ANNEX II

MENTAL HEALTH STRATEGY

Recommended Screening Tools

Contents

GLOSSARY

Sensitivity	Sensitivity measures the ability of a screening tool to correctly identify those with the condition (true positive rate).If a test has a sensitivity of 100%, it correctly identifies all people with the condition. *Formula: Sensitivity = True Positives / (True Positives + False Negatives). Represents the probability of the screening tool indicating positive when the situation is truly present.*
Specificity	Specificity measures the ability of a screening tool to correctly identify those without the condition (true negative rate). A test with high specificity will correctly classify individuals as disease-free. *Formula: Specificity = True Negatives / (True Negatives + False Positives). Represents the probability of the screening tool indicating negative when the condition is truly absent.*
Positive Predictive Value (PPV)	PPV is the proportion of positive results in a statistical screening test that are true positive results. *Formula: PPV = True Positives / (True Positives + False Positives). Represents the probability that a person has the condition when the screening tool indicates positive.*
Negative Predictive Value (NPV)	NPV is the proportion of negative results in a statistical screening test that are true negative results. *Formula: NPV = True Negatives / (True Negatives + False Negatives). Represents the probability that a person does not have the condition when the screening tool indicates negative.*

1 INTRODUCTION TO SCREENING

By systematically evaluating different aspects of mental health, screening tools may offer an enhanced understanding of United Nations Uniformed Personnel's psychological states. This annex explores the significance of utilizing screening tools with United Nations Uniformed Personnel, underscoring their role in promoting the mental health of those involved in the deployment cycle and possibly identifying those at risk.

There are disparate views on the use of screening tools stemming from their perceived effectiveness, reliability, and cost. However, many Member States conduct screening for their Uniformed Personnel pre-deployment. Since these are only recommended tools, Member States can choose whether or not to use them.

Screening offers several key advantages for the well-being of individuals, particularly within peacekeeping settings. Annexes I and III provide further details on these advantages, alongside comprehensive insight into how screening can enhance mental health support within peacekeeping environments.

Advantages of screening:

- Identification of pre-existing conditions: Screening facilitates the identification of pre-existing mental health symptoms among individuals. This early recognition enables tailored interventions and support.
- Ongoing monitoring and early intervention: Regular screening throughout the deployment cycle allows for continuous monitoring of mental health status. This proactive approach enables early intervention, minimizing the impact of potential challenges. Pre-deployment screening sets a baseline.
- Transition support and targeted assistance: Screening assists in providing targeted support during transitions, such as pre-deployment, returning from deployment and transitioning to civilian life.
- Training and resilience building: Screening outcomes inform the design of training programmes and resilience building initiatives. This customization may enhance the effectiveness of such initiatives.
- Learning and improvement: Member States can use data collected from screening for organizational learning and improvement. Insights gained could inform policy adjustments and may help enhance mental health programmes.
- Resource allocation for support services: Screening results guide resource allocation for mental health support services. Resources are directed where they are most needed, optimizing their impact.
- Integration with existing mental health resources: Screening complements existing mental health resources, enhancing their use and ensuring a holistic approach to mental well-being.
- Checking in with troops; normalizing and breaking stigma around screening; and introducing it as a part of general pre-deployment workup, where mental fitness is an element of a comprehensive fitness approach.

Disadvantages of screening:

- Doubts about mental health screening tools' accuracy and effectiveness: The literature contains reservations about the accuracy and effectiveness of mental health screening tools, raising questions about how well these tools can capture the complexity of mental health conditions and provide reliable results.
- Concerns about stigma in Uniformed Personnel: Some individuals worry that undergoing screening may lead to negative perceptions or consequences within their organization or among colleagues.
- Privacy and confidentiality worries: Uniformed Personnel can have concerns about privacy and confidentiality regarding mental health screenings. They may worry about the security of their personal information and fear that their results could be accessed by others, potentially impacting their careers or future assignments.
- The influence of cultural differences on perceptions: Cultural differences and varying experiences among Uniformed Personnel can also influence their perceptions of mental health screenings. Some may feel that existing screening tools do not adequately consider their cultural or occupational contexts, leading to scepticism or sometimes resistance.
- Implementation and support system concerns: Uniformed Personnel may express concerns about the implementation and support systems surrounding mental health screenings. There may be questions about the availability of adequate resources, follow-up procedures, or treatment options to support individuals who receive positive screening results.
- Fears about career advancement impacts: Uniformed Personnel may also have concerns about how mental health screenings could impact career advancement, promotion opportunities, or assignment preferences. Some may worry that disclosing mental health issues could hinder their career development or lead to negative consequences.
- Organizational culture challenges: There may be challenges embedding the implementation of screening into organizational culture.
- Timely interventions crucial: Screening only works well if timely access can be provided to interventions when indicated.

Balancing the advantages of identifying and addressing mental health needs through screening with the potential negative implications is essential. By addressing these concerns through thoughtful planning, clear communication, and effective support systems, each Member State can strive to create screening programmes that enhance the mental health of Uniformed Personnel while minimizing potential drawbacks. Inquiry into Uniformed Personnel's mental well-being by their medical and non-medical leadership can also often help identify their mental health needs.

2 SCREENING – CASE SCENARIOS

In complex missions within the United Nations, the importance of safeguarding mental well-being is becoming increasingly apparent. The three scenarios below give examples of the psychological challenges that can emerge within these contexts. They speak to the pivotal role of screening in identifying and addressing mental health concerns among United Nations Uniformed Personnel. The scenarios aim to offer an insight into the impact of trauma, stress, and emotional strains on individuals. They also demonstrate the resilience that can be developed through taking proactive measures to seek help and support on the basis of the results of self-assessments. These

narratives highlight the importance of early intervention, normalize help-seeking, and point to the instrumental role of screening and counselling in sustaining mental well-being.

Scenario 1: A United Nations Uniformed Personnel experienced a traumatic event when on patrol, during which he was kidnapped and held hostage for a short period. After his release, he returned to his unit, exhibiting signs of distress. He struggled with sleep disturbances, irritability, and restlessness, which indicated a potential psychological impact from the traumatic incident. Despite talking about his experience with his buddy, he was hesitant to share it with the psychologist. He believed he could manage on his own and that the incident had not significantly affected him. However, when he accessed and completed a screening form on the United Nations app, he learned that his responses placed him in the “orange” zone, signalling that he needed to seek help for his mental well-being. Recognizing the importance of seeking assistance, he reached out for support. Through his interactions with mental health experts in the unit, he engaged in exercises designed to address his distress. These exercises, tailored to his needs, proved beneficial in relieving his symptoms and providing him with tools to manage his psychological responses effectively.

