



INSTITUTE FOR DEFENSE ANALYSES

Catalogue of Warrior Resilience and Fitness Metrics and Measures

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INSTITUTE FOR DEFENSE ANALYSES

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Executive Summary

The Institute for Defense Analyses (IDA) developed this catalogue to provide a common set of metrics and associated survey measures, ranging across the Total Force Fitness (TFF) model, to help guide and align program evaluation across the National Guard (NG). This product will facilitate the program evaluation process by providing easy access to a range of metrics and provide a more consistent approach to evaluation across the NG by encouraging the use of common survey measures. For each metric, suggested measurement instruments and/or other data sources are provided. Measurement instruments were selected from peer-reviewed publications and/or existing Department of Defense (DoD) surveys based on (1) commonality of use in the research community, (2) relevance for the military, and (3) feasibility of use (e.g., short, already included in a DoD survey).

The catalogue contains process metrics (i.e., measures of performance) and outcome metrics (i.e., measures of effectiveness). Outcome metrics are organized based on the domains of the TFF model: Psychological, Social, Financial, Ideological/Spiritual, Nutritional, and Physical. Within each domain, these metrics are further grouped into categories, as shown in Table ES-1.

Table ES-1. Outcome Metrics across the Total Force Fitness Domains

Domain	Categories of Metrics
Psychological Outcomes	Stress, coping, and mental health; mental health help-seeking and stigma; identifying and helping people at risk; substance use; suicidal behavior and lethal means
Social Outcomes	Military-specific (e.g., cohesion, trust, retention); sexual assault and sexual harassment; family and global (e.g., relationships, connectedness)
Financial Outcomes	No categories. Sample metrics include employment, job insecurity, job satisfaction, social determinants of health
Ideological/Spiritual Outcomes	No categories. Sample metrics include life purpose, spiritual fitness, flourishing
Nutritional Outcomes	No categories. Sample metrics include nutrition-related knowledge, behavior, and self-efficacy
Physical Outcomes	Physical activity; sleep; overall health

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1. Introduction

A. Overview

The Warrior Resilience and Fitness (WRF) Division of the National Guard Bureau asked the Institute for Defense Analyses (IDA) to assist in developing and refining the WRF Innovation Incubator (WRFII), a process to identify, select, and evaluate local prevention and resiliency-promotion programs. Through this process, WRF and IDA identified a need for a consistent approach to program evaluation for the WRFII and for the National Guard (NG) more broadly.

IDA developed this catalogue to provide a common set of metrics and associated survey measures, broadly ranging across the Total Force Fitness (TFF) model,¹ to guide and align program evaluation across the NG. This product will facilitate the program evaluation process by providing easy access to a range of metrics and provide a more consistent approach to evaluation across the NG by encouraging the use of common survey measures. By providing a broad range of outcomes across TFF domains, this catalogue will improve WRF's ability to assess program outcomes across multiple prevention domains (e.g., a program to prevent suicide might prevent other forms of violence). The catalogue is a working document and should be updated as NG programs evolve and new metrics and survey measures are developed or identified.

B. About the Catalogue

This catalogue provides a common set of metrics to evaluate program effectiveness. For each metric, suggested survey questions and/or other data sources are provided. Survey measures were selected from research publications and/or existing Department of Defense (DoD) surveys based on (1) commonality of use in the research community, (2) relevance for the military, and (3) feasibility of use (e.g., short, already included in a DoD survey). Citations to the original versions are provided as footnotes. Users of this catalogue should look to these citations for specific guidance on scoring each survey measure.²

¹ Keith Tidball, "The Eight Domains of Total Force Fitness - Military Families, Lethality, and Resilience," Military Families Learning Network, October 12, 2020, <https://militaryfamilieslearningnetwork.org/2019/03/15/the-eight-domains-of-total-force-fitness-military-families-lethality-and-resilience/>.

² When creating an average or sum of participants' responses across a set of survey items, users should *reverse score* items that have the opposite meaning of other items on the survey measure. For example, the majority of items on a survey measure of "training satisfaction" may be positively worded, with a few others negatively worded (e.g., "I am satisfied with this training" vs. "I am not satisfied with this training"). If all items use the same answer scale (e.g., 1 = strongly disagree, 5 = strongly agree), the negatively worded items should be reverse scored (1 = strongly agree, 5 = strongly disagree) before calculating a total score to be consistent with the positively worded items. Items that need to be reverse-scored are noted throughout the document.

The catalogue does not provide a comprehensive list of metrics and measures across all TFF domains. Program evaluators may need to find additional measures or tailor the measures included in the catalogue to their specific program.

The catalogue provides process metrics (i.e., measures of performance), which provide information about the scope and quality of program activities and are used for *monitoring program implementation*, as well as outcome metrics (i.e., measures of effectiveness), which provide information on the changes that occur as a direct result of program activities. Outcome metrics are grouped by category, based on the TFF model (click each domain name to follow link): [Psychological](#), [Social](#), [Financial](#), [Ideological/Spiritual](#), [Nutritional](#), and [Physical](#).

C. Additional Evaluation Resources

Databases of survey measures can be referenced for additional measures that are not featured in this catalogue (e.g., PhenX Toolkit, HealthMeasures, Measurement Instrument Database for the Social Sciences). Existing DoD and service-specific surveys also provide a wealth of information that could be useful for program evaluation. The Defense Organizational Climate Survey (DEOCS), the Unit Risk Inventory (URI, used in the Army) and the Azimuth Check (formerly referred to as the Global Assessment Tool (GAT) in the Army) may be particularly useful because their results are aggregated down to the unit level. As such, it may be possible to compare survey findings for units that received a particular program vs. those that did not.

2. Description of Process and Outcome Metrics

For suggested survey measures and/or sources of administrative data that you can use to track each metric, click on the metric name.

A. Process Metrics	
Metric	Description
Inputs	The resources and investments (equipment, materials, supplies, funding, and staff) that go into a program
Outputs	The activities, services, events, and products that the program delivers
Implementation	The process of carrying out program activities
Fidelity/quality	The degree to which program activities met intended standards – training implemented as intended (fidelity to protocol; meeting required items on implementation checklist)
Reach	The extent of interaction or exposure to program activities (e.g., participants trained, individuals referred for services, use of resources provided)
Satisfaction	The degree to which program activities were acceptable to or met the expectations of participants

B. Psychological Outcomes	
Metric	Description
<i>Stress, Coping, and Mental Health</i>	
Coping behavior	The use of strategies to manage or reduce the effects of challenging events
Emotional control	Maladaptive behaviors to control or suppress anger, depressed mood, or anxiety
Perceived stress	Feelings of being under stress in a defined period of time
Depression symptoms	Feelings of sadness and loss of interest that impedes functioning
Hopelessness	Lack of hope, optimism, or expectation of future improvement or success
Resilience	Ability to adapt to and bounce back from stressful events
General self-efficacy	Confidence in one's ability to handle stressful events
Anxiety symptoms	Feelings of anxiety, worry, nervousness

Metric	Description
Posttraumatic stress symptoms	Changes in physical or emotional reactions as a result of trauma
Psychological distress	Emotional behavioral functioning across several dimensions, e.g., depression, anxiety, somatization (i.e., physical symptoms linked to psychological distress)
Aggression	The extent to which an individual exhibits aggressive, violent, or hostile behavior
<i>Mental Health Help-Seeking and Stigma</i>	
Help-seeking self-efficacy	Belief in one's own capacity to successfully seek support services
Perceived norms about help-seeking	Beliefs about the social acceptability and prevalence of help-seeking
Perceived stigma related to seeking mental health services	Expectations about the extent to which others subscribe to stigmatic beliefs about using mental health services
Perceived barriers to mental health treatment	Expectations about obstacles to engaging mental health treatment
Attitudes about mental health services	Attitudes about and willingness to seek mental health services
Perceived stigma and barriers to behavioral health care (for providers)	Behavioral health providers' perception of stigma and barriers to care
Awareness of resources and services	Familiarity with various military resources and services
Help-seeking intentions	Intentions to seek military resources and services if stressful situation came up
Help-seeking behavior	Actions an individual takes to access military resources and services
<i>Identifying and Helping People at Risk</i>	
Readiness to help individuals at risk	An individual's assessment of the extent to which he/she is prepared to help those experiencing psychological distress, is likely to help, and has the capacity to help
Self-efficacy to provide combat operational stress control response (providers)	Confidence in one's ability to prevent and respond to combat stress reactions
<i>Substance Use</i>	
Attitudes about drinking	Attitudes about the acceptability of one's own drinking behavior
Benefits and consequences of alcohol use	Perceived social and personal benefits and consequences of alcohol use
Readiness to change	Stage of change with respect to substance use behaviors
Coping strategies for alcoholism	Use of tools and techniques to avoid alcohol use
Hazardous alcohol use	The extent to which an individual engages in risky alcohol use behaviors

Metric	Description
Risky substance-related behavior	Self-reported risky behaviors involving alcohol and illegal substances (e.g., driven under the influence, use of illegal drugs)
Substance-related incidents (administratively recorded)	Substance-related incidents recorded in administrative data sources (e.g., positive urinalysis, DUIs)
<i>Suicidal Behavior and Lethal Means</i>	
Attitudes about suicide	Rejecting or accepting attitudes about individuals who have a history of suicidal behavior
Attitudes about suicide prevention (for clinicians)	Clinicians' attitudes about suicide and caring for patients at risk for suicide
Knowledge of suicide	Understanding of the causes, prevalence, and prevention of suicidality
Self-harm and suicidal behavior	Engagement in self-injurious behavior or attempted suicide in a defined time frame
Firearm safety	Presence of and safe storage of firearms at home
<i>For additional measures, see the Military Suicide Research Consortium's Common Data Elements³</i>	

C. Social Outcomes

Metric	Description
<i>Military-specific</i>	
Positive perceptions of leadership	Individuals' trust in leadership and perceptions of leadership quality (immediate and senior leadership)
Negative perceptions of leadership	Individuals' perceptions of leadership as disrespectful and self-serving
Unit cohesion	Interpersonal bonding between unit members in pursuit of common goals
Inclusion	Sense of feeling respected, valued, and involved in unit communication
Workplace hostility	Occurrence of aggressive behaviors at work (verbal and physical)
Military and family life alignment	Extent to which family supports military service and military meets the needs of one's family
Identification with the National Guard	Extent to which being a member of the National Guard is important, valued, and part of one's self-concept
Intentions to stay in the National Guard	Plans to remain or reenlist in the National Guard
Military satisfaction	Evaluations of various aspects of the military experience
Perceived readiness	Perception of the extent to which self/unit is prepared to perform its mission

³ Fallon B. Ringer et al., "Initial Validation of Brief Measures of Suicide Risk Factors: Common Data Elements Used by the Military Suicide Research Consortium," *Psychological Assessment* 30, no. 6 (June 2018): 767–778, <https://pubmed.ncbi.nlm.nih.gov/29130694/>.

Metric	Description
Retention	The rate at which service members stay in the military through and after their term of service
Work performance	Ability to execute work responsibilities
<i>Sexual Assault and Sexual Harassment</i>	
Bystander intervention behavior	The actions an individual takes in response to situations related to sexual harassment and assault
Bystander intervention intentions	Willingness to act in response to situations related to sexual harassment and assault
Gender-related workplace culture	Perception of and participation in a workplace environment that is protective against sexual harassment and assault
Knowledge of sexual harassment and assault	Understanding of what constitutes sexual harassment and assault
Reporting climate	Trust in the military and expected outcomes related to reporting incidents of sexual harassment and assault
Sexual assault and harassment experiences (prevalence)	Individual experiences with behaviors that constitute sexual assault and sexual harassment (survey-measured)
Sexual harassment risk within organization	Experience of behaviors associated with an increased risk that sexual harassment is occurring within an organization
Reports of sexual assault	Administratively recorded Unrestricted and Restricted reports of sexual assault
Complaints of sexual harassment	Administratively recorded Formal and Informal complaints of sexual harassment
<i>For additional measures, see Workplace and Gender Relations (WGR) Survey⁴ and Measures of Performance and Effectiveness for the Marine Corps Sexual Assault Prevention Programs⁵</i>	
<i>Family and Global</i>	
Family relationship quality	The quality of relationships with adult children and extended family members
Relationship quality	Overall feelings of satisfaction in one's relationship
Significant other closeness and conflict	Perceived support and conflict in close relationships
Social functioning	Ability to maintain work and personal relationships
Community belonging	Sense of belonging to or affinity with one's community
Connectedness	Sense of belonging or positive association with other people in general

⁴ Rachel A. Breslin et al., 2019 *Workplace and Gender Relations Survey of Reserve Component Members: Overview Report*, OPA Report No. 2020-054 (Alexandria, VA: Office of People Analytics (OPA), May 2020), https://www.sapr.mil/sites/default/files/16_Annex_2_2019_Workplace_and_Gender_Relations_Survey_of_Reserve_Component_Members_Overview_Report.pdf.

⁵ Coreen Farris et al., *Measures of Performance and Effectiveness for the Marine Corps Sexual Assault Prevention Programs*, RR-2220-USMC (Santa Monica, CA: RAND Corporation, 2019), https://www.rand.org/pubs/research_reports/RR2220.html.

Metric	Description
Loneliness	Feelings of social isolation
Perceived social support	An individual's belief that he/she is cared for, has tangible or intangible assistance available from other people, and is part of a supportive social network
Satisfaction with work/family balance	Satisfaction with one's ability to meet the multiple demands of work and family
Satisfaction with social support and integration	Satisfaction with one's access to tangible and intangible support from other people

D. Financial Outcomes

Metric	Description
Employment	Having paid work
Job insecurity	Perceived likelihood of losing one's job in the near future
Job satisfaction	Attitude regarding and fulfillment derived from one's current job
Financial well-being	Feeling a sense of financial security
Financial functioning	Ability to manage personal responsibilities and finances
Social determinants of health	Economic and social conditions that influence an individual's health outcomes (e.g., living situation, transportation, food availability)

E. Ideological and Spiritual Outcomes

Metric	Description
General life purpose	An individual's sense of having a purpose in life
Life satisfaction	An individual's satisfaction with his/her life as a whole
Spiritual fitness	An individual's sense of purpose, connection, and meaning in life
Spiritual experience	Personal experiences with a higher power and religion
Flourishing	The experience of positive emotions, functioning, and meaning
Well-being	The experience of positive mental health, functioning, and life satisfaction

F. Nutritional Outcomes

Metric	Description
Nutrition-related knowledge	Knowledge of healthy foods and eating behaviors
Nutrition-related behavior	Self-reported practice of healthy eating habits
Nutrition-related changeability	Willingness to work toward developing healthy eating habits
Nutrition-related self-efficacy	Confidence in one's ability to eat nutritious foods

G. Physical Outcomes

Metric	Description
<i>Physical Activity</i>	
Physical activity	Self-reported physical activity
Exercise-related perceived barriers	The presence of barriers and facilitators to engaging in physical activity
Perceived physical fitness	Perceptions of one's own level of physical fitness
Exercise-related self-efficacy	Confidence in one's own ability to be physically active
Physical readiness	Meeting standards of physical fitness required for deployment
<i>Sleep</i>	
Sleep behavior	Perception and practice of getting adequate sleep
Sleep quality	The extent to which an individual sleeps well
Sleep-related impairment	Effects of poor sleep on individual functioning
<i>Overall Health</i>	
Access to medical care	Use of and access to medical care
Health-related quality of life	Perceptions of one's own physical and mental health and functioning
Pain	Intensity of pain and impact of pain on daily activities
Medical readiness	Meeting standards of health required for deployment

3. Suggested Survey Measures by Domain

A. Process Metrics

1. **Inputs:** the resources and investments (equipment, materials, supplies, funding, and staff) that go into a program
 - For example,
 - Equipment, material, and supplies
 - Funding
 - Staff
2. **Outputs:** the activities, services, events, and products that the program delivers
3. **Implementation:** the process of carrying out program activities
 - For example,
 - Events/activities held
 - Partnerships with external organizations
4. **Fidelity/Quality:** the degree to which the program activities meet intended standards – training implemented as intended
 - For example,
 - Time between screening and contact with a case manager
 - Fidelity to training curriculum
5. **Reach:** the extent of interaction or exposure to program activities
 - For example,
 - Participants trained
 - Individuals referred for behavioral health services
 - Email newsletter clicks
 - Users accessing web page
 - Users downloading resources on web page
6. **Satisfaction:** the degree to which program activities were acceptable to or met the expectations of recipients
 - For example, training satisfaction
 - *Answer choices: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*
 - Overall, I am satisfied with this training
 - After this training, I feel more prepared to recognize signs that someone is distressed
 - The information in this training was relevant to my life

- *Answer choices: Very unlikely, Likely, Neither likely nor unlikely, Likely, Very likely*
 - How likely are you to use the information presented in this training in your work?
 - How likely would you be to recommend this training to others?
 - Do you plan on discussing this training with anyone?
- For example, training satisfaction (for service providers)⁶
 - *Answer choices: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*
 - Overall, I am satisfied with the training program
 - The educational content of the training was helpful
 - The presenter was clear and effective
 - The videos were appropriate for the training
 - The activities and discussion were appropriate for the training
 - I think this training will help me in my role as a sexual assault victim advocate
 - I intend to use the training content after today
- For example, treatment satisfaction and relevance⁷
 - *Answer choices: Not at all true, Untrue, Somewhat untrue, Neither true nor untrue, Somewhat true, Very true, Extremely true*
 - This group relates to my particular problems
 - I am satisfied with this particular group
 - The treatment program in general relates to my particular problems
 - I am satisfied with treatment here in general
 - What percent of the entire treatment program relates to you and your problems so far?
- For example, satisfaction with therapy and therapist⁸
 - *Answer choices: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree*
 - I am satisfied with the quality of the therapy I received
 - The therapist listened to what I was trying to get across
 - My needs were met by the program
 - The therapist provided an adequate explanation regarding my therapy
 - I would recommend the program to a friend

⁶ Robert J. Cramer et al., “Implementation and Evaluation of a Psycho-Educational Training on Sexual and Gender Minority Needs for Military Sexual Assault Victim Advocates,” *Military Behavioral Health* 7, no. 1 (2019): 14–21, <https://doi.org/10.1080/21635781.2018.1515133>.

