Predictor Variables:</u> Race-related Stressors total scale scores as measured by the Vietnam Racial Stressor Scale for African Americans (VRSS), Combat Exposure measured by the Combat Exposure Scale, and Military Rank as measured by the Military questionnaire.

<u>Criterion Variable</u>: General psychiatric symptoms as measured by the Brief Symptom Inventory.

Hypothesis 10: Exposure to race-related stressors (measured by the VRSS total scale scores) experienced by African American Vietnam Veterans will predict PTSD symptoms over and above the effects of combat exposure and military rank. <u>Predictor Variables:</u> Race-related Stressors total scale scores as measured by the Vietnam Racial Stressor Scale for African Americans (VRSS), Combat Exposure measured by the Combat Exposure Scale, and Military Rank as measured by the Military questionnaire. <u>Criterion Variable</u>: PTSD symptoms as measured by the Mississippi Scale for Combat-Related PTSD.

CHAPTER THREE

Method

Participants

The focus of this study was to adapt the Race Related Stressor Scale (RRSS) for African Americans Vietnam Veterans, to determine if the VRSS would achieve similar results to Loo et al (2001). Therefore, the present study mirrored the previous methodology used by Loo et al (2001). This study included 95 veterans of African decent (including those of mixed race) who served in the U.S. forces in the Vietnam Theater between February 28, 1961 and May 7, 1975. African American veterans included individuals who identified themselves as black, African, Negro, or African mixed race (e.g. mixed African American and Caucasian, African American /Asian, African American and Native American, African American/Latino, African American/Hawaiian, and African American/other). Participants of mixed racial ancestry who did not identify with their African American ancestry were not eligible for the study. Participants were sampled using multiple methods (e.g. income and employment history), military (e.g. rank and branch of service), and health status (e.g., treatment and nontreatment seekers of psychological services). African American Vietnam veterans were drawn from registries of veterans maintained by the Veteran's Administration Hospital, National Association for Black Veterans, Vietnam Veterans of America Incorporated, Defense Manpower Data Center, Department of Veterans Affairs registries of treatment seekers, word-of-mouth recruitment by staff at Vet Centers, specialized PTSD treatment programs, and Veterans service organizations including those specific to African Americans.

Design and Procedures

Data were collected from January 2006 to August 2006 in dispersed geographical areas within the United States of America. Prospective participants who were drawn from registries were mailed a recruitment letter and flyer that described the project. Potential participants were told that the purpose of the study was to understand the experiences of African American veterans who served in Vietnam, particularly those experiences related to race and ethnicity in a military or combat context. All participants were asked to sign an informed consent form and were provided a packet of questionnaires, including the VRSS. Questionnaires and instruments were disseminated in either a group, individual format, or in a private setting. Questionnaires and instruments were disseminated and collected by either the primary researcher or a professional staff member located at the site of the study. Either the primary researcher or a professional staff member were present in the room when the participants completed their questionnaires and instruments, for the purpose of addressing any questions or concerns that the participants had concerning the study. On completion of the questionnaires, participants were debriefed individually in a private office on-site. Participants were not compensated for travel. The following scales and questionnaires were administered, in this order: Demographic History, VRSS, Combat Exposure Scale, Mississippi Scale for Combat-Related PTSD, and Brief Symptom Inventory. All study procedures and instruments were reviewed, approved, and monitored by an institutional review board.

Instruments

Demographic questionnaire. Participants completed a demographic questionnaire, which included questions about their age, gender, employment status, ethnicity, place of residence, military rank/branch, and current marital status.

Race-Related Stressor Scale (RRSS). The RRSS, a 33 item self-report questionnaire, was created by Loo, Fairbank, Scurfield, Ruch, King, Adams, & Chemtob (2001). Each item is rated on a 5-point Likert-scale response ranging from 0 to 5 ("never" to "very frequently"). The item development was based on several factors: (1) Review of the literature on racially related stressors, (2) clinician and veteran interviews, and (3) focus groups regarding negative race-related experiences of minority veterans who served in the Vietnam War. High scores indicate the presence of negative racedrelated military experiences (e.g. singled out for harsher treatment than other people of the same rank because of racial factors, or treated by other Americans with racial hatred or hostility). A factorial analysis revealed 3 subscales: Racial Prejudice and Stigmatization (RPS), Bicultural Identification and Conflict (BIC), and a Racist Environment (RE). This scale was normed on 300 Asian American veteran participants. The Cronbach alpha for the full RRSS scale was .97 for 33 items. Internal consistency for each of the three subscales was: RPS ($\alpha = .97$; 19 items), BIC ($\alpha = .93$; 7 items), and RE ($\alpha = .93$; 7 items). Intercorrelations between the RRSS subscales demonstrated that they moderately intercorrelated with some overlap, but still maintained distinct factors. Specifically, the correlations between RPS and RE was .72, the correlations between RPS and BIC was .63. The correlation between BIC and RE was .52 (p = .001 for all correlations). Hierarchical regression analyses revealed that exposure to race-related

stressors accounted for a significant proportion of the variance in PTSD symptoms and general psychiatric symptoms over and beyond, (20% and 19% respectively) than accounted for by combat exposure and military rank. Test-retest coefficients (r = .85) were based on a sample of 61 male veterans drawn from the full sample of 300. A positive and significant association was observed: between the RRSS total score and the Combat Exposure Scale score (r = .40, p = .001), between the RRSS total score and the Global Severity Index score of the Brief Symptom Inventory (r = .67, p = .001) and between the RRSS total score and the Mississippi Scale for Combat-Related PTSD scores (r = .68, p = .001). The Mississippi Scale scores were also positively correlated with each of the 3 RRSS sub-scales. The RRSS total score was negatively correlated with military rank (r = ..37, p = .001).

Mississippi Scale for Combat-Related Posttraumatic Stress Disorder (Mississippi Scale). Similarly to Loo et al (2001), The Mississippi Scale was used to measure PTSD. The Mississippi Scale was developed by Keane, Caddell, & Taylor (1988) for measuring combat-related PTSD. This is a 35-item scale in which subjects were rated from 1 (never) to 4 (*very frequently*); scores can range from 35 to 175. This self-reported scale has an overall efficiency of .90 in differentiating veterans with and without PTSD and a suggested cutoff score of 107 when identifying combat-related PTSD patients (Keane et al 1988). It demonstrates excellent reliability, internal consistency, and test-retest coefficients above .90 (Loo et al 2001; Keane et al., 1988). It also has excellent specificity (.89) and sensitivity (.93) with PTSD clinical diagnosis (Loo et al.; Kulka et al., 1990).

Brief Symptom Inventor (BSI). This inventory was created by Derogatis and Melistaratos, (1983) and measures general psychiatric symptoms. It was designed to screen for psychopathology, psychiatric symptomatology, and psychological distress. It is comprised of 53-items and is considered to be a multidimensional self-report symptom inventory. It rates each item on a 5-point scale of distress, from 0 (not at all) to 4 (extremely). The BSI has demonstrated good reliability. Derogatis and Melisaratos (1983) presented appropriate coefficients of internal consistency of the BSI ranging from 0.71 to 0.85 and test-retest reliability ranging from 0.68 to 0.91. Other studies have reported similar estimates (e. g., Aroian et al., 1995; Boulett & Boss, 1991; Hayes, 1997; Johnson et al., 1996).

Combat Exposure Scale (CES). This scale was created by Keane, Fairbank, Caddell, Zimering, Taylor, and Mora (1989) and is a 7-item self-report instrument measuring combat exposure. Items are weighted according to the severity of combatrelated experiences. Total scores for this scale can range from 0 to 41. It demonstrates acceptable internal consistency (alpha coefficient = .85) and test-re-test reliability (r = .97). Keane et al's (1989) Combat Exposure Scale scores were found to correlate positively with Mississippi Scale for PTSD scores (r = .43, p <.01). Loo et al. (2001) cites several studies (e.g. King, King, Foy, Keane & Fairbank, 1999) that find combat exposure to be the strongest predictor of PTSD among male Vietnam veterans.

Vietnam Racial Stressor Scale for African Americans (VRSS). The development and validation of the VRSS was based on the Race-Related Stressor Scale (RRSS) developed by Loo, Fairbank, Scurfield, Ruch, King, Adams, Chemtob (2001). These authors set out to create a questionnaire that assessed exposure to race-related stressors in the military and war zone. Using a sample of 300 Asian American Vietnam veterans, the RRSS was found to have high internal consistency and adequate temporal stability (as note above in the RRSS description). Exposure to race-related stressors was found to account for a significant proportion of the variance in PTSD symptoms and general psychiatric symptoms (by 20% and 19% respectively) than accounted for by combat exposure and military rank. The purpose of this study was to (1) adapt a well-established instrument (RRSS) for one minority group: African American veterans who served in the Vietnam War, and to (2) explore the relationship between race-related stressor exposure, PTSD, and general psychiatric distress.

