

## ASSESSMENT AND TREATMENT OF WAR TRAUMA

Review paper

Laurence Armand FRENCH  
Goran KOVAČEVIĆ  
Lidija NIKOLIĆ-NOVAKOVIĆ  
Bakir ALISPAHIĆ

### ABSTRACT

**Reason(s) for writing and research problem(s):** The Yugoslavian break-up wars beginning in the early 1990s resulted in many common unresolved war-trauma issues. Common to these conflicts, whether it be Bosnia-Herzegovina, Croatia, Serbia, Kosovo, or Macedonia is the unmet need of both military veterans and civilian casualties suffering with either physical or psychological injuries, or both.

**Aims of the paper (scientific and/or social):** The scientific and social aim is to offer valuable methodology for estimate of the presence of War trauma in respective societies and propose the best possible approach in assessing the scope of the problems.

**Methodology/Design:** The authors developing assessment protocols with a number of them translated into the Bosnian and Serbian language so that they could be used within those nations most closely involved in the Balkan Wars of 1991-2002. Validity will be established by administering the predictor (like the MMPI) to all applicants/candidates and then later assessing the scores/profiles with those who are successful or who failed the program.

**Research/paper limitations:** The proposed methodological approach as explained in this paper is a profile based research and it is constructed for and limited to assessment of War trauma and using it for other purposes could give one false data and interpretations.

**Results/Findings:** The paper analyze the best fit methodology for respective societies and results. In other countries where similar research was administered, results were the blueprint for state policy development in the fields of Societal security, radicalization, social deviations and victimization.

**General conclusion:** The idea behind this paper is to explain sophisticated scientific approach to analysis of societal trends and to develop the best procedures for neutralizing the effects of detected negative societal trends in local communities.

**Research/paper validity:** Validity is established by administering the predictor (like the MMPI) to all applicants/candidates and then later assessing the scores/profiles with those who are successful or who failed the program.

### Keywords

War trauma, PTSD, MMPI, MSE, screening, assessment

## INTRODUCTION

The process involved in evaluating a mental health problem through to its effective treatment involves a number of steps from the initial intake interview to providing individualized treatment protocol. A distinction is made between an initial, brief screening and that of more reliable assessment protocols. The initial screening can be done by just about any mental health professional or paraprofessional while the administration of an assessment protocol requires specialized training usually by a certified/licensed professional such as a psychiatrist or psychologist. The assessment tools used in determining a definitive diagnosis varies with their effectiveness based on their test construction reliability and validity.

Reliability refers to the accuracy of the instrument in measuring what it purports to assess. Accuracy refers to the consistency of score obtained by people taking the same test. Score consistency is usually measured by a correlation coefficient which is the expression of the degree of correspondence, or relationship, between two sets of scores. Here a +1 reflects a perfect correlation. The most common way of computing the correlation coefficient is using the Pearson Product-Movement Correlation Coefficient. Types of reliability are "Test-Retest Reliability" (repeating the same test to the same subjects on a second occasion), "Alternate-Form Reliability" (two different versions of the same test are administered to the same subjects – e.g., Forms L and M), "Split-Half Reliability" (a single test, consisting of equivalent halves, is administered once and the scores determined by comparing the corresponding responses) and "Kuder-Richardson Reliability and Coefficient Alpha" (a single administration of a test is administered to the subjects with the correlation coefficient determined by inter-item consistency). The coefficient of stability is the measure linked with test-retest reliability while the coefficient of equivalence is the measure associated with alternate forms reliability and the coefficient of internal consistency is used with split-half reliability. The reliability of a test is usually expressed in terms of the "Standard Error of Measurement" (SEM). It is calculated by dividing the standard deviation for the test into the reliability coefficient. Using IQ test results, if a person has a SEM of 5 and an IQ result of 100 then we would state that the person's IQ is most likely 100 + or – 5; that is between 95 and 105 (Anastasi & Urbina, 1997a).

Validity, on the other hand, addresses the instruments utility – how useful is it in the assessment process. That is, does the test measure what it purports to measure (its content) and if so, how well does it measure it? Content validity is not the same as "Face Validity." Face validity is the extent to which test items appear to measure what it purports to measure but is not substantiated by a more rigorous procedure. Actually the more direct the questions in an assessment, the less valid its outcome. There are three basic ways to ascertain content validity: (1) Criterion-Related Validity; (2) Content Validity; and (3) Construct Validity.

Criterion-Related Validity is determined by correlating predictor and criterion scores. This form of validity depends on a mathematical correlational analysis (Pearson's  $r$ ) termed the "coefficient of determination." There are two types of criterion-related validity – predictive and concurrent. Predictive validity is established by administering the predictor (like the MMPI) to all applicants/candidates and then later assessing the scores/profiles with those who are successful or who failed the program. Concurrent validity is when you administer the predictor to current applicants/candidates based on the data derived from the predictive validity process. Criterion-related concurrent validity often uses cutting scores to determine if

someone is accepted into a program.

Content Validity refers to the extent to which an instrument adequately measures the content domain that it was designed to measure (IQ, personality, aptitude, attitude...). This is generally determined by a blind review of experts in the field, a process known as *judgment of experts*.

Construct Validity refers to the extent to which an instrument measures the theoretical construct it was designed to measure. Here the test scores are compared to similar instruments whose reliability and validity has been determines to be accurate. Often the *multitrait-multimethod matrix* is used in this process measuring the convergent and discriminant validity of the instrument in relation to other similar instruments (Anastasi & Urbina, 1997b).

Obviously the strength of an assessment tool is contingent upon its reliability and validity. Sometimes a number of instruments are used in a battery of tests. The collective result comes to constitute the client's "baseline" data. Certain assessments can then be used during the treatment process in order to measure the effectiveness of the intervention protocol (s). Hence, these assessments provide "outcome" measures. Within this process the screening/assessment procedure should help determine a definitive diagnosis or diagnoses which, in turn, drive the treatment protocol. Treatment can include individual or group therapies, psychotherapies, cognitive-behavioral therapies, medical procedures (acupuncture...) and psychopharmacological interventions, or a combination of these clinical approaches.

## SCREENING & ASSESSMENTS

Assessment of mental illness, including traumatic stress, includes initial screening instruments as well as more detailed clinical protocols. The most common screening instrument used by the medical profession is the Mental Status Exam (MSE). If mental pathology is suspected, then the next major reference resource is the DSM (Diagnostic and Statistical Manual of Mental Disorders) and the SCID (Structured Clinical Interview for the DSM). The DSM series follows a multi-axel format with the first three axis being the most relevant to the diagnosis of mental disorders. Axis I includes Major Mental Disorders as well as conditions that may result in a mental disorder if lest unattended or untreated while Axis II addresses Personality Disorder and Mental Retardation. Axis III provides the etiology and associated medical conditions along with the appropriate ICD codes.

Numerous assessment instruments have been developed over the years for PTSD, Depression, Anxiety and Personality Disorders. Most have been influenced by either the MSE and DSM, or both. A stand alone clinical protocol, however, is the MMPI (Minnesota Multiphasic Personality Inventory). Indeed, the MSE and MMPI are perhaps the most widely used mental health assessment tools used throughout the world. The administration and interpretation of these assessment require professionally trained individuals, mainly those with doctoral degrees (MD, Ph.D, PsyD...), and are not to be used by lay personnel, including those within the military. Other brief assessment protocols lend themselves to lesser qualified technicians and clinical assistants.

## MENTAL STATUS EXAM

The MSE covers six categories of mental status that is generally observed during the initial clinical consultation. There are various methods of conducting the MSE with most trained clinicians using the casual conversational approach so as to not startle the interviewee and further elevating their stress level.

Appearance, Attitude, and Activity: Appearance is the assessment of the physical characteristics of the client including physical disabilities or abnormalities as well as the client's dress, hygiene, grooming. This observation needs to be in concert with the client's cultural norms and social class and not necessarily that of the clinician. Attitude is how the client reacts to the questions during the intake process – the factors here are cooperativeness, hostility, or overly dependency.... Activity looks at the client's physical demeanor during the interview. What is their activity level especially that which seems abnormal for the situation – sitting rigidly, involuntary tics or tremors, fidgeting, unique mannerisms....

Mood and Affect: Mood and affect are sometimes difficult to distinguish from each other. Mood is how the person describes his/her feelings while affect is the external manifestation of these feelings. The continuum for mood and affect runs from depression to mania. Generally speaking mood and affect fall into six categories: euthymic (calm, friendly, pleasant...); angry (belligerent, confrontational, hostile, irritable, oppositional, out raged...); euphoric (cheerful, elated, ecstatic...); apathetic (flat affect, dull, bland...); dysphoric (despondent, grieving, hopeless, distraught, sad, overwhelmed...); and apprehensive (anxious, fearful, nervous, tense, panicked, terrified...).

Speech and Language: Speech looks at fluency of the language spoken. Also note if this is the client's original language or a second language. This category of the MSE looks at the following language functions: fluency of speech, repetition, comprehension, naming, writing, reading, prosody (variations in rate, rhythm and stress in speech), and quality of speech. Portions of standardized intelligence tests such as the Weschler batteries and the Stanford-Binet test can be used to determine many of these features. Disorders to look out for during this phase of the MSE include cluttering, dysgraphia, dyslexia, echolalia, mutism, palialilia, pressured speech, stuttering, and word salad, among others.