⁷ Ronald T. Murphy et al., “Effect of a Motivation Enhancement Intervention on Veterans’ Engagement in PTSD Treatment,” *Psychological Services* 6, no. 4 (2009): 264–278, <https://doi.org/10.1037/a0017577>.

⁸ Tian P. S. Oei and Angela L. Green, “The Satisfaction with Therapy and Therapist Scale--Revised (STTS-R) for Group Psychotherapy: Psychometric Properties and Confirmatory Factor Analysis,” *Professional Psychology: Research and Practice* 39, no. 4 (2008): 435–442, <https://doi.org/10.1037/0735-7028.39.4.435>.

- The therapist was not negative or critical towards me
- I would return to the clinic if I needed help
- The therapist was friendly and warm towards me
- I am now able to deal more effectively with my problems
- I felt free to express myself
- I was able to focus on what was of real concern to me
- The therapist seemed to understand what I was thinking and feeling
- How much did this treatment help with the specific problem that led you to therapy?
 - *Made things a lot better*
 - *Made things somewhat better*
 - *Made no difference*
 - *Made things somewhat worse*
 - *Made things a lot worse*

B. Psychological Outcomes

1. Stress, Coping, and Mental Health

a. **Coping behavior:** the use of strategies to manage or reduce the effects of challenging events

- Suggested measure: Brief-COPE Scale⁹
 - Instructions: The following questions deal with the ways you've been coping with stress in your life. Read the statements and indicate how much you use each coping style.
 - Answer choices: 1 = I haven't been doing this at all, 2 = A little bit, 3 = A medium amount, 4 = I've been doing this a lot
 - Scoring: Two subscales should be examined separately: avoidant for coping strategies that tend to be less beneficial in dealing with stress (denoted with *) and approach for coping strategies associated with more effective stress management (all other items).
 - I've been turning to work or other activities to take my mind off things*
 - I've been concentrating my efforts on doing something about the situation I'm in
 - I've been saying to myself "this isn't real"*
 - I've been using alcohol or other drugs to make myself feel better*
 - I've been getting emotional support from others
 - I've been giving up trying to deal with it*
 - I've been taking action to try to make the situation better
 - I've been refusing to believe that it has happened*
 - I've been saying things to let my unpleasant feelings escape*
 - I've been getting help and advice from other people
 - I've been using alcohol or other drugs to help me get through it*
 - I've been trying to see it in a different light, to make it seem more positive
 - I've been criticizing myself*
 - I've been trying to come up with a strategy about what to do
 - I've been getting comfort and understanding from someone
 - I've been giving up the attempt to cope*
 - I've been looking for something good in what is happening
 - I've been making jokes about it
 - I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping*
 - I've been accepting the reality of the fact that it has happened
 - I've been expressing my negative feelings*
 - I've been trying to find comfort in my religion or spiritual beliefs

⁹ Charles S. Carver, Michael F. Scheier, and Jagdish K. Weintraub, "Assessing Coping Strategies: A Theoretically Based Approach," *Journal of Personality and Social Psychology* 56, no. 2 (1989): 267–283, <https://doi.org/10.1037/0022-3514.56.2.267>. Scoring instructions also here: "Brief-COPE," NovoPsych, <https://novopsych.com.au/assessments/brief-cope/>.

- I've been trying to get advice or help from other people about what
- I've been learning to live with it
- I've been thinking hard about what steps to take
- I've been blaming myself for things that happened*
- I've been praying or meditating
- I've been making fun of the situation

b. Emotional control: maladaptive behaviors to control or suppress anger, depressed mood, or anxiety

- Suggested measure: Courtauld Emotional Control Scale¹⁰
 - Instructions: Below are listed some of the reactions people have to certain feelings or emotions. Read each one and indicate how far it describes the way you generally react.
 - *Answer choices: Almost never, Sometimes, Often, Almost always*
 - Scoring: Three subscales should be examined separately, as shown below but may be summed for an overall score. Each subscale includes a number of reverse-scored items (denoted with *) that describe expression of an emotional response; all other items describe control of emotions. A high score indicates control of emotional response.
 - Anger
 - I keep quiet
 - I refuse to argue or say anything
 - I bottle it up
 - I say what I feel*
 - I avoid making a scene
 - I smother my feelings
 - I hide my annoyance
 - Depressed mood
 - I refuse to say anything about it
 - I hide my unhappiness
 - I put on a bold face
 - I keep quiet
 - I let others see how I feel*
 - I smother my feelings
 - I bottle it up
 - Anxiety
 - I let others see how I feel*
 - I keep quiet
 - I refuse to say anything about it
 - I tell others all about it*

¹⁰ Maggie Watson and Steven Greer, "Development of a Questionnaire Measure of Emotional Control," *Journal of Psychosomatic Research* 27, no. 4 (1983): 299–305, [https://doi.org/10.1016/0022-3999\(83\)90052-1](https://doi.org/10.1016/0022-3999(83)90052-1).

- I say what I feel*
- I bottle it up
- I smother my feelings

c. Perceived stress: feelings of being under stress in a defined period of time

- Suggested measure: Perceived Stress Scale¹¹
 - *Answer choices: Never, Sometimes, Often, Very often*
 - In the last month, how often have you felt nervous or stressed?
 - In the last month, how often have you felt that you were unable to control the important things in your life?
 - In the last month, how often have you been upset because of something that happened unexpectedly?
 - In the last month, how often have been angered because of things that were outside of your control?
 - In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
 - In the last month, how often have you found you could not cope with all the things you had to do?

d. Depression symptoms: feelings of sadness and loss of interest that impedes functioning

- Suggested measure: Patient Health Questionnaire (PHQ-9)¹²
 - Instructions: Over the LAST 2 WEEKS, how often have you been bothered by the following problems?
 - *Answer choices: Not at all, Few or several days, More than half the days, Nearly every day*
 - Little interest or pleasure in doing things
 - Feeling down, depressed, or hopeless
 - Trouble falling/staying asleep, or sleep too much
 - Feeling tired or having little energy
 - Poor appetite or overeating
 - Feeling bad about yourself – or that you are a failure or have let yourself or your family down
 - Trouble concentrating on things, such as reading the newspaper or watching television

¹¹ Sheldon Cohen, Tom Kamarck, and Robin Mermelstein, “A Global Measure of Perceived Stress,” *Journal of Health and Social Behavior* 24, no. 4 (December 1983): 385–396, <https://www.jstor.org/stable/2136404>. Included on the Status of Forces Survey.

¹² Kurt Kroenke, Robert L. Spitzer, and Janet B. W. Williams, “The PHQ-9: Validity of a Brief Depression Severity Measure,” *Journal of General Internal Medicine* 16, no. 9 (September 2001): 606–613, <https://pubmed.ncbi.nlm.nih.gov/11556941/>. Measure is also used on the Periodic Health Assessment (PHA) and the Azimuth Check (previously the GAT).

- Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety that you have been moving around a lot more than usual
 - Thoughts that you'd be better off dead, or hurting yourself in some way
- e. Hopelessness:** lack of hope, optimism, or expectation of future improvement or success
- Suggested measure: Hopelessness items; Common Data Elements Military Suicide Research Consortium (MSRC)¹³
 - Answer choices: *True, False*
 - Scoring: Reverse-score items denoted with *.
 - I happen to be particularly lucky, and I expect to get more of the good things in life than the average person*
 - All I can see ahead of me is unpleasantness rather than pleasantness
 - I don't expect to get what I really want
 - Things just won't work out the way I want them to
 - I have great faith in the future*
- f. Resilience:** ability to adapt to and bounce back from stressful events
- Suggested measure: Brief Resilience Scale¹⁴
 - Answer choices: *1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree*
 - Scoring: Score by taking the mean of all six items. Reverse score items denoted with *.
 - I tend to bounce back quickly after hard times
 - I have a hard time making it through stressful events*
 - It does not take me long to recover from a stressful event
 - It is hard for me to snap back when something bad happens*
 - I usually come through difficult times with little trouble
 - I tend to take a long time to get over set-backs in my life*
 - Suggested measure: Connor-Davidson Resilience Scale¹⁵
 - Instructions: To what extent is each of the following true for you?
 - Answer choices: *0 (Not true at all), 1, 2, 3, 4 (True nearly all the time)*
 - I am able to adapt to change
 - I can deal with whatever comes my way
 - I try to see the humorous side of problems
 - Coping with stress can strengthen me

¹³ Ringer et al., "Initial Validation of Brief Measures of Suicide Risk Factors," 767–778.

¹⁴ Bruce W. Smith et al., "The Brief Resilience Scale: Assessing the Ability to Bounce Back," *International Journal of Behavioral Medicine* 15, no. 3 (2008): 194–200, <https://doi.org/10.1080/10705500802222972>.

¹⁵ Laura Campbell-Sills and Murray B. Stein, "Psychometric Analysis and Refinement of the Connor–Davidson Resilience Scale (CD-RISC): Validation of a 10-Item Measure of Resilience," *Journal of Traumatic Stress* 20, no. 6 (December 2007): 1019–1028, <https://doi.org/10.1002/jts.2027>.

- I tend to bounce back after illness or hardship
- I can achieve my goals despite obstacles
- I can stay focused under pressure
- I am not easily discouraged by failure
- I think of myself as a strong person
- I can handle unpleasant feelings

g. General self-efficacy: confidence in one's ability to handle stressful events

- Suggested measure: Patient-Reported Outcomes Measurement Information System (PROMIS) General Self-Efficacy Short-Form 4a¹⁶
 - Instructions: For the next set of questions, please read each sentence and rate your level of confidence in managing various situations, problems, and events.
 - Answer choices: *I am not at all confident, I am a little confident, I am somewhat confident, I am quite confident, I am very confident*
 - I can manage to solve difficult problems if I try hard enough
 - I am confident that I could deal efficiently with unexpected events
 - If I am in trouble, I can think of a solution
 - I can handle whatever comes my way

h. Anxiety symptoms: feelings of anxiety, worry, nervousness

- Suggested measure: Generalized Anxiety Disorder 7-item (GAD-7)¹⁷
 - Instructions: Over the last 2 weeks, how often have you been bothered by any of the following problems?
 - Answer choices: *Not at all, Several days, More than half the days, Nearly every day*
 - Feeling nervous, anxious, or on edge
 - Not being able to stop or control worrying
 - Worrying too much about different things
 - Trouble relaxing
 - Being so restless that it is hard to sit still
 - Becoming easily annoyed or irritable
 - Feeling afraid as if something awful might happen

¹⁶ “PROMIS Short Form v1.0 – General Self-Efficacy 4a,” Health Measures, https://www.healthmeasures.net/index.php?option=com_instruments&view=measure&id=863&Itemid=992.

¹⁷ Robert L. Spitzer et al., “A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7,” *Archives of Internal Medicine* 166, no. 10 (2006): 1092–1097, doi:10.1001/archinte.166.10.1092.

i. Posttraumatic stress symptoms: changes in physical or emotional reactions as a result of trauma

- Suggested measure: The Primary Care Post-Traumatic Stress Disorder (PTSD) Screen¹⁸
 - Instructions: Have you ever had any experience that was so frightening, horrible, or upsetting that, in the PAST MONTH, you:
 - *Answer choices: Yes, No*
 - Have had nightmares about it or thought about it when you did not want to?
 - Tried hard not to think about it or went out of your way to avoid situations that remind you of it?
 - Were constantly on guard, watchful or easily startled?
 - Felt numb or detached from others, activities, or your surroundings?
- Suggested measure: PTSD Checklist – Military Version (PCL-M)¹⁹
 - Instructions: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each question carefully and check the box for how much you have been bothered by that problem in the LAST MONTH.
 - *Answer choices: Not at all, A little bit, Moderately, Quite a bit, Extremely*
 - Repeated, disturbing memories, thoughts, or images of a stressful experience from the past
 - Repeated, disturbing dreams of a stressful experience from the past
 - Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)
 - Feeling very upset when something reminded you of a stressful experience from the past
 - Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience from the past
 - Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it
 - Avoid activities or situations because they remind you of a stressful experience from the past
 - Trouble remembering important parts of a stressful experience from the past
 - Loss of interest in things that you used to enjoy
 - Feeling distant or cut off from other people
 - Feeling emotionally numb or being unable to have loving feelings for those close to you

¹⁸ Annabel Prins et al., “The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and Evaluation Within a Veteran Primary Care Sample,” *Journal of General Internal Medicine* 31, no. 10 (October 2016): 1206–1211, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5023594/>. Used on the PHA.

¹⁹ F. W. Weathers, J. A. Huska, and T. M. Keane. “The PTSD Checklist – Military Version (PCL-M)” (Boston, MA: National Center for PTSD, Behavioral Science Division, 1991), <https://www.newriver.marines.mil/Portals/17/Documents/3%20PTSDBIChecklists20100819.pdf>. Used on the PHA.

- Feeling as if your future will somehow be cut short
- Trouble falling or staying asleep
- Feeling irritable or having angry outbursts
- Having difficulty concentrating
- Being “super alert” or watchful, on guard
- Feeling jumpy or easily startled

j. Psychological distress: emotional behavioral functioning across several dimensions, e.g., depression, anxiety, somatization (i.e., physical symptoms linked to psychological distress)

- Suggested measure: Brief Symptom Inventory-18²⁰
 - Instructions: To what extent have you experienced the following in the past 7 days?
 - *Answer choices: Not at all, A little, Significantly, Extremely*
 - Scoring: All items can be examined together or in separate subscales (specific subscales noted in parentheses but should not be included when administered to participants).
 - Faintness or dizziness (somatization)
 - Feeling no interest in things (depression)
 - Nervousness or shakiness inside (anxiety)
 - Pains in heart or chest (anxiety)
 - Feeling lonely (depression)
 - Feeling tense or keyed up (anxiety)
 - Nausea or upset (somatization)
 - Feeling blue (depression)
 - Suddenly scared for no reason (anxiety)
 - Trouble getting your breath (somatization)
 - Feelings of worthlessness (depression)
 - Spells of terror or panic (anxiety)
 - Numbness or tingling in parts of your body (somatization)
 - Feeling hopeless about the future (depression)
 - Feeling so restless you couldn’t sit still (anxiety)
 - Feeling weak in parts of your body (somatization)
 - Thoughts of ending your life (depression)
 - Feeling fearful (anxiety)

²⁰ Leonard Derogatis, *BSI 18, Brief Symptom Inventory 18: Administration, Scoring and Procedures Manual* (Minneapolis, MN: NCS Pearson, Inc., 2001).

k. Aggression: the extent to which an individual exhibits aggressive, violent, or hostile behavior

- Suggested measure: Buss Perry Aggression Questionnaire – Anger Subscale²¹
 - Instructions: Using this 5-point scale, indicate how uncharacteristic or characteristic each of the following statements is in describing you.
 - Answer choices: *Extremely uncharacteristic, Somewhat uncharacteristic, Neither uncharacteristic nor characteristic, Somewhat characteristic, Extremely characteristic*
 - Scoring: Obtain a score by summing the items (higher scores indicate higher aggression). Reverse-scored items denoted with *.
 - I flare up quickly but get over it quickly
 - When frustrated, I let my irritation show
 - I sometimes feel like a powder keg ready to explode
 - I am an even-tempered person*
 - Some of my friends think I'm a hothead
 - Sometimes I fly off the handle for no good reason
 - I have trouble controlling my temper

²¹ Arnold H. Buss and Mark Perry, "The Aggression Questionnaire," *Journal of Personality and Social Psychology* 63, no. 3 (1992): 452–459, <https://doi.org/10.1037/0022-3514.63.3.452>. Shortened version used in the Military Suicide Research Consortium's Common Data Elements. See also "Buss Perry Aggression Questionnaire (BPAQ)," Psychology Tools, <https://psychology-tools.com/test/buss-perry-aggression-questionnaire>.