Research has consistently found that African Americans have higher prevalence rates of PTSD and other readjustment problems than Caucasians (Egendorf, Kadushin, Laufer, Rathbart, & Sloan, 1981; Kulka et al., 1990). The prevalence rates of PTSD among African American Vietnam Veterans can partially be accounted for by combat exposure, pre-military risk factors (i.e. family history, mental illness, and exposure to child abuse, Schlenger et al., 1992). Adaptations to the RRSS were made in the effort to demonstrate that the effects of race-related stressors could be discriminated from combat exposure. In creating an adapted version of the RRSS (i.e. VRSS) both combat-exposure and exposure to race-related stressors among African American Vietnam Veterans were examined, to assess the separate associations between combat-exposure, military rank, psychiatric distress, and PTSD symptoms. This was done in the effort to show that racerelated stressors had predictive power in assessing mental health outcomes over other stressors (i.e. combat exposure, military rank, and psychiatric distress). Initial adaptations of the RRSS were performed by removing the racial identifier (i.e. Asian American), and replacing it with Black, and also changing derogatory racial themes used to describe Asians (e.g. "gook") with derogatory terms used to described Blacks (e.g. "nigger") during the Vietnam war era. The RRSS contains general items that capture race-related stressor experiences as identified from: (a) an extensive literature survey on race-related stressors among minority veterans; (b) clinical interviews with minority Vietnam veterans who had symptoms of PTSD associated with race-related events in the military; focus groups with minority Vietnam veterans; (d) input from clinicians with experience treating war-related psychological problems of minority veterans; and (e) a conceptual model of race-related stressors that encompassed the three dimensions of: racial stigmatization and prejudice, bi-cultural identification and conflict, and exposure to a racist environment.

The item adaptations demonstrated the same format with respects to it being a 5point Likert-type scale from 0 (never) to 4 (very frequently) so that high scale scores represented a stronger endorsement of exposure to negative race-related experiences (e.g. Were you ever denied access to certain areas or hassled before being given access to certain areas because you were Black?). No items were omitted. General item themes were kept to maintain the face content of the three proposed domains of race-related stressors contained in the RRSS. A total of 19 items comprise the racial prejudice and stigmatization subscale. Example: How often if ever were you resented because you were Black? A total of 7 items comprise the bicultural identification and conflict subscale. Example: How often if ever did you have a stronger identification with Vietnamese civilians than with White Americans? A total of 7 items comprise the racist environment subscale. Example: How often did military personnel describe Black lives as having no/lesser value than American lives? It is important to note that Loo et al's (2001) race-related themes were constructed based on several models (Loo, 1994; Loo, et al, 1998; Kiang, 1991; Hamanda et al, 1987). (Specific subscale items are included in Appendix C).

Data Analysis

To determine if the VRSS demonstrated adequate construct validity and internal reliability, a correlational analysis between the VRSS total scores and other constructs were performed (Military rank, Combat Exposure scale, Mississippi Scale for Combat-Related PTSD, Brief Symptom Inventory). To address the item content, VRSS items were examined by 3 African American mental health providers and 3 African American Vietnam Veterans to assess for item inclusiveness, clarity, and meaning.

Intercorrelations between VRSS sub-scales. The three adapted subscales: RPS, BIC, and RE of the 33-item VRSS were inter-correlated to assess overlap between the subscales and factor uniqueness in identifying specific racial-stressors using the Statistical Package for the Social Sciences (SPSS).

Internal consistency. The internal consistency reliability (Cronbach alpha coefficient) was assessed for the entire VRSS scale and for each of the three factors.

Descriptive analysis. Mean total scores for the VRSS, Combat Exposure Scale, Mississippi scale for PTSD, and the Brief Symptom Inventory were assessed. The correlation coefficient between combat exposure and Mississippi Scale scores were assessed. The bi-variate relationship between military rank and PTSD symptomatology were assessed to identify the prevalence of PTSD among lower ranked military personnel and higher ranked personnel. Military rank was as followed: lowest rank enlised (E1-E3), middle-ranked enlisted (E4-E5), highest-rank enlisted (E6-E9), warrant officers (W1-W4), lowest-ranked officers (O1-O3), and middle-ranked officers (O4-O6). With E1-E5 recorded as a "0" and E6-O6 as "I" for rank.

Construct validity. Construct validity was assessed by conducting (a) bi-variate correlational analyses between the VRSS scores and other constructs (the Combat Exposure Scale, military rank, Brief Symptom Inventory, and the Mississippi Scale for PTSD) and (b) a series of regression analyses for the VRSS with the Brief Symptom Inventory and the Mississippi scale for PTSD taking into account combat exposure and military rank

Correlational analysis. Construct validity was assessed by performing calculated Pearson product-moment correlations between the VRSS total, subscale scores (i.e. RPS, BIC, and RE) and scores on the Brief Symptom Inventory and Mississippi Scale for PTSD to see if there was a significant relationship between exposure to race-related stressors, general psychiatric and PTSD symtomatology.

General psychiatric symptoms measure. To examine the construct validity of the VRSS in regard to theoretically related constructs, regression analyses were performed with the Brief Symptom Inventory scores measuring general psychiatric symptoms as the dependent variable. In step 1, combat exposure and military rank were entered into the equation as independent variables. In step 2, the total VRSS scale scores and the three VRSS subscale scores were added to the equation along with combat exposure and military rank.

PTSD measures. Regression analyses were conducted for PTSD symptoms, with the Mississippi Scale scores as a measure of PTSD symptoms entered as the dependent variable for step 1. In step 2, the VRSS total scale scores and each of the three VRSS subscale scores (i.e. RPS, BIC, and RE) were entered into the equation along with combat exposure and military rank.

CHAPTER FOUR

Results

This chapter reports the results of the current study and describes the relationship between race-related stressors, PTSD, and general psychiatric symptoms for African American Vietnam veterans. The results from this study are presented with the statistical significance pre-set at the .05 level; although most results were actually found statistically significant at or below the .01 level. These results also explain the psychometric properties of the Vietnam Race Related Stressor Scale (VRSS) in relationship to well established instruments.

Descriptive analysis

The Vietnam Race-Related Stressor Scale (VRSS) was examined in this study with relationship to empirically validated instruments to assess African American Vietnam veteran's race-related symptomology.

Table 1

| Scale | Mean | SD | Range |
|-------------|------|------|--------|
| VRSS | 62.9 | 27.9 | 1-132 |
| RPS | 36.4 | 16.9 | 0-76 |
| BIC | 10.2 | 7.3 | 0-28 |
| RE | 16.3 | 6.3 | 0-28 |
| CES | 13.5 | 12.5 | 0-132 |
| Mississippi | 99.9 | 23.4 | 43-156 |
| BSI | 78.2 | 46.1 | 0-196 |

Instrument Means, Standard Deviations, and Ranges_

Please refer to table 2 for a comparison between the means and standard deviations of these instruments in this study (VRSS) and in Loo et al (2001) study (RRSS).

Table 2

| Inventory Name | Mean | SD |
|--------------------|-------|-------|
| RRSS | 56.5 | 29.9 |
| VRSS | 62.9 | 27.9 |
| CES (RRSS) | 17.5 | 12.1 |
| CES (VRSS) | 13.5 | 12.50 |
| Mississippi (RRSS) | 92.2 | 32.2 |
| Mississippi (VRSS) | 99.9 | 23.4 |
| BSI (RRSS) | 62.61 | 58.9 |
| BSI (VRSS) | 78.2 | 46.1 |
| | | |

The demographic characteristics of the sample used in this study are summarized in table 3.

Table 3

| Variables Marital Status Single/never married Married/live-in partner/remarried Divorced/separated/widowed Employment history Full time | % 35 27 38 | % 9 71 20 | |
|---|---------------------|--------------------|--|
| Single/never married Married/live-in partner/remarried Divorced/separated/widowed Employment history | 27 38 | 71 | |
| Married/live-in partner/remarried Divorced/separated/widowed Employment history | 27 38 | 71 | |
| Married/live-in partner/remarried Divorced/separated/widowed Employment history | 38 | | |
| Divorced/separated/widowed Employment history | | 20 | |
| Employment history | 22 | | |
| | ~~ | | |
| | 22 | 39 | |
| Unemployed | 19 | 13 | |
| Disabled | 37 | 13 | |
| Retired | 18 | 23 | |
| Current yearly income | | | |
| Under \$20,000 | 75 | 30 | |
| \$30,000-\$39,000 | 10 | 12 | |
| \$40,000-\$49,000 | 5 | 8 | |
| \$50,000+ | 10 | 29 | |
| Beographic region | 10 | * | |
| Midwest | 9 | | |
| Northwest/Southwest | 19 | _ | |
| Northeast/Southeast | 10 | _ | |
| West | 37 | _ | |
| East | 6 | _ | |
| South | 16 | _ | |
| North | 2 | _ | |
| Race/ethnicity | _ | * | |
| African American/Black | 85 | | |
| Mixed/African American/Black 1 | | _ | |
| Ailitary Branch | | | |
| Army | 47 | 70 | |
| Marines | 14 | 10 | |
| Navy | 24 | 10 | |
| Air Force | 13 | 10 | |
| Ailitary Status | 10 | 10 | |
| Mostly or entirely "in the field" 2' | 7 36 | | |
| More "in the filed" | 11 | 11 | |
| Equal time "in the field" | 14 | 14 | |
| Mostly or entirely in base camps | 48 | 21 | |
| ank | 10 | | |
| Enlisted E1-E4 53 | 3 30 | | |
| Enlisted E5 | 24 | 26 | |
| Enlisted E6-E9 | | - | |
| Warrant Officer 1-4, Officer 01-06 | | 20 | |

Demographic Characteristics of the Sample

Note. Non-comparable categories include: Geographic Region and Race/Ethnicity, as these two categories pertain to unique variables that are specific to the Asian American culture (e.g. Loo et al. 2001 Race/Ethnicity: Chinese, Filipino, Korean, Japanese/Okinawan, Chamorro; Geographic Region: Hawaii, Guam, and Somoa.