This scenario illustrates the after-effects of a traumatic event on a UN Uniformed Personnel's mental health, and how this presents an ideal opportunity for a leader to recognize a high-risk event and consequent change in behaviour and support help-seeking amongst their subordinates. Despite initial reluctance, the individual's decision to undergo screening and seek help demonstrated the value of early intervention. The support received through exercises and interventions not only alleviated his distress but also highlighted the significance of recognizing and addressing mental health concerns to foster resilience and well-being within military contexts.

Scenario 2: A United Nations Uniformed Personnel received the distressing news when on the phone to his wife that his four-year-old daughter had broken her elbow riding her bicycle. The incident significantly impacted his emotional state and ability to concentrate. He felt bad because he was not there to help. Despite his worries, he chose not to share the news with anyone around him. He noticed that his inability to cope was affecting his focus at work, and he began to experience sleep disturbances. He turned to alcohol consumption, initially to help him sleep better. Over time, his alcohol consumption escalated, driven by his emotional distress and frustration over his daughter's treatment. Fuelled by a sense of isolation, this behaviour contributed to strained relations with his wife. After two weeks of self-medicating with alcohol, he recognized that his drinking had become problematic and that he was using alcohol as a coping mechanism. Taking a proactive step he had learned during a mental health literacy class, he completed a screening tool on alcohol abuse. The results indicated a need for intervention. He consulted his trusted buddy. Making his buddy aware of his condition enabled him to access mental healthcare through the unit authorities. This led him to begin counselling to address his emotional struggles and alcohol use. Engaging in counselling sessions helped him decompress, allowing him to confront his emotions, seek healthier coping strategies, and ultimately reduce his reliance on alcohol.

This scenario underscores the impact of external stressors on mental health and the potential consequences of unhealthy coping mechanisms. It also illustrates that not all stressors are trauma related. The individual's decision to confront his alcohol abuse through screening and counselling showcases the importance of recognizing the need for support and actively seeking assistance. This proactive approach to addressing mental health challenges within United Nations Uniformed Personnel demonstrates the significance of early intervention and its positive effects on well-being and resilience.

Scenario 3: A United Nations Uniformed Personnel encountered a distressing situation while on patrol outside the base, during which he was a witness to atrocities and had to intervene at personal risk. The incident occurred shortly after the unit was attacked by mobs, compounding its emotional toll. While the individual benefited from the Critical Incident Stress Debriefing session organized for the unit, this new traumatic event continued to overwhelm him. Despite his pride in his successful mission and service, he noticed a decline in his spirits. This was marked by reduced motivation, neglecting tasks, and struggling to maintain his usual level of care.

Knowing he was due to return home eight weeks later, he consoled himself with the thought of the upcoming farewell ceremony. Even so, his emotional well-being continued to decline. A call with his mother prompted him to acknowledge that he needed help, and he consulted his contingent Religious Teacher. After talking to the Uniformed Personnel, the Religious Teacher helped him reach out to a doctor. A screening process revealed that he was experiencing subtle signs of depression. Acting on the doctor's advice, he began to take proactive steps toward well-being. He started talking about his experiences and prioritized sport and physical activity. Despite initially avoiding it, he found enjoyment and relief in participating in sports. He also channelled his energy into preparing for the farewell ceremony, finding a sense of purpose and satisfaction in the process.

This scenario highlights the cumulative impact of traumatic experiences on mental health, even in the face of positive achievements and pride in service. The individual's decision to seek help and engage in active strategies to address his emotional well-being demonstrates the value of early intervention. By acknowledging his struggles, seeking support, and finding outlets for expression, he took significant strides toward recovery and resilience within the context of United Nations Uniformed Personnel.

3 SCREENING AND THE MENTAL HEALTH CONTINUUM

Screening tools are important in aligning mental health support with the Mental Health Continuum model. By identifying individuals at different points on the continuum – from healthy functioning to potential distress or illness – screeners enable timely interventions that match individuals' evolving needs. If United Nations Uniformed Personnel progress along this continuum, screening assists in recognizing early signs of distress, preventing escalation, and facilitating well-being. This alignment enhances the appropriateness of any support provided, ensuring a targeted approach to interventions.

The Mental Health Continuum model uses a colour-coded system to represent different stages of mental well-being:

Green: represents individuals who are functioning well mentally. They experience minimal stress, have good coping strategies, and are emotionally balanced. *Example: A United Nations Uniformed Personnel who maintains a positive outlook, effectively manages stressors, and engages in healthy coping mechanisms.*

Yellow: signifies mild distress. Individuals in the yellow zone may experience some stressors, but their overall functioning remains relatively stable. They may benefit from stress-reduction strategies and support. *Example: A United Nations Uniformed Personnel who feels slightly overwhelmed by their workload but can still perform tasks effectively.*

Orange: indicates moderate distress. People in the orange zone are facing more significant challenges and may exhibit symptoms of mental health difficulties. Interventions, such as counselling or support groups, are recommended. *Example: A United Nations Uniformed Personnel who recently experienced a traumatic incident and is showing signs of sleep disturbances and increased irritability.*

Red: represents severe distress or mental illness. Individuals in the red zone are struggling significantly and may require urgent intervention. Their ability to function is greatly compromised. *Example: A United Nations Uniformed Personnel exposed to multiple traumatic events and displaying clear signs of anxiety, depression, and impaired daily functioning. This individual needs care.*

The colour coding provides a visual way to understand where a United Nations Uniformed Personnel falls on the Mental Health Continuum and guides appropriate interventions based on their current state. It's important to note that this colour coding is a simplified representation, and mental health is complex, with many factors contributing to an individual's well-being.

The Mental Health Continuum model promotes a more inclusive and fluid understanding of mental health. It is not just about identifying whether someone has a disorder or not, but about capturing the range and depth of experiences:

- **Holistic view:** Instead of a binary approach, where an individual is either classified as mentally healthy or mentally ill, the continuum offers a gradient. This includes optimal mental well-being, mild mental health challenges, more severe challenges, and clinical disorders.
- **Dynamic understanding:** The continuum recognizes the ever-changing nature of mental health. An individual may move along the spectrum due to various life events, stressors, or protective factors. This dynamic perspective can guide assessments to consider the current state, potential risks, and protective factors.
- **Incorporation of resilience and coping:** The continuum model also incorporates positive mental health factors like resilience and coping mechanisms, allowing for a richer assessment that considers strengths and resources, not just deficits or challenges.