2. Mental Health Help-Seeking and Stigma

a. Help-seeking self-efficacy: belief in one's own capacity to successfully seek support services

- Suggested measure: Help-seeking perceptions²²
 - Instructions: Suppose you were feeling depressed. To what extent do you agree or disagree with the following statements about your capability to ask for your help?
 - Answer choices: *Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - I would feel comfortable asking my loved ones for help
 - I would know how to ask my loved ones for help
 - I would know how to approach my loved ones for help
 - I have the confidence to ask my family for help
 - I could prepare myself to ask for my loved ones help
 - I feel I have the ability to ask my loved ones for help

b. Perceived norms about help-seeking: beliefs about the social acceptability and prevalence of help-seeking

- Suggested measure: DoD Status of Forces (SOF) items: reasons for not seeking help²³
 - Instructions: How much do you agree or disagree with each of the following statements? Individuals who need help with personal problems (e.g., relationship, financial) would not seek help because of
 - Answer choices: *Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - A negative impact to their career
 - Loss of privacy/confidentiality
 - Fear of being perceived as “broken” by chain of command or peers
 - A lack of confidence in the resources available to solve their problem
 - A lack of confidence in the chain of command
 - Not knowing who to turn to
 - Other

²² Amanda R. Keeler and Jason T. Siegel, “Depression, Help-Seeking Perceptions, and Perceived Family Functioning among Spanish-Dominant Hispanics and Non-Hispanic Whites,” *Journal of Affective Disorders* 202 (15 September 2016): 236–246, <https://doi.org/10.1016/j.jad.2016.05.017>.

²³ Defense Manpower Data Center, “2018 Status of Forces Survey of Active Duty Members: Tabulations of Responses” (Alexandria, VA: Office of People Analytics (OPA), 2019). Adapted from Q244. The SOF of Reserve Component Members does not contain these items.

c. Perceived stigma related to seeking mental health services: expectations about the extent to which others subscribe to stigmatic beliefs about using mental health services

- Suggested measure: Public and Self-stigma in the military²⁴
 - Instructions: Please choose the response that best matches how much you agree or disagree with each statement about seeking mental health services. There are no right or wrong answers.
 - *Answer choices: Definitely disagree, Somewhat disagree, Somewhat agree, Definitely agree*
 - I would worry about my personal problems being part of my military records if I sought mental health services
 - My chances of promotion would be harmed if I sought mental health services
 - I would feel worse about myself if I could not solve my own problems
 - I would feel inadequate if I went to a therapist for psychological help
 - My peers would think less of me if they knew I was getting help from a mental health provider

d. Perceived barriers to mental health treatment: expectations about obstacles to engaging with mental health services

- Suggested measure: Perceived Barriers to Mental Health Services²⁵
 - Instructions: Rate each of the possible concerns that might affect your decision to receive mental health counseling or services if you ever had a problem.
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - I don't trust mental health professionals
 - I don't know where to get help
 - I don't have adequate transportation
 - It is difficult to schedule an appointment
 - There would be difficulty getting time off work for treatment
 - Mental health care costs too much money
 - It would be too embarrassing
 - It would harm my career
 - Members of my unit might have less confidence in me
 - My unit leadership might treat me differently
 - Mental health care doesn't work

²⁴ Nancy A. Skopp et al., "Development and Initial Testing of a Measure of Public and Self-Stigma in the Military," *Journal of Clinical Psychology* 68, no. 9 (September 2012): 1036–1047, <https://doi.org/10.1002/jclp.21889>.

²⁵ Charles W. Hoge et al., "Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care," *New England Journal of Medicine* 351, no. 1 (2004): 13–22, doi:10.1056/NEJMoa040603.

e. Attitudes about mental health services: attitudes about and willingness to seek mental health services

- Suggested measure: Beliefs about Psychological Services²⁶
 - Instructions: Please read the following statements and rate them using the scale provided. Place your ratings to the left of each statement by recording the number that most accurately reflects your attitude toward seeking mental health services.
 - Answer choices: 1 (*Strongly disagree*), 2, 3, 4, 5, 6 (*Strongly agree*)
 - Scoring: All items can be examined together or in separate subscales: intent (willingness or intent to seek services), stigma tolerance (labeling, stigma, and negative beliefs about psychotherapy), and expertness (unique characteristics of professional counseling). Specific subscales are noted in parentheses but should not be included when administered to participants. Reverse-scored items are denoted with *. Higher scores indicate a more positive attitude.
 - If a good friend asked my advice about a serious problem, I would recommend that he/she see a mental health professional (intent)
 - I would be willing to confide my intimate concerns to a mental health professional (intent)
 - Seeing a mental health professional is helpful when you are going through a difficult time in your life (intent)
 - At some future time, I might want to see a mental health professional (intent)
 - I would feel uneasy going to a mental health professional because of what some people might think (stigma tolerance)*
 - If I believed I were having a serious problem, my first inclination would be to see a mental health professional (intent)
 - Because of their training, mental health professionals can help you find solutions to your problems (expertness)
 - Going to a mental health professional means that I am a weak person (stigma tolerance)*
 - Mental health professionals are good to talk to because they do not blame you for the mistakes you have made (expertness)
 - Having received help from a mental health professional stigmatizes a person's life (stigma tolerance)*
 - There are certain problems that should not be discussed with a stranger such as a mental health professional (stigma tolerance)*
 - I would see a mental health professional if I were worried or upset for a long period of time (intent)
 - Mental health professionals make people feel that they cannot deal with their problems (stigma tolerance)*

²⁶ Stefanía Ægisdóttir and Lawrence H. Gerstein, "Beliefs About Psychological Services (BAPS): Development and Psychometric Properties," *Counselling Psychology Quarterly* 22, no. 2 (2009): 197–219, <https://doi.org/10.1080/09515070903157347>. Scale refers to psychologists specifically, but this version changed the language to reference mental health professionals to make the scale more broadly applicable.

- It is good to talk to someone like a mental health professional because everything you say is confidential (expertness)
- Talking about problems with a mental health professional strikes me as a poor way to get rid of emotional conflicts (expertness)*
- I would feel uneasy going to a mental health professional because of what some people might think (stigma tolerance)
- Mental health professionals provide valuable advice because of their knowledge about human behavior (expertness)
- It is difficult to talk about personal issues with highly educated people such as mental health professionals (stigma tolerance)*
- If I thought I needed help from a mental health professional, I would get this help no matter who knew I was receiving assistance (stigma tolerance)

f. Perceived stigma and barriers to behavioral health care (for providers): behavioral health personnel's perception of stigma and barriers to care

- Suggested measure: Behavioral Health/Combat and Operational Stress Control – Personnel Survey²⁷
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - Commanders welcome back Soldiers who have received COSC services from my team
 - Commanders welcome back Soldiers who have been assessed for suicidal thoughts/behaviors and returned to duty
 - Commanders welcome back Soldiers who have been assessed for homicidal thoughts/behaviors and returned to duty
 - Commanders welcome back Soldiers who have received other BH services from my team
 - The medical leadership doesn't support BH/COSC outreach
 - The supported units' leadership doesn't support BH/COSC activities
 - There is inadequate transportation to conduct outreach activities
 - There is inadequate communication between BH/COSC and supported units
 - Service members feel uncomfortable talking to BH/COSC and supported units
 - BH/COSC personnel are unfamiliar with support unit's leadership and Soldiers
 - Traveling to supported units is too dangerous
 - Arranging travel to supported units is too difficult
 - The inability to arrange travel has led to mission cancellations
 - BH/COSC personnel don't like to perform outreach services
 - BH/COSC personnel aren't trained to conduct outreach services
 - BH/COSC personnel aren't available due to performing non-BH/COSC missions

²⁷ Office of the Surgeon Multinational Force-Iraq and Office of the Surgeon General United States Army Medical Command, *Mental Health Advisory Team (MHAT) IV: Operation Iraqi Freedom*, Final Report (Washington, DC: Office of the Surgeon General (Army), November 17, 2006), <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2010103335.xhtml>.

- BH/COSC personnel don't think preventive outreach activities are effective
- Commanders respect patient confidentiality when it comes to mental health issues
- There are sufficient BH assets in theater to cover the mission across the area of responsibility

g. Awareness of resources and services: familiarity with various military resources and services

- Suggested measure: DoD SOF items: awareness of services²⁸
 - Instructions: What is your level of awareness of each of the following military support services? (*Note: These are just examples. The list should be tailored to the specific program/location.*)
 - *Answer choices: I know a lot about this service, I have heard of this service but only superficially understand it; I have heard of this service but do not really know what it is; I have never heard of this service*
 - Military Crisis Line
 - VCL
 - Military OneSource
 - Military and Family Life Counseling Program
 - Star Behavioral Health
 - Transition assistance
 - Employment services
 - Deployment assistance
 - Chaplain services

h. Help-seeking intentions: intentions to seek military resources and services, if stressful situation came up

- Suggested measure: DoD SOF items: help-seeking intentions²⁹
 - Instructions: Suppose you felt trapped or stuck in a stressful situation. How likely or unlikely is it that you would use each of the following ways to deal with or cope with the situation?
 - *Answer choices: Very unlikely, Unlikely, Neither likely nor unlikely, Likely, Very likely*
 - Ignore the situation
 - Avoid the situation
 - Deal with the situation on your own to try and fix it
 - Ask someone in the National Guard to help you try and fix the situation
 - Ask someone outside of the National Guard to help you try and fix the situation

²⁸ Defense Manpower Data Center, "2018 Status of Forces Survey of Active Duty Members: Tabulations of Responses." Adapted from Q245. The SOF of Reserve Component Members does not contain these items.

²⁹ Ibid. Adapted from Q246 and Q252. The SOF of Reserve Component Members does not contain these items.

- Seek out self-help resources via the Internet or books
 - Use alcohol or drugs to cope with the situation
 - Instructions: Suppose you found yourself in a situation where you thought you needed help with personal problems (e.g., relationship, financial). How likely is it that you would use each of the following support services? (*Note:* These are just examples. The list should be tailored to the specific program/location.)
 - *Answer choices: Very unlikely, Unlikely, Neither likely nor unlikely, Likely, Very likely*
 - Military Crisis Line
 - VCL
 - Military OneSource
 - Military and Family Life Counseling Program
 - Star Behavioral Health
 - Transition assistance
 - Employment services
 - Deployment assistance
 - Chaplain services
- i. Help-seeking behavior:** actions an individual takes to access military resources and services
- Suggested measure: DoD SOF items – help-seeking behavior³⁰
 - Instructions: How often have you used each of the following support services in the past 12 months? (*Note:* These are just examples. The list should be tailored to the specific program/location.)
 - *Answer choices: Never, Once, 2–3 times, 4–5 times, More than 5 times*
 - Military Crisis Line
 - VCL
 - Military OneSource
 - Military and Family Life Counseling Program
 - Star Behavioral Health
 - Transition assistance
 - Employment services
 - Deployment assistance
 - Chaplain services
 - Suggested measure (administrative): Service utilization and referral data

³⁰ Ibid. Adapted from Q246. The SOF of Reserve Component Members does not contain these items.

3. Identifying and Helping People at Risk

a. Readiness to help individuals at risk: an individual's assessment of the extent to which he/she is prepared to help those experiencing psychological distress, is likely to help, and has the capacity to help

- Suggested measure: Gatekeeper Behavior Scale³¹
 - Preparedness subscale
 - Instructions: How would you rate your preparedness to
 - *Answer choices: Very low, Low, Medium, High, Very high*
 - Recognize when a service member's behavior is a sign of psychological distress?
 - Discuss with a service member your concern about the signs of psychological distress they are exhibiting?
 - Motivate a service member exhibiting signs of psychological distress to seek help?
 - Recommended mental health/support services to a service member exhibiting signs of psychological distress?
 - Likelihood subscale
 - Instructions: How likely would you be to
 - *Answer choices: Very unlikely, Unlikely, Likely, Very likely*
 - Discuss your concerns with a service member who was exhibiting signs of psychological distress?
 - Recommend mental health/support services to a service member who was exhibiting signs of psychological distress?
 - Self-efficacy subscale
 - Instructions: Please rate how much you agree/disagree with the following statements.
 - *Answer choices: Strongly disagree, Disagree, Agree, Strongly agree*
 - I feel confident in my ability to discuss my concerns with a service member exhibiting signs of psychological distress
 - I feel confident in my ability to recommend mental health/support services to a service member exhibiting signs of psychological distress
 - I feel confident that I know where to refer a service member for mental health support
 - I feel confident in my ability to help a service member experiencing suicidal thoughts

³¹ Glenn L. Albright et al., "Development and Validation of the Gatekeeper Behavior Scale," *Journal of Crisis Intervention and Suicide Prevention* 37, no. 4 (2016): 271–280, <https://doi.org/10.1027/0227-5910/a000382>.

b. Self-efficacy to provide combat operational stress control response (providers):
confidence in one's ability to prevent and respond to combat stress reactions

- Suggested measure: Combat Operational Stress Training³²
 - Instructions: Please rate how much you agree/disagree with the following statements.
 - *Answer choices: Strongly disagree, Disagree, Agree, Strongly agree*
 - I feel confident in my ability to
 - Help service members adapt to stressors of combat or deployment
 - Evaluate and manage service members with suicidal thoughts or behaviors
 - Evaluate and manage service members with substance abuse or dependence
 - Evaluate and treat Combat Operational Stress Reaction
 - Evaluate and treat acute stress disorder or PTSD
 - Evaluate and treat victims of sexual assault

³² Office of the Surgeon Multinational Force-Iraq and Office of the Surgeon General United States Army Medical Command, *Mental Health Advisory Team (MHAT) IV: Operation Iraqi Freedom*.

4. Substance Use

a. Attitudes about drinking: attitudes about the acceptability of one's own drinking behavior

- Suggested measure: Perceptions of drinking behavior³³
 - Instructions: Thinking about your own behavior, how acceptable or unacceptable are each of the following behaviors to you?
 - *Answer choices: Never acceptable, Rarely acceptable, Sometimes acceptable, Frequently acceptable, Always acceptable*
 - Drinking to get drunk
 - Drinking alcohol every weekend
 - Drinking to blow off steam
 - Driving a car after drinking
 - Drinking more than one drink in front of my own or others' children
 - Drinking alcohol daily
 - Drinking alone
 - Drinking enough alcohol to pass out
 - Drinking when feeling down or depressed

b. Benefits and consequences of alcohol use: perceived social and personal benefits and consequences of alcohol use

- Suggested measure: Alcohol Expectancies Questionnaire³⁴
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - I find that conversing with members of the opposite sex is easier for me after I've had a few drinks
 - A few drinks makes it easier for me to talk to people
 - A few drinks makes me feel less shy
 - Drinking adds a certain warmth to social occasions
 - Having a few drinks is a nice way to celebrate special occasions
 - Drinking is pleasurable because it's enjoyable to join in with people who are enjoying themselves
 - Alcohol enables me to have a better time at parties
 - Drinking makes get-togethers more fun
 - My feelings of isolation and alienation decrease when I drink
 - Alcohol makes me worry less
 - Drinking helps me get out of a depressed mood
 - Alcohol decreases my feelings of guilt about not working
 - If I'm feeling afraid, alcohol decreases my fears

³³ Eric R. Pederson et al., "Young Adult Veteran Perceptions of Peers' Drinking Behavior and Attitudes," *Psychology of Addictive Behaviors* 30, no. 1 (February 2016): 39–51, doi:10.1037/adb0000120.

³⁴ Sandra A. Brown, Bruce A. Christiansen, and Mark S. Goldman, "The Alcohol Expectancy Questionnaire: An Instrument for the Assessment of Adolescent and Adult Alcohol Expectancies," *Journal of Studies on Alcohol* 48, no. 5 (September 1987): 483–491, <https://doi.org/10.15288/jsa.1987.48.483>.

- Alcohol makes it easier to forget bad feelings
- At times, drinking is like permission to forget problems
- If I am tense or anxious, having a few drinks makes me feel better
- Drinking makes me feel good
- I feel more creative after I've been drinking
- When I'm drinking I feel freer to be myself and do whatever I want
- Drinking makes it easier to concentrate on the good feelings I have at the time
- When I feel "high" from drinking, everything seems to feel better
- After a few drinks, I feel more self-reliant than usual
- After a few drinks, I am usually in a better mood
- After I've had a couple of drinks, I feel I'm more of a caring, sharing person
- Alcohol makes me more interesting
- I feel like more of a happy-go-lucky person when I drink
- A drink or two makes the humorous side of me come out

c. Readiness to change: stage of change with respect to substance use behaviors

- Suggested measure: University of Rhode Island Change Assessment (URICA) – Reduced Drinking version³⁵
 - Instructions: Each statement below describes how a person might feel when approaching problems related to drinking in their lives. Please indicate how much you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.
 - *Answer choices: Strongly disagree, Disagree, Undecided, Agree, Strongly agree*
 - Scoring: Detailed scoring instructions are available at the University of Maryland Baltimore County (UMBC) HABITS Lab.³⁶
 - It doesn't make much sense for me to consider changing my drinking
 - I've been thinking that I might want to change something about my drinking
 - At times my drinking causes problems and I'm determined to change
 - It is frustrating, but I feel I might be having a recurrence of a drinking problem I thought I had resolved
 - Trying to change my drinking is pretty much a waste of time for me
 - I guess I have faults, but there's nothing that I really need to change about my drinking
 - I thought once I had resolved my problem drinking I would be free of it, but sometimes I still find myself struggling with it
 - I may have a problem with drinking and I think I should work on it
 - I am really working hard to change my drinking
 - I hope that someone will have some good advice for me about my drinking

³⁵ "The HABITS Lab at UMBC: URICA," University of Maryland Baltimore County (UMBC), accessed June 23, 2020, <https://habitslab.umbc.edu/urica/>.

³⁶ "The HABITS Lab at UMBC: URICA Scoring," University of Maryland Baltimore County (UMBC), accessed June 23, 2020, <https://habitslab.umbc.edu/urica-scoring/>.

- Anyone can talk about changing the way they drink; I'm actually going to do something about it
- After all I had done to try and change my problem drinking, every now and then it comes back to haunt me
- Suggested measure: URICA – Alcohol or Drug version³⁷
 - Answer choices: *Strongly disagree, Disagree, Undecided, Agree, Strongly agree*
 - Scoring: Detailed scoring instructions are available at the University of Maryland Baltimore County (UMBC) HABITS Lab.³⁸
 - I'm not the problem one. It doesn't make much sense for me to consider changing
 - I am finally doing some work on my problem
 - I've been thinking that I might want to change something about myself
 - At times my problem is difficult, but I'm working on it
 - Trying to change is pretty much a waste of time for me because the problem doesn't have to do with me
 - I'm hoping that I will be able to understand myself better
 - I guess I have faults, but there's nothing that I really need to change
 - I am really working hard to change
 - I have a problem and I really think I should work on it
 - I'm not following through with what I had already changed as well as I had hoped, and I want to prevent a relapse of the problem
 - Even though I'm not always successful in changing, I am at least working on my problem
 - I thought once I had resolved the problem I would be free of it, but sometimes I still find myself struggling with it
 - I wish I had more ideas on how to solve my problem
 - Maybe someone or something will be able to help me
 - I may need a boost right now to help me maintain the changes I've already made
 - I may be part of the problem, but I don't really think I am
 - I hope that someone will have some good advice for me
 - Anyone can talk about changing; I'm actually doing something about it
 - All this talk about psychology is boring. Why can't people just forget about their problems?
 - I'm struggling to prevent myself from having a relapse of my problem
 - It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved
 - I have worries but so does the next guy. Why spend time thinking about them?

³⁷ “The HABITS Lab at UMBC: URICA,” University of Maryland Baltimore County (UMBC), accessed June 23, 2020.

³⁸ “The HABITS Lab at UMBC: URICA Scoring,” University of Maryland Baltimore County (UMBC), accessed June 23, 2020.

- I am actively working on my problem
- After all I had done to try and change my problem, every now and then it comes back to haunt me

d. Coping strategies for alcoholism: use of tools and techniques to avoid alcohol use

- Suggested measure: Coping Strategies Scale³⁹
 - Instructions: The following items are strategies that people might use to abstain from drinking alcohol. Rate how often you have used these strategies in the past 3 months.
 - *Answer choices: Each of the items are rated on a 4-point scale, from 1 (never) to 4 (frequently).*
 - Ask people not to offer me drinks
 - Just wait and know that the urge to drink will go away
 - I reward myself for not giving in to the urge to drink
 - Be with people who reward me for not drinking
 - Before doing something I think about whether it will lead to drinking
 - I avoid people associated with my drinking
 - I try to think about other things when I begin to think about drinking

e. Hazardous alcohol use: the extent to which an individual engages in risky alcohol use behaviors

- Suggested measure: AUDIT⁴⁰
 - How often do you have a drink containing alcohol?
 - *Answer choices: Never, Monthly or less, 2–4 times a month, 2–3 times a week, 4 or more times a week*
 - How many drinks containing alcohol do you have on a typical day when you are drinking?
 - *Answer choices: 0–2, 3 or 4, 5 or 6, 7–9, 10 or more*
 - *Answer choices for the following questions: Never, Less than monthly, Monthly, Weekly, Daily or almost daily*
 - How often do you have four or more drinks on one occasion?
 - How often during the last year have you found that you were not able to stop drinking once you had started?
 - How often during the last year have you failed to do what was normally expected of you because of drinking?
 - How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

³⁹ Mark D. Litt et al., “Coping Skills and Treatment Outcomes in Cognitive-Behavioral and Interactional Group Therapy for Alcoholism,” *Journal of Consulting and Clinical Psychology* 71, no. 1 (2003): 118, <https://doi.org/10.1037/0022-006X.71.1.118>.

⁴⁰ John B. Saunders et al., “Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption-II,” *Addiction* 88, no. 6 (June 1993): 791–804. <https://doi.org/10.1111/j.1360-0443.1993.tb02093.x>.

- How often during the last year have you had a feeling of guilt or remorse after drinking?
- How often during the last year have you been unable to remember what happened the night before because of your drinking?
- *Answer choices for the following questions: No; Yes, but not in the last year; Yes, in the last year*
 - Have you or someone else been injured because of your drinking?
 - Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?
- Suggested measure: Alcohol Use Disorders Identification Test (AUDIT-C (brief screen))⁴¹
 - How often do you have a drink containing alcohol?
 - *Answer choices: Never, Monthly or less, 2–4 times a month, 2–3 times a week, 4 or more times a week*
 - How many standard drinks containing alcohol do you have on a typical day? One standard drink is equivalent to a can of beer (12 fl. oz.), a glass of wine (5 fl. oz.), or a shot of liquor (1.5 fl. oz.)
 - *Answer choices: 1 or 2, 3 or 4, 5 or 6, 7 or 9, 10 or more*
 - How often do you have six or more drinks on one occasion?
 - *Answer choices: Never, Less than monthly, Monthly, Weekly, Daily or almost daily*

f. Risky substance-related behavior: self-reported risky behaviors involving alcohol and illegal substances

- Suggested measure: Brief Young Adult Alcohol Consequences Questionnaire⁴²
 - Instructions: In the past year, have the following situations happened to you?
 - *Answer choices: Yes, No*
 - While drinking, I have said or done embarrassing things
 - I have had a hangover (headache, sick stomach) the morning after drinking
 - I have felt very sick to my stomach or thrown up after drinking
 - I often have ended up drinking on nights when I had planned not to drink
 - I have taken foolish risks when I have been drinking
 - I have passed out from drinking

⁴¹ Kristen Bush et al., “The AUDIT Alcohol Consumption Questions (AUDIT-C): An Effective Brief Screening Test for Problem Drinking,” *Archives of Internal Medicine* 158, no. 16 (1998): 1789–1795, doi:10.1001/archinte.158.16.1789. For the 10-item AUDIT measure, see AUDIT, <https://www.drugabuse.gov/sites/default/files/files/AUDIT.pdf>.

⁴² Christopher W. Kahler, David R. Strong, and Jennifer P. Read, “Toward Efficient and Comprehensive Measurement of the Alcohol Problems Continuum in College Students: The Brief Young Adult Alcohol Consequences Questionnaire,” *Alcoholism: Clinical and Experimental Research* 29, no. 7 (July 2005): 1180–1189, <https://doi.org/10.1097/01.ALC.0000171940.95813.A5>.

- I have found that I needed larger amounts of alcohol to feel any effect, or that I could no longer get high or drunk on the amount that used to get me high or drunk
- When drinking, I have done impulsive things I regretted later
- I've not been able to remember large stretches of time while drinking heavily
- I have driven a car when I knew I had too much to drink to drive safely
- I have not gone to work because of drinking, a hangover, or illness caused by drinking
- My drinking has gotten me into sexual situations I later regretted
- I have often found it difficult to limit how much I drink
- I have become very rude, obnoxious, or insulting after drinking
- I have woken up in an unexpected place after heavy drinking
- I have felt badly about myself because of my drinking
- I have had less energy or felt tired because of my drinking
- The quality of my work has suffered because of my drinking
- I have spent too much time drinking
- I have neglected my obligations to family or work because of my drinking
- My drinking has created problems between myself and my boyfriend/girlfriend/spouse, parents, or other near relatives
- I have been overweight because of drinking
- My physical appearance has been harmed by my drinking
- I have felt like I needed a drink after I'd gotten up (that is, before breakfast)

g. Substance-related incidents (administratively recorded): substance-related incidents recorded in administrative data sources (e.g., positive urinalysis, DUIs)

- Suggested measure: Administrative records (e.g., Drug and Alcohol Management Information System)

5. Suicidal Behavior and Lethal Means

a. **Attitudes about suicide:** rejecting or accepting attitudes about individuals who have a history of suicidal behavior

- Suggested measure: Military Suicide Attitudes Questionnaire⁴³
 - Instructions: This is not a test but a survey of your opinions. There are no right or wrong answers. Only your honest opinion counts. Please select the box that most closely describes your opinion.
 - Answer choices: *Strongly disagree, Disagree, Neutral, Agree, Strongly agree*
 - Scoring: This measure includes two subscales. Higher scores on the subscales indicate more accepting attitudes. Reverse-scored items are denoted by *.
 - Individual-based Rejection vs. Acceptance subscale
 - People who attempt suicide should not be eligible for promotion or leadership billets*
 - Admitting thoughts of suicide should not harm someone's career
 - I would feel uncomfortable if I learned someone I was working with was suicidal*
 - I do not want to be in a unit with someone who has a history of a suicide attempt or suicidal thoughts*
 - I would not respect my leader if I knew he/she had expressed suicidal thoughts*
 - Suicide violates our military core values*
 - People who attempt suicide should be given time to receive help
 - Seeking help for suicide requires courage
 - A person who attempts suicide must be in a lot of pain
 - Unit-based Acceptance vs. Rejection subscale
 - A service member who attempts suicide requires help and support from his military unit as well as leadership
 - Suicide hurts unit functioning
 - People who attempt suicide would benefit from support from their unit members
 - Unit support can help prevent suicide
 - I have a duty to help those who are feeling suicidal
 - Suicide hurts unit morale
 - Military duty requires us to help those who are struggling with suicidal thoughts
 - A service member who attempts suicide deserves understanding and empathy

⁴³ Items from two subscales. Two additional subscales available related to perceived pathology and immorality. See Marcus VanSickle et al., "Development and Psychometric Evaluation of the Military Suicide Attitudes Questionnaire (MSAQ)," *Journal of Affective Disorders* 203 (October 2016): 158–165, <https://doi.org/10.1016/j.jad.2016.03.065>.

b. Attitudes about suicide prevention (for clinicians): clinicians' attitudes about suicide and caring for patients at risk for suicide

- Suggested measure: Attitudes toward suicide prevention in front-line health staff⁴⁴
 - *Answer choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree*
 - Scoring: Higher scores indicate more negative attitudes. Reverse-scored items denoted with *
 - I resent being asked to do more about suicide
 - Suicide prevention is not my responsibility
 - Making more funds available to the appropriate health services would make no difference to the suicide rate
 - Working with suicidal patients is rewarding*
 - If people are serious about committing suicide, they don't tell anyone
 - I feel defensive when people offer advice about suicide prevention
 - If a person survives a suicide attempt, then this was a ploy for attention
 - People have the right to take their own lives
 - Since unemployment and poverty are the main causes of suicide, there is little that an individual can do to prevent it
 - I don't feel comfortable assessing someone for suicide risk
 - Suicide prevention measures are a drain on resources which would be more useful elsewhere
 - There is no way of knowing who is going to commit suicide
- *Answer choices: None – All*
 - What proportion of suicides do you consider preventable?

c. Knowledge of suicide: understanding of the causes, prevalence, and proper prevention and treatment of suicidality

- Suggested measure: Literacy of Suicide Scale⁴⁵
 - *Answer choices: True, False (correct responses indicated in parentheses)*
 - People who have thoughts about suicide should not tell others about it (F)
 - Seeing a psychiatrist or psychologist can help prevent someone from suicide (T)
 - Most people who suicide are psychotic (F)
 - Talking about suicide always increases the risk of suicide (F)
 - A suicidal person will always be suicidal and entertain thoughts of suicide (F)
 - Not all people who attempt suicide plan their attempt in advance (T)
 - Very few people have thoughts about suicide (F)

⁴⁴ Jane Herron et al., "Attitudes Toward Suicide Prevention in Front-Line Health Staff," *Suicide and Life-Threatening Behavior* 31, no. 3 (Fall 2001): 342–347, <https://doi.org/10.1521/suli.31.3.342.24252>. *Note:* One item—"It is easy for people not involved in clinical practice to make judgements about suicide prevention"—was removed for lack of clarity on the direction for scoring.

⁴⁵ Philip J Batterham, Alison L. Calear, and Helen Christensen, "Correlates of Suicide Stigma and Suicide Literacy in the Community," *Suicide and Life-Threatening Behavior* 43, no. 4 (August 2013): 406–417, <https://doi.org/10.1111/sltb.12026>.

- If assessed by a psychiatrist, everyone who kills themselves would be diagnosed as depressed (F)
- Men are more likely to die by suicide than women (T)
- People who talk about suicide rarely kill themselves (F)
- People who want to attempt suicide can change their mind quickly (T)
- There is a strong relationship between alcoholism and suicide (T)

d. Self-harm and suicidal behavior: engagement in self-injurious behavior or attempted suicide in a defined time frame

- Suggested measure: DoD SOF items – suicide prevention⁴⁶
 - *Answer choices: Yes, No*
 - In the past year, have you ever intentionally hurt yourself (e.g., cut or hit yourself) to relieve stress, feel better, get sympathy, or get something else to happen without any intention of killing yourself?
 - In the past year, have you ever had thoughts of actually killing yourself?
 - [If yes to previous item] Going back to the time when you thought about killing yourself, have you ever thought about how you might actually do it (e.g., taking pills, shooting yourself) or worked out a plan of how to kill yourself?
 - In the past year, have you ever made a suicide attempt (e.g., purposely hurt yourself with at least some intention to die)?
 - In the past year, have you ever talked to anyone about your thoughts or attempts to kill yourself?

e. Firearm safety: presence of and safe storage of firearms at home

- Suggested measure: Firearm items, Common Data Elements, MSRC⁴⁷
 - Instructions: The next questions are about safety and firearms. Some people keep guns for recreational purposes such as hunting or sport shooting. People also keep guns in the home for protection. Please include firearms such as pistols, revolvers, shotguns, and rifles but do not include BB guns or guns that cannot fire. Include those kept in a garage, outdoor storage area, or motor vehicle.
 - *Answer choices: Yes, No, Don't know/not sure*
 - Are any firearms kept in or around your home?
 - Are any of these firearms now loaded?
 - Are any of these loaded firearms unlocked? By unlocked, we mean you do not need a key or a combination to get the gun to fire it. We don't count a safety as a lock

⁴⁶ Defense Manpower Data Center, “2019 Status of Forces Survey of Reserve Component Members: Tabulations of Responses for Quality of Life Items” (Alexandria, VA: Office of People Analytics OPA, 2020). Adapted from Q157–162.

⁴⁷ Ringer et al., “Initial Validation of Brief Measures of Suicide Risk Factors,” 767–778.

C. Social Outcomes

1. Military-Specific

a. Positive perceptions of leadership: individuals' trust in leadership and perceptions of leadership quality (immediate and senior leadership)

- Suggested measure: DEOCS – Leadership Support scale (immediate supervisor)⁴⁸
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - I have trust and confidence in my immediate supervisor
 - My immediate supervisor listens to what I have to say
 - My immediate supervisor treats me with respect
 - My immediate supervisor cares about my personal well-being
 - My immediate supervisor provides me with opportunities to demonstrate my leadership skills
 - My immediate supervisor provides me with constructive suggestions to improve my performance
 - My immediate supervisor supports my career development
 - If needed, I can go to my immediate supervisor to address my concerns without fear of reprisal
 - My immediate supervisor puts the interests of subordinates and subordinates' families above their personal interests
- Suggested measure: DEOCS – Transformative Leadership scale⁴⁹
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - My unit's leader communicates a clear and motivating vision of the future
 - My unit's leader takes actions that are consistent with [service component] values
 - My unit's leader supports and encourages the development of others
 - My unit's leader encourages their subordinates to think about problems in new ways
 - My unit's leader takes early action in addressing problems
 - My unit's leader addresses problems when brought to their attention
- Same questions can be asked about senior NCO/senior enlisted advisor

⁴⁸ Department of Defense, "Defense Organizational Climate Survey (DEOCS) 5.0 – Military Version" (Washington, DC: Office of People Analytics (OPA), January 2021), https://www.defenseculture.mil/Portals/90/Documents/A2S/OPA-DEOCS_5.0_Sample_Survey_Instrument_Military-20210104.pdf?ver=3DqwZfYcY4t3T3-ai8UOng%3d%3d.

⁴⁹ Ibid.

- b. Negative perceptions of leadership:** individuals' perceptions of leadership as disrespectful and self-serving
- Suggested measure: DEOCS – Toxic Leadership scale⁵⁰
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - My immediate supervisor ridicules subordinates
 - My immediate supervisor has explosive outbursts
 - My immediate supervisor has a sense of personal entitlement
 - My immediate supervisor acts only in the best interest of their own advancement
 - My immediate supervisor ignores ideas that are contrary to their own
 - Same questions can be asked about senior NCO/senior enlisted advisor
- c. Unit cohesion:** interpersonal bonding between unit members in pursuit of common goals
- Suggested measure: Platoon cohesion index⁵¹
 - Instructions: Thinking about your current [insert appropriate level (e.g., squad/platoon/company)], indicate the extent to which you agree or disagree with the following statements.
 - *Answer choices: Strongly Disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - Members of this unit have trust in each other
 - Members of this unit care about each other
 - Members of this unit work well together to get the job done
 - Members of this unit support each other as a team
- d. Inclusion:** sense of feeling respected, valued, and involved in unit communication
- Suggested measure: DEOCS – Inclusion scale⁵²
 - *Answer choices: Strongly disagree, Disagree, Slightly disagree, Neither agree nor disagree, Slightly agree, Agree, Strongly agree*
 - The people I work with believe that everyone has worth and value, regardless of how they identify (for example, gender, race/ethnicity, sexual orientation, and other identities)
 - The people I work with believe that everyone has worth and value, regardless of their occupation and rank/grade
 - The people I work with build on each other's ideas and thoughts during the decision-making process

⁵⁰ Ibid.

⁵¹ Guy L. Siebold and Dennis R. Kelly, *Development of the Combat Platoon Cohesion Questionnaire*, Technical Report 817 (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, October 1998), <https://apps.dtic.mil/sti/citations/ADA204917>.

⁵² Department of Defense, "Defense Organizational Climate Survey (DEOCS) 5.0 – Military Version."

- The people I work with would speak up if someone is being excluded
 - Communication goes both up and down the chain of command
 - Among the people I work with, the quality of ideas matters more than who expresses them
- e. Workplace hostility:** Occurrence of aggressive behaviors at work (verbal and physical)
- Suggested measure: DEOCS – Workplace Hostility scale⁵³
 - *Answer choices: Never, Rarely, Sometimes, Often*
 - How often does someone from your unit/organization intentionally interfere with your work performance?
 - How often does someone from your unit/organization take credit for work or ideas that were yours?
 - How often does someone from your unit/organization gossip or talk about you?
 - How often does someone from your unit/organization use insults, sarcasm, or gestures to humiliate you?
 - How often does someone from your unit/organization not provide you with information and assistance when needed?
 - How often does someone from your unit/organization yell when they are angry?
- f. Military and family life alignment:** extent to which family supports military service and military meets the needs of one’s family
- Suggested measure: Azimuth Check – Military Family Fitness items⁵⁴
 - Instructions: Please indicate how strongly you agree or disagree with the following statements.
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - My family supports my decision to serve in the military
 - The military meets my family’s needs
 - The military makes it easy for my family to do well

⁵³ Ibid.

⁵⁴ “Army Ready and Resilient: Army Fit,” U.S. Army Resilience Directorate (2020), <https://www.armyresilience.army.mil/ard/R2/armyfit.html>.

g. Identification with the National Guard: extent to which being a member of the National Guard is important, valued, and part of one's self-concept

- Suggested measure: Three-factor model of social identity⁵⁵
 - Answer choices: 1 (*strongly disagree*) to 6 (*strongly agree*)
 - Scoring: Score each subscale separately or administer only the subscale of interest.
 - Ingroup Ties subscale
 - I have a lot in common with other National Guard (NG) service members
 - I feel strong ties to other NG service members
 - I find it difficult to form a bond with other NG service members
 - I don't feel a sense of being "connected" with other NG service members
 - I really "fit in" with other NG service members
 - In a group of NG service members, I really feel that I belong
 - Centrality to Self subscale
 - I often think about the fact that I am an NG service member
 - Overall, being an NG service member has very little to do with how I feel about myself
 - In general, being an NG service member is an important part of my self-image
 - The fact that I am an NG service member rarely enters my mind
 - I am not usually conscious of the fact that I am an NG service member
 - Being an NG service member is an important reflection of who I am
 - In my everyday life, I often think about what it means to be an NG service member
 - Ingroup Affect subscale
 - In general, I'm glad to be an NG service member
 - I often regret that I am an NG service member
 - I don't feel good about being an NG service member
 - Generally, I feel good when I think about myself as an NG service member
 - Just thinking about the fact that I am NG service member gives me bad feelings

⁵⁵ James E. Cameron, "A Three-factor Model of Social Identity," *Self and Identity* 3, no. 3 (2004): 239–262, <https://doi.org/10.1080/13576500444000047>. Inserted NG-specific language.

h. Intentions to stay in the National Guard: plans to remain or reenlist in the National Guard

- Suggested measure: DoD SOF items – retention⁵⁶
 - *Answer choices: Very unlikely, Unlikely, Neither likely nor unlikely, Likely, Very likely*
 - Suppose that you have to decide whether to stay in the National Guard. Assuming you could stay, how likely is it that you would choose to do so?

i. Military satisfaction: evaluations of various aspects of the military experience

- Suggested measure: DoD SOF items – satisfaction⁵⁷
 - *Answer choices: Very dissatisfied, Dissatisfied, Neither satisfied nor dissatisfied, Satisfied, Very satisfied*
 - Taking all things in consideration, how satisfied are you, in general, with each of the following aspects of being in the military?
 - Your compensation
 - The type of work you do in your military job
 - Your opportunities for promotion
 - The quality of your coworkers
 - The quality of your supervisor
 - Overall, how satisfied are you with the military way of life?

j. Perceived readiness: perception of the extent to which the self/unit is prepared to perform its mission

- Suggested measure: DoD SOF items – readiness⁵⁸
 - *Answer choices: Very well prepared, Well prepared, Neither well nor poorly prepared, Poorly prepared, Very poorly prepared*
 - Overall, how well prepared are you to perform your wartime job?
 - Overall, how well prepared is your unit to perform its wartime mission?
 - How well has your training prepared you to perform your wartime job?
 - How well has your training prepared you to perform your wartime job in support of joint operations?

k. Retention: the rate at which service members stay in the military through and after their term of service

- Suggested measure: data available from administrative records

⁵⁶ Defense Manpower Data Center, “2019 Status of Forces Survey of Reserve Component Members: Tabulations of Responses for Leading Indicator Items” (Alexandria, VA: Office of People Analytics (OPA), 2020). Adapted from Q42.

⁵⁷ Ibid. Adapted from Q39-40.

⁵⁸ Ibid. Adapted from Q52–54.

I. Work performance: ability to execute work responsibilities

- Suggested measure: data available from administrative records (e.g., qualifications, awards, reviews)
- Suggested measure: Walter Reid Functional Impairment Scale⁵⁹
 - How much difficulty do you CURRENTLY have with the following:
 - *Answer choices: No difficulty at all, A little difficulty, Moderate difficulty, Quite a bit of difficulty, Extreme difficulty*
 - Your overall work performance
 - The accuracy of your work
 - The quality of your work
 - Your ability to complete assigned tasks
 - Your ability to multi-task
 - Your problem solving at work
 - In the PAST 3 MONTHS,
 - *Answer choices: Yes, No*
 - Has a family member or friend expressed concern about you?
 - Has your supervisor expressed concern about your work performance?
 - Have you received corrective training for substandard performance?
 - Have you received a negative counseling statement?
 - Have you received a Letter of Reprimand?
 - Have you received an Article 15 or other UCMJ action?

⁵⁹ Richard K. Herrell et al., “Assessing Functional Impairment in a Working Military Population: The Walter Reed Functional Impairment Scale,” *Psychological Services* 11, no. 3 (2014): 254–264, <https://doi.org/10.1037/a0037347>.

2. Sexual Assault and Harassment

a. Bystander intervention behavior: the actions an individual takes in response to situations related to sexual harassment and assault

- Suggested measure: Workplace and Gender Relations Survey of Reserve Component Members (WGRR) items – bystander intervention⁶⁰
 - Instructions: The following question asks whether you observed a variety of situations in the past 12 months. These situations could have taken place at your military work or outside of the military workplace. In the past 12 months, did you
 - *Answer choices: Yes, No*
 - Observe someone who “crossed the line” with their sexist comments or jokes?
 - Encounter a group or individual being hazed or bullied?
 - See someone making unwanted sexual advances on someone?
 - See horseplay or roughhousing that “crossed the line” or appeared unwanted?
 - Encounter someone who drank too much and needed help?
 - See someone grabbing, pushing, or insulting someone?
 - Encounter someone who was taking advantage of someone who was passed out?
 - See a situation you thought was a sexual assault or could have led to a sexual assault?
 - Hear someone say people who take risks are at fault for being sexually assaulted?
 - If you indicated that you observed any of these situations, how did you respond to the situation? Mark all that apply.
 - I spoke up to address the situation
 - I told someone else about it while it was happening
 - I told someone else about it after it happened
 - I created a distraction
 - I talked to those involved to see if they were okay
 - I intervened in some other way
 - I did not intervene

b. Bystander intervention intentions: willingness to act in response to situations related to sexual harassment and assault

- Suggested measure: Workplace and Gender Relations Survey of Active Duty Members (WGRA) items – gender-related culture and training⁶¹
 - *Answer choices: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree*
 - When you are in a social setting, it is your duty to confront a fellow military member from doing something potentially harmful to themselves or others

⁶⁰ Breslin et al., 2019 *Workplace and Gender Relations Survey of Reserve Component Members*, 313.

⁶¹ Rachel A. Breslin et al., 2018 *Workplace and Gender Relations Survey of Active Duty Members: Overview Report*, OPA Report No. 2019-027 (Alexandria, VA: Office of People Analytics (OPA), May 2019), 282, https://www.sapr.mil/sites/default/files/Annex_1_2018_WGRA_Overview_Report.pdf. The WGRR does not contain these items.

- Instructions: To what extent are you willing to
 - *Answer choices: Very large extent, Large extent, Moderate extent, Small extent, Not at all*
 - Point out to someone when you think they “crossed the line” with gender-related comments or jokes?
 - Encourage others to point out to someone when they think he or she “crossed the line” with gender-related comments or jokes?
 - Seek help from the chain of command in confronting other service members who continue to engage in sexual harassment after having been previously spoken to?
- c. Gender-related workplace culture:** perception of and participation in a workplace environment that is protective against sexual harassment and assault
- Suggested measure: WGRR items – gender-related culture and training⁶²
 - Instructions: In the past 12 months, to what extent have you witnessed people in your unit
 - *Answer choices: Very large extent, Large extent, Moderate extent, Small extent, Not at all*
 - Make it clear that sexual assault has no place in the military?
 - Promote a unit climate based on mutual respect and trust?
 - Lead by example by refraining from sexist comments and behaviors?
 - Recognize and immediately correct incidents of sexual harassment?
 - Encourage bystander intervention to assist others in situations at risk for sexual assault or other harmful behaviors?
 - Publicize sexual assault report resources (e.g., SARC information, UVA/VA information, awareness posters, sexual assault hotline number)?
 - Encourage victims to report sexual assault?
- d. Knowledge of sexual harassment and assault:** understanding of what constitutes sexual harassment and assault
- Suggested measure: WGRA items – gender-related culture and training⁶³
 - Instructions: How confident are you in your understanding of what constitutes
 - *Answer choices: Completely confident, Very confident, Somewhat confident, A little confident, Not at all confident*
 - Sexual harassment?
 - Sexual assault?

⁶² Breslin et al., *2019 Workplace and Gender Relations Survey of Reserve Component Members*, 314.

⁶³ Breslin et al., *2018 Workplace and Gender Relations Survey of Active Duty Members*, 282. The WGRR does not contain these items.

- Suggested measure: Measures of Performance and Effectiveness for the Marine Corps' Sexual Assault Prevention Programs – knowledge items⁶⁴
 - *Answer choices: True, False (correct responses indicated in parentheses)*
 - If you accidentally touched someone's crotch during a training exercise and it greatly embarrassed them, it would be classified as a sexual assault (F)
 - Imagine you agreed to have sex with your supervisor because they threatened you with an unfair evaluation. Because you consented to have sex with them, it would NOT be a sexual assault (F)
 - If you attempted to touch someone's genitals but they shoved you away before you were able to, it would NOT be classified as a crime (F)
 - If you were frightened into having sex with someone, it would be classified as sexual assault under the Uniform Code of Military Justice even if you had previously had sex with the person (T)
 - If you touch someone's genitals to humiliate them while initiating them into your unit, it would be classified as a sex crime under the Uniform Code of Military Justice even if no one was sexually aroused (T)
 - Of all service members who are sexually assaulted, approximately 50% are men (T)
 - It is impossible for a woman to rape a man (T)
 - If a sexual harassment incident includes touching, it may also be classified as a sexual assault (T)
 - If a highly intoxicated person asks you to have sex and you agree, it would be classified as a sex crime by DoD (T)
 - Sex with your spouse after they passed out from drinking too much would not be classified as a sex crime by DoD because they are your spouse (F)
 - Sexual consent can be verbal or nonverbal (T)
 - If a person doesn't physically resist your advances, that means they are consenting to sexual contact (F)

- e. **Reporting climate:** trust in the military and expected outcomes related to reporting incidents of sexual harassment and assault
 - Suggested measure: WGRR items – gender-related culture and training⁶⁵
 - Instructions: How much do you agree with each of the following statements?
 - *Answer choices: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree*
 - If you are sexually assaulted, you can trust the military system to protect your privacy
 - If you are sexually assaulted, you can trust the military system to ensure your safety following the incident

⁶⁴ Farris et al., *Measures of Performance and Effectiveness*.

⁶⁵ Breslin et al., *2018 Workplace and Gender Relations Survey of Active Duty Members*, 282. The WGRR includes only the first seven items on this measure.

- If you are sexually assaulted, you can trust the military system to treat you with dignity and respect
 - You believe you will be treated differently by your supervisor or chain of command if you report you were sexually assaulted
 - You believe you will be treated differently by your supervisor or chain of command if you report someone else was sexually assaulted
 - You believe you will be treated differently by your supervisor or chain of command if you report you were sexually harassed
 - You believe you will be treated differently by your supervisor or chain of command if you report someone else was sexually harassed
 - Reporting an incident or filing a complaint of sexual harassment is highly encouraged to prevent harmful outcomes
 - Reporting an incident or filing a complaint of gender discrimination is highly encouraged to prevent harmful outcomes
 - Retaliation and/or reprisal does not occur when an incident or complaint is reported
- Instructions: How likely would you be to
 - *Answer choices: Very likely, Likely, Neither likely nor unlikely, Unlikely, Very unlikely*
 - Encourage someone who has experience sexual harassment to tell a supervisor?
 - Encourage someone who has experience sexual assault to seek counseling?
 - Encourage someone who has experienced sexual assault to report it?
 - Tell a military supervisor about sexual harassment if it happened to you?
 - Report a sexual assault if it happened to you?

f. Sexual assault and harassment experiences (prevalence): individual experiences with behaviors that constitute sexual assault and sexual harassment

- Suggested measure: WGRR sexual assault and sexual harassment prevalence⁶⁶
 - Full measures can be found in a 2019 OPA report⁶⁷

g. Sexual harassment risk within organization: experience of behaviors associated with an increased risk that sexual harassment is occurring within an organization

- Suggested measure: DEOCS – Sexual Harassment scale⁶⁸
 - Instructions: In this section, please rate how often the following situations occur. When responding, consider only time spent [over the past 12 months] in your unit.

⁶⁶ Prevalence measured every other year on the WGRR.

⁶⁷ Breslin et al., *2019 Workplace and Gender Relations Survey of Reserve Component Members*.

⁶⁸ Department of Defense, “Defense Organizational Climate Survey (DEOCS) 5.0 – Military Version.”. The items contain behaviors associated with an increased probability that sexual harassment could be occurring.