Demographically, most participants in this study described themselves as being: divorced (38%), disabled (35%), had an annual income of under 20,000 (75%), west coast residents (37%), non-mixed African Americans (85%), Army veterans (48%), and having served at the military rank of E1-E4 (53%). These demographic variables are consistent with previous research in this field which suggests that African American Vietnam veterans typically experienced socio-economic and military stressors which included: divorce, military-related health issues, difficulty maintaining stable employment, and often occupied low-ranking positions during the Vietnam War (Karnow, 1983).

Response Rates

The overall participation rates of African American Vietnam veterans selected from community-based veteran's assistance programs was 100%. The participation rate from a west-coast Veteran's Administration (VA) Hospital was 90%. In total, 75 participants were drawn from community-based veteran's assistance programs, while the remaining 20 participants were selected from a west coast VA hospital. Response rates at the community based veteran's assistance program reflect onsite participation in one setting for all surveys. Response rates at the VA hospital setting reflected mailed surveys completed over a period of time.

Analysis Summary

Reliability Estimates. The SPSS 11.0 statistical software package was used to perform analysis for this study. Cronbach's alphas (α) were computed for the VRSS to ensure the reliability of this instrument. Similar to Loo et al's (2001) RRSS results, the internal consistency reliability (Cronbach alpha coefficient) was high for the entire VRSS scale (α 97; 33 items) and for each of the three subscales: RPS (α = 96; 19 items); BIC (α = 89; 7 itmes); and RE(α = .91; 7 items). The VRSS was found to be a psychometrically sound instrument in assessing race-related stressors in an African American Vietnam veteran sample. Comparisons between the VRSS and RRSS alpha levels are presented in table 4.

Table 4

| Instrument | VRSS Alpha | RRSS Alpha | | |
|-------------------|------------|------------|--|--|
| Total Scale Score | .97 | .97 | | |
| RPS | .96 | .97 | | |
| RE | .91 | .93 | | |
| BIC | .89 | .93 | | |
| | | | | |

Comparison between Alpha levels

Intercorrelations between the VRSS subscales. The three subscales of the VRSS replicate similar intercorrelations as Loo et al. (2001) with all correlations significant at the pre-set significance level of .05. The moderate to high correlations for the VRSS suggest that the three subscales overlap, yet retain distinct characteristics suggestive of unique factors. The intercorrelational relationship between the VRSS subscales are as follows: RPS and RE was .91 (p < .01); RPS and BIC was .63 (p < .01); and the BIC and

RE .55 (p < .01). The intercorrelational relationship between the RPS and RE subscales of .91 is suggestive that one factor is being assessed, rather than two unique factors. (Please refer to table 5 for the comparisons between the intercorrelations of the VRSS and the RRSS).

Table 5

| Intercorrelations | <u>RRSS</u> | <u>VRSS</u> |
|---|-------------|-------------|
| Racial Prejudice and Stigmatization and Racist Environment | .72** | .91** |
| Racial Prejudice and Stigmatization and Bicultural Identification and Conflict | .63** | .63** |
| Bicultural Identification and Conflict and Racist Environment | .52** | .55** |

Intercorrelations Between the RRSS and VRSS

Note: * *= p < .01

Construct Validity. Assessing the construct validity of the VRSS required examining the relationship between this instrument and other empirically validated assessments. This was accomplished by conducting the following statistical procedures: (1) correlational analysis between the VRSS scores and the Combat Exposure Scale, military rank, Brief Symptom Inventory, and the Mississippi Scale for PTSD, (2) a series of regression analyses on the VRSS along with the Mississippi Scale for PTSD and the Brief Symptom Inventory, whereby considering combat exposure and military rank (i.e. two potentially confounding factors that have been shown in previous research to

significantly contribute to PTSD symptomology but not general psychiatric symptoms). Results are summarized in the following section by the respective hypotheses.

Hypotheses Results

The first hypothesis tested in this study was H₁: A significant positive relationship will exist between perceived racial prejudice and stigmatization, and PTSD symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between perceived racial prejudice and stigmatization and PTSD symptoms (r = .49, p < .01) see table 6. African American Vietnam veterans who identified themselves as perceiving racial prejudice and stigmatization in the Vietnam War were more likely to endorse PTSD symptoms.

The second hypothesis tested in this study was H₂: A significant positive relationship will exist between bicultural identification and conflict, and PTSD symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between bicultural identification and conflict and PTSD symptoms (r = .33, p = p < .01) see table 6. African American Vietnam veterans who experienced bicultural identification and conflict with the Vietnamese during the Vietnam War were more likely to endorse PTSD symptoms.

The third hypothesis tested in this study was H₃: A significant positive relationship will exist between exposure to a racist environment and PTSD symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between exposure to a racist environment and PTSD symptoms (r = .41, p < .01) see table 6. African American Vietnam veterans who were

exposed to a racist environment while serving in the military during the Vietnam War were more likely to endorse PTSD symptoms.

The fourth hypothesis tested in this study was H₄: A significant positive relationship will exist between race-related stressor total scale scores and PTSD symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between the race-related stressor total scale scores and PTSD symptoms (r = .48, p < .01) see table 6. African American Vietnam veterans who experienced race-related stressors while serving in the military during the Vietnam War were more likely to endorse PTSD symptoms.

Please see table 6 and table 7 for a comparison between the correlations of the present study (VRSS) and Loo et al's (2001) study (RRSS).

The fifth hypothesis tested in this study was H_5 : A significant positive relationship will exist between perceived racial prejudice and stigmatization, and general psychiatric symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between perceived racial prejudice and stigmatization, and general psychiatric symptoms (r = .61, p < .01) see table 6. African American Vietnam veterans who identified themselves as perceiving racial prejudice and stigmatization in the Vietnam War were more likely to endorse general psychiatric symptoms.

The sixth hypothesis tested in this study was H₆: A significant positive relationship will exist between bicultural identification conflict and general psychiatric symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between bicultural identification and conflict, and general psychiatric symptoms (r = .38, p < .01) see table 6. African American Vietnam veterans who experienced bicultural identification conflict with the Vietnamese (i.e. living/dead women, children, men, and military personnel) during the Vietnam War were more likely to endorse general psychiatric symptoms.

The seventh hypothesis tested in this study was H₇: A significant positive relationship will exist between exposure to a racist environment and general psychiatric symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between exposure to a racist environment and general psychiatric symptoms (r = .50, p < .01) see table 6. African American Vietnam veterans who were exposed to a racist environment while serving in the military during the Vietnam War were more likely to endorse general psychiatric symptoms.

The eighth hypothesis tested in this study was H_8 : A significant positive relationship will exist between race-related stressor total scale scores and general psychiatric symptoms in African American Vietnam veterans. Study results support this hypothesis and found a significant positive relationship between the race-related stressor total scale scores and general psychiatric symptoms (r = .58, *p* < .01) see table 6. African American Vietnam veterans who experienced race-related stressors while serving in the military during the Vietnam War were more likely to endorse general psychiatric symptoms.

Table 6

| Correlations between Instruments and VRS | <i>Correlations</i> | between | Instruments | and VRSS |
|--|---------------------|---------|-------------|----------|
|--|---------------------|---------|-------------|----------|

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------|---|-------|-------|------|-------|-------|-------|-------|
| 1. CES | - | .35** | .17 | 39** | .33** | .34* | .46** | .27** |
| 2. Mississippi Scale | | - | .82** | 22* | .48** | .49** | .33** | .41** |
| 3. BSI | | | - | 18 | .58** | .61** | .38** | .50** |
| 4. Military Rank | | | | - | 34** | 29** | 38** | -29** |
| 5. VRSS total | | | | | - | .98** | .76** | .92** |
| 6. VRSS-RS | | | | | | - | .63** | .91** |
| 7. VRSS-BC | | | | | | | - | .55** |
| 8. VRSS-RE | | | | | | | | - |

Table 7

Correlations between Instruments and RRSS

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------|---|-------|-------|------|-------|-------|-------|-------|
| 1. CES | - | .50** | .49** | 23** | .41** | .38** | .36** | .36** |
| 2. Mississippi Scale | | - | .90** | 45** | .68** | .67** | .53** | .48** |
| 3. BSI | | | - | 39** | .67** | .68** | .51** | .43** |
| 4. Military Rank | | | | - | 37** | 36** | 31** | 26** |
| 5. RRSS total | | | | | - | .96** | .77** | .82** |
| 6. RRSS-RS | | | | | | - | .63** | .72** |
| 7. RRSS-BC | | | | | | | - | .52** |
| 8. RRSS-RE | | | | | | | | |

Note: ** significant at the .01 level; * significant at the .05 level.

