

## Screening for PTSD and Other Psychological Problems Using the PsychEval Personality Questionnaire (PEPQ)

Heather E.P. Cattell, Ph.D.

Exposure to violent and traumatic events has long been known to have destabilizing psychological effects, and there is a wealth of research on post-traumatic reactions in a range of different contexts (e.g., exposure to natural disasters, sexual assault or other violent crimes, kidnapping, torture, or terrorist attacks).<sup>1</sup> These studies have revealed that the normative response to trauma is to experience a range of acute stress reactions in the immediate weeks following the event. These may include feelings of anxiety, physical agitation, panic sensations, trouble sleeping or concentrating, distressing and recurrent thoughts of the event, feeling detached or estranged from others, feeling endangered or angry, and thinking about attacking or harming others. These findings of post-trauma symptoms have been found to be remarkably similar for men and women, children and adults, Western and non-Western cultures, and all socioeconomic groups.<sup>1</sup>

These kinds of acute stress reactions are particularly common after exposure to the severe trauma of war. The immediate response to severe stress in a war-zone has had many different labels over the centuries (e.g. combat fatigue). However, the symptoms associated with Posttraumatic Stress Disorder (PTSD)—which are defined in the next section of this paper—have been observed in all veteran populations that have been studied, including World War II,

Korean conflict, and Persian Gulf War populations, and in United Nations peacekeeping forces deployed to other war zones around the world.<sup>1</sup>

Although acute stress reactions are very common in those exposed to the traumatic, stressful events of war, the majority of soldiers who initially experience distress gradually adapt and recover normal functioning over a period of a few weeks or months. There are great individual differences in reactions to catastrophic stress, and only a very small percentage of soldiers subjected to traumatic events go on to develop PTSD. Recent data from the National Comorbidity Study Report indicates PTSD prevalence rates are about 5% and 10%, respectively, among American men and women.<sup>2</sup> Therefore, it is very important to be able to properly assess PTSD and differentiate it from normal, transitory reactions to stressful events in order to provide effective treatment. Proper assessment tools may also be able to identify in advance those who are at risk for this type of adverse reaction to stress.

Longitudinal research has shown that PTSD can become a chronic psychiatric disorder and can persist for decades and sometimes for a lifetime. Although some individuals may experience symptoms that are consistent and unremitting, the course of PTSD is often not linear. It may wax and wane, depending on life-demands, exposure to critical reminders of war experiences, etc. In fact, many of the soldiers who later develop PTSD do not show symptoms during the immediate impact of the war. The course of chronic PTSD usually involves periods of severe symptoms followed by periods of remission or decreased symptoms, followed by relapses. This makes the diagnosis and treatment of PTSD particularly difficult and critical.

Although PTSD is a debilitating psychological issue, it is just one of many different chronic post-war adjustment problems experienced by veterans. Veterans are also at risk for other

<sup>1</sup>Trimble, M.D. (1985). Post-traumatic Stress Disorder: History of a concept. In C.R. Figley (Ed.), *Trauma and its wake: The study and treatment of Post-Traumatic Stress Disorder*. New York: Brunner/Mazel.

<sup>2</sup> Kessler, R.C., Sonnega, A., Bromet, E., Hughes, M. & Nelson, C.B. (1996). Posttraumatic Stress Disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52, 1048-1060

mental health problems such as depression, substance abuse, problems with aggressive behavior, and more severe mental illnesses that can be just as debilitating as PTSD.

In fact, individuals who meet the diagnostic criteria for PTSD are also more likely to meet DSM-IV criteria for one or more additional diagnoses.<sup>3 4</sup> In this large-scale study, 88% of men and 79% of women with PTSD also met criteria for another psychiatric disorder. The co-occurring disorders most prevalent for men were major depressive episodes, conduct disorders, and drug abuse and dependence. For women the disorders most frequently comorbid with PTSD were major depressive disorders, simple phobias, social phobias, and alcohol abuse or dependence. Therefore, the most useful diagnostic screening tool in posttraumatic situations is one that evaluates numerous kinds of disorders. The PsychEval Personality Questionnaire (PEPQ) is a measure that can be used to diagnose PTSD plus various depressive disorders, conduct disorder, phobias, and drug abuse.

Early assessment of PTSD and other comorbid conditions is critical in providing effective treatment. Interventions provided as early as possible will provide secondary prevention of chronic maladaptive behavior and adaptations. A summary of the therapeutic approaches useful for PTSD patients is presented in Foa, Keane, and Friedman's comprehensive book on treatment methods.<sup>5</sup> They find that the most successful interventions are cognitive-behavioral therapy (CBT), medication, and group therapy.

