

Twin Study Confirms Psychological Effects of War

A study of Vietnam era identical twin pairs demonstrated that participation in combat during the Vietnam War is causing substantial emotional problems in veterans today. Approximately 17 percent of all veterans who served in Southeast Asia and 40 percent of those who experienced the highest levels of combat currently have symptoms of a psychological illness called posttraumatic stress disorder (PTSD). By comparison, only 5 percent of twin brothers who did not serve in Southeast Asia have this disorder. PTSD is characterized by a set of symptoms that follow exposure to psychologically traumatic events that are outside the range of normal human experience. Veterans with the highest levels of combat exposure in Vietnam report many more symptoms.

Identical twins are an ideal group on which to perform this kind of research since twin brothers are, at entry into military service, as similar as any pair of individuals can be. Therefore, consistent differences found between pairs of brothers which correlate with combat exposure can confidently be said to be due to combat.

The results of this study will help identify and treat veterans with psychological problems resulting from military service.

What Is the VET Registry?

The Vietnam Era Twin (VET) Registry is a register of approximately 7,400 identical and fraternal twin pairs, where both members of each pair were in service during the Vietnam War era (1965 to 1975). Most twins were identified from a computerized list of 6 million Vietnam era veterans obtained from the Department of Defense. Using computer programming techniques, veterans were identified who had the same last names and dates of birth, and similar social security numbers. Military records were then reviewed to determine which individuals had the same parents and were therefore twins.

Combat Has Little Effect on Current Drinking

Researchers recently reported that a study of identical twin pair members of the VET Registry demonstrated that 6.7 percent of veterans who experienced extensive combat during the Vietnam War are currently high consumers of alcohol by comparison to 4.0 percent of twin brothers who did not serve in Southeast Asia. High alcohol consumption was defined as more than an average of five drinks daily. Veterans with lower levels of combat experience drank the same amount of alcohol as their non-Vietnam experienced brothers. Thus, service in Southeast Asia and combat have relatively modest long-term effects on the alcohol drinking patterns of Vietnam era veterans.

The researchers emphasized that their investigation provides no information about the effects of combat on alcoholism, since alcoholism data are not currently available in the Registry.

How Does an Investigator Get to Use the VET Registry?

Access to the Registry for investigators is a long and arduous task, typically taking two to four years. After an investigator develops a research idea, a detailed research application (60 pages are common) is then submitted to the VET Registry for review by the Registry's Human Studies and Scientific Advisory Committees. The former committee ensures that the project has little or no risk to Registry members and the latter (composed of internationally renowned scientists) makes sure that the project will contribute to the improved health of Americans. Because the VET Registry has no research funds and projects typically cost many hundreds of thousands of dollars, the investigator must also submit the application to government or private foundations. Although many applications are approved because of their high quality, money is available to fund only about 20 percent. Thus, only the very best research ideas are actually examined.

Registry Data Are Confidential

All information the Registry collects about Registry members is completely confidential. Although information about Registry members is released to researchers, NO identifiers which link the information with an individual is ever released except if the Registry member gives his specific, written approval. Only two people have the key to link Registry information with individuals: the Registry's Director, Dr. William Henderson and the Registry's Coordinator, Ms. Mary Ellen Vitek.

Research Publications Now Available

The following are titles of research articles published in journals using information obtained from the VET Registry. Contact Dr. Henderson or Ms. Vitek by mail or phone for free copies of any or all the articles or to learn how to contact the responsible researchers: 1) The Vietnam Era Twin Registry: a resource for medical research, 2) The Vietnam Era Twin (VET) Registry: Method of Construction, 3) The Vietnam Era Twin (VET) Registry: Ascertainment Bias, 4) Determining zygosity in the Vietnam Era Twin Registry: an approach using questionnaires, 5) Effect of combat experience on alcohol consumption: analysis of monozygotic twin pairs, 6) A twin study of the effects of the Vietnam conflict on posttraumatic stress disorder, and 7) Reliability and validity of self report combat exposure index.

Research Projects Currently Underway

Two major research efforts are underway: 1) a project being performed by the National Heart, Lung, and Blood Institute will investigate inherited and environmental factors (such as physical activity, diet, and medications) which contribute to heart disease, and 2) funding from the National Institute on Drug Abuse to Harvard University Medical School will develop a better understanding of inherited and environmental factors contributing to the onset, course, and remission of drug abuse (ranging from cigarettes to hard drugs such as heroin).

Research Analyses in Progress

Using data obtained from the VET Registry, researchers are currently evaluating the effects of combat on veterans' educational achievement, job selection, family income, marital status, and number of children. Researchers are also determining the influence of inheritance, service in Southeast Asia and combat on current physical and psychological health. The results of these analyses will be ready within several months.

Have You Moved?

The VET Registry Staff wishes to keep you informed of our research efforts. In order to ensure that you are kept up to date, please notify the VET Registry of any changes in your address or telephone number.

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