Thought Process, Thought Content, and Perception: Thought process involves evaluating the organization, flow and production of thought looking for abnormalities such as flight of ideas, loose associations, tangentiality, clang associations, echolalia, perseveration, thought blocking and word salad. Thought content and perception looks for delusions, homicidal or suicidal ideations, magical thinking, overvalued ideas, obsessions, paranoia, phobias, preoccupation, rumination, suspiciousness, depersonalization, derealization, hallucinations and illusions.

Cognition: Cognition is the ability to think using one's intellect, logic, reasoning and memory. The cognitive testing sequence involves: (1) orientation X 4 – person, place, time and situation; (2) attention and concentration; (3) registration and short-term memory; (4) long-term memory (verbal and non-verbal); (5) constructional and visuospatial ability; and (6) abstraction and conceptualization. Standardized tests used for attention and concentration include the Trail-making Tests, Symbol Digit Test, and the Stroop Color-Word Test while the Digit Span (forward and backwards) sub-test of the Weschler IQ batteries are used for attention. Short-term memory is usually tested by giving the client 3 common words (cat, blue, bike...) at the

beginning of the session and then having them repeat these words back to you at least 15 minutes into the session. Visual memory and construction and visuospatial ability can be tested with the Bender-Gestalt, Draw-A-Clock, Rey-Osterrieth Complex Figure Test or Trail-making Tests.

Insight and Judgment: Insightfulness includes the capacity for abstraction and the ability to communicate effectively with appropriate cognitive functioning while having a stable mood and affect and not manifesting any thought disorder. Insight and judgment are seen as being interrelated in that the ability to make sound judgments or decisions is dependent upon an adequate level of insight. Insight is the ability to be self-aware - being conscious of one's feelings, ideas, and motives. Intrusive defense mechanisms such as repression, displacement, dissociation, reaction formation and intellectualization often arise during this portion of the MSE as well as acting out, externalization, idealization, projection and denial and distortions. These are features that impair one's insight and judgment (Trzepacz & Baker, 1993).

The *Mini-Mental Exam* is an abbreviated form that is often used in hospital intakes. It consists of five categories: Orientation; Registration; Attention and Calculation; Recall; and Language. Under orientation the client is asked what is the year, month, season, day and month as well as where he/she is at that time. Under registration the client is asked to name 3 objects that you present them and ask them to repeat them back to you. In attention and calculation have the client count back from 100 by 7s. Stop after 5 answers. Under recall, ask for the 3 objects repeated earlier. With language, have the client name a pencil, and watch; have them repeat "No ifs, ands, or buts"; and then have them follow a 3-stage command (take a paper in your right hand and fold it in half and put it on the floor). Then have them read a sentence and then write it followed with having the client copy a geometric design. These are usually scored and are used primarily with people suspected of brain damage including those with TBIs (Robinson, 2000; Strub & Black, 2000).

## THE DSM-V PROPOSED PTSD DRAFT REVISIONS

The following conditions regarding the duration of the PTSD disorder along with the fact that these disturbances cause clinically significant distress or impairment in social, occupational, or other important areas of functioning, remains the same as stated in the original 1980 DSM-III PTSD diagnosis.

- A. Exposure to one or more of the following event(s): death or threatened death, actual or threatened serious injury, or actual or threatened sexual violation, in one or more of the following ways:
  1. Experiencing the event(s) him/herself.
  2. Witnessing, in person, the event(s) as they occurred to others.
  3. Learning that the event(s) occurred to a close relative or close friend; in such cases, the actual or threatened death must have been violent or accidental.
  4. Experiencing repeated or extreme exposure to aversive details of the event(s) (e.g., first responders collecting body parts; police officers repeatedly exposed to details of child abuse); this does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

- B. Intrusion symptoms that are associated with the traumatic event(s) (that began after the traumatic event(s)), as evidenced by 1 or more of the following:
1. Spontaneous or cued recurrent, involuntary, and intrusive distressing memories of the traumatic event(s) – in children, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.
  2. Recurrent distressing dreams in which the content and/or affect of the dream is related to the event(s) – in children these may be frightening dreams without recognizable content.
  3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring – in children, trauma-specific reenactment may occur in play.
  4. Intense or prolonged psychological distress at exposure to internal cues that symbolize or resemble an aspect of the traumatic event(s).
  5. Marked physiological reactions to reminders of the traumatic event(s).
- C. Persistent avoidance of stimuli associated with the traumatic event(s) (that began after the traumatic event(s)), as evidenced by efforts to avoid 1 or more of the following:
1. Avoids internal reminders (thoughts, feelings, or physical sensations) that arouse recollections of the traumatic event(s).
  2. Avoids external reminders (people, places, conversations, activities, objects, situations) that arouse recollections of the traumatic event(s).
- D. Negative alterations in cognitions and mood that are associated with the traumatic event(s) (that began or worsened after the traumatic event(s)), as evidenced by 3 or more of the following – in children, as evidenced by 2 or more:
1. Inability to remember an important aspect of the traumatic event(s) (typically dissociative amnesia, not due to head injury, alcohol or drugs).
  2. Persistent and exaggerated negative expectations about one's self, others, or the world.
  3. Persistent distorted blame of self or others about the cause or consequences of the traumatic event(s).
  4. Pervasive negative emotional state – fear, horror, anger, guilt, or shame.
  5. Markedly diminished interest or participation in significant activities.
  6. Feeling of detachment or estrangement from others.
  7. Persistent inability to experience positive emotions (e.g., unable to have loving feelings, psychic numbing).
- E. Alterations in arousal and reactivity that are associated with the traumatic event(s) (that began or worsened after the traumatic event(s)), as evidenced by 3 or more of the following – in children, as evidenced by 2 or more:
1. Irritable or aggressive behavior.
  2. Reckless or self-destructive behavior.
  3. Hypervigilance.
  4. Exaggerated startle response.
  5. Problems with concentration.

6. Sleep disturbance...difficulty falling or staying asleep, or restless sleep (American Psychiatric Association, 2017).

Accompanying the DSM, beginning with the 1987 DSM-III-R version, is the SCID, or Structured Clinical Interview for the DSM, a semi-structured interview schedule, like the MSE. The SCID-I is a diagnostic tool used to determine Axis I disorders – major mental disorders including mood disorders, psychotic disorders, anxiety disorders and the substance-use disorders. The SCID-II, on the other hand, is a diagnostic tool for assessing personality disorders. The current edition is the DSM-RV edition of SCID-I and SCID-II which was modified in 2010. In 2007, revisions in SCID-I were made to better discern between Acute Stress Disorder and PTSD (Rogers, 2001; Babor & First, 2009).

### **THE MMPI'S**

The Minnesota Multiphasic Personality Inventory (MMPI) is one of the most widely used tools, along with the MSE, for screening for mental illness and is the leading assessment for predicting occupational success, including mental health professionals, and law enforcement and legal professionals. The MMPI was first standardized in 1943 and readied for use. Its reliability and validity is not so much due to its original construction validation sample, which was poor by current standards, but to the numerous sets of predictive data generated by the MMPI during its nearly 70 years of retrospective research relevant to both concurrent and predictive studies. Its predictive strength comes from the instrument being administered to all individuals entering academic and/or professional studies at the time of their entry into these programs. This represented the concurrent study data whereby aggregate profiles were later developed reflecting those who were successful or unsuccessful in these professions – hence leading to the MMPI's predictive strength. These retrospective studies have led to a wealth of data in the areas of professional aptitude and mental health status. Clearly, this is one of the most studied assessment tools with thousands of published reports including samples worldwide. All versions of the MMPI (MMPI-2; MMPI-A; MMPI-2 RF) provide a graphic profile on the basis clinical and validity scales using a bell-distribution based T-score analysis where 50 is the mean and the standard deviation is 10 and where two standard deviations above the mean generally indicates statistical significance relevant to pathology.

### **THE VALIDITY SCALES**

The original MMPI consists of three validity scales (Lie, Validity, and Corrections). The Lie score (L) is based on a group of items that place the respondent in a favorable light but are unlikely to be truthfully answered as being true. The Validity Scale (F) consisted of unfavorable items unlikely for any respondent to answer all as relevant to his/her life. Accordingly, high F scores reflect a number of responding errors: carelessness in responding, gross eccentricity or deliberate malingering (faking bad). The Correction Scale (K) again use specifically chosen items that measure test-taking attitudes. A high K score most likely indicates defensiveness or an attempt to fake good. A low K score, on the other hand, may reflect frankness and self-analysis or yet another attempt to fake bad. Besides, the K score provides a computed correction factor that is added to certain of the clinical scales in order to provide a weighted adjusted scale: scale 1 (Hs) = +.5 K; scale 4 (Pd) = +.4K; scale 7 (Pt) = +1K; scale 8 (Sc) = +1K; and scale 9 (Ma) = +.2K.

These weighted factors are provided on the MMPI *Profile and Case Summary* sheet which presents a graphic representation of the MMPI scores based on a T-score distribution.

### THE CLINICAL SCALES

The body of the original MMPI consists of 10 clinical scales that correspond to the major clinical syndromes posited by the DSMs.

1. Hypochondriasis Scale (Hs). This scale measures the level of preoccupation with illnesses and health as well as long-term fears and worries about one's health.
2. Depressive Scale (D). This scale measures self-worth ranging from hopelessness (high T-score), to effortless optimism (low T-score). High scores, with suicidal ideations, represent a red flag for suicide potential.
3. Hysteria Scale (Hy). This scale measures one's preoccupation with body pain including conversion disorders (psychosomatic illnesses with no biological basis). At the other end of the continuum, low T-scores indicate levels of trustfulness and a lack of hostility.
4. Psychopathic Deviant Scale (Pd). This scale is designed to measure amoral, asocial behavior and levels of empathy. Also measured are family conflicts, feelings of alienation and problems with authority. This is a critical item when assessing law enforcement or military personnel. It is important to discern if a high score is indicative of a transitory event in the past or if the score reflects a pervasive characterological feature of one's personality.
5. Masculine-Feminine Interests Scales (Mf). This scale measures sexual identification and sexual occupational/professional identification. It focuses on contrasts of action versus feeling and expressions of aggression (verbal versus physical). This scale does not identify homosexuality or lesbianism. Instead it tends to identify certain personality traits including competitiveness and aggressiveness, as well as being outgoing, uninhibited and self-confidence.
6. Paranoia Scale (Pa). This scale measures ideas of mistreatment and persecution (higher T-scores) versus heightened interpersonal sensitivity and moral righteousness (lower T-scores). It combines with other scales to indicate critical personality disorders, including Paranoid PD, and certain dangerous clinical disorders such as Paranoid Schizophrenia and Paranoid Delusional Disorder.
7. Psychasthenia Scale (Pt). In contemporary terms, this scale measures obsessive and compulsive tendencies including Obsessive Compulsive Personality Disorder and Obsessive Compulsive Anxiety Disorder. It also indicates excessive fears and other forms of rumination secondary to anxiety. It a good index of psychological turmoil, discomfort and agitation.
8. Schizophrenia Scale (Sc). This scale measures the degree of personal confusion, including serious thought disorders such as alienation from one's own feelings and from others, impaired concentration and attention, uncontrolled impulses, excitability, peculiar body experiences, delusions, depersonalization and hallucinations. A number of personality disorders are indicted by elevated T-scores on this item (schizoid, Schizotypal, Borderline, Antisocial...) as well as Schizophrenia. Extremely



high T-scores, however, are more likely to reflect transitory psychosis secondary to Substance-Use Disorders.

9. Hypomania Scale (Ma). This scale measures a person's activity from intense autonomic over-activity (high T-scores) to a markedly slow personal temperament (low T-scores). Autonomic endocrine/limbic dysregulation can result in an override of the executive functioning of the frontal lobe, thereby falsely presenting hypermania as a thought disorder or psychosis. The manias are associated with a number of disorders including bipolar affective disorders, paraphilias, and impulse control disorders. They can also emerge as secondary features of Substance-Use Disorders, and organic brain damage including dementia and TBIs.
10. Social Introversion-Extroversion Scale (Si). This scale indicates one's level of introversion versus extroversion. In western societies where 75 percent of the people are extroverted and only about 25 percent introverted, extremes of the latter reflect pathology. However, extremely low T-scores can be problematic in that these individuals can be overly dependent on others for their social motivation and interaction. Indeed, being slightly socially introverted may prove to be a virtue for clinicians assessing and/or treating victims of traumatic stress.

### SUPPLEMENTAL SCALES

A number of additional scales, many outside the clinical criteria outlined in the DSM are part of the more recent MMPI-2. Even with about 20 years of data available, most of these additional scales are not yet considered to have the reliability and validity of the original 13 scales. However, four supplementary scales are common to both the MMPI and the MMPI-2. These scales appeared as a modification to the original MMPI and many practitioners used to the expanded MMPI continue to draw on these items when using the MMPI-2.

A Scale. High T-score on this item reflects miserable and unhappy individuals.

R Scale. On the other hand, high scores on this scale reflect individuals who are careful and cautious.

Combined A/R Scales. U.S. Veterans Administration data profiled the A/R combinations among its patients. Depressive diagnoses were associated with the high A-high R profile while personality disorders were mostly associated with the low A-low R profile.

Es Scale. High scores on this item are indicative of stability and good mental health.