The ninth hypothesis tested in this study was: H₉: Exposure to race-related stressors experienced by African American Vietnam veterans will predict general psychiatric symptoms over and above the effects of combat exposure and military rank.

<u>Predictor Variables:</u> Race-related Stressors total scale scores as measured by the Vietnam Racial Stressor Scale for African Americans (VRSS), Combat Exposure measured by the Combat Exposure Scale, and Military Rank as measured by the Military questionnaire.

<u>Criterion Variable</u>: General psychiatric symptoms as measured by the Brief Symptom Inventory.

Study results support this hypothesis and found that the VRSS total scale scores accounted for 32% of the variance of Brief Symptom Inventory Scores (adjusted $R^2 = .32$, (1,91), p = .001), over and above the contribution of combat exposure and military rank alone.

The tenth hypothesis tested in this study was: H_{10} : Exposure to race-related stressors (measured by the VRSS total scale scores) experienced by African American Vietnam veterans will predict PTSD symptoms over and above the effects of combat exposure and military rank.

<u>Predictor Variables:</u> Race-related Stressors total scale scores as measured by the Vietnam Racial Stressor Scale for African Americans (VRSS), Combat Exposure measured by the Combat Exposure Scale, and Military Rank as measured by the Military questionnaire.

<u>Criterion Variable</u>: PTSD symptoms as measured by the Mississippi Scale for Combat-Related PTSD.

Study results support this hypothesis and found that VRSS total scale scores accounted for 25% of variance in Mississippi scale scores adjusted (adjusted $R^2 = .25$ (1,91), p = .001),), over and above the contributions of combat exposure and military rank.

CHAPTER FIVE

Discussion

The debilitating effects of military trauma have been historically misclassified for ethnic minorities. Loo et al's (2001) study was the first investigation into furthering the understanding of war-zone race-related stressors for an ethnic minority group (i.e. Asian American Vietnam veterans). The present study was devised to extend Loo et al's (2001) research by contributing to the conceptual definition of race-related stressors for African American Vietnam veterans. The creation and validation of the Vietnam Racial Stressor Scale (VRSS) was the main focus of this study and serves to describe the relationship between race-related stressors and mental health issues in a sample of African American Vietnam veterans. The VRSS is a psychometrically sound measurement that demonstrates high and similar internal consistency, reliability, intercorrelations, and construct validity when compared with the Loo et al (2001) RRSS. A review of this study's results is discussed in this chapter.

Summary of results

The first hypothesis was supported and showed that higher levels of perceived racial prejudice and stigmatization was found to be correlated with higher PTSD scores (r = .49, p <.01). The VRSS' racial prejudice and stigmatization subscale is comprised of 19 items that underwent revision for this study to capture the racist epithets that existed during the Vietnam era for African Americans. Item content represented by this subscale includes themes of direct: racial hostility, racial isolation, racial humiliation, and fear of being murdered by Caucasian soldiers (e.g. "pointed out as an example of what the enemy looked like."). The impact of being racially discriminated against and stigmatized

in a war-zone could exacerbate already heightened stress responses and produce acute distress reactions consistent with PTSD diagnostic features criterion A-2 and D (i.e. "the person's response to the event must involve intense fear, helplessness, or horror" and "the individual has persistent symptoms of anxiety or increased arousal that were not present before the trauma") (American Psychiatric Association, 2000). Examples of these stress responses include: hypervigillance, detachment, estrangment, and an exaggerated startle response. Many researchers have found evidence that racial discrimination can lead to the unjust negative preemptive treatment of minority group members based upon socially constructed stereotypes (Matsuoka et al., 1992; Myers, 1993; Pinel, 1999). Therefore, it is very plausible to believe that African American Vietnam veterans could have interpreted discrimination by their Caucasian counterparts as a reason to fear for their physical safety. This fear could have reinforced their minority status as being helpless to defend themselves against both: a foreign enemy they believed wanted to kill them and a domestic enemy with whom they had to depend on for their very survival.

Support for the second hypothesis revealed that African American Vietnam veterans who identified with Vietnamese people or culture were more likely to experience PTSD symptoms (r = .33, p < .01). Examples of these symptoms include: intrusive thoughts, flashbacks, and recurrent distressing dreams, which are several of the diagnostic features of PTSD criterion B. This subscale was created from literature suggesting that the relational affinity experienced between African American veterans and Third World peoples during the Vietnam War, was partially responsible for postwar adjustment issues experienced by African American veterans. Several prominent researchers (Laufer et al., 1984; Parson, 1984; Holm, 1992) have hypothesized that

African American Vietnam veterans who have these adjustment issues were afflicted with "guilt and rage over having injured or killed Vietnamese people which heightened their ambivalence and conflict between service to country and injuring people perceived as very much like themselves" (Loo et al. 2001, p. 505). The pejorative term "gook identification" was used to define this bicultural conflict that African American veterans experienced during the Vietnam War. Thematic content for this subscale includes items that ask whether respondents "could identify" with living or deceased Vietnamese military personnel. Such an inappropriate identification with the enemy during war times could produce emotional conflicts and identity disturbances. Post-war adjustment issues were intensified for Vietnam veterans coming back home by anti-war protestors and sympathizers who frequently referred to military personnel as "baby killers." A negative homecoming has been suggestive of the maintenance of PTSD symptoms and could help explain the prolonged sense of guilt experienced by African American Vietnam veterans (Eisenhart, 1975). One important note to mention is that the bicultural identification conflict is most salient to the Vietnam War era due to the striking socio-political similarities between African Americans and Vietnamese people with regards to their civil liberties and social status. This latter point is evidenced by Parson (1985a) who proposed that Vietnamese people reminded African Americans of their "sociopolitical history of slavery, racism, exclusion, and poverty" (p. 182). The Vietnam War offered unique opportunities to fight cultural injustices endemic to the preservation of freedoms not afforded to both groups.

Results for the third hypothesis were supported and found that African American Vietnam veterans who experienced a racist environment were more likely to also

experience PTSD symptoms (r = .41, p < .01). The racist environment subscale is defined as "having witnessed remarks or behaviors by American military personnel that denigrated, harassed, or dehumanized Asians" (Loo et al, p. 505). Endorsement of these items would be indicative of a person who experienced PTSD diagnostic criterion A. This criterion involves a person being exposed to a traumatic event in which they have "experienced, witnessed, or was confronted with events that threatened death, serious injury, or negatively affected the physical integrity of self or others" (American Psychiatric Association, 2000, p. 218). Questions that comprise this subscale asked participants whether they observed racism and bias against Asian lives (e.g. have you ever observed military personnel describe Asian lives as having lesser or no value than American lives or how often if ever did military personnel refer to Asians as "gooks" or other racial slurs). This subscale is based on the premise that African Americans experienced emotional distress by witnessing the mistreatment of Asians. This subscale is differentiated from the racial prejudice and stigmatization subscale in that, this scale involves the perceived exposure to an anti-Asian environment and not the actual direct physical threat to personal safety due to behaviors driven by racism (p. 505).

Results supportive of this hypothesis demonstrates the negative impact that social alienation can have on the morale of group processes. Research has shown that the Vietnam War relied heavily on "Antigook" conditioning as a normative aspect of military personnel training (Lifton, 1973). Such practices can create an emotional distance from the enemy that serves as a protective factor against developing feelings of guilt and/or remorse for successfully engaging in combat (Lifton, 1973). One problem experienced by African American Vietnam veterans was the level of personalization they experienced

by being exposed to anti-Asian sentiments that they did not agree with. In addition, many of these military personnel often felt they could not express their disapproval. To reconcile this emotional discomfort, many African American military personnel felt compelled to adhere to anti-Asian sentiments in the attempt to prove their loyalty for their country and affiliation with Caucasian military personnel (Eisenhart, 1975). A common fear that African American Vietnam veterans experienced was appearing disloyal and/or compromising American morale by defending Asians (Lifton, 1973).

Hypothesis four was validated and found a significant relationship between racerelated stressors and PTSD symptoms for African American Vietnam veterans (r = .48, p<.01). The combination of being racially discriminated against, having a bicultural identification with Asians, and being exposed to a racist environment, were previously found to produce symptoms consistent with several diagnostic criteria of PTSD in this study and Loo et al.'s (2001) study. There are several reasons that might account for the prolonged negative effects of racially-related stressors on the mental health status of African American Vietnam veterans. One explanation the author offer is that many of these minority military personnel did not possess the coping skills and/or support systems necessary to process their emotional conflict post-Vietnam War. Such an intervention of providing post-war support resources for military personnel is currently being employed as the primary treatment for military-related PTSD in the current War in Iraq.

Another possible explanation is that race-related stressors are developmentally debilitating and can compromise emotional and psychological resilience. This latter hypothesis is relevant to the Vietnam War in that, minorities tended to be young and of low-ranking military status, making them more susceptible to internalize the negative

effects of war. In fact, the average age of low ranking (E1-E5) military personnel in the Vietnam War was 20 years of age (Goff, Sanders, and Smith, 1982). Lower ranked Vietnam veterans in this study were significantly more likely to experience race-related stressors than higher ranked military personnel (r = -.34, =. p <.01), compared with Loo et al's (2001) findings, examining the same variables (r = -.37, p <.01). This study's finding underscores the impact that rank had on the likelihood of experiencing racial stressors. The correlation between military rank and the Mississippi Scale for PTSD was r = -.22 (p < .05). This finding is consistent with both Loo et al. (2001) and Kulka et al. (1990) who reported a statistically significant relationship between PTSD symptomology, and low-ranking military personnel. Young military personnel that primarily worked in war-zones and racially insensitive environments would have the greatest chances to experience prolonged exposure to acute stressors. Research consistently finds that people who experience trauma earlier in life are more likely to have poorer prognosis than older adults (Davidson and Foa, 1991).