Screening tools often provide standardized and empirical measures that can give a snapshot of an individual's mental state. These tools can identify symptoms, severity, and specific areas of concern, making them essential for accurately placing an individual on the Mental Health Continuum.

- **Early detection:** Screening tools are designed to catch early signs or risk factors for mental health challenges. When someone's position on the continuum is identified early, it paves the way for timely interventions, potentially preventing further decline or complications.
- **Tailored interventions:** With the data from screenings, mental health professionals can recommend interventions tailored to an individual's specific needs, ensuring more effective treatment outcomes.
- **Feedback over time:** Regular screenings can track changes in an individual's mental health status, providing feedback about treatment effectiveness and any shifts along the continuum.

When integrating the Mental Health Continuum and screening processes in assessment, mental health experts gain a thorough understanding of an individual's mental well-being. The continuum

provides the framework and conceptual understanding, while screening tools offer empirical data and specifics. Together, they guide professionals in making informed decisions about interventions, and support strategies, ensuring that interventions are both effective and personalized.

4 SCREENING TOOLS SCHEDULE

The following list highlights self-report tools that can be utilized periodically through the deployment cycle to assess general mental well-being among Uniformed Personnel. They can also be used in response to specific events. These tools do not require specialized expertise or training and are designed to screen for the psychological status of individuals.

Table 1
Overview of widely used screening tools and suggested times for use

Screening instrument	*Pre-deployment*	*Deployment–towards the end of:*				*Post-deployment–towards the end of:*					
		Month 1	*Quarter*			*Month 1*	*Year*				
			2	*3*	*4*		*1*	*2*	*3*	*4*	*5*
A. Patient Health Questionnaire (PHQ-9)	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
B. Alcohol Use Disorders Identification Test-Concise (AUDIT-C)	N	WHERE INDICATED					Y	Y	Y	Y	Y
C. WHO 5 Well-Being Index (WHO 5)	Y	Y	N	N	Y	Y	Y	N	N	N	N
D. Post-Traumatic Stress Disorder (PTSD) Checklist for DSM-5 (PCL-5)	N	N	N	N	Y	N	Y	Y	Y	Y	Y
E. General Anxiety Disorder (GAD-7)	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y
F. Depression and Anxiety Stress Scale (DASS-21)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G. Athens Insomnia Scale (AIS)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H. Brief Resilience Scale (BRS)	Y	N	N	N	Y	Y	N				

Y = Yes, N = No

Recommendations:

1. The screening tools listed above are self-administered and can be completed independently by the Uniformed Personnel. Nonetheless, conducting them under the supervision of the contingent Senior Medical Officer or paramedical personnel is recommended.

2. These tools can be administered in a setting where the privacy of the Uniformed Personnel is ensured. They are recommended for regularly evaluating Uniformed Personnel or for when they report psychological difficulties.
3. These screening tools are free to use.
4. Regular utilization of screening tools can encourage Uniformed Personnel to openly discuss their psychological well-being, thereby reducing barriers to seeking timely psychological support. The objective is to identify mental health issues and provide appropriate assistance promptly.
5. **None of these screening tools determine an individual's fitness for deployment or repatriation.**
6. **The use of these screening tools is NOT mandatory from a United Nations perspective.**
7. **Screening tools do NOT provide a formal diagnosis. Instead, they identify signs and symptoms, signalling the need for further assessment by a qualified health professional when a high score is obtained.**

5 SCREENING TOOLS AVAILABILITY

The following list highlights the self-reporting tools that maybe utilized by Uniformed Personnel periodically through the deployment cycle. Each tool has been listed below along with information on the time it takes to complete, languages in which it is available and the link where the tool can be found. These tools do not require specialized expertise or training and are designed to screen for the mental health status of individuals in a variety of roles.

These are just a few examples of the many screening tools available for assessing mental health. The choice of screening instrument depends on the specific aims, intended users, and context of the screening programme. When selecting a tool, it is essential to select validated and culturally appropriate tools to ensure accurate and meaningful results.

Table 2
Overview of free and widely available screening tools

Tools	*Time to administer*	*Languages*
A. PHQ 9 Patient Health Questionnaire	10 min	Afrikaans, Arabic, Bengali, Chinese, English, French, German, Hindi, Indonesian, Korean, Malayalam, Malay, Marathi, Portuguese, Punjabi, Russian, Serbian, Spanish, Swahili, Tamil, Thai, Ukrainian,
B. AUDIT-C Alcohol Use Disorders Identification Test-Concise	3 min	Arabic, Bengali, Chinese, English, French, German, Hindi, Indonesian, Korean, Malayalam, Malay, Marathi, Mongolian, Nepali, Persian, Portuguese, Punjabi, Russian, Serbian, Sinhala, Somali, Spanish, Tamil, Thai, Turkish, Ukrainian, Urdu, Vietnamese
C. WHO 5 Well-Being Index	5 min	Arabic, Chinese, English, Filipino, French, Portuguese, Russian, Spanish, Thai, Urdu
D. PCL-5 PTSD Checklist for DSM-5 (Diagnostic and Statistical Manual	10 min	Arabic, English, Cambodian, Chinese, French, Spanish, Hindi, Korean, Vietnamese

of Mental Disorders, Fifth Edition)		
E. GAD-7 General Anxiety Disorder	5 min	Afrikaans, Arabic, Bengali, Cebuano, Chinese, English, Filipino, French, Hindi, Indonesian, Korean, Malayalam, Malay, Marathi, Portuguese, Punjabi, Spanish, Tamil, Thai, Turkish, Ukrainian, Urdu
F. DASS 21 Depression and Anxiety Stress Scale	10 min	Arabic, Bahasa, Bengali, Chinese, English, Filipino, French, German, Hindi, Indonesian, Korean, Malayalam, Mongolian, Marathi, Nepali, Serbian, Sinhala, Portuguese, Punjabi, Spanish, Tamil, Thai, Vietnamese
G. AIS Athens Insomnia Scale	5 min	English, Arabic, Bengali, Cantonese, French, Mandarin, Spanish, Xhosa, Yoruba, Zulu
H. BRS Brief Resilience Scale	5 min	English, Arabic, Chinese, Portuguese, Urdu, French, German, Spanish, Serbian

A PATIENT HEALTH QUESTIONNAIRE (PHQ - 9)

A1. OVERVIEW

The PHQ-9 is a multipurpose instrument for screening, diagnosing, monitoring, and measuring the severity of depression:

- The PHQ-9 combines Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) depression diagnostic criteria with other leading depressive symptoms into a brief self-report tool.
- The tool rates the frequency of the symptoms, which contributes to the severity index score.
- Question 9 on the PHQ-9 screens for the presence and duration of suicide ideation.
- A follow-up question on the PHQ-9 which is not scored on a scale assigns a weight to the degree to which depressive problems have affected the patient's level of function.

a) Clinical utility

The PHQ-9 is brief and helpful in clinical practice. The PHQ-9 is completed by the patient in minutes and is rapidly scored by the clinician. The PHQ-9 can also be administered repeatedly, to measure improvement or worsening of depression in response to treatment.

b) Psychometric properties

- The diagnostic validity of the PHQ-9 was established in studies involving eight primary care and seven obstetrical clinics.
- PHQ scores $\geq$ 10 had a sensitivity of 88% and a specificity of 88% for major depression. The Positive Predictive Value (PPV) of a PHQ-9 score $\geqslant$10 is 50%, and its Negative Predictive Value (NPV) of 89%.
- PHQ-9 scores of 5, 10, 15, and 20 represent mild, moderate, moderately severe and severe depression respectively.

A2. INTERPRETATION

a) Use of the PHQ-9 to make a tentative depression diagnosis

The clinician should rule out physical causes of depression, normal bereavement, and a history of a manic/hypomanic episode.

Step 1: Questions 1 and 2
One or both first two questions must be given a score of “2” or “3”
(2 = “more than half the days” or 3 = “nearly every day”)
Step 2: Questions 1 through 9
Five or more boxes must be endorsed within the shaded area of the form to arrive at the total symptom count. (Questions 1–8 must be scored “2” or “3”; question 9 must be scored “1” ,“2” or “3”)
Step 3: Question 10
This question must be scored as “somewhat difficult,” “very difficult” or “extremely difficult.”

b) Use of the PHQ-9 for treatment selection and monitoring

Step 1
A depression diagnosis that warrants treatment or a treatment change needs at least one endorsement of one of the first two questions (“more than half the days” or “nearly every day”) in the previous two weeks. In addition, the tenth question regarding difficulty at work or home or getting along with others, should receive a response of “somewhat difficult” or greater.

Step 2
Add the total points for each of the columns 2–4 separately (column 1 = several days; column 2 = more than half the days; column 3 = nearly every day). Add the totals for each of the three columns together to arrive at the total score. The total score is the Severity Score.

Step 3
Review the Severity Score using table 3.

Table 3
PHQ-9 scores and proposed treatment actions

PHQ-9 Score	*Depression Severity*	*Proposed treatment actions*
0 – 4	None-minimal	None
5 – 9	Mild	Watchful waiting; repeat PHQ-9 at follow-up
10 – 14	Moderate	Treatment plan, considering counselling, follow-up and/or pharmacotherapy
15 – 19	Moderately severe	Active treatment with pharmacotherapy and/or psychotherapy
20 – 27	Severe	Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management

A3. PATIENT HEALTH QUESTIONNAIRE - 9 (PHQ-9)

Over the last two weeks, how often have you been bothered by any of the following problems?
(Use "✓" to indicate your answer)

		Not at all	Several days	More than half the days	Nearly every day
1	Little interest or pleasure in doing things	0	1	2	3
2	Feeling down, depressed, or hopeless	0	1	2	3
3	Trouble falling or staying asleep or sleeping too much	0	1	2	3
4	Feeling tired or having little energy	0	1	2	3
5	Poor appetite or overeating	0	1	2	3
6	Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8	Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9	Thoughts that you would be better off dead or hurting yourself in some way	0	1	2	3

FOR OFFICE CODING *0* + _____ + _____ + _____
=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your
work, take care of things at home, or get along with other people?

	Not difficult at all	Somewhat difficult	Very difficult	Extremely Difficult

A4. REFERENCES

i. Kroenke, Kurt, Robert L. Spitzer, and Janet B.W. Williams (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, vol. 16, No. 9, pp. 606–616.

B ALCOHOL USE DISORDERS IDENTIFICATION TEST – CONCISE (AUDIT - C)

B1. OVERVIEW

The Alcohol Use Disorders Identification Test-Concise (AUDIT-C) is a brief alcohol screening instrument that reliably identifies individuals who are hazardous drinkers or have active alcohol use disorders (including alcohol abuse or dependence). The AUDIT-C is a modified version of the 10-question AUDIT instrument.

The AUDIT-C has three questions and is scored on a scale of 0-12. Each AUDIT-C question has five answer choices from 0 points to 4 points. In men, a score of 4 or more is considered positive, optimal for identifying hazardous drinking or active alcohol use disorders. In women, a score of 3 or more is considered positive. Generally, the higher the score, the more likely a person's drinking affects his or her safety. The AUDIT-C is available for use in the public domain.

B2. INTERPRETATION

The AUDIT-C is a 3-item alcohol screen that reliably identifies individuals who are hazardous drinkers or have active alcohol use disorders (including alcohol abuse or dependence). The AUDIT-C is a modified version of the 10-question AUDIT instrument.

a) Clinical utility

The AUDIT-C is a brief alcohol screen that reliably identifies individuals who are hazardous drinkers or have active alcohol use disorders.

b) Scoring

The AUDIT-C is scored on a scale of 0–12.
Each AUDIT-C question has five answer choices. Points allotted to each answer are as follows:
a = 0 points; b = 1 point; c = 2 points; d = 3 points; e = 4 points.

- **In men**, a score of 4 or more is considered positive, optimal for identifying hazardous drinking or active alcohol use disorders.
- **In women**, a score of 3 or more is considered positive (same as above).
- However, when the points are all from question 1 and questions 2 and 3 are zero, it can be assumed that the patient is drinking below recommended limits (for healthy adults this generally means up to one drink a day for women and up to two drinks a day for men. Examples of one drink include: beer: 12 fluid ounces or 355 millilitres; wine: 5 fluid ounces or 148 millilitres.). In that case, it is suggested that the Medical Officer review the individual's alcohol intake over the past few months to confirm accuracy.
- Generally, the higher the score, the more likely it is that the individual's drinking is affecting his or her safety.

c) Psychometric properties

The table below demonstrates the reliability of AUDIT-C in identifying individuals with heavy/hazardous drinking–DSM-5 alcohol abuse or dependence and with active alcohol abuse or dependence.

