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2002). Results are promising, but there is evidence that the measure is in need of psychometric multiple studies in Norway (Johnsen, Eid & Bartone, 2004; Bartone, Johnsen, Eid, Laberg & Brun, Adler & Bartone, 2000). This scale was translated into Norwegian in 1998, and has since been used in American sample of Norwegian Navy cadets was low (61; Bartone et al., 2002), and reliability coefficients for the three facets were also somewhat low. A useful step in the test adaptation process is to conduct a DIF – Differential Item Functioning – analysis in order to identify items that may not be operating the same way in the two cultures, or other contextual factors, etc.)

Introduction
A brief 15-item hardiness (“dispositional resilience”) scale developed by Bartone (1995) has been used in many research studies, with good results (e.g., Bartone, Ursano, Wright & Ingram, 1989; Britt, Adler & Bartone, 2000). This scale was translated into Norwegian in 1998, and has since been used in multiple studies in Norway (Johnsen, Eid, Bartone, 2004). For example, the overall scale reliability (Cronbach’s alpha) in a sample of Norwegian Navy cadets was low (61; Bartone et al., 2002), and reliability coefficients for the three facets were also somewhat low. A useful step in the test adaptation process is to conduct a DIF – Differential Item Functioning – analysis in order to identify items that may not be operating the same way in the two cultures, or other contextual factors, etc.)

Method
For present study, two similar samples of U.S. and Norwegian military cadets were used for a DIF analysis of hardiness items. The U.S. cadets (N=436) were in their senior year at the U.S. Military Academy – West Point when they completed the English version of the short hardiness scale - DRIS-15. The Norwegian cadets (N=297) all had some military experience before entering the Naval Academy, and were in average (Mean=23.1 years, S.D.=2.6) to the West Point cadets (Mean=22.2, S.D.=1.1). Both samples were primarily men, with women a comparable minority in the U.S. (13%) and Norwegian (10%) samples. Mean overall hardiness levels were slightly higher in the African American sample (Mean=30.76, S.D.=4.65) as compared to the Norwegian (Mean=30.03, S.D.=4.42).

Results of the DIF analysis were followed up with a detailed conceptual analysis of Norwegian and English items by bilingual experts, and also administration of both language forms to available groups in a bilingual research design. This has led to an improved Norwegian version, now under evaluation with Norwegian forces deployed to Lebanon and Afghanistan.

Resiliency under stress is highly important in many occupations. The costs of non-adaptive responses to stress can be extremely high, not only for individuals but also for organizations. The personality style of hardiness has been linked to resilient responding, and helps to explain how it is that some people remain healthy, while others become symptomatic when exposed to highly stressful conditions. More research is needed to clarify how hardness and other possible resilience factors operate. The present study contributes to this line of investigation by providing improved instruments for measuring hardness. Ultimately, the results of this work will allow practitioners to design more effective training programs for building-up the kinds of healthy cognitions and behaviors that resilient person does display in response to stress.

Discussion
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