Support for hypothesis five revealed that African American Vietnam veterans who identified themselves as perceiving racial prejudice and stigmatization in the Vietnam War were more likely to endorse general psychiatric symptoms (r = .61, p < .01). General psychiatric symptoms as measured by the Brief Symptom Inventory (BSI) reflects aspects of psychological maladjustment (Derogatis, 1993). Loo et al (2001) concluded in their study that minorities experiencing racial prejudice were more likely to have lower self-esteem, lower self-confidence in decision making, and an increased emotional sensitivity to external stimuli. The Interpersonal Sensitivity Dimension BSI subscale best reflects the results of this hypothesis, which centers on feelings of personal inadequacy and inferiority, particularly in comparison with others. Self-deprecation, selfdoubt, and marked discomfort during interpersonal interactions are characteristic manifestations of this psychiatric distress feature as measured by the BSI (Derogatis, 1993, p. 8).

Out of the 95 total participants for this study: 61 reported experiencing emotional distress symptoms within a week of taking the BSI due to "feeling inferior to others"; while 75 participants reported feeling "very self-conscious with others." Also relevant to this subscale is the psychoticism general psychiatric dimension that represents "items indicative of a withdrawn, isolated, schizoid lifestyle...with a graduated continuum from mild interpersonal alienation to dramatic psychosis" (Derogatis, 1993, p. 9). A staggering 75 participants reported feeling "lonely even when they are with others" and also feeling that they "never feel close to others." Both general psychiatric symptom dimensions typify issues consistent with persons who were negatively affected by racial prejudice and stigmatization.

Hypothesis six was supported by significant results that suggests African American Vietnam veterans who experienced bicultural identification and conflict with the Vietnamese (i.e. living/dead women, children, men, and military personnel) during the Vietnam War were more likely to endorse general psychiatric symptoms (r = .38, p<.01). Of the 95 total participants in this study: 63 participants reported "feeling more like the Vietnamese than like the Americans"; 62 participants reported that they were "reminded of a family member, relative, or friend by a living Vietnamese male"; while 63 participants reported that they were "reminded of a family member, relative, or friend by a living Vietnamese woman or child." Symptoms consistent with bicultural identification are depression and anxiety, as measured by the BSI. Depressive symptoms are often characterized by dysphoria and acute anxiety. Of the 95 participants in this study; 67 participants reported feeling "hopeless about the future"; and 61 participants reported feeling "worthless" within seven days of participating in this study. Of the 95 participants in this study 67 participants reported experiencing "spells of terror or panic." Research suggests that many of the symptoms that African American Vietnam veterans experienced were also accompanied by nightmares, intrusive thoughts, and vivid recollections of their interactions with the Vietnamese culture (Parson, 1985a; Laufer, Gallops, & Frey-Wouters, 1985). These above mentioned symptoms reflect some reactivity to a negative bicultural experience. The maintenance of these general psychiatric symptoms could be seen as distress symptoms produced by the inability to reconcile the emotional conflicts between nationalistic feelings and devaluing of human life.

This study found support for hypothesis seven which stated that there would be a significant relationship between being exposed to a racist environment and endorsing general psychiatric symptoms for African American Vietnam veterans (r = .50, p < .01). Common symptoms reported in the literature relating to being exposed to racist environments included hostility and phobic anxiety (Laufer et al., 1984). Derogatis (1993) defined hostility as "thoughts, feelings, or actions that are characteristic of the negative affective state of anger" (p. 8). Of the 95 participants: 63 participants reported experiencing "temper outbursts" that they could not control; 55 participants reported having "urges to beat, injure, or harm someone"; and 51 participants reported having "urges to break or smash things" within seven days of participating in this study.

Similarly, phobic anxiety is a common symptom that is experienced when a person is unable to leave a threatening environment (as measured by the BSI). Derogatis (1993) defines phobic anxiety as "a persistent fear response to a specific person, place, object, or situation...and leads to avoidance or escape behavior" (p. 9). Out of the 95 participants; 64 participants reported feeling that they have to "avoid certain things, places, or activities" because they frighten them; 74 participants reported feeling "uneasy in crowds, such as shopping or at a movie"; and 51 participants reported feeling "mervous" when they are left alone, within seven days of participating in this study. The long lasting effects of being exposed to a racist environment are damaging to a persons sense of safety and often promote generalized stress responses that are irrational and unprovoked.

Hypothesis eight's results suggests that African American Vietnam veterans who scored higher on the VRSS tended to endorse more general psychiatric symptoms (r =.58, p < .01). Such comparable results add depth to this measure's construct validity. Current results of this study are both consistent with the Loo et al (2001) findings for Asian American Vietnam veterans and previous literature that describes the negative impact that racially-related stressors has on mental health processes of ethnic minorities (Scarville, Button, Edwards, Lancaster, and Elig,1999; Loo et al, 2001; Matsuoka et al., 1992). Over 70% of the participants in this study endorsed each dimension of the BSI, indicating that they experienced a wide range of general psychiatric distress symptoms within seven days of participating in this study. Each dimension represents a variety of psychological, physiological, and interpersonal issues that when combined, would most likely not be attributable to transient stressors, but would rather reflect a pervasive pattern of dysfunctional coping. This chronic style of maladaptive coping would most likely present unique challenges in establishing and maintaining healthy support systems. Behavioral observations of most participants in this study were suggestive of disadvantaged lifestyles (i.e. homelessness and impoverishment). It was a common occurrence to hear offbeat racial overtures by the participants while answering questions about their military race-related experiences. In some cases the participants were observed tearful and angry during their participation, which almost always was accompanied by small group gatherings after their participation to discuss shared memories about their experiences in the Vietnam War. The demographic make-up of this study possibly reflects the devastating consequences of their military experiences, as the greatest percentage of participants reported being: divorced (38%), disabled (37%), and having an annual income of under \$20, 000 (75%).

Hypothesis nine was found significant and showed that the VRSS predicts general psychiatric symptoms better than traditional variables in the literature (i.e. military rank and combat exposure). A vital aspect of assessing the construct validity of the VRSS included assessing whether exposure to race-related stressors experienced by African American Vietnam veterans could predict general psychiatric distress symptoms over and above the effects of combat exposure and military rank. To examine the predictive power of the VRSS with regards to theoretically related constructs, regression analyses were conducted with Brief Symptom Inventory scores as a measure of general psychiatric symptoms (being entered as the dependent variable). Step 1 consisted of entering military rank and combat exposure into the equation as independent variables. Step 2 consisted of entering the VRSS total scale score along with combat exposure and military

rank into the equation. The first set of predictors, military rank and combat exposure did not account for a significant amount of general psychiatric symptom variability (adjusted $R^2 = .02$). When the VRSS total scale scores were entered in step 2, this equation accounted for a significant amount of general psychiatric symptoms (adjusted $R^2 = .32$), over and above the contribution of combat exposure and military rank.

In this study the combined strength of combat exposure and military rank only accounted for 2% (in comparison to Loo et al's 31%) of the variance in Brief Symptom Inventory scores (adjusted $R^2 = .02$) in step 1. In step 2, the three predictors; combat exposure, military rank, and VRSS explained 32% (adjusted $R^2 = .32$), in comparison with Loo et al's 50% in the variance in the Brief Symptom Inventory scores. Thus an additional 30% of the variance in Brief Symptom Inventory scores is accounted for by adding the VRSS to the regression model. Combat exposure and military rank accounted for a greater amount of variance in general psychiatric symptoms for Asian American Vietnam veterans (adjusted $R^2 = .31$ or 31%) than compared with African American Vietnam veterans (2%). In contrast, the VRSS explained a greater amount of variance in general psychiatric symptoms above and beyond combat exposure and military rank for African American Vietnam veterans (30%) when added to the equation compared with Loo et al (2001). The RRSS explained 19% above and beyond combat exposure and military rank for Asian American Vietnam veterans. For a detailed comparison between the RRSS and VRSS with regards to their abilities to predict general psychiatric symptoms, please see table 8.