- *Answer choices: Never, Rarely, Sometimes, Often*
- How often does someone from your unit tell sexual jokes that make you uncomfortable, angry, or upset?
- How often does someone from your unit embarrass, anger, or upset you by suggesting that you do not act how a man or a woman is supposed to act?
- How often does someone from your unit display, show, or send sexually explicit materials (such as pictures or videos) that make you uncomfortable, angry, or upset? *Do not include materials you may have received as part of your professional duties (for example, as a criminal investigator)*
- How often does someone from your unit ask you questions about your sex life or sexual interests that make you uncomfortable, angry, or upset?
- How often does someone from your unit make sexual comments about your appearance or body that make you uncomfortable, angry, or upset?
- How often does someone from your unit make attempts to establish unwanted romantic or sexual relationships with you? *These attempts could range from asking you out on a date to asking you for sex or a “hookup”*
- How often does someone from your unit intentionally touch you in unwanted sexual ways?

h. Reports of sexual assault and complaints of sexual harassment: administratively recorded Unrestricted and Restricted reports of sexual assault and Informal and Formal complaints of sexual harassment

- Suggested measure: Administrative data sources (Defense Sexual Assault Incident Database, Incident Case Reporting System)

3. Family and Global

a. Family relationship quality: the quality of relationship with adult children and extended family members

- Suggested measure: Quality of relationships measure⁶⁹
 - Instructions: Indicate the extent to which you agree or disagree that the following statements characterize your family:
 - *Answer choices: Strongly agree, Agree, Disagree, Strongly disagree*
 - Scoring: Responses are scored on a scale of 1 to 4, and mean scores are calculated to indicate the quality of the relationship. Reverse-scored items are denoted with *.
 - The members of this family are interested in you and your problems
 - The members of this family get along with each other as well as you would like
 - You are troubled because members of this family differ from you regarding your beliefs and values*
 - Members of this family have many good times together
 - Members of this family respect your rights
 - You try to avoid some members of this family*
 - You would say this family is a close-knit group
 - You confide in the members of this family
 - Members of this family have grown apart*
 - You feel loved and cared for by this family
 - You enjoy being with this family
 - The members of this family often go out of their way to help you
 - This family gets together for holiday celebrations
 - Members of this family are thoughtful of each other
 - Conflict arises when this family gets together*

b. Relationship quality: overall feelings of satisfaction in one's relationship

- Suggested measure: DoD SOF items: relationship satisfaction⁷⁰
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly Agree*
 - How much do you agree or disagree with the following statements about your relationship with your spouse or significant other?
 - We have a good relationship
 - My relationship with my partner is very stable
 - My relationship with my partner is strong
 - My relationship with my partner makes me happy
 - I really feel like part of a team with my partner

⁶⁹ Andrea Kay Ryan and Fern K. Willits, "Family Ties, Physical Health, and Psychological Well-Being," *Journal of Aging and Health* 19, no. 6 (December 2007): 907–920, <https://doi.org/10.1177/0898264307308340>.

⁷⁰ Defense Manpower Data Center, "2019 Status of Forces Survey of Reserve Component Members: Tabulations of Responses for Quality of Life Items." Adapted from Q123–125.

- *Answer choices: Very unhappy, Unhappy, Neither happy nor unhappy, Happy, Very happy*
 - All things considered, how would you rate the current level of happiness in your relationship with your spouse or significant other?
- *Answer choices: Much less often, Less often, About the same, More often, Much more often*
 - Compared to 12 months ago, how often do you and your spouse or significant other have problems in your personal relationship?

c. Significant other closeness and conflict: perceived support and conflict in close relationships

- Suggested measure: The Quality of Relationships Inventory^{71, 72}
 - Instructions: Participants should be instructed to answer the following questions in regard to a particular relationship (e.g., spouse, family member, friend).
 - *Answer choices: Not at all, A little, Significantly, Very much*
 - Scoring: This measure includes three subscales, which should be scored separately: support, conflict, and depth. Specific subscales are noted in parentheses but should not be included when administered to participants.
 - To what extent could you turn to this person for advice about problems? (support)
 - How often do you have to work hard to avoid conflict with this person? (conflict)
 - To what extent could you count on this person for help with a problem? (support)
 - How upset does this person sometimes make you feel? (conflict)
 - To what extent can you count on this person to give you honest feedback, even if you might not want to hear it? (support)
 - How much does this person make you feel guilty? (conflict)
 - How much do you have to “give in” in this relationship? (conflict)
 - To what extent can you count on this person to help you if a family member very close to you died? (support)
 - How much does this person want you to change? (conflict)
 - How positive a role does this person play in your life? (depth)
 - How significant is this relationship in your life? (depth)
 - How close will your relationship be with this person in 10 years? (depth)
 - How much would you miss this person if the two of you could not see or talk with each other for a month? (depth)

⁷¹ Lesley L Verhofstadt et al., “Confirming the Three-Factor Structure of the Quality of Relationships Inventory Within Couples,” *Psychological Assessment* 18, no. 1 (2006): 15–21, <https://doi.org/10.1037/1040-3590.18.1.15>.

⁷² Gregory R. Pierce, “The Quality of Relationships Inventory: Assessing the Interpersonal Context of Social Support,” in *Communication of Social Support: Messages, Interactions, Relationships, and Community*, ed. Brant R. Burleson, Terrance L. Albrecht, and Irwin G. Sarason (Thousand Oaks, CA: Sage Publications, Inc., 1994), 247–266.

- How critical of you is this person? (conflict)
- If you wanted to go out and do something this evening, how confident are you that this person would be willing to do something with you? (conflict)
- How responsible do you feel for this person's well-being? (depth)
- How much do you depend on this person? (depth)
- To what extent can you count on this person to listen to you when you are very angry at someone else? (support)
- How much would you like this person to change? (conflict)
- How angry does this person make you feel? (conflict)
- How much do you argue with this person? (conflict)
- To what extent can you really count on this person to distract you from your worries when you feel under stress? (support)
- How often does this person make you feel angry? (conflict)
- How often does this person try to control or influence your life? (conflict)
- How much more do you give than you get from this relationship? (conflict)

d. Social functioning: ability to maintain work and personal relationships

- Suggested measure: Walter Reid Functional Impairment Scale⁷³
 - Instructions: How much difficulty do you CURRENTLY have difficulty with the following:
 - *Answer choices: No difficulty at all, A little difficulty, Moderate difficulty, Quite a bit of difficulty, Extreme difficulty*
 - Your ability to get along with your coworkers
 - Your ability to interact with social groups (church, sports, clubs)
 - Your ability to get along with family or friends
 - Your ability to have a close relationship (e.g., spouse, girlfriend/boyfriend)

e. Community belonging: sense of belong to or affinity with one's community

- Suggested measure: Community belonging measure⁷⁴
 - *Answer choices: Very dissatisfied, Dissatisfied, Neither satisfied nor Unsatisfied, Satisfied, Very satisfied*
 - The extent you feel like you belong in your community
 - The extent you are involved in your community
 - The social support you receive from your community

⁷³ Herrell et al., "Assessing Functional Impairment in a Working Military Population," 254–264.

⁷⁴ Brian K. Barber et al., "Long-term Exposure to Political Violence: The Particular Injury of Persistent Humiliation," *Social Science & Medicine* 156 (May 2016): 154–166, <https://doi.org/10.1016/j.socscimed.2016.03.011>.

f. Connectedness: sense of belonging or positive association with other people in general

- Suggested measure: DEOCS – Connectedness scale⁷⁵
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - These days, I feel like I belong
 - These days, I feel that there are people I can turn to in times of need
 - These days, I think I make things worse for the people in my life
 - My future seems dark to me

g. Loneliness: feelings of social isolation

- Suggested measure: Three-item Loneliness scale⁷⁶
 - *Answer choices: Hardly Ever, Some of the time, Often*
 - How often do you feel that you lack companionship?
 - How often do you feel left out?
 - How often do you feel isolated from others?

h. Perceived social support: an individual’s belief that he/she is cared for, has tangible or intangible assistance available from other people, and is part of a supportive social network

- Suggested measure: Service Members’ Social Support⁷⁷
 - Instructions: Please mark how much you agree or disagree with each statement.
 - *Answer choices: Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree*
 - My family members and/or friends make me feel better when I am down
 - I can go to family members or friends when I need good advice
 - My family and friends understand what I have been through in the Armed Forces
 - There are family and/or friends with whom I can talk about my experiences in the Armed Forces
 - My family members or friends would lend me money if I needed it
 - My family members or friends would help me move my belongings if I needed help
 - If I were unable to attend to daily chores, there is someone who would help me with these tasks
 - When I am ill, family members or friends will help out until I am well

⁷⁵ Department of Defense, “Defense Organizational Climate Survey (DEOCS) 5.0 – Military Version.”

⁷⁶ Mary Elizabeth Hughes et al., “A Short Scale for Measuring Loneliness in Large Surveys: Results from Two Population-Based Studies,” *Research on Aging* 26, no. 6 (2004): 655–672, doi:10.1177/0164027504268574.

⁷⁷ Adapted from D. Vogt et al., “Manual for the Deployment Risk and Resilience Inventory-2 (DRRI-2): A Collection of Measures for Studying Deployment-Related Experiences of Military Veterans” (Boston, MA: National Center for PTSD, 2012), Section O: Postdeployment Support, <https://www.ptsd.va.gov/professional/assessment/documents/drri2manual.pdf>.

- i. Satisfaction with work/family balance:** satisfaction with one's ability to meet the multiple demands of work and family
- Suggested measure: Satisfaction with work/family balance⁷⁸
 - Instructions: Indicate your level of satisfaction with the following five items:
 - *Answer choices: Very dissatisfied, Dissatisfied, Neither dissatisfied nor satisfied, Satisfied, Very satisfied*
 - The way you divide your time between work and personal or family life
 - The way you divide your attention between work and home
 - How well your work life and your personal or family life fit together
 - Your ability to balance the needs of your job with those of your personal or family life
 - The opportunity you have to perform your job well and yet be able to perform home-related duties adequately
- j. Satisfaction with social support and integration:** satisfaction with one's access to tangible and intangible support from other people
- Suggested measure: Brief Inventory of Social Support and Integration (BSSI)⁷⁹
 - How many non-cohabiting (i.e., do not live with you) close friends do you have?
 - *None, one, two, three, four, five or more*
 - How satisfied are you with your social relations (quantity and quality of relationships)?
 - *Very unsatisfied, somewhat unsatisfied, neither satisfied nor unsatisfied, somewhat satisfied, very satisfied*
 - Are you satisfied with the conversational or listening support available to you?
 - *Very unsatisfied, somewhat unsatisfied, neither satisfied nor unsatisfied, somewhat satisfied, very satisfied*
 - If you are having personal problems or difficulties with your emotional life or your relationships, and you are in need of discussion or compassion, how much help would there be available from the following persons?
 - *Answer choices: None, A little, Somewhat, A lot*
 - Spouse or partner
 - Your father or mother or your partner's father or mother
 - Your son or daughter

⁷⁸ Monique Valcour, "Work-Based Resources as Moderators of the Relationship Between Work Hours and Satisfaction with Work-Family Balance," *Journal of Applied Psychology* 92, no. 6 (November 2007): 1512–1523, <https://doi.org/10.1037/0021-9010.92.6.1512>.

⁷⁹ Olavi Lindfors et al., "Social Support as a Predictor of the Outcome of Depressive and Anxiety Disorder in Short-Term and Long-Term Psychotherapy," *Psychiatry Research* 216, no. 1 (30 April 2014): 44–51, <https://doi.org/10.1016/j.psychres.2013.12.050>.

- Other relatives
- Neighbors
- Workmates or fellow students
- Other friends or acquaintances

D. Financial Outcomes

1. **Employment:** having paid work

- Suggested measure: Administrative data sources

2. **Job insecurity:** perceived likelihood of losing one's job in the near future

- Suggested measure: Job Insecurity, General Social Survey (GSS)⁸⁰
 - Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off?
 - *Answer choices: Very likely, Fairly likely, Not too likely, Not at all likely*
 - About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have?
 - *Answer choices: Very easy, Somewhat easy, Not easy at all*

3. **Job satisfaction:** attitude regarding and fulfillment derived from one's current job

- Suggested measure: DEOCS – Job Engagement and Commitment scale⁸¹
 - Instructions: Use the following options to respond to each item on this portion of the survey.
 - *Answer choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree*
 - I am proud of my work
 - My work has a great deal of personal meaning to me
 - I am committed to making this job my career
 - I feel like “part of the family” at work
- Suggested measure: DoD SOF items – satisfaction⁸²
 - *Answer choices: Very dissatisfied, Dissatisfied, Neither satisfied nor dissatisfied, Satisfied, Very satisfied*
 - Taking all things in consideration, how satisfied are you, in general, with each of the following aspects of your civilian job?
 - Your compensation
 - The type of work you do in your job
 - Your opportunities for promotion
 - The quality of your coworkers
 - The quality of your supervisor

⁸⁰ National Opinion Research Center (NORC), *General Social Surveys – Quality of Working Life Module 1972–2014: Cumulative Codebook* (Chicago, IL: University of Chicago, June 2017), <http://gss.norc.org/Documents/codebook/QWL%20Codebook.pdf>.

⁸¹ Department of Defense, “Defense Organizational Climate Survey (DEOCS) 5.0 – Military Version.” Language slightly modified for better applicability to the NG population.

⁸² Defense Manpower Data Center, “2019 Status of Forces Survey of Reserve Component Members: Tabulations of Responses for Leading Indicator Items.” Adapted from Q39 for better applicability to civilian jobs.

4. **Financial well-being:** feeling a sense of financial security
 - Suggested measure: DoD SOF items – financial well-being⁸³
 - Which of the following best describes your financial condition?
 - *Answer choices: Very comfortable or secure; Able to make ends meet without much difficulty; Occasionally have some difficulty making ends meet; Tough to make ends meet but keeping your head above water; In over your head*
 - Compared to 12 months ago, is your financial situation better, worse, or has it stayed the same?
 - *Answer choices: Much worse, Somewhat worse, Stayed the same, Somewhat better, Much better*
5. **Financial functioning:** ability to manage personal responsibilities and finances
 - Suggested measure: Walter Reid Functional Impairment Scale⁸⁴
 - Instructions: How much difficulty do you CURRENTLY have with the following:
 - *Answer choices: No difficulty at all, A little difficulty, Moderate difficulty, Quite a bit of difficulty, Extreme difficulty*
 - Your ability to handle personal responsibilities (e.g., maintaining the car, keeping appointments, running errands)
 - Your ability to get your bills paid on time
6. **Social determinants of health:** economic and social conditions that influence an individual’s health outcomes
 - Suggested measure: Accountable Health Communities Health-related Social Needs (AHC HRSN) Screening Tool⁸⁵
 - What is your living situation today?
 - *Answer choices:*
 - *I have a steady place to live*
 - *I have a place to live today, but I am worried about losing it in the future*
 - *I do not have a steady place to live (I am temporarily staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building, bus or train station, or in a park)*

⁸³ Defense Manpower Data Center, “2019 Status of Forces Survey of Reserve Component Members: Tabulations of Responses for Quality of Life Items.” Adapted from Q129–130.

⁸⁴ Herrell et al., “Assessing Functional Impairment in a Working Military Population,” 254–264.

⁸⁵ Alexander Billioux et al., “Standardized Screening for Health-Related Social Needs in Clinical Settings: The Accountable Health Communities Screening Tool,” Discussion Paper (Washington, DC: National Academy of Medicine, National Academies Press, May 30, 2017), <https://www.capc.org/documents/download/294/>.

- Think about the place you live. Do you have problems with any of the following? Check all that apply.
 - *Answer choices:*
 - *Pests such as bugs, ants, or mice*
 - *Lack of heat*
 - *Smoke detectors missing or not working*
 - *Mold*
 - *Oven/stove not working*
 - *Lead paint/pipes*
 - *Water leaks*
 - *None of the above*

- Within the last 12 months, you worried that your food would run out before you got money to buy more
 - *Answer choices: Often true, Sometimes true, Never true*

- Within the last 12 months, the food you bought didn't last and you didn't have money to get more
 - *Answer choices: Often true, Sometimes true, Never true*

- In the past 12 months, has lack of reliable transportation kept you from medical appointments, meetings, work or getting things for daily living? *Check all that apply.*
 - *Answer choices:*
 - *Yes, it has kept me from medical appointments or getting medications*
 - *Yes, it has kept me from non-medical meetings, appointments, work, or getting things that I need*
 - *No*

- In the past 12 months, has the electric, gas, oil, or water company threatened to shut off services in your home?
 - *Answer choices: Yes, No, Already shut off*

- How often does anyone, including friends
 - *Answer choices: Never, Rarely, Sometimes, Fairly often, Frequently*
 - *Physically hurt you?*
 - *Insult or talk down to you?*
 - *Threaten you with harm?*
 - *Scream or curse at you?*

E. Ideological and Spiritual Outcomes

1. General life purpose: an individual's sense of having a purpose in life

- Suggested measure: General Life Purpose Scale⁸⁶
 - *Answer choices: Strongly disagree, Disagree, Slightly disagree, Neither agree nor disagree, Slightly agree, Agree, Strongly agree*
 - I have goals that I am working toward
 - I am confident about who I am
 - I am confident about where I am going in life
 - I have a well-developed understanding of my gifts and talents
 - I have no sense of direction in life
 - I know how I should be using my gifts and talents
 - I have a good sense of purpose in life
 - I am unsure about what I should do with my life
 - I make a difference in the lives of those around me
 - My life is valuable and worthwhile
 - I have a strong sense of the reasons for my living
 - I have identified my mission in life
 - My life does not serve any purpose
 - I am making a contribution to society
 - I am taking actions now that are moving toward my mission in life
- Suggested measure: Azimuth Check – Life Purpose Items⁸⁷
 - Instructions: Answer in terms of whether the statement describes how you actually live your life.
 - *Answer choices: Not at all like me, A little like me, Somewhat like me, Mostly like me, Very much like me*
 - I am a person of dignity and worth
 - My life has meaning
 - I believe that in some way my life is closely connected to all humanity and all the world
 - The job I am doing in the military has enduring meaning
 - I believe there is a purpose for my life

⁸⁶ Katie Byron and Cindy Miller-Perrin, "The Value of Life Purpose: Purpose as a Mediator of Faith and Well-Being," *The Journal of Positive Psychology* 4, no. 1 (2009): 64–70, <https://doi.org/10.1080/17439760802357867>.