MAC-R scale. This scale does not measure if a person is a problem drinker as much as it indicates his/her potential to exhibit problems if he/she drinks. High T-scores on this item indicate individuals who present themselves as being socially extroverted, self-confident, and assertive but are also likely to be exhibitionistic and risk takers (Graham, 2000; Green, 2000).

### POLITICAL CORRECTIVENESS AND MMPI REVISIONS

The genesis of the current review of the predictive effectiveness of psychological testing was rooted in the U.S. Civil Rights Act of 1964, Section H of Title VII which specifically makes reference to the use of nondiscriminatory tests for employment decisions. This, and other civil

rights cases, led to the restructuring of the original MMPI. A major decision was the *Soroka v. Dayton-Hudson* case, better known as the Target case, which was filed as a class action on September 7<sup>th</sup>, 1989. The case involved the use of a pre-employment psychological screening device for security officers working for Target Stores. The significance of the Soroka case was that it coincided with passage of the *Americans with Disabilities Act of 1990* which underscored the importance of keeping the invasiveness of psychological inquiries in pre-employment testing to a minimum. At that time the Target Stores used the Rodgers Condensed CPI-MMPI which was developed in 1966. The California Psychological Inventory (CPI) augmented the MMPI by looking at attributes on one's personality using a 20 scale format compared to the MMPI's traditional 10 clinical scales. However, the CPI also used 194 MMPI items in its 462-item measure. Security officer applicants screened out by Rodgers CPI-MMPI claimed that the inventory was not job related and was offensive and intrusive. Part of the problem with the Rodgers assessment tool was that no empirical data was available related to its administration, norming, standardization, use interpretation even though such standards existed independently for the CPI and the MMPI. Hence, in August 1989, the MMPI-2 was introduced. This version came 46 years following the original MMPI. The reason for a change in the MMPI was not that it needed renorming (subsequent normings of the original has greatly increased its reliability and validity) but was to replace outdated items. Toward this end, the MMPI-2 omitted the 16 repeat items, religious and sexual preference items and what was felt to be outdated items. In all 107 items were eliminated due to these reasons, but 108 items were added. Some of these new items pertain to revisions in the validity scales while others pertain to new scales and measures such as family dynamics, Type A behavior, eating disorders, substance abuse, and suicide.

The MMPI-2 is even longer (567 items) than the original MMPI (566 items). The norming sample for the MMPI-2 consisted of respondents who had higher educational levels than that of the general public, thereby contributing to a T-score distribution flaw where now T=65 (a standard deviation and a half) indicates statistical significance instead of the traditional two-standard deviations (T=70 or more). In order to use the decades of reliability and validity associated with the original MMPI, the first 370 items of the revised MMPI-2 are said to correspond to the 3 validity and initial 10 clinical scales of the MMPI, without of course the items measuring religiosity and sexuality. Given the significant changes reflected in the MMPI-2, many clinicians question the transferability of the original MMPI's predictive validity, especially when measuring mental pathology and critical occupational suitability to the new versions. For one, hyper-religiosity and hyper-sexuality are common features of manic episodes. A protocol used by forensic psychologists who prefer the greater reliability, validity and predictability of the original MMPI is to alert those being tested as to archaic terms and the flexibility of tense (past or present). The authors found that 10 of the 566 items raised the most questions among those taking the MMPI:

- Item 48:                    When I am with people I am bothered by hearing very *queer* things.
- Item 57:                    I am a good *mixer*.
- Item 70:                    I used to like *drop-the-handkerchief*.
- Item 105:                    Sometimes when I am not feeling well I am *cross*.
- Item 118:                    In school I was sometimes sent to the principal for *cutting up*.

- Item 129: Often I can't understand why I have been so *cross* and *grouchy*.
- Item 236: I *brood* a great deal.
- Item 381: I am often said to be *hotheaded*.
- Item 471: In school my marks in *deportment* were quite regularly bad.
- Item 506: I am a *high-strung* person.

