

TABLE 2. RAP Publications Linking RAP Survey Data with Other Data Sources for Epidemiological Study

First Author	Publication Year	Data Source(s)	Findings
Larson ²⁸	2009	DMDC, PDHA, and MDR	Post-deployment psychiatric disorders were associated with low pay grade, hospitalization during deployment, low education, pre-service smoking, and PTSD symptoms at end of deployment. Findings supported expansion of combat-related questions in the PDHA.
Leardmann ²⁹	2010	DMDC and MDR	Childhood physical neglect was associated with post-deployment PTSD. Findings suggest Marines who experience multiple types of ACEs have increased risk for post-deployment PTSD.
Phillips ³⁰	2010	DMDC and RAP II	Risk factors for post-deployment PTSD included pre-service measures of violence exposure and combat experiences of feeling in great danger of death, being shot or seriously injured, and witnessing someone wounded or killed. Follow-up measures of military rank, social support, and number of deployments were also associated with post-deployment PTSD.
Booth-Kewley ³¹	2010	DMDC and MDR	The strongest predictors of bad conduct discharges and military demotions among combat-deployed Marines were post-combat psychiatric diagnoses and younger age. These results indicate that combat-related psychological disorders may manifest as impulsive, disruptive, and antisocial behavior.
Horton ²⁶	2014	Physical fitness of recruit and DMDC	Trends in pre-service health and behavioral measures during the OEF/OIF era were improvements in BMI and physical activity levels and increases in smokeless tobacco use, caffeine use, and angry outbursts.
Feinberg ³²	2015	Physical fitness of recruit	Smoking cessation in this cohort of male, Marine recruits resulted in improved physical aerobic performance, independent of other pre-service health and behavioral measures. Average recruit running speeds improved among all recruits, but improvement was greater among prior smokers compared to recruits with no history of smoking.
White ⁶	2016	DMDC	Pre-service risk factors for military attrition due to drug use included endorsement of a Black racial group, incomplete high school education, joining the military to "leave problems at home," and an arrest within the year prior to joining the military. Attrition due to drug use accounted for a significant loss in service years of trained service members.
Phillips ³³	2017	DOD Medical Mortality Registry, DMDC, and MDR	Risk factors for suicide completion included incomplete high school education and current smoking behavior at enlistment. Diagnoses of TBI or depression and relationship counseling during military service also were risk factors for suicide completion. Suicide prevention efforts should not preferentially focus on deployed service members, as deployment was not an independent risk factor.
Bauer ³⁴	2020	RAP II	Deployed Marines were less likely to reduce fast food consumption versus non-deployed Marines at 3 years of follow-up from enlistment. Combat-deployed Marines, compared with non-deployed Marines, had increased odds of several adverse health-related behaviors post-deployment including binge drinking, new-onset alcohol dependence, initiation of smoking, and reduced seat belt use.
Leardmann ⁷	2022	NCIS	A low prevalence of sexual offenses over a 9-year period were observed (0.01%). Pre-service health and behavioral measures associated with sexual misconduct while in military service included endorsement of American Indian/Alaskan Native, Hispanic, and Multiracial/Other race and ethnicity categories; incomplete high school education; adverse experiences such as parental death and school suspension/expulsion; and unprotected sex.
Reed-Fitzke ³⁶	2023	MCS	Subgroups of exposure to pre-service ACEs indicative of adversity, such as parental absence, have more impact on risk for depression and PTSD symptoms versus absolute count of ACEs. These associations were modified by combat exposure when assessing moderate adversity with parental loss.
MacGregor ³⁷	in preparation	PHA	New-onset alcohol misuse was more likely among Marines who turned 21 years old during follow-up. Pre-service experiences associated with alcohol misuse in this study included a higher ACE score, job dismissal, and witnessing a stranger injured or killed.

Abbreviations: RAP, Recruit Assessment Program; PDHA, Post Deployment Health Assessment; MDR, Military Health System Data Repository; PTSD, Post-traumatic stress disorder; ACE, adverse childhood experience; OEF/OIF, Operation Enduring Freedom/Operation Iraqi Freedom; BMI, body mass index; DOD, Department of Defense; TBI, traumatic brain injury; NCIS, Naval Criminal Investigative Service; MCS, Millennium Cohort Study; PHA, Periodic Health Assessment.