

Technical Abstract

Optimizing Screening and Risk Assessment for Suicide in the U.S. Military

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Background

Suicide is a leading cause of death in the general population (National Institute for Mental Health, 2008), and it is the second most common cause of death in the United States Armed Forces (Ritchie, Keppler, & Rothberg, 2003). In fact, in recent years the suicide rate of military service members and veterans has been quickly rising, which has sparked a pressing interest in better ways to treat and assess this phenomenon in military personnel (Lorge, 2008). For instance, one study found that the most common type of traumatic death suffered during armed forces training was suicide (Scoville, Gardner, & Potter, 2004). Employing the most up-to-date measurement technologies and theoretical approaches to risk assessment may represent a key component in allaying this worrisome mental health trend in the military.

Objective/Hypothesis

In a sample of several thousand army recruiters – a group with documented high risk for suicidal behavior – we will administer an innovative and highly promising battery of measures (agitation, insomnia, suicidal ideation, implicit associations, suicide-specific hopelessness, perceived burdensomeness, low belonging, and fearlessness), and use them to predict suicide-related outcomes over eighteen months in a high-risk military sample, recruiters. Importantly, we have gained access to this sample, and administration of all measures is feasible in the relevant setting. Scores from the measures, as well as data from existing, status quo risk assessment, will be entered into regression equations simultaneously, which will reveal which particular measure – or set of measures – is optimally predictive of outcomes. Classification statistics (e.g., sensitivity, specificity, positive predictive value, negative predictive value) will be used to inform how best to implement the resulting battery and to evaluate how well it might do overall.

As the explicit aim of this proposal is to compare very promising risk factor assessment approaches to each other, we make no specific predictions about which measure(s) will perform best. An advantage of the project and the research team is that most approaches have a “partisan advocate” on the team (e.g., Joiner for interpersonal-psychological variables; Rudd for suicide-specific hopelessness; Nock for implicit associations). This is advantageous because it ensures a fair test, and any potential allegiance effects are negated.

Study Design

Except for two weeks each year, over 100 recruiters per week attend the Army Recruiters Course (ARC) at The Recruiting and Retention School (RRS) on Fort Jackson, South Carolina. During their orientation to the ARC, recruiters complete a number of surveys and assessment instruments, such as a post deployment survey and a personality

inventory. The results from these instruments are downloaded and reviewed by the RRS recruiter coaches and the Behavioral Health Consultant to identify those who may need behavioral health care and/or other services. Thus, the infrastructure for the proposed project is up and running in the project's setting; our project would thus seamlessly integrate with existing infrastructure, in that we would add our brief battery to the existing protocol. We will use elements of our battery to predict suicide-related outcomes over time; these outcomes will be tracked using the existing electronic infrastructure.

We will use the indices in our battery as predictors of our suicide-related dependent variables, which, in order of specificity, are suicide attempts, non-suicidal self-injury, episodes of suicidal ideation, episodes of depression, and mental health visits. For each of these DV's, we will examine the number of occurrences and time to first occurrence, over the course of approximately eighteen months; time to first occurrence is an index of interest because it may illuminate predictors' temporal parameters (e.g., near-term vs. longer-term prediction). The project will utilize existing electronic infrastructure to track these variables. As illustrated in our Preliminary Studies section, our team has already begun tracking these outcomes in the proposed setting.

Relevance

The proposed study has direct military relevance because it will be conducted 1) among military personnel, 2) using among the most innovative, state-of-the art technology and scientific advances in suicide risk assessment, and 3) using a team of civilian and military collaborators with extensive expertise in researching suicidal behaviors and conducting clinical suicide research among military populations.