Table 4
Psychometric properties of AUDIT-C

Score	*Men*	*Women*
For identifying individuals with heavy/hazardous drinking–DSM alcohol abuse or dependence		
>3	Sens:0.95 / Spec. 0.60	Sens: 0.66 / Spec. 0.94
>4	Sens:0.86 / Spec. 0.72	Sens:0.48 / Spec. 0.99
	PPV 71% NPV 80%	
For identifying individuals with active alcohol abuse or dependence		
>3	Sens:0.95 / Spec. 0.45	Sens:0.95 / Spec. 0.87
>4	Sens:0.95 / Spec. 0.56	Sens:0.95 / Spec. 0.94
	PPV 78% NPV 80%	

B3. ALCOHOL USE DISORDERS IDENTIFICATION TEST-CONCISE (AUDIT-C)

General Instructions
The Alcohol Use Disorders Identification Test-Concise (AUDIT-C) is a brief alcohol screening instrument. Please give a response for each question.

1. How often do you have a drink containing alcohol?
☐ a. Never
☐ b. Monthly or less
☐ c. 2-4 times a month
☐ d. 2-3 times a week
☐ e. four or more times a week
2. How many standard drinks containing alcohol do you have on a typical day?
☐ a. 1 or 2
☐ b. 3 or 4
☐ c. 5 or 6
☐ d. 7 to 9
☐ e. ten or more
3. How often do you have six or more drinks on one occasion?
☐ a. Never
☐ b. Less than monthly
☐ c. Monthly
☐ d. Weekly
☐ e. Daily or almost daily

B4. REFERENCES

i. Bradley, Katherine, and others (2003). Two brief alcohol-screening tests From the Alcohol Use Disorders Identification Test (AUDIT): Validation in a female Veterans Affairs patient population. *Archives of Internal Medicine*, vol. 163, No. 7, pp. 821–9.

ii. Bush, Kristen, and others (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). *Archives of Internal Medicine,* vol. 158, No. 16, pp.1789–95.

C WORLD HEALTH ORGANIZATION 5 WELL-BEING INDEX

C1. OVERVIEW

The World Health Organization's (WHO) 5 Well-being Index is a self-report questionnaire developed to assess the level of emotional well-being of individuals. It consists of five simple questions, each focusing on a different aspect of mental well-being. These questions address subjects like mood, relaxation, and daily life activities.

C2. INTERPRETATION

The WHO-5 Well-Being Index should be self-administered if respondents have sufficient reading ability. Otherwise, interviewer-assisted or interview-administered forms should be used.

a) Frame of reference and timeframe

The WHO-5 Well-Being Index operates within a specific frame of reference and timeframe, which are crucial for its correct application and interpretation:

Frame of reference: The WHO-5 focuses on positive psychological well-being. It assesses aspects such as good spirits, relaxation, and being active and awake. This perspective is somewhat different from other mental health scales that often focus on symptoms of illness or distress. The WHO-5's positive orientation makes it a valuable tool for assessing aspects of mental health that go beyond the mere absence of illness.

Timeframe: The WHO-5 asks respondents to reflect on their experiences over the last two weeks. This period is chosen to provide a balance between capturing recent states of well-being (which can be influenced by temporary factors) and ensuring that the responses are relevant to the individual's current mental state. The two-week timeframe is standard in many mental health assessments as it is considered long enough to account for day-to-day fluctuations in mood and short enough to avoid recall bias.

Understanding this frame of reference and timeframe is important for both administering the scale and interpreting its results. It helps to place the responses in the appropriate context and ensures that the scale is used as intended by its developers.

b) Calculation of domain scores

The calculation of domain scores in the WHO-5 Well-Being Index involves the following simple steps.

Individual responses: The WHO-5 consists of five questions, each scored on a scale from 0 (at no time) to 5 (all the time). Respondents indicate how often they have experienced the feelings described in each question over the last two weeks.

Summation: The total score is obtained by adding the scores of all five questions together. This total can range from 0 (worst possible well-being) to 25 (best possible well-being).

Normalization (Optional): In some cases, for easier interpretation or comparison, this score may be normalized to a 0–100 scale. To do this, the total score is multiplied by four. On this scale, 0 still represents the worst possible well-being, and 100 represents the best possible well-being.

Scores are broken down into the following ranges:
0–5 on the 0–25 scale (0–20 on the 0–100 scale): This range suggests very low well-being and might indicate severe depression or other mental health concerns.
6–10 on the 0–25 scale (21–40 on the 0–100 scale): This range indicates low well-being and may suggest mild to moderate mental health issues.
11–15 on the 0–25 scale (41–60 on the 0–100 scale): This range represents moderate well-being.
16–20 on the 0–25 scale (61–80 on the 0–100 scale): This indicates high well-being, though there may still be some room for improvement.
21–25 on the 0–25 scale (81–100 on the 0–100 scale): This range indicates very high well-being, suggesting that the individual is flourishing.

It is important to note that the WHO-5 is a screening tool and not a diagnostic instrument. A low score suggests that further evaluation for depression might be warranted, but it does not diagnose depression by itself. The WHO-5 is valued for its simplicity and has been validated in numerous studies across different populations and settings.

C3. WHO 5 WELL-BEING INDEX

WHO (Five) Well-Being Index (1998 version)

Question: For each of the five statements, please indicate which is closest to how you have been feeling over the last two weeks. Note that higher numbers mean better well-being. *Example:* If you have felt cheerful and in good spirits more than half of the time during the last two weeks, put a tick in the box with the number 3 in the upper right corner.

Over the last two weeks:	All the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1. I have felt cheerful and in good spirits	5	4	3	2	1	0
2. I have felt calm and relaxed	5	4	3	2	1	0
3. I have felt active and vigorous	5	4	3	2	1	0
4. I woke up feeling fresh and rested	5	4	3	2	1	0

5. My daily life has been filled with things that interest me	5	4	3	2	1	0

C4. REFERENCE

Winther Topp, Christian, and others (2015). The WHO-5 Well-Being Index: A systematic review of the literature subject area. *Psychotherapy and Psychosomatics*, vol. 84, No. 2, pp. 167–176.

D PTSD CHECKLIST (PCL-5)

D1. OVERVIEW

The Post-Traumatic Stress Disorder (PTSD) Checklist for Diagnostic Statistical Manual fifth edition (DSM-5) (PCL-5) is a 20-item self-report measure that assesses the presence and severity of PTSD symptoms. Items on the PCL-5 correspond with DSM-5 criteria for PTSD. The PCL-5 has a variety of purposes, including:

- quantifying and monitoring symptoms over time
- screening individuals for PTSD
- assisting in making a provisional diagnosis of PTSD

The PCL-5 is a self-report measure that can be read by respondents or read to them in person or over the telephone. It can be completed in approximately 5–10 minutes. The preferred administration is for an individual to self-administer the PCL-5.

The PCL-5 is intended to assess symptoms experienced by an individual **in the past month.** It is a psychometrically sound measure of DSM-5 PTSD. It is valid and reliable, helpful in quantifying PTSD symptom severity, and sensitive to change over time.

D2. INTERPRETATION

Respondents are asked to rate how bothered they have been by each of 20 items in the past month on a 5-point Likert scale ranging from 0–4. Items are summed to provide a **total severity score** (range = 0–80). The numbers on the scale correspond to the following:
0 = Not at all; 1 = A little bit; 2 = Moderately; 3 = Quite a bit; 4 = Extremely.

a) PCL-5 administration

The PCL-5 is a self-report measure that can be completed by individuals in approximately 5–10 minutes. The PCL-5 can be administered in one of three formats:

- Without Criterion A (brief instructions and items only), which is appropriate when trauma exposure is measured by some other method
- With a brief Criterion A assessment

- With the revised Life Events Checklist for DSM-5 (LEC-5) and extended Criterion A assessment

b) Scoring

The PCL-5 can be scored in different ways:

- Using the total score: A total symptom severity score (range = 0–80) can be obtained by summing the scores for each of the 20 items. A total score of 44 is considered PTSD-positive for the general population, while a total score of 50 is considered PTSD-positive in military populations.
- Using the DSM scoring rules:
    - DSM-5 symptom cluster severity scores can be obtained by summing the scores for the items within a given cluster, that is, cluster B (items 1–5), cluster C (items 6–7), cluster D (items 8–14), and cluster E (items 15–20).
    - A provisional PTSD diagnosis can be made by treating each item rated as 2 (moderately) or higher as a symptom endorsed, then following the DSM-5 diagnostic rule, which requires the endorsement of at least one B item, one C item, two D items and two E items.
    - However, it is possible to get a PTSD diagnosis with a total score of 29 using this approach, which is very low. As such, it is best to use a combination of the two approaches: a score of 2 or above for the requisite number of items within each cluster AND a total score above the specified cut-off value.
    - Initial research suggests that a PCL-5 cut-off score between 31–33 indicates probable PTSD across samples.

c) Psychometric properties

Psychometric properties for PCL-5 scores are provided in the table below.

Table 5

True and false positive and negative rates (%) for PCL-5, by total score

PCL-5 score category	*True positive*	*True negative*	*False positive*	*False negative*
≥ 33	93.8	49.2	50.8	6.2
PCL DSM-5 criteria met	90.7	49.8	50.2	9.3
≥ 40	88.6	61.0	39.0	11.4
≥ 45	81.9	69.2	30.8	18.1
≥50	72.5	76.9	23.1	27.5

Note: At each cut-off value, the true positive rate can also be interpreted as sensitivity, whereas the true negative rate can be interpreted as the specificity of the scale.

D3. PCL-5

PCL-5

Instructions: This questionnaire asks about problems you may have had after a very stressful experience involving actual or threatened death, serious injury, or sexual violence. It could be something that happened to you directly, something you witnessed, or something you learned

happened to a close family member or close friend. Some examples are a serious accident; fire; disaster such as a hurricane, tornado, or earthquake; physical or sexual attack or abuse; war; homicide; or suicide.

First, please answer a few questions about your worst event, which for this questionnaire means the event that currently bothers you the most. This could be one of the examples above or some other very stressful experience. Also, it could be a single event (for example, a car crash) or multiple similar events (for example, multiple stressful events in a warzone or repeated sexual abuse).

Briefly identify the worst event (if you feel comfortable doing so):

_____

_____

How long ago did it happen? _____ (please estimate if you are not sure)

Did it involve actual or threatened death, serious injury, or sexual violence?
____Yes
____No

How did you experience it?

____It happened to me directly
____I witnessed it
____I learned about it happening to a close family member or close friend
____I was repeatedly exposed to details about it as part of my job (for example, paramedic, police, military, or other first responder)
____Other, please describe
_____

If the event involved the death of a close family member or close friend, was it due to some kind of accident or violence, or was it due to natural causes?
____ Accident or violence
____Natural causes
____Not applicable (the event did not involve the death of a close family member or close friend)

Second, below is a list of problems that people sometimes have in response to a very stressful experience. Keeping your worst event in mind, please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month. The options include not at all, a little bit, moderately, quite a bit, and extremely.

	In the past week, how much were you bothered by:	Not at all	A little Bit	Mode rately	Quite a bit	Extremely
1	Repeated, disturbing and unwanted memories of the stressful experienced?					
2	Repeated, disturbing dreams of the stressful experience?					

3	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?					
4	Feeling very upset when something reminded you of the stressful experience?					
5	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?					
6	Avoiding memories, thoughts, or feelings related to the stressful experience?					
7	Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?					
8	Trouble remembering important parts of the stressful experience?					
9	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?					
10	Blaming yourself or someone else for the stressful experience or what happened after it?					
11	Having strong negative feelings such as fear, horror, anger, guilt or shame?					
12	Loss of interest in activities that you used to enjoy?					
13	Feeling distant or cut off from other people?					
14	Trouble experiencing positive feelings (for people close to you)?					
15	Irritable behaviour, angry outbursts, or acting aggressively?					
16	Taking too many risks or during things that could cause you harm?					
17	Being “super alert” or watchful or on guard?					
18	Feeling jumpy or easily startled?					
19	Having difficulty concentrating?					
20	Trouble falling or staying asleep?					

D4. REFERENCES

i. Weathers, F. W., and others (2013). *The PTSD Checklist for DSM-5 (PCL-5) – Standard [Measurement instrument]*. Available from https://www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.pdf

ii. Weathers, F. W., and others (2013). *The PTSD Checklist for DSM-5 (PCL-5) – Extended Criterion A [Measurement instrument].* Available from https://www.ptsd.va.gov/professional/assessment/documents/PCL5_criterionA_form.PDF

iii. Boyd, Jenna, and others (2021). Sensitivity and specificity of the Posttraumatic Stress Disorder Checklist for DSM-5 in a Canadian psychiatric outpatient sample. *Journal of Traumatic Stress*, vol. 35, No. 6, pp. 1–10.