Table 8

Comparisons between RRSS and VRSS scales in accounting for general psychiatric symptoms

| <u>Scales of</u> Interests | Model 1 | | <u>Change in Variance</u> Between Model <u>1</u> |
|-------------------------------|---|--|--|
| RRSS | Combat exposure and military rank accounted for 31% of the variance of general psychiatric symptoms | and Mo Combat exposure, military rank, and RRSS accounted for 50% of the variance of general psychiatric symptoms | del 2 RRSS explains 19% of the variance in Brief Symptom Inventory Scores when added to the regression equation |
| VRSS | Combat exposure and military rank accounted for 2% of the variance of general psychiatric symptoms | Combat exposure, military rank, and VRSS accounted for 32% of the variance of general psychiatric symptoms | VRSS explains 30% of the variance in Brief Symptom Inventory Scores when added to the regression equation |

Hypothesis ten proved to have statistically significant results which showed that the VRSS predicts PTSD symptoms over and above the effects of military rank and combat. Researchers in the area of military-related PTSD consistently find evidence to suggest that military rank and combat exposure are significant predictors of PTSD experienced by war veterans (e.g. Schlenger, Kulka, Fairbanks, Jordan, Hough, Marmar, 1992). Prior to its introduction into the Western Diagnostic Statistical Manual in 1980, PTSD symptoms were primarily seen in low ranking military personnel that often exhibited acute distress features (i.e. "shell shock" symptoms) after engaging in heavy combat. One critical aspect of examining the construct validity of the VRSS, was to assess whether it predicted PTSD symptoms over and above the effects of military rank and combat exposure variables. To achieve this goal, a series of regression analyses were conducted with the Mississippi scale scores as the measure of PTSD symptoms. In step 1, Mississippi scale scores were entered into the equation as the dependent variable, along with military rank and combat exposure entered as the independent variables. In step 2, VRSS scores were added to the equation along with military rank and combat exposure. The first set of predictors in step 1, combat exposure and military rank, accounted for 11% of the variability of PTSD symptoms (adjusted $R^2 = 11$). When the VRSS total scale scores were entered in step 2, VRSS total scale scores accounted for 25% of variance in PTSD symptoms (adjusted $R^2 = .25$) over and above the contributions of combat exposure and military rank. The results of the present study support the construct validity of the VRSS, as it significantly contributes above and beyond the contributions of military rank and combat exposure in predicting general psychiatric and PTSD symptoms. For a detailed comparison between the RRSS and VRSS with regards to their abilities to predict PTSD symptoms please see the table 9.

Table 9

| <u>Scales of</u> Interests | | | <u>Change in Variance</u> Between Model <u>1</u> |
|-------------------------------|---|---|---|
| RRSS | Combat exposure and military rank accounted for 36% of the variance of PTSD symptoms | and Me Combat exposure, military rank, and RRSS accounted for 56% of the variance of PTSD symptoms | RRSS explains 20% of the variance in Mississippi scale scores when added to the regression equation |
| VRSS | Combat exposure and military rank accounted for 11% of the variance of PTSD symptoms | Combat exposure, military rank, and VRSS accounted for 25% of the variance of PTSD symptoms | VRSS explains 14% of the variance in Mississippi scale scores when added to the regression equation |

Comparisons between RRSS and VRSS scales in accounting for PTSD symptoms

Limitations

African American Vietnam veterans with higher combat exposure were significantly more likely to endorse PTSD symptoms. This finding supports previous research that suggest that combat exposure can induce and/or increase the likelihood of experiencing acute anxiety symptoms (Wilson, 1980; Yager, Lauger, and Gallops,1984). Interestingly, combat exposure did not increase the chance of experiencing general psychiatric symptoms in this study. One plausible explanation that accounts for this discrepancy is that the measure of general psychiatric distress symptoms (i.e. BSI) was not normed with a military population, whereas the Mississippi Scale for combat-related PTSD was normed with military personnel. Not surprisingly, the only non-significant correlations in this study included ones that measured the relationships between general psychiatric symptoms (as measured by the BSI) and military related factors (i.e. military rank and combat exposure). ($\mathbf{r} = -.18$; $\mathbf{r} = .17$ respectively).

Researchers in the field of trauma and abuse frequently acknowledge the impact of pre-existing factors as predisposing a person to pathology and emotional distress (Marsella, Friedman, Gerrity, & Scurfield, 2001; Yager, Lauger, and Gallops, 1984). Such pre-existing factors that influence the maintenance of PTSD symptoms include: substance abuse, low level of education, and previous abuse history. Limitations of this study include the absence of measure(s) to account for veteran's pre-existing mental health factors. Such factors could help explain the frequency of symptomology experienced by African American veterans. A review of VA medical records could have assisted in collecting this kind of information, but might not have been feasible to obtain given the series of privacy acts precluding such documentation to be shared with third parties.

This study did not adequately account for the retrospective assessment of its factors (i.e. participant's ability to recall previous PTSD symptoms, combat exposure, and race-related stressors). Research in the area of military race-related stressors suggests that there are multiple factors (e.g. appraisal of emotional experiences, suppression of facts, and/or the tendency to embellish information for secondary gains) that can compromise a person's ability to recall information during times of extreme stress (King, 1999). To remedy this limitation, a test-retest procedure could have increased the confidence in the reliability of the information collected from participants of this study and could have also minimized the presence of response-bias. The invitation to maintain contact information was extended to participants for these purposes, and proved to be futile given the transient population of veterans in the community-based assistance programs transitioning to more stable living accommodations.

The intercorrelational relationship between the racial prejudice and stigmatization and exposure to a racist environment subscales (.91) suggests that one factor is being assessed instead of two distinct factors. The racial prejudice and stigmatization subscale differs from the exposure to a racist environment subscale in that it measures the perception of being directly subjected to racial prejudice and stigmatization. Whereas, the exposure to a racist environment subscale measures the extent that race negatively affects daily experiences. The extreme overlap between these two subscales suggests that being exposed to a racist environment and the perception of being marginalized due to race was interpreted similarly by the respondents of this study. One plausible explanation for this finding is that African American Vietnam veterans have a difficult time differentiating between their perceptions and actual experiences of being discriminated against. Their tendency to internalize racial stressors is supported by the literature of their prolonged physiological and psychological distress symptoms. This internalization of symptoms is indicative of a heightened startle response characterized by hypervigillence and extreme suspiciousness of others and new environments. The inability to distinguish between perceived and actual threats is one of the key elements in considering a diagnosis of PTSD.

This study's methodological limitations are indicative of using a convenience sample. The recruiting practices used for this study can not ensure the representativeness of the target population and therefore restricts the range of generalizability to the general body of African American Vietnam veterans. The disproportionate number of treatment vs. non-treatment veterans further contributed to the issue of generalizability, in that clinical intervention treatment options (or a lack thereof) could have altered veterans' symptom presentation. Similarly, the subgroup cultural experiences of African Americans (mixed vs. non-mixed) presents unique challenges in providing an accurate representation of symptoms experienced by a collective group of African American Vietnam veterans. Due to the complex racial issues that were present during the time of the Vietnam War, the cultural experiences of African American military personnel could vary in terms of: (1) the degree of observable racial features, (2) cultural expression of traditional Afrocentric values, (3) level of acculturation, (4) and level of cultural identity. Assessments pertaining to these culture-specific factors could have provided a more detailed picture of issues influencing the generaliability of results.

Implications for Future Research

The Vietnam Race-Related Stressor Scale (VRSS) for African American veterans is an adapted measure of Loo et al's (2001) Race-Related Stressor Scale (RRSS) for Asian Americans. It offers comparable psychometric and statistical properties to the RRSS with respect to construct validity, internal consistency, and the ability to account for PTSD and general psychiatric symptoms over and above combat exposure and military rank. Its subscales are moderately correlated, suggesting some overlap with somewhat distinct factors. This assessment was the first step in developing an assessment that measures the level of race-related stressors for an African American veteran's group. Future steps to increase its clinical application with this target group include: (1) systematic replication of this measure with other African American samples, (2) normative criteria with regards to cutoff scores to suggest low, moderate, and high levels of race-related stressors, and (3) the inclusion of within group questions to delineate between the phenomenalogical experiences of specific race-related factors that might account for unique race-related stressors. This measure offers a glimpse into the nuances of race-related factors affecting a specific cultural group and should be used as a tool in establishing specific instruments to assess for race-related trauma. By increasing our awareness of these risk factors, it could be possible to develop specialized treatment interventions in addition to redefining diagnostic criteria to be more inclusive of militaryrelated cultural experiences.

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Appendix A

Race-Related Stressor Scale

Please answer the following questions about your experiences while you served in the Vietnam War or served in the military during the Vietnam War. These questions describe events that may have occurred in the field or in base camps or other rear areas. The term "military personnel" refers to American military personnel. The term "in Vietnam" refers to any duty on the ground, in the air over or in the waters contiguous or South or North Vietnam or Cambodia, or in or over Laos. Please circle the answer that best describes your experiences. In the military...

| 1. | | | you <i>hear</i> military than American li | | ribe Asian lives as having |
|----|------------------|-----------------------------------|---|---|--|
| | 0 | 1 | 2 | 3 | 4 |
| | Never | Rarely | Sometimes | Frequently | Very Frequently |
| 2. | | | hilitary personne han White Amer | | s if their lives were of no |
| | 0 | | 2 | 3 | 4 |
| | Never | Rarely | Sometimes | Frequently | Very Frequently |
| 3. | How often 0 | , if ever, could | d you identify wi 2 | ith the people or 3 | culture of Vietnam? |
| | Never | Rarely | Sometimes | Frequently | Very Frequently |
| 4. | | · · | you concerned the you interacted wind with 2 | | can soldiers might civilians? 4 |
| | Never | Rarely | Sometimes | Frequently | Very Frequently |
| 5. | | e civilians tha 1 | | n soldiers of Wh 3 | tronger identification with hite or Black ancestry? 4 Very Frequently |
| 6. | "slopes," c 0 | or some other 1 | nilitary personne racially insulting 2 Sometimes | el refer to Asians or insensitive r 3 | s as "gooks," "slant eyes," |
| | Never | Kalely | Sometimes | Frequentity | very rrequently |
| 7. | | ever singled o ce but of the s | | | nent than personas of |
| | 0 | 1 | 2 | 3 | 4 |
| | Never | Rarely | Sometimes | Frequently | Very Frequently |

| 8. How ofter Asians? | , if every, di | d you hear militar | ry personnel exp | ress hatred toward |
|---------------------------|--------------------------------|--|-----------------------|----------------------------|
| Asialis? | 1 | 2 | 3 | 4 |
| Never | - | Sometimes | - | Very Frequently |
| INCVCI | Karcıy | Sometimes | requently | very mequentry |
| 9. Were you | ever pointed | out as an exampl | e of what the end 3 | emy looked like? 4 |
| Ũ | Rarely | Sometimes | 5 | Very Frequently |
| ivever | Ratery | Sometimes | requently | very rrequentry |
| | | ver keep their ph se you were Asia | n? | rom you or tell you to get |
| 0 | | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | | every do or say th te a Vietnamese? | ings that led you | to believe that they |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | iturery | Sometimes | requeing | very requency |
| that non-A | | Asian American ans were not? | | el being stared at in ways |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 13. How ofter American | | l you feel you we | re more like the ` | Vietnamese than like the |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| - | d to persons o disrespectfu | | of the same rank | r, were you ever ignored |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | n, if ever, wa our being As | | - | asons you suspect had to |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 0 | n, if ever, dic | l military personn 2 | el treat Asians as | s inferior? |
| 0 Nover | I Dorolar | - | - | - |
| Never | Karely | Sometimes | riequentiy | Very Frequently |
| | | | | slant eyes," "Jap," |

"kamikaze," "Chink," "boy," "pineapple," or "coconut head" in a way that felt hostile or insulting?

| | l | 2 | 3 | 4 |
|--|--|--|--|---|
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | | ever make racial using chopsticks 2 | | narks about your doing 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| • | ver feel like y | | in a negative way | y) or were looked at is |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | | tions where you f mericans in your 2 | | use you were the only or small group? 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 21. How often 0 | , if ever, did | other Americans 2 | treat you with ra 3 | cial hatred or hostility? 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 22. Were you ever denied access to certain areas or hassled before being given access to certain areas because you were Asian? | | | | |
| 0 | 1 | 2 | 3 | 4 |
| Ũ | | | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | 2 | | 1 2 | Very Frequently st of the Americans in |
| 23. Did you ev | 2 | | 1 2 | |
| 23. Did you ev | 2 | ou did not really 2 | fit in with the rea | |
| 23. Did you ev your unit? 0 Never 24. How often | ver feel like y 1 Rarely , if ever, did 1 | ou did not really 2 Sometimes | fit in with the rea 3 Frequently el make insulting | st of the Americans in 4 Very Frequently remarks about the |
| 23. Did you ev your unit? 0 Never 24. How often | ver feel like y 1 Rarely , if ever, did 1 | ou did not really 2 Sometimes military personne | fit in with the rea 3 Frequently el make insulting | st of the Americans in 4 Very Frequently remarks about the |
| 23. Did you ev your unit? 0 Never 24. How often South Viet 0 Never | ver feel like y 1 Rarely , if ever, did t tnamese, relat 1 Rarely , if ever, did t | ou did not really 2 Sometimes military personne ted to their size, i 2 Sometimes | fit in with the rea 3 Frequently el make insulting ntelligence, diet, 3 Frequently | st of the Americans in 4 Very Frequently remarks about the or abilities? 4 |
| 23. Did you ev your unit? 0 Never 24. How often South Viet 0 Never 25. How often | ver feel like y 1 Rarely , if ever, did t tnamese, relat 1 Rarely , if ever, did t | ou did not really 2 Sometimes military personne ted to their size, i 2 Sometimes | fit in with the rea 3 Frequently el make insulting ntelligence, diet, 3 Frequently | st of the Americans in 4 Very Frequently remarks about the or abilities? 4 Very Frequently |
| 23. Did you ev your unit? 0 Never 24. How often South Viet 0 Never 25. How often relative, or 0 Never 26. How often | ver feel like y 1 Rarely , if ever, did i mamese, relat 1 Rarely , if ever, did i friend? 1 Rarely | ou did not really 2 Sometimes military personne ted to their size, i 2 Sometimes a <i>living</i> Vietname 2 Sometimes a <i>living</i> Vietname | fit in with the real 3 Frequently el make insulting ntelligence, diet, 3 Frequently ese <i>male</i> remind 3 Frequently | st of the Americans in 4 Very Frequently remarks about the or abilities? 4 Very Frequently you of a family member, 4 |
| 23. Did you ev your unit? 0 Never 24. How often South Viet 0 Never 25. How often relative, or 0 Never 26. How often | ver feel like y 1 Rarely , if ever, did to tramese, relation 1 Rarely , if ever, did to triend? 1 Rarely , if ever, did to triend? 1 Rarely , if ever, did to triend? 1 Rarely , if ever, did to triend? 1 Rarely | ou did not really 2 Sometimes military personne ted to their size, i 2 Sometimes a <i>living</i> Vietname 2 Sometimes a <i>living</i> Vietname | fit in with the real 3 Frequently el make insulting ntelligence, diet, 3 Frequently ese <i>male</i> remind 3 Frequently | st of the Americans in 4 Very Frequently remarks about the or abilities? 4 Very Frequently you of a family member, 4 Very Frequently |

| | | | r dead Vietname | ese male remind you of a |
|-----------------------------|--------------|---|---------------------------------|----------------------------|
| family mer | nber, relat | ive, or friend? | 2 | |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | | id any <i>wounded o</i> ber, relative, or fri | | se woman or child remind |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| • | | e you had to expre ou did not really fe 2 | | timents in front of other |
| Never | I Doroly | Sometimes | Frequently | I |
| INEVEL | Kalely | Sometimes | riequently | very riequentry |
| 30. How often because yo | | | resence in the mil | itary was resented |
| 0 | Doroly | - | e | T Vom Engquently |
| Never | Rafely | Sometimes | Frequently | Very Frequently |
| 31. How often ethnicity? | , if ever, d | id you feel you w | ere treated unfair | ly because of your race or |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 32. Did other A_0 | Americans | ever treat you like | e an outside or a $\frac{1}{3}$ | foreigner? |
| 0 | I Doroly | Somotimos | Eroquantly | I |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| 33. How often American? | | id you try to prove | e, or feel the need | to prove, that you were |
| 0 | 1 | 2 | 3 | 4 |
| Never | Rarely | Sometimes | Frequently | Very Frequently |
| | | | | |

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Appendix B

(Bold refers to adapted items)

Vietnam Racial Stressor Scale for African Americans

Please answer the following questions about your experiences while you served in the Vietnam War or served in the military during the Vietnam War. These questions describe events that may have occurred in the field or in base camps or other rear areas. The term "military personnel" refers to American military personnel. The term "in Vietnam" refers to any duty on the ground, in the air over or in the waters contiguous or South or North Vietnam or Cambodia, or in or over Laos. Please circle the answer that best describes your experiences. In the military...

1. How often, if ever, did you *hear* military personnel describe Black lives as having no value or lesser value than American lives?

| 0 | 1 | 2 | 3 | 4 |
|-------|--------|-----------|------------|-----------------|
| Never | Rarely | Sometimes | Frequently | Very Frequently |

2. Did you ever observe military personnel treat Blacks as if their lives were of no value or of lesser value than White American lives?

| 0 | 1 | 2 | 3 | 4 |
|-------|--------|-----------|------------|-----------------|
| Never | Rarely | Sometimes | Frequently | Very Frequently |

- 3. How often, if ever, could you identify with the people or culture of Vietnam? 0 3 1 Frequently Never Rarely Sometimes Very Frequently
- 4. How often, if ever, were you concerned that other American soldiers might question your loyalty if you interacted with Vietnamese civilians? 0 2 4 3 1 Very Frequently Never Rarely Sometimes Frequently
- 5. As an American of African ancestry, did you ever feel a stronger identification with Vietnamese civilians than with American soldiers of White ancestry? 0 1 2 3 Δ Ne

| lever Rarely Sometimes Frequently Very Free |
|---|
|---|

6. How often, if ever, did military personnel refer to Black as "niggers," or some other racially insulting or insensitive name? 0 1 2 3 Δ