⁸⁷ "Army Ready and Resilient: Army Fit," U.S. Army Resilience Directorate.

2. **Life satisfaction:** an individual's satisfaction with his/her life as a whole
 - Suggested measure: Satisfaction with Life Scale⁸⁸
 - Instructions: Indicate your agreement or disagreement with each item below.
 - *Answer choices: Strongly agree, Agree, Slightly agree, Neither agree nor disagree, slightly disagree, Disagree, Strongly disagree*
 - In most ways my life is close to my ideal
 - The conditions of my life are excellent
 - I am satisfied with my life
 - So far I have gotten the important things I want in life
3. **Spiritual fitness:** an individual's sense of purpose, connection, and meaning in life
 - Suggested measure: Revised Spiritual Fitness Scale⁸⁹
 - *Answer choices: 1 (not like me at all)–5 (very much like me)*
 - I have a core of beliefs, ethics, and values that give my life a sense of meaning and purpose
 - I've been able to find a sense of meaning in my life
 - I feel a sense of connection to the rest of humanity and the natural world
 - The work I am doing in the military is meaningful to me
 - I live life with a clear sense of purpose
4. **Spiritual experience:** personal experiences with a higher power and religion
 - Suggested measure: Spiritual Experience items from the Brief Multidimensional Measure of Religiousness/Spirituality⁹⁰
 - *Answer choices: 0 (Strongly Disagree)–10 (Strongly Agree)*
 - In my life, I experience the presence of God or a higher power
 - I seek strength and comfort in my religion or spirituality
 - My religion or spirituality gives me sense of responsibility for reducing pain and suffering in the world
 - I feel God or a higher power is punishing me

⁸⁸ Ed Diener et al., "The Satisfaction with Life Scale," *Journal of Personality Assessment* 49, no. 1 (1985): 71–75, https://doi.org/10.1207/s15327752jpa4901_13.

⁸⁹ Joseph H. Hammer, Ryan T. Cragun, and Karen Hwang, "Measuring Spiritual Fitness: Atheist Military Personnel, Veterans, and Civilians," *Military Psychology* 25, no. 5 (2013): 438–451, <https://doi.org/10.1037/mil0000010>. Included on the Global Assessment Scale.

⁹⁰ Fetzer Institute/National Institute on Aging Working Group, *Multidimensional Measurement of Religiousness, Spirituality for Use in Health Research* (Kalamazoo, MI: Fetzer Institute, 1999), https://fetzer.org/sites/default/files/resources/attachment/%5Bcurrent-date%3Atiny%5D/Multidimensional_Measurement_of_Religiousness_Spirituality.pdf.

5. **Flourishing:** the experience of positive emotions, functioning, and meaning
- Suggested measure: Flourishing Measures⁹¹
 - Overall, how satisfied are you with life as a whole these days?
 - *Answer choices: 0 = Not satisfied at all, 10 = Completely satisfied*
 - In general, how happy or unhappy do you usually feel?
 - *Answer choices: 0 = Extremely unhappy, 10 = Extremely happy*
 - In general, how would you rate your physical health?
 - *Answer choices: 0 = Poor, 10 = Excellent*
 - How would you rate your overall mental health?
 - *Answer choices: 0 = Poor, 10 = Excellent*
 - Overall, to what extent do you feel the things you do in your life are worthwhile?
 - *Answer choices: 0 = Not at all worthwhile, 10 = Completely worthwhile*
 - I understand my purpose in life
 - *Answer choices: 0 = Strongly disagree, 10 = Strongly agree*
 - I always act to promote good in all circumstances, even in difficult and challenging situations
 - *Answer choices: 0 = Not true of me, 10 = Completely true of me*
 - I am always able to give up some happiness now for greater happiness later
 - *Answer choices: 0 = Not true of me, 10 = Completely true of me*
 - I am content with my friendships and relationships
 - *Answer choices: 0 = Strongly disagree, 10 = Strongly agree*
 - My relationships are as satisfying as I would want them to be
 - *Answer choices: 0 = Strongly disagree, 10 = Strongly agree*
 - How often do you worry about being able to meet normal monthly living expenses?
 - *Answer choices: 0 = Worry all of the time, 10 = Do not ever worry*
 - How often do you worry about safety, food, or housing?
 - *Answer choices: 0 = Worry all of the time, 10 = Do not ever worry*

⁹¹ Tyler J. VanderWeele, “On the Promotion of Human Flourishing,” *Proceedings of the National Academy of Sciences* 114, no. 31 (August 1, 2017): 8148–8156, <https://doi.org/10.1073/pnas.1702996114>.

6. **Well-being:** the experience of positive mental health, functioning, and life satisfaction

- Suggested measure: Ryff Scales of Psychological Well-Being⁹²

- *Answer choices: Strongly disagree, Disagree, Disagree slightly, Agree slightly, Agree, Strongly agree*

- I like most parts of my personality
- When I look at the story of my life, I am pleased with how things have turned out so far
- Some people wander aimlessly through life, but I am not one of them
- The demands of everyday life often get me down
- In many ways I feel disappointed about my achievements in life
- Maintaining close relationships has been difficult and frustrating for me
- I live life one day at a time and don't really think about the future
- In general, I feel I am in charge of the situation in which I live
- I am good at managing the responsibilities of daily life
- I sometimes feel as if I've done all there is to do in life
- For me, life has been a continuous process of learning, changing and growth
- I think it is important to have new experiences that challenge how I think about myself and the world
- People would describe me as a giving person, willing to share my time with others
- I gave up trying to make big improvements or changes in my life a long time ago
- I tend to be influenced by people with strong opinions
- I have not experienced many warm and trusting relationships with others
- I have confidence in my own opinions, even if they are different from the way most other people think
- I judge myself by what I think is important, not by the values of what others think is important

⁹² Carol D. Ryff and Corey Lee M. Keyes, "The Structure of Psychological Well-Being Revisited," *Journal of Personality and Social Psychology* 69, no. 4 (1995): 719, <https://doi.org/10.1037/0022-3514.69.4.719>.

F. Nutritional Outcomes

1. Nutrition-related knowledge: knowledge of healthy foods and eating behaviors

- Suggested measure: Consumer Nutrition Knowledge Questionnaire⁹³
 - *Answer choices: True, False (correct responses indicated in parentheses)*
 - Lentils contain only few useful nutrients, therefore their health benefit is not great (F)
 - If you have eaten high-fat foods, you can reverse the effects by eating apple (F)
 - If cream is whipped it contains less calories than in its liquid form (F)
 - A healthy meal should consist of half meat, a quarter vegetables and a quarter side dishes (F)
 - Fat contains fewer calories than the same amount of fiber (F)
 - A salad dressing made with mayonnaise is as healthy as the same dressing made with (F)
 - Fat is always bad for your health; you should therefore avoid it as much as possible (F)
 - Pasta with tomato sauce is healthier than pasta with mushroom and cream sauce (T)
 - A balanced diet implies eating all foods in the same amounts (F)
 - The health benefit of fruit and vegetables lies alone in the supply of vitamins and minerals (F)
 - Bacon contains more calories than ham (T)
 - Oily fish (salmon, mackerel) contain healthier fats than red meat (T)
 - To eat healthily, you should eat less fat. Whether you also eat more fruit and vegetables does not matter (F)
 - A scoop of chocolate ice cream is just as healthy as a scoop of lemon sorbet (F)
 - The same amount of beef steak and chicken breast contains equally many calories (F)
 - The same amount of sugar and fat contains equally many calories (F)
 - A sandwich with mozzarella contains as many calories as the same sandwich with Gruyère cheese (F)
 - For a healthy nutrition, dairy products should be consumed in the same amounts as fruit and vegetables (F)
 - Skimmed milk contains fewer minerals than full-fat milk (F)
 - Brown sugar is much healthier than white sugar (F)

⁹³ Maria Dickson-Spillmann, Michael Siegrist, and Carmen Keller, "Development and Validation of a Short, Consumer-Oriented Nutrition Knowledge Questionnaire," *Appetite* 56, no. 3 (June 2011): 617–620, <https://doi.org/10.1016/j.appet.2011.01.034>.

2. **Nutrition-related behavior:** self-reported practice of healthy eating habits

- Suggested measure: Behavior, Environment, and Changeability Survey⁹⁴
 - *Answer choices: Never, Rarely, Sometimes, Often, Always*
 - I eat healthy food
 - I eat healthy food at my dining hall/apartment/home
 - I prepare healthy meals
 - I eat 2–3 cups or more of vegetables daily
 - I eat healthy snacks
 - I eat 1–2 cups or more of fruit daily
 - I eat healthy food at work
 - I eat healthy food from local food/grocery stores
 - I eat healthy food at local restaurants
 - I eat whole grain food
- Suggested measure: Azimuth Check – Nutrition items⁹⁵
 - Instructions: Over the last 30 days, how often did you eat/drink the following foods/beverages? (Note: Only a few examples of each category are listed to remind you of the types of foods – many more are possible).
 - *Answer choices: Rarely or never, 1 or 2 servings per week, 3 to 6 servings per week, 1 serving per day, 2 to 3 servings per day, 4 or more servings per day*
 - **FRUIT:** fresh, frozen, canned or dried, or 100% fruit juices. A serving is 1 cup of fruit or 1/2 cup of fruit juice
 - **VEGETABLES:** fresh, frozen, canned, cooked or raw: dark green vegetables (broccoli, spinach, most greens), orange vegetables (carrots, sweet potatoes, winter squash, pumpkin), legumes (dry beans, chick peas, tofu), starchy vegetables (corn, white potatoes, green peas), and other (tomatoes, cabbage, celery, cucumber, lettuce, onions, peppers, green beans, cauliflower, mushrooms, summer squash, etc.) A serving is 1 cup of raw vegetables or 1/2 cup of cooked vegetables
 - **WHOLE GRAINS:** rye, whole wheat, or heavily seeded bread, brown or wild rice, whole wheat pasta or crackers, oatmeal or corn tacos. A serving is one slice of bread or 1/2 cup of grains
 - **DAIRY:** regular/whole fat milk; low or reduced fat milk (2%, 1%, 1/2 % or skim), yogurt, cottage cheese, low fat cheese, frozen low fat yogurt, soy milk or other calcium fortified foods (orange juice, soy/rice milk, breakfast cereals, etc.). A serving is 8 ounces of liquid or 1 ounce of cheese

⁹⁴ Jennifer R. Walsh et al., “The Development and Preliminary Validation of the Behavior, Environment, and Changeability Survey (BECS),” *Journal of Nutrition Education and Behavior* 44, no. 6 (November–December 2012): 490–499, <https://doi.org/10.1016/j.jneb.2012.05.002>.

⁹⁵ “Army Ready and Resilient: Army Fit,” U.S. Army Resilience Directorate.

- *Answer choices: Rarely or never, 4 or more times per week, 2 to 3 times per week, 1 time per week, 2 times per month, 1 time per month*
 - Over the last 30 days, how often did you eat FISH: tuna, salmon, or other non-fried fish?
 - *Answer choices: 8 or more servings per day, 5 to 7 servings per day, 2 to 4 servings per day, 1 serving per day, None*
 - Think about the past 30 days. On an average day, how many servings of water do you drink? (1 serving is a glass or cup of water or 8 oz; 1 cup is equivalent to a baseball or the size of your fist; a standard CamelBak or Nalgene water bottle has 24 oz or 3 servings).
- 3. Nutrition-related changeability:** willingness to work toward developing healthy eating habits
- Suggested measure: Behavior, Environment, and Changeability Survey⁹⁶
 - Instructions: I am willing to make changes so that I can
 - *Answer choices: Strongly disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly agree*
 - Eat healthy food more often
 - Eat vegetables more often
 - Enjoy eating a variety of healthy food
 - Eat fruit more often
 - Prepare healthy meals more often
 - Eat healthy snacks more often
 - Eat whole grain food more often
 - Eat more slowly to determine whether I am hungry or full
- 4. Nutrition-related self-efficacy:** confidence in one's ability to eat nutritious foods
- Suggested measure: Health Behavior Self-Efficacy Measure⁹⁷
 - *Answer choices: Not at all true, A little true, Pretty true, Completely true*
 - I am confident that I can manage to eat five servings of fruits and vegetables per day
 - I am confident that I can manage to eat five portions of fruit and vegetables per day even if I have worries or problems

⁹⁶ Ibid.

⁹⁷ Lena Fleig et al., "Cross-Behavior Associations and Multiple Health Behavior Change: A Longitudinal Study on Physical Activity and Fruit and Vegetable Intake," *Journal of Health Psychology* 20, no. 5 (May 2015): 525–534, <https://doi.org/10.1177/1359105315574951>.

- Suggested measure: Brief Self-efficacy Scales⁹⁸
 - Answer choices: 0% (not at all confident), 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100% (completely confident)
 - How confident are you that you can stick with eating healthful foods
 - Even if you need a long time to develop the necessary routines?
 - Even if you have to try several times until it works?
 - Even if you have to rethink your entire way of nutrition?
 - Even if you have to make a detailed plan?
 - How confident are you that you can lose weight
 - Even if you need a long time to develop the necessary routines?
 - Even if you have to try several times until it works?
 - Even if you have to rethink your entire way of losing weight?
 - Even if you have to make a detailed plan?

⁹⁸ Kathryn E. Wilson et al., “Brief Self-Efficacy Scales for Use in Weight-Loss Trials: Preliminary Evidence of Validity,” *Psychological Assessment* 28, no. 10 (October 2016): 1255–1264, doi:10.1037/pas0000249.

G. Physical Outcomes

1. Physical Activity

a. Physical activity: self-reported physical activity

- Suggested measure: International Physical Activity Questionnaire⁹⁹
 - Instructions: We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise, or sport.
 - Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least **10 minutes** at a time.
 - During the **last 7 days**, on how many days did you do **vigorous** physical activities like running, agility drills calisthenics, interval training, sprints, road marches, and bicycling at high effort?
 - *Answer choices: ___days per week*
 - How much time did you usually spend doing **vigorous** physical activities on one of those days?
 - *Answer choices: ___hours per day; ___minutes per day; ___don't know/not sure*
 - Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Moderate activity DOES NOT include resistance training. Think only about those physical activities that you did for at least **10 minutes** at a time.
 - During the **last 7 days**, on how many days did you do **moderate** physical activities like brisk walking, bicycling (flat, 5–9 mph), swimming (recreational), softball, shooting basketball, or tennis? Do not include walking.
 - *Answer choices: ___days per week*

⁹⁹ Paul H. Lee et al., “Validity of the International Physical Activity Questionnaire Short Form (IPAQ-SF): A Systematic Review,” *International Journal of Behavioral Nutrition and Physical Activity* 8, article no. 115 (October 21, 2011), <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-8-115>.

- How much time did you usually spend doing **moderate** physical activities on one of those days?
 - *Answer choices: ___hours per day; ___minutes per day; ___don't know/not sure*
- Think about all the light activities you did in the **last 7 days**. Light activities refer to activities that take minimal physical effort and make you breathe a little harder than normal. Light activity DOES NOT include resistance training.
 - During the last 7 days, on how many days did you do **light** physical activities like slow to moderate walking, performing maintenance, cleaning, lifting or carrying light items?
 - *Answer choices: ___days per week*
 - How much time did you usually spend walking on one of those days?
 - *Answer choices: ___hours per day; ___minutes per day; ___don't know/not sure*

b. Exercise-related perceived barriers: the presence of barriers and facilitators to engaging in physical activity

- Suggested measure: Determinants of Physical Activity Questionnaire¹⁰⁰
 - *Answer choices: Strongly disagree, Disagree, Slightly disagree, Neutral, Slightly agree, Agree, Strongly agree*
 - I know what the recommended levels of physical activity are
 - I DO NOT know the reasons why I should be meeting the nationally recommended physical activity guidelines
 - I have NOT previously read information about the current nationally recommended physical activity guidelines
 - Facilities are available to help me to do physical activity
 - There is NO WHERE to do physical activity near me
 - My local area is NOT very attractive and this puts me off doing physical activity
 - I want to do physical activity
 - I CANNOT be bothered to do physical activity
 - I feel motivated to do physical activity
 - I DO NOT feel confident when doing physical activity
 - Doing physical activity makes me feel embarrassed
 - I FIND IT HARD to do physical activity when I see others doing well at physical activity (e.g., watching others run for a long time on the treadmill)
 - I can do physical activity to a good enough standard
 - I've NEVER really had sports skills so I DON'T do physical activity

¹⁰⁰ Natalie Taylor, Rebecca Lawton, and Mark Conner, "Development and Initial Validation of the Determinants of Physical Activity Questionnaire," *The International Journal of Behavioral Nutrition and Physical Activity* 10, article no. 74 (June 11, 2013), <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-10-74>. Measure also used on the Azimuth Check (formerly the GAT).