E GENERAL ANXIETY DISORDERS-7 (GAD-7)

E1. OVERVIEW

The GAD-7 was originally developed to diagnose generalized anxiety disorder (or GAD) and validated in 2,740 primary care patients. The GAD-7 then proved to have good sensitivity and specificity as a screener for panic, social anxiety, and post-traumatic stress disorder. It developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues and is in the public domain. No permission is required to reproduce, translate, display, or distribute the tool. Copies of the PHQ family of measures, including the GAD-7, are available from the website: www.phqscreeners.com. Translations, a bibliography, an instruction manual, and other information is also provided on this website.

E2. INTERPRETATION

a) GAD-7 anxiety severity

This is calculated by assigning scores to response categories as shown below.

Response category	not at all	several days	more than half the days	nearly every day
Score	0	1	2	3

The severity of anxiety can be calculated by totalling the scores of responses to all seven questions in the tool. The total GAD-7 score ranges from 0 to 21.

Table 6
Psychometric properties for GAD-7 cut-off scores

Level of anxiety	Mild	Moderate	Severe
Score	5	10	15
Sensitivity %	97.5	79.5	49.0
Specificity %	17.4	44.7	74.8
PPV%	42.3	47.2	54.7
NPV%	91.8	77.8	70.3

Though designed primarily as a screening and severity measure for generalized anxiety disorder, the GAD-7 also has moderately good operating characteristics for three other common anxiety disorders: panic disorder, social anxiety disorder, and PTSD. When screening for anxiety disorders, a score of 10 or greater is recommended for further evaluation.

E3. GAD-7 SCALE

1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Add the score for each column	+	+	+	
Total Score *(add your column scores)* =				

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____
Somewhat difficult _____
Very difficult _____
Extremely difficult _____

E4. REFERENCES

i. Spitzer, Robert L., and others (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, vol. 166, No. 10, pp. 1092–97.

ii. Kroenke, Kurt, and others (2007). Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, vol. 146, No. 5. Includes validation data on GAD-7 and GAD-2 in detecting four common anxiety disorders.

iii. Rutter, Lauren A., and Timothy A. Brown (2017). Psychometric properties of the Generalized Anxiety Disorder Scale-7 (GAD-7) in outpatients with anxiety and mood disorders. *Journal of Psychopathology and Behavioral Assessment*, vol. 39, No. 1, pp. 140–146.

F DEPRESSION, ANXIETY AND STRESS SCALE (DASS-21)

F1. OVERVIEW

Depression, Anxiety and Stress Scale–21 Items (DASS-21)

The Depression, Anxiety and Stress Scale–21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety, and stress.

The three DASS-21 scales each contain seven items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, easily upset/agitated, irritable/over-reactive, and impatient. Scores for depression, anxiety, and stress are calculated by summing the scores for the relevant items.

The DASS-21 is based on a dimensional rather than a categorical conception of psychological disorder. The assumption on which the DASS-21 development was based (and which was confirmed by the research data) is that the differences between the depression, anxiety, and stress experienced by general and clinical populations are essentially differences of degree. The DASS-21, therefore, has no direct implications for the allocation of patients to discrete diagnostic categories postulated in classificatory systems such as the DSM and the International Classification of Diseases (ICD).

F2. INTERPRETATION

a) DASS-21 scoring instructions

The DASS-21 should not be used to replace a face-to-face clinical interview. If you are experiencing significant emotional difficulties, you should contact your Medical Officer for a referral to a qualified professional.

DASS scoring

	Questions	Score
S (Stress)	Q1, 6, 8, 11, 12, 14, 18	S score x 2 = Stress
A (Anxiety)	Q2, 4, 7, 9, 15, 19, 20	A score x 2 = Anxiety
D (Depression)	Q3, 5, 10, 13, 16, 17, 21	D score x 2 = Depression

1.Record the circled number on the line provided in the Office Use Only columns next to the responses.
2.Add up the number in the first column of the Office Use Only. Record this number on the line next to A at the bottom of the form.
3.Add up the number in the second column of the Office Use Only. Record this number on the line next to D at the bottom of the form.
4.Add up the number in the third column of the Office Use Only. Record this number on the line next to S at the bottom of the form.
5.Range:

	Questions	Normal	Mild	Moderate	Severe	Extremely Severe
Stress	Q1, 6, 8, 11, 12, 14, 18	0–10	11–18	19–26	27–34	35–42
Anxiety	Q2, 4, 7, 9, 15, 19, 20	0–6	7–9	10–14	15–19	20–42
Depression	Q3, 5, 10, 13, 16, 17, 21	0–9	10–12	13–20	21–27	28–42

DASS-21 Scoring Instructions

The DASS-21 should not be used to replace a face-to-face clinical interview. If you are experiencing significant emotional difficulties, you should contact your GP for a referral to a qualified professional.

DASS (Depression and Anxiety Stress Scale) Scoring

	Questions	Score
S (Stress)	Q1, 6, 8, 11, 12, 14, 18	. S score x 2 = Stress
A (Anxiety)	Q2, 4, 7, 9, 15, 19, 20	A score x 2 = Anxiety
D (Depression)	Q3, 5, 10, 13, 16, 17, 21	D score x 2 = Dépression

1. Record the circled number on the line provided in the Office Use Only columns next to the responses.
2. Add up the number in the first column of the Office Use Only. Record this number on the line next to A at the bottom of the form.
3. Add up the number in the second column of the Office Use Only. Record this number on the line next to D at the bottom of the form.
4. Add up the number in the third column of the Office Use Only. Record this number on the line next to S at the bottom of the form.
5. Range :

	Questions	Normal	Mild	Moderate	Severe	Extremely Severe
Stress	Q1, 6, 8, 11, 12, 14, 18	0-10	11-18	19-26	27-34	35-42
Anxiety	Q2, 4, 7, 9, 15, 19, 20	0-6	7-9	10-14	15-19	20-42
Depression	Q3, 5, 10, 13, 16, 17, 21	0-9	10-12	13-20	21-27	28-42

(DASS-21) Cut-off score	Sensitivity	Specificity	PPV	NPV
2.5	**.79**	**.75**	**.19**	**.98**
7.5	.32	.95	.32	.95
10.5	.11	.97	.23	.94

F3. DASS-21 SCALE

Please read each statement and circle a number 0, 1, 2 or 3, which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all

1 Applied to me to some degree or some of the time
2 Applied to me to a considerable degree or a good part of the time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of the dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feelings at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g., in my hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt downhearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy,	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

F4. REFERENCES

i. Lovibond, S.H., and P.F. Lovibond (1995). *Manual for the Depression Anxiety & Stress Scales (2nd Ed.).* Sydney: Psychology Foundation of Australia.

ii. Chin, Eu Gene, and others (2019). Depression, anxiety, and stress: how should clinicians interpret the total and subscale scores of the 21-item Depression, Anxiety, and Stress Scales (DASS-21)? Psychological Reports, vol. 122, No. 4, pp.1550–1575.

G ATHENS INSOMNIA SCALE (AIS)

G1. OVERVIEW

Purpose: The AIS assesses the severity of insomnia using diagnostic criteria set forth by the ICD-10. The eight-item questionnaire evaluates sleep onset, night and early-morning waking, sleep time, sleep quality, frequency and duration of complaints, distress caused by the experience of insomnia, and interference with daily functioning. A shorter questionnaire, consisting of the first five items alone, may also be used.

Population for testing: The instrument has been validated in patients with insomnia and control participants aged 18–79 years.

Administration: The questionnaire requires 3–5 minutes to complete. It is a self-report, pencil-and-paper measure.

Reliability and validity: An initial study evaluating the psychometric properties of both the long and shorter versions of the scale found an internal consistency of.87 –.89 and the test-retest reliability of.88 –.89. Regarding the instrument's validity, results on the AIS correlated highly with scores obtained on the Sleep Problems Scale (.85–.90).

G2. INTERPRETATION

a) Scoring:
Respondents use Likert-type scales to show how severely certain sleep difficulties have affected them during the past month. Scores range from 0 (meaning that the item in question has not been a problem) to 3 (indicating more acute sleep difficulties). A sum score is calculated (range: 0–28), with lower scores indicating fewer insomnia symptoms. The severity level is categorized as:

no insomnia	0–7
subthreshold (mild) insomnia	8–14
moderate insomnia	15–21
severe insomnia	>21

The tool developers suggest a cut-off score of 6, which correctly distinguished between insomnia patients and controls in 90% of cases.

b) **AIS psychometric properties**

Table 8
Psychometric properties of AIS cut-off scores

AIS cut-off score	Sensitivity	Specificity	PPV	NPV
06	93%	85%	41%	99%

G3. ATHENS INSOMNIA SCALE

Instructions: This scale is intended to record your own assessment of any sleep difficulty you might have experienced. Please, check (by circling the appropriate number) the items below to indicate your estimate of any difficulty, if it occurred at least three times per week during the last month.

1. **Sleep induction** (time it takes you to fall asleep after turning-off the lights)

0: No problem 1: Slightly delayed 2: Markedly delayed 3: Very delayed or did not sleep at all

2. **Awakenings during the night**

0: No problem 1: Minor problem 2: Considerable problem 3: Serious problem or did not sleep all

3. **Final awakening earlier than desired**

0: Not earlier 1: A little earlier 2: Markedly earlier 3: Much earlier or did not sleep at all

4. **Total sleep duration**

0: Sufficient 1: Slightly insufficient 2: Markedly insufficient 3: Very insufficient or did not sleep it all

5. **Overall quality of sleep (no matter how long you slept)**

0: Satisfactory 1: Slightly unsatisfactory 2: Markedly unsatisfactory 3: Very unsatisfactory or did not sleep at all

6. **Sense of well-being during the day**

0: Normal 1: Slightly decreased 2: Markedly decreased 3: Very decreased

7. **Functioning (physical and mental) during the day**

0: Normal 1: Slightly decreased 2: Markedly decreased 3: Very decreased

8. **Sleepiness during the day**

0: None 1: Mild 2: Considerable 3: Intense

G4. REFERENCES

i. Soldatos, Constantin R., Dimitris G. Dikeos, and Thomas J. Paparrigopoulos (2000). Athens Insomnia Scale: validation of an instrument based on ICD-10 criteria. *Journal of Psychosomatic Research*, vol. 48, No. 6, pp. 555–560.

ii. Soldatos, Constantin R., Dimitris G. Dikeos, and Thomas J. Paparrigopoulos (2003). The diagnostic validity of the Athens Insomnia Scale. *Journal of Psychosomatic Research*, vol. 55, No. 3, pp. 263–267.

H Brief Resilience Scale (BRS)

H1. OVERVIEW

While resistance to illness, adaptation, and thriving have all been used to define resilience, the ability to bounce back or recover from stress is closest to its original meaning.

The BRS is among the best and most highly recommended tools with which to measure this. The BRS assesses perceived ability to bounce back or recover from stress. The scale was developed to assess a unitary resilience construct, including positively and negatively worded items. The possible score range on the BRS is from 1 (low resilience) to 5 (high resilience).

H2. INTERPRETATION

a) Instructions and scoring

Respondents are asked to score six statements. Statements 1, 3, and 5 are positively worded, and statements 2, 4, and 6 are negatively worded. The BRS is scored by reverse coding items 2, 4, and 6 and finding the mean of the six items.

For questions 1, 3, and 5:
1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree
For questions 2, 4, and 6:
5 = Strongly Disagree, 4 = Disagree, 3 = Neutral, 2 = Agree, 1 = Strongly Agree

The responses varying from 1–5 for all six items are added together, giving a range from 6–30. The total sum is then divided by the total number of questions answered.

b) BRS score interpretation

1.00–2.99 Low resilience
3.00–4.30 Normal resilience
4.31–5.00 High resilience

The possible score range on the BRS is from 1 (low resilience) to 5 (high resilience). In a study with 844 participants constituting a mix of healthy people and people with diseases, the developers Smith and colleagues found an average score of 3.70.

H3. BRIEF RESILIENCE SCALE

Please respond to each item by marking <u>one box per row</u>		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BRS 1	I tend to bounce back quickly after hard times.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 2	I have a hard time making it through stressful events.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 3	It does not take me long to recover from a stressful event.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 4	It is hard for me to snap back when something bad happens.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 5	I usually come through difficult times with little trouble.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 6	I tend to take a long time to get over setbacks in my life.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Cost / Terms of Use Free (No permission required)

H4. REFERENCES

i. Smith, Bruce W., and others (2008). The Brief Resilience Scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine,* vol. 15, No. 3, pp. 194–200.
ii. Fung, Sai-Fu (2020). Validity of the Brief Resilience Scale and Brief Resilient Coping Scale in a Chinese sample. *International Journal of Environmental Research and Public Health,* vol. 17, No. 4.

iii. Smith, Bruce W., and others (2013). The foundations of resilience: what are the critical resources for bouncing back from stress? In *Resilience in Children, Adolescents, and Adults: Translating Research into Practice*, Sandra Prince-Embury and Donald H. Saklofske, eds. New York: Springer.