Being able to define these terms in contemporary terms is the only adjustment that is needed for the continued of the original MMPI and its 50 years of post facto predictive validity. The original MMPI assessment, at the time of job entry, should be conducted along with a Mental Status Exam, with the MMPI score constituting a baseline profile. Subsequent, the abbreviated MMPI assessment, consisting of the first 360 items covering the 3 validity scales and 10 clinical scales, can then be administered as needed with these profiles compared with the initial MMPI baseline profile. In 1992, the MMPI-A (adolescent version) was introduced based mainly on the item from the original MMPI. The MMPI-A comes in both a long form (478 items) and a short form consisting of 350 items. Most recently, the MMPI-2-RF (restructured form) is an attempt to give the MMPI-2 clinical scales the same validity of those in the original MMPI. Yet, many clinicians see these efforts as further complicating the assessment role of the MMPI, especially regarding major clinical syndromes and personality disorders. The added content scales of the MMPI-2, such as the Dominance Scale, Addiction Potential Scale, Addiction Acknowledgement Scale, Social Discomfort Scale, Type A scale, Over-Controlled Hostility Scale, Marital Distress Scale and Psy-5 scales all seem to add to the original problem as to why the MMPI was changed in the first place – claiming intrusive attributes of human behavior that may not stand up in a court-of-law when their reliability and validity is challenged, let alone what they purport to measure. Indeed, this controversy over the MMPI-2-RF prompted a special issue of the *Journal of Personality Assessment* (Vol. 87, Issue No. 2, October, 2006) [French, 2002; 2003; Rogers et al., 2006].

## OTHER TESTS FOR DEPRESSION AND ANXIETY: THE PROJECTIVES

Many European clinicians are trained in psychoanalysis and rely more heavily on projective assessment techniques than do their American counterparts. The major projective techniques were developed in the early part of the 20<sup>th</sup> century and relied heavily on clinical training and clinical judgment while the instruments developed in the United States were based more quantified relying on standard scores and statistical significance. Both types of assessments are quite useful as long as they are administered and interpreted by qualified clinicians. Included in the category of projective assessment protocols is The Rorschach Test developed by the Swiss psychiatrist, Hermann Rorschach in 1921. He was the first to apply the inkblots projective technique and relating to dimensions of personality, including pathology. The Rorschach Inkblot Test consists of 10 cards or plates with each consisting of one inkblock. Five are black or gray and five are colored. Clients are asked to project what they see in each card. The American psychologist, Henry Murray developed a similar projective technique, one involving hazy pictures and a blank sheet, known as the Thematic Apperception Test (TAT) in 1938 by Murray and Christina Morgan. The TAT uses an interview approach using certain of the pool of 30 black-and-white picture cards and a blank white card. In 1938, Loretta Bender developed the Bender Visual Motor Gestalt Test, also know as the Bender-Gestalt Test. Initially the gestalt

(geometric figures) drawings were aggregated and used to determine a student's appropriate grade level. The Bender-Gestalt Test consists of nine cards showing geometric designs presented as dots, curves or lines. There is a copy and a recall component to the assessment with the recall done by memory. The Bender Gestalt Test is now a viable component of neurological test batteries. Florence Goodenough developed a Draw-A-Man test in 1926 which was revised in the 1960s by Dale Harris resulting in the popular "Draw-a-Person" techniques. Others soon followed suit with the House-Tree-Person and other variations of the Draw-a-Person tests. Another popular and widely used projective technique is the Sentence-Completion technique. Of these techniques, the Rotter Incomplete Sentence Bland (ISB) is perhaps the most widely used. It consists of 40 sentence stems that need to be completed (Anastasi & Urbina, 1997c; Walsh & Betz, 1995).

### **BRIEF ASSESSMENT TOOLS FOR ANXIETY AND DEPRESSION**

Aaron Beck has developed a number of short self-or clinician- administered screening instruments that are widely used. These instruments include his Depression Inventory; Hopelessness Scale; Anxiety Inventory and the Scale for Suicide Ideation – all currently published by the Psychological Corporation. Other self-administered screening questionnaires used with traumatic stress include: the Impact of Events Scale (IES-R); General Health Questionnaire (GHQ 60); Symptom Checklist 90; Traumatic Symptom Inventory (TSI); and the Davidson Trauma Scale (DTS), to mention a few. Other screening instruments are designed to be administered by trained clinicians and are not designed for self-reporting. Included in this category is: the Mississippi Scale for PTSD (Military Version); the Historical, Clinical, Risk Management – 20 (HRC-20); the Detailed Assessment of Posttraumatic Stress (DAPS); the Clinician-Administered PTSD Scale (CAPS); and the PTSD Checklist – Military Version (PLC) [Walsh & Betz, 1995].

Other screening and assessment protocols attempt to measure either particular items associated with traumatic stress or are broader in their approach to the topic. The McCormick TBI Interview (Military Version) is a specialty screening instrument again administered only by trained clinicians. This instrument was designed to determine the presence of TBIs among military personnel including discerning the nature of the injury: blast (IED, landmine, grenade, RPG...); land-based vehicle accident; air-based vehicular crash (helicopter, airplane); fall; fragment; physical confrontation (fight, assault...); or other accident(s). The TBI Interview also looks at experiences following the injury: memory problems or lapses; balance problems or dizziness; sensitivity to bright light; sleep problems; change in work function; ringing in the ears; irritability; headaches or personality changes. More detailed assessments can be determined from this initial screening instrument in order to focus on the particular nature and extent of the TBI as well as secondary problems associated with the injury (McCormick, 2018).

Another instrument, this one a self-reporting questionnaire, the Global Assessment Tool (GAT) is designed to measure the psychological status of military personnel of all ranks and experience in four domains: emotional fitness; social fitness; family life; and spiritual fitness. It is part of the United States Army's "Comprehensive Soldier Fitness" (CSF) program. This inventory, the GAT, is administered to all U.S. Army personnel thereby attempting to minimize the negative status associated with any mental health inventory within the military. Here, emotional fitness attempts to ascertain the degree of life satisfaction, freedom from depression, optimism, character strengths, coping styles and resilience. Social fitness is conceptualized as how one

feels about the Army, the soldier's unit and his/her fellow soldiers. Family fitness looks at family and personal relationships while spiritual fitness attempts to see if the individual has a sense of meaning, purpose and goals that extend beyond the self. How this data is used is another matter (American Psychiatrist Association, 2011) .

## REFERENCES

1. American Psychiatric Association (2011). Comprehensive Soldiers Fitness. *American Psychologist – Special Issue*, 66, 1-86.
2. American Psychiatric Association (2017). 309.81 Posttraumatic Stress Disorder, DSM-5: The Future of Psychiatric Diagnosis. Retrieved from: [www.dsm5.org/pages/default.aspx](http://www.dsm5.org/pages/default.aspx).
3. Anastasi, A. & Urbina, S. (1997a). Reliability (chapter 4). In Anastasi, A. & Urbina, S. (Ed.). *Psychological Testing*. Upper Saddle River, N.J.: Prentice Hall.
4. Anastasi, A. & Urbina, S. (1997b). Validity: Basic Concepts (chapter 5). In Anastasi, A. & Urbina, S. (Ed.). *Psychological Testing*. Upper Saddle River, N.J.: Prentice Hall.
5. Anastasi, A. & Urbina, S. (1997c). Projective Techniques (chapter 15). In Anastasi, A. & Urbina, S. (Ed.). *Psychological Testing*. Upper Saddle River, N.J.: Prentice Hall.
6. Babor, T. F. & First, M. B. (2009). Structured clinical interview for DSM-IV (SCID). *Encyclopedia of Drugs, Alcohol, and Addictive Behavior*. Retrieved from: [www.encyclopedia.com](http://www.encyclopedia.com).
7. French, L. A. (2002). Assessing law enforcement personnel: Comparative uses of the MMPIs. *The Forensic Examiner*, 11, 21-28.
8. French, L. A. (2003). Police culture and the MMPI. *International Journal of Comparative Criminology*, 3, 63-67.
9. Graham, J. R. (2000). *MMPI-2: Assessing Personality and Psychopathology*. New York: Oxford University Press;
10. Green, R. L. (2000). *The MMPI-2: An Interpretive Manual*. Boston, MA: Allyn & Bacon.
11. McCormick, TBI Interview (Military), developed at Salisbury VAMC by Courtney McCormick (VISN G MIRECC).
12. Robinson, D. J. (2000). *The Mental Status Exam Explained*. Fort Huron, Mich., USA: Rapid Psychier Press;
13. Rogers, R. (2001). *Handbook of Diagnostic and Structured Interviewing*. New York; London: Guilford Press.
14. Rogers, R., Sewell, K. W., Harrison, K. S. & Jordan, M.J. (2006). The MMPI-2 restructured clinical scales, *Journal of Personality Assessment*, 87, 139-147.
15. Strub, R. L. & Black, W. F. (2000). *The Mental Status Examination in Neurology*. Philadelphia : F.A. Davis Co.
16. Trzepacz, P. T. & Baker, R. W. (1993). *The Psychiatric Mental Status Examination*. Oxford: Oxford University Press.
17. Walsh, W. B. & Betz, N. E. (1995). The Assessment of Personality (Part II). In Walsh, W. B. & Betz, N. E. (Ed.). *Tests and Assessment (87-148)*. Englewood Cliffs, NJ: Prentice-Hall.

#### About the Authors

**Laurence Armand French** – Professor Emeritus at University of New Hampshire

**Goran Kovačević** – Associate professor at Faculty of Criminal Justice, criminology and security studies University of Sarajevo. E-mail: gkovacevic@fkn.unsa.ba

**Lidija Nikolić – Nikačević** – MA, independent forensic linguistic researcher

**Bakir Alispahić** – Associate professor at Faculty of Criminal Justice, criminology and security studies University of Sarajevo. E-mail: balispahic@fkn.unsa.ba