- I don't seem to have the skills to keep going in physical activity sessions
- Daily life is too stressful for physical activity
- I have too many negative emotions which prevent me from doing physical activity
- When I think about doing physical activity, I start to worry
- My friends DON'T support or encourage my physical activity
- The people I spend my free time with don't do physical activity
- I DON'T have anyone to do physical activity with
- If I do physical activity, it will benefit me in the short term (e.g., burn calories, sleep better, etc.)
- If I do physical activity it will benefit me in the long term (e.g., live longer, lose weight, etc.)
- I think physical activity will change my life for the better
- I tend to plan where my physical activity will happen (e.g., at the park, leisure center, etc.)
- I do not tend to plan when my physical activity will happen (e.g., Monday at 6pm etc.)
- I tend to plan how my physical activity will happen (e.g., how to get there, kit needed, etc.)
- I do not tend to plan what type of physical activity I will do (e.g., aerobics class, walking to work, session at the gym, etc.)
- I know what to do in difficult situations in order to make sure I do the physical activity I have planned
- I get easily distracted from the physical activity I have planned
- I always work around obstacles to physical activity; nothing really stops me
- I WOULD NOT be prepared to give up work ambitions to do physical activity
- I would be prepared to give up things I usually do in my leisure time for physical activity
- I WOULD NOT be prepared to give up spending time with my friends for physical activity

c. Perceived physical fitness: perceptions of one's own level of physical fitness

- Suggested measure: Perceived Physical Fitness Scale¹⁰¹
 - Instructions: The following statements are designed to assess your perception of your physical fitness. Please read each statement carefully, and then select one of the five alternatives.
 - Answer choices: *Strongly agree, Agree, Undecided, Disagree, Strongly disagree*
 - Scoring: Reverse-scored items denoted with *. An † indicates slightly modified items for better applicability to NG
 - I am in good physical condition
 - I need to alter (lose or gain) weight in order to improve my physical health*

¹⁰¹ Ben R. Abadie, "Construction and Validation of a Perceived Physical Fitness Scale," *Perceptual and Motor Skills* 67, no. 3 (December 1988): 887–892, doi:10.2466/pms.1988.67.3.887.

- I am better able to run for twenty minutes than most NG members my age and gender†
- I am as physically strong as I need to be
- An object that I can lift once with slight difficulty soon becomes strenuous when I attempt to lift it repeatedly*
- I possess greater muscular flexibility than most NG members my age and gender†
- I am more overweight than most NG members my age and gender†
- When I exercise, I tire easily*
- I am more physically fit than most NG members my age and gender†
- I am a very limber (flexible) individual
- I possess less muscular strength than NG members my age and gender†
- I need to improve my present overall physical condition*

d. Exercise-related self-efficacy: confidence in one's own ability to be physically active

- Suggested measure: Health Behavior Self-Efficacy Measure¹⁰²
 - Answer choices: *Not at all true, A little true, Pretty true, Completely true*
 - I am confident that I can manage to be more physically active
 - I am confident that I can engage in regular physical activity even if I have worries or problems
- Suggested measure: Physical Activity Self-Efficacy¹⁰³
 - Instructions: The following items reflect situations that are listed as common reasons for preventing individuals from participating in exercise sessions or, in some cases, dropping out. Using the scales below, please indicate how confident you are that you could exercise in the event that any of the following circumstances were to occur. Please indicate the degree to which you are confident that you could exercise in the event that any of the following circumstances were to occur by selecting the appropriate %. Select the response that most closely matches your own, remembering that there are no right or wrong answers. For example, in question #1 if you have complete confidence that you could exercise even if “the weather was very bad,” you would circle 100%. If, however, you had no confidence at all that you could exercise, if you failed to make or continue making progress (that is, confidence you would not exercise), you would circle 0%.
 - Answer choices: *0% (Not at all confident); 10%; 20%; 30%; 40%; 50% (Moderately confident); 60%; 70%; 80%; 90%; 100% (Highly confident)*
 - I believe that I could exercise 3 times per week for the next 3 months if
 - The weather was very bad (hot, humid, rainy, cold)
 - I was bored by the program or activity

¹⁰² Fleig et al., “Cross-Behavior Associations and Multiple Health Behavior Change.”

¹⁰³ Edward McAuley, “The Role of Efficacy Cognitions in the Prediction of Exercise Behavior in Middle-Aged Adults,” *Journal of Behavioral Medicine* 15, no. 1 (1992): 65–88, <https://link.springer.com/article/10.1007/BF00848378>.

- I was on vacation
- I was not interested in the activity
- I felt pain or discomfort when exercising
- I had to exercise alone
- It was not fun or enjoyable
- It became difficult to get to the exercise location
- I didn't like the particular activity program that I was involved in
- My schedule conflicted with my exercise session
- I felt self-conscious about my appearance when I exercised
- An instructor does not offer me any encouragement
- I was under personal stress of some kind

e. Physical readiness: meeting standards of physical fitness required for deployment

- Suggested measure: data from administrative records (e.g., physical fitness test scores)

2. Sleep

a. Sleep behavior: perception and practice of getting adequate sleep

- Suggested measure: Behavior, Environment, and Changeability Survey¹⁰⁴
 - I get 7–9 hours of sleep at night.
 - *Answer choices: Never, Rarely, Sometimes, Often, Always*
 - It is important to me to get 7–9 hours of sleep at night.
 - *Answer choices: Very important, Important, Neither important nor unimportant, important, Very important*

b. Sleep quality: the extent to which an individual sleeps well

- Suggested measure: Behavioral Risk Factor Surveillance Survey – Module 9¹⁰⁵
 - On average, how many hours of sleep do you get in a 24-hour period?
 - *Answer choices: [enter hours of sleep, 0–24], Don't know/not sure*
 - Over the last 2 weeks, how many days have you had trouble falling asleep or staying asleep or sleeping too much?
 - *Answer choices: [write in number of days, 0–14], Don't know/not sure*
 - Over the last 2 weeks, how many days did you unintentionally fall asleep during the day?
 - *Answer choices: [write in number of days, 0–14], Don't know/Not sure*
 - Have you ever been told that you snore loudly?
 - *Answer choices: Yes, No, Don't know/not sure*
 - Has anyone ever observed that you stop breathing during your sleep?
 - *Answer choices: Yes, No, Don't know/not sure*
- Suggested measure: Short Pittsburgh Sleep Quality Index¹⁰⁶
 - *Answer choices: Open ended*
 - During the past month, when have you usually gone to bed at night?
 - During the past month, how long (in minutes) has it taken you to fall asleep each night?
 - During the past month, when have you usually gotten up in the morning?
 - During the past month, how many actual hours of sleep did you get at night? (This may be different from the number of hours you spent in bed)

¹⁰⁴ Walsh et al., “The Development and Preliminary Validation.”

¹⁰⁵ Centers for Disease Control and Prevention (CDC), “2017 Behavioral Risk Factor Surveillance System Questionnaire” (Atlanta, GA: CDC, 2016), https://www.cdc.gov/brfss/questionnaires/pdf-ques/2017_BRFSS_Pub_Ques_508_tagged.pdf.

¹⁰⁶ Oluremi A Famodu et al., “Shortening of the Pittsburgh Sleep Quality Index Survey Using Factor Analysis,” *Sleep Disorders* 2018, article ID 9643937 (April 12, 2018): 1–9, <https://doi.org/10.1155/2018/9643937>.

- *Answer choices: Not during the past month, Less than once a week, Once or twice a week, Three or more times a week*
 - During the past month, how often have you had trouble sleeping because you
 - Cannot get to sleep within 30 minutes
 - Wake up in the middle of the night or early morning
 - Cannot breathe comfortably
 - Cough or snore loudly
 - Feel too hot
 - Had bad dreams
 - Have pain
 - During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?
- *Answer choices: No problem at all, Only a very slight problem, Somewhat of a problem, A very big problem*
 - During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?

c. Sleep-related impairment: effects of poor sleep on individual functioning

- Suggested measure: PROMIS Short Form – Sleep-Related Impairment Short Form 4a¹⁰⁷
 - Instructions: In the past 7 days,
 - *Answer choices: Not at all, A little bit, Somewhat, Quite a bit, Very much*
 - I had a hard time getting things done because I was sleepy
 - I had problems during the day because of poor sleep
 - I had a hard time concentrating because of poor sleep
 - I was sleepy during the daytime

¹⁰⁷ “PROMIS Short Form v1.0 – Sleep-Related Impairment 4a,” Health Measures, https://www.healthmeasures.net/index.php?option=com_instruments&view=measure&id=863&Itemid=992.

3. Overall Health

a. Access to medical care: use of and access to medical care

- Suggested measure: National Health Interview Survey (NHIS) Adult Access to Health Care & Utilization¹⁰⁸
 - About how long has it been since you last saw a doctor or other health care professional about your health?
 - *Answer choices: Never; Within the past year (anytime less than 12 months ago); Within the last 2 years (1 year but less than 2 years ago); Within the last 3 years (2 years but less than 3 years ago); Within the last 5 years (3 years but less than 5 years ago); Within the last 10 years (5 years but less than 10 years ago); 10 years ago or more; Don't know*
 - What kind of place do you go to most often if you are sick and need healthcare?
 - *Answer choices: Response options: a doctor's office or health center; an urgent care center, a clinic in a drug store or grocery store; a hospital emergency room; a VA Medical Center or VA outpatient clinic; some other place; don't know*
 - During the past 12 months, how many times have you gone to an urgent care center or a clinic in a drug store or grocery store about your health? (open-ended numeric response)
 - During the past 12 months, how many times have you gone to a hospital emergency room about your health? (open-ended numeric response)
 - During the past 12 months, have you been hospitalized overnight? (open-ended numeric response)
 - During the past 12 months, have you DELAYED getting medical care because of the cost?
 - *Answer choices: Yes, No, Don't know*
 - During the past 12 months, was there any time when you needed medical care but DID NOT GET IT because of the cost?
 - *Answer choices: Yes, No, Don't know*

b. Health-related quality of life: perceptions of one's own physical and mental health and functioning

- Suggested measure: BRFSS – Module 8¹⁰⁹
 - *Answer choices: [Write in number of days: 0–30], Don't know/not sure*
 - During the past 30 days, for about how many days did pain make it hard for you to do your activities, such as self-care, work, or recreation?

¹⁰⁸ “National Health Interview Survey,” Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics, <https://www.cdc.gov/nchs/nhis/2020nhis.htm>.

¹⁰⁹ Centers for Disease Control and Prevention (CDC), “2017 Behavioral Risk Factor Surveillance System Questionnaire.”

- During the past 30 days, for about how many days have you felt sad, blue, or depressed?
- During the past 30 days, for about how many days have you felt worried, tense, or anxious?
- During the past 30 days, for about how many days have you felt very healthy and full of energy?
- Suggested measure: Veterans RAND 12-Item Health Survey¹¹⁰
 - In general, would you say your health is
 - *Answer choices: Excellent, Very good, Good, Fair, Poor?*
 - The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?
 - *Answer choices: Yes, limited a lot; Yes, limited a little; No, not limited at all*
 - Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf
 - Climbing several flights of stairs
 - During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? If so, how much?
 - *Answer choices: No, none of the time; Yes, a little of the time; Yes, some of the time; Yes, most of the time; Yes, all of the time*
 - Accomplished less than you would like
 - Didn't do work or other activities as carefully as usual
 - During the past 4 weeks, how much did pain interfere with your normal work (include both work outside the home and housework)?
 - *Answer choices: Not at all, A little bit, Moderately, Quite a bit, Extremely*
 - The following questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks
 - *Answer choices: All of the time, Most of the time, A good bit of the time, Some of the time, A little of the time, None of the time*
 - Have you felt calm and peaceful?
 - Did you have a lot of energy?
 - Have you felt downhearted and blue?

¹¹⁰ Alfredo J. Selim et al., "Updated U.S. Population Standard for the Veterans RAND 12-Item Health Survey (VR-12)," *Quality of Life Research* 18, no. 1 (February 2009): 43–52, doi:10.1007/s11136-008-9418-2.

- During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?
 - *Answer choices: All of the time, Most of the time, A good bit of the time, Some of the time, A little of the time, None of the time*
- c. Pain:** intensity of pain and impact of pain on daily activities
 - Suggested measure: Pain Intensity (PROMIS Pain Intensity 3a)¹¹¹
 - Instructions: Please respond to each item by marking one response per row. In the past 7 days,
 - *Answer choices: Had no pain, Mild, Moderate, Severe, Very severe*
 - How intense was your pain at its worst?
 - How intense was your average pain?
 - What is your level of pain right now?
 - Suggested measure: Pain Impact (PROMIS Pain Interference – Short Form 4a)¹¹²
 - Instructions: Please respond to each item by marking one response per row. In the past 7 days...
 - *Answer choices: Not at all, A little bit, Somewhat, Quite a bit, Very much*
 - How much did pain interfere with your day to day activities?
 - How much did pain interfere with your work?
 - How much did pain interfere with your ability to participate in social activities?
 - How much did pain interfere with your household chores?
- d. Medical readiness:** meeting standards of health required for deployment
 - Suggested measure: data from administrative records, readiness reports

¹¹¹ “PROMIS Scale v2.0 – Pain Intensity 3a,” Health Measures, https://www.healthmeasures.net/index.php?option=com_instruments&view=measure&id=3379&Itemid=992.

¹¹² “PROMIS Short Form v1.1 – Pain Interference 4a,” Health Measures, https://www.healthmeasures.net/index.php?option=com_instruments&view=measure&id=164&Itemid=992.

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Appendix B. Abbreviations

AHC HRSN	Accountable Health Communities Health-related Social Needs
AUDIT	Alcohol Use Disorders Identification Test
BAPS	Beliefs About Psychological Services
BECS	Behavior, Environment, and Changeability Survey
BH	Behavioral Health
BPAQ	Buss Perry Aggression Questionnaire
BRFSS	Behavioral Risk Factor Surveillance System
BSSI	Brief Inventory of Social Support and Integration
CD-RISC	Connor–Davidson Resilience Scale
CDC	Centers for Disease Control and Prevention
COSC	Combat and Operational Stress Control
COPE	Coping Orientation to Problems Experienced
DEOCS	Defense Organizational Climate Survey
DMDC	Defense Manpower Data Center
DoD	Department of Defense
DRRI	Deployment Risk and Resilience Inventory
DSM	<i>Diagnostic and Statistical Manual of Mental Disorders</i>
DUI	driving under the influence
GAD	Generalized Anxiety Disorder
GAT	Global Assessment Tool
GSS	General Social Survey
HABITS	Health and Addictive Behaviors: Investigating Transtheoretical Solutions
IPAQ-SF	International Physical Activity Questionnaire Short Form
MHAT	Mental Health Advisory Team
MSAQ	Military Suicide Attitudes Questionnaire
MSRC	Military Suicide Research Consortium
NG	National Guard
NHIS	National Health Interview Survey
NORC	National Opinion Research Center
OPA	Office of People Analytics
PC-PTSD-5	Primary Care <i>PTSD Screen for DSM-5</i>
PCL-M	PTSD Checklist – Military Version
PHA	Periodic Health Assessment
PHQ	Patient Health Questionnaire

PROMIS	Patient-Reported Outcomes Measurement Information System
PTSD	<i>post-traumatic stress</i> disorder
SARC	Sexual Assault Response Coordinator
SOF	Status of Forces
STTS-R	Satisfaction with Therapy and Therapist Scale--Revised
TFF	Total Force Fitness
UCMJ	Uniform Court of Military Justice
UMBC	University of Maryland Baltimore County
URI	Unit Risk Inventory
URICA	University of Rhode Island Change Assessment
USMC	United States Marine Corps
UVA	University of Virginia
VA	Veterans Administration
VCL	Veterans Crisis Line
WGR	Workplace and Gender Relations
WGRA	Workplace and Gender Relations Survey of Active Duty Members
WGRR	Workplace and Gender Relations Survey of Reserve Component Members
WHO	World Health Organization
WRF	Warrior Resilience and Fitness
WRFII	WRF Innovation Incubator

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14. ABSTRACT The Institute for Defense Analyses developed this document to provide a common set of metrics and associated survey measures, broadly ranging across the domains of the Total Force Fitness (TFF) model, to serve as a tool to guide and align program evaluation across the National Guard. If used broadly, this product will not only facilitate the program evaluation process by providing easy-access to a range of measures, but also provide a more consistent approach to evaluation by encouraging the use of common survey measures. As such, NG will be better equipped to compare outcomes across programs. Furthermore, as the Warrior Resilience and Fitness (WRF) program pursues a more holistic and integrative approach to the prevention of harmful behaviors, it will be important to evaluate program outcomes across multiple prevention domains (e.g., a program to prevent suicide may also prevent other forms of violence). By providing a broad range of outcomes across TFF domains, this document will improve WRF's ability to assess the broader impacts of prevention programs.					
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