Frequently Very Frequently Never Rarely Sometimes

7. Were you ever singled out for different or harsher treatment than personas of another race but of the same rank? 0 3 Never Rarely Sometimes Frequently Very Frequently

| 8. How often, if every, did you hear military personnel express hatred toward | | | | | | |
|--|----------------|-----------------|----------------------|--|--|--|
| Blacks? 0 1 | 2 | 3 | 4 | | | |
| v 1 | _ | - | Very Frequently | | | |
| 9. Were you ever pointed out as an example of what the enemy looked like? | | | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 10. Did other Americans ever keep their physical distance from you or tell you to get away from them because you were Black? | | | | | | |
| 0 1 | 2 | 3 | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 11. Did other Americans every do or say things that led you to believe that they thought you looked like a Vietnamese? | | | | | | |
| $0 \qquad 1$ | $\frac{1}{2}$ | 3 | 4 | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 12. Did you ever observe Black military personnel being stared at in ways that non- blacks were not? | | | | | | |
| 0 1 | 2 | 3 | 4 | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 13. How often, if ever, did you feel you were more like the Vietnamese than like the Americans? | | | | | | |
| 0 1 | 2 | 3 | 4 | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 14. Compared to persons of other races but of the same rank, were you ever ignored or treated disrespectfully? | | | | | | |
| 0 1 | 2 | 3 | 4 | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | |
| 15. How often, if ever, was your authority questioned for reasons you suspect had to do with your being Black? | | | | | | |
| $0 \qquad 1$ | 2 | 3 | 4 | | | |
| Never Rarely | Sometimes | - | Very Frequently | | | |
| 16. How often, if ever, did military personnel treat Blacks as inferior? | | | | | | |
| U I Nover Parely | 2 Somotimos | 3 Eroquantly | 4 Vory Frequently | | | |
| inever Karely | Sometimes | riequently | Very Frequently | | | |
| 17. How often, if ever, were Asians called a "gook," "slope," "slant eyes," "Jap," "kamikaze," "Chink," "boy," "pineapple," or "coconut head" in a way that felt hostile or insulting? | | | | | | |

| • | 1 | 2 | 3 | 4 | | |
|---|---|--------------------|------------------------|---------------------------------------|--|--|
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 18. Did military personnel ever make racially insensitive remarks about Asians doing things like eating rice, using chopsticks, or squatting?01234 | | | | | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 19. Did you ever feel like you "stood out" (in a negative way) or were looked at is you did not belong there? | | | | | | |
| 0 N | 1 | 2 | 3 | 4 | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| | | | | isolated because you were the only or | | |
| one of | the few] | Blacks in you 2 | ır platoon or otl 3 | ner small group? | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 21 11 | | | | | | |
| 21. How of 0 | 1 | 2 /er, and other | Americans treat | you with racial hatred or hostility? | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 22 Were | VOIL EVE | er denied ac | cess to certain | areas or hassled before being given | | |
| | • | | use you were Bl | | | |
| 0 | 1 | 2 | 3 | 4 | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 23. Did yo unit? | 23. Did you ever feel like you did not really fit in with the rest of the Americans in your unit? | | | | | |
| 0 | 1 | 2 | 3 | 4 | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |
| 24. How often, if ever, did military personnel make insulting remarks about the South Vietnamese, related to their size, intelligence, diet, or abilities? 0 1 2 3 4 | | | | | | |
| 0 | Rarely | Sometimes | Frequently | Very Frequently | | |
| 25. How often, if ever, did a <i>living</i> Vietnamese <i>male</i> remind you of a family member, relative, or friend? | | | | | | |
| 0 Navar | 1 Domalar | 2 Somotimos | 3 Eno au antilu | 4 Martin Eraguarthy | | |
| inever | Karely | Sometimes | rrequently | Very Frequently | | |
| 26. How often, if ever, did a <i>living</i> Vietnamese <i>woman or child</i> remind you of a family member, relative, or friend? | | | | | | |
| 0 | 1 | 2 | 3 | 4 | | |
| Never | Rarely | Sometimes | Frequently | Very Frequently | | |

| 27. How often, if ever, did a <i>wounded or dead</i> Vietnamese <i>male</i> remind you of a family member, relative, or friend? | | | | | | | | |
|---|---|---|----------------------------|--|--|--|--|--|
| 0 1 | 2 | 3 | 4 | | | | | |
| Never Rarely | Sometimes Frec | uently Very F | requently | | | | | |
| 5 | | | | | | | | |
| 28. How often, if ever, did any <i>wounded or dead</i> Vietnamese <i>woman or child</i> remind you of a family member, relative, or friend? | | | | | | | | |
| 0 1 | 2 | 3 | 4 | | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | | | |
| 2 | | 1 2 | | | | | | |
| 29. Did you ever feel like you had to express anti-Asian sentiments in front of other Americans even if you did not really feel that way? | | | | | | | | |
| 0 1 | • | B S S S S S S S S S S S S S S S S S S S | 4 | | | | | |
| Never Rarely | | Frequently | Very Frequently | | | | | |
| Never Rarery | Sometimes | requently | very rrequently | | | | | |
| | 30. How often, if ever, did you feel your presence in the military was resented | | | | | | | |
| because you w | | | | | | | | |
| 0 1 | 2 | 3 | 4 | | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | | | |
| 31. How often, if ever, did you feel you were treated unfairly because of your race or ethnicity? | | | | | | | | |
| 0 1 | 2 | 3 | 4 | | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | | | |
| 32. Did other Americans ever treat you like an outside or a foreigner? | | | | | | | | |
| 0 1 | _ | 3 | 4 | | | | | |
| Never Rarely | Sometimes | Frequently | Very Frequently | | | | | |
| - | | | | | | | | |
| 33. How often, if ever, did you try to prove, or feel the need to prove, that you were American? | | | | | | | | |
| 0 1 | 2 | 3 | 4 | | | | | |
| Never Rarely | | Frequently | Very Frequently | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | <i>y y y y y y y y y y</i> | | | | | |

Appendix C

Race Related Stressor for Asian American Vietnam Veterans - Subscales

Factor 1: Racial Prejudice and Stigmatization

- Pointed out as example of what the enemy looked like
- Others make racially insensitive remarks about you doing things like eating rice, using chopsticks.
- Singled out for harsher treatment than other races of the same rank
- Ignored/treated more disrespectfully than other races of same rank
- Your authority questioned because of being Asian
- Resented because you were Aisan
- Called you racial slurs like "Gook" "slant eyes"
- Treated by other American with racial hatred or hostility
- Treated unfairly because of your race or ethnicity
- Other Americans stayed away from you or told you to get away because you were Asian
- Denied access or hassled about access to certain areas because you were Asian
- Tried or felt the need to prove you were American
- Expressed anti-Asian sentiments in front of other Americans even if you did not feel that way
- Other Americans did or said things indicating you looked like the Vietnamese
- You "stood out" or were looked at as if you did not belong
- Felt isolated because you were the only Asian American
- Concerned your loyalty questioned if interacted with Vietnamese civilians

Factor 2: Bicultural Identification and Conflict

- Could identify with people or culture of Vietnam
- Stronger identification with Vietnamese civilians than with White Americans
- Living Vietnamese male reminded you of relative or friend
- Living Vietnamese woman or child reminded you of a relative or friend
- Wounded or dead Vietnamese male reminded you of relative or friend
- Wounded or dead Vietnamese woman or child reminded you of relative or friend
- Felt more like the Vietnamese than the Americans

Factor 3: Racist Environment

- Military personnel described Asian lives as having no or lesser value than American lives
- Military personnel referred to Asians as "gooks" or other racial slur
- Military personnel expressed hatred toward Asians.
- Military personnel treated Asians as inferior
- Military personnel made insulting remarks about South Vietnamese size, intelligence, diet.
- Asian American military personnel stared at in ways other races were not
- Military personnel treated Asians as if their lives were of lesser value than American lives

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Appendix D (Bold refers to adapted items)

Vietnam Racial Stressor Scale for African American Vietnam Veterans - Subscales

Factor 1: Racial Prejudice and Stigmatization

- Pointed out as example of what the enemy looked like
- Others make racially insensitive remarks about you doing things like eating chicken, water melon, or other stereotypical foods
- Singled out for harsher treatment than other races of the same rank
- Ignored/treated more disrespectfully than other races of same rank
- Your authority questioned because of being Black
- Resented because you were Black
- Called you racial slurs like "nigger" or other derogatory names
- Treated by other American with racial hatred or hostility
- Treated unfairly because of your race or ethnicity
- Other Americans stayed away from you or told you to get away because you were Black
- Denied access or hassled about access to certain areas because you were Black
- Tried or felt the need to prove you were American
- Expressed anti-Black sentiments in front of other Americans even if you did not feel that way
- Other Americans did or said things indicating you looked like the enemy
- You "stood out" or were looked at as if you did not belong
- Felt isolated because you were the only Black
- Concerned your loyalty questioned if interacted with Vietnamese civilians

Factor 2: Bicultural Identification and Conflict

- Could identify with people or culture of Vietnam
- Stronger identification with Vietnamese civilians than with White Americans
- Living Vietnamese male reminded you of relative or friend
- Living Vietnamese woman or child reminded you of a relative or friend
- Wounded or dead Vietnamese male reminded you of relative or friend
- Wounded or dead Vietnamese woman or child reminded you of relative or friend
- Felt more like the Vietnamese than the Americans

Factor 3: Racist Environment

- Military personnel described Black lives as having no or lesser value than American lives
- Military personnel referred to Black as "nigger" or other racial slur
- Military personnel expressed hatred toward Blacks
- Military personnel treated Blacks as inferior
- Military personnel made insulting remarks about South Vietnamese size, intelligence, diet
- Black American military personnel stared at in ways other races were not
- Military personnel treated Blacks as if their lives were of lesser value than American lives