<sup>3</sup> Kulka, R.A., Schlenger, W.E., Fairbank, J.A., Hough, R.L., Jordan, B.K., Marmar, C.R., & Weiss, D.S. (1990). *Trauma and the Vietnam War generation*. New York: Brunner/Mazel.

<sup>4</sup> Davidson, J.R.T., & Foa, E.B (Eds.). (1993). *Posttraumatic Stress Disorder: DSM-IV and beyond*. Washington, DC: American Psychiatric Press.

<sup>5</sup> Foa, E.B., Keane, T.M., & Friedman, M.J. (2000). *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies*. New York: Guilford Publications.

## Diagnostic Features of Posttraumatic Stress Disorder

The six essential diagnostic features of Posttraumatic Stress Disorder as described in the *Diagnostic and Statistical Manual of Mental Disorders IV*<sup>6</sup> are listed in Table 1 below. They describe the development of characteristic symptoms after an individual has been exposed to an extreme traumatic stressor.

**Table 1**

### Essential Diagnostic Features of Posttraumatic Stress Disorder

- The person has been exposed to a recent traumatic event.
- The traumatic event is persistently re-experienced.
- The person avoids stimuli that are associated with the trauma and experiences diminished or numbing of responsiveness.
- Symptoms of increased distress and arousal persist.
- Duration of the symptoms is more than one month.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

The first diagnostic feature is exposure to an extreme traumatic stressor, one involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity. The stated definition of a traumatic event includes military combat, terrorist attack, being kidnapped or taken hostage, incarceration as a prisoner of war, being diagnosed with a life-threatening

<sup>6</sup> American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders IV*. Washington, D.C.

illness, exposure to natural or manmade disasters, severe automobile accidents, violent sexual or physical assault, or torture. The definition also includes witnessing or being exposed to an event that involves death, serious harm, or threat to the physical integrity of a family member or other person. An essential aspect of this diagnostic feature is that the individual's response to the event must involve intense fear, helplessness, or horror. These criteria for the first diagnostic feature of PTSD are summarized in Table 2.

**Table 2****Criteria for Diagnostic Feature #1 of PTSD**

- Exposure to an extreme traumatic event in which the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
- The person experienced intense fear, helplessness, or horror in response to this event.

The second essential diagnostic feature of PTSD is the persistent re-experiencing of the traumatic event. The person may have distressing, recurrent, and intrusive recollections of the event or dreams about the event—including images, thoughts, or perceptions. Alternatively, the person may feel and act as if they are actually re-living the traumatic event, including illusions, hallucinations, and dissociative flashback episodes that may last a few seconds to several hours, or even days. At these times, the individual re-lives components of the events and behaves as though experiencing the event at the moment; they experience again the same mental, emotional, and physical experiences that occurred during or just after the trauma. These include thinking about the trauma, seeing images of the event, feeling agitated, and having physical sensations like those that occurred during the trauma.

PTSD sufferers find themselves feeling as if they are in danger, experiencing panic sensations, wanting to escape, getting angry, and thinking about attacking or harming someone else. Because they are anxious and physically agitated, they may have trouble sleeping and concentrating. They might get overly concerned about staying safe in situations that are not truly dangerous. Because traumatized people often feel like they are in danger even when they are not, they may be overly aggressive and lash out to protect themselves when there is no need. The survivor usually can't control these symptoms or stop them from happening. Intense psychological distress or physiological reactivity often occurs when the person is exposed to triggering events that resemble or symbolize an aspect of the traumatic experience. Table 3 summarizes the criteria for this second diagnostic feature of PTSD.

**Table 3****Criteria for Diagnostic Feature #2 of PTSD**

- Experiencing recurrent and intrusive distressing recollections or dreams of the traumatic event.
- Acting or feelings as if the traumatic event is recurring, including a sense of re-living the experience, hallucinations, and dissociative flashback episodes.
- Intense psychological distress or physiological reactivity at exposure to internal or external stimuli that symbolize or resemble an aspect of the traumatic event.

The third essential diagnostic feature of PTSD involves the persistent avoidance of stimuli associated with the trauma. The individual typically makes deliberate efforts to avoid thoughts, feelings or conversations about the traumatic event, and tries to avoid activities, or people who arouse recollections of the event. This avoidance of reminders of the event may

include amnesia for an important aspect of the traumatic event. In its extreme manifestation, avoidant behavior may superficially resemble agoraphobia because the PTSD individual is afraid to leave the house for fear of confronting reminders of the traumatic event.

Additionally, the individual may experience diminished responsiveness to the external world, referred to as “psychic numbing” or “emotional anesthesia,” which usually begins soon after the traumatic event. They may complain of having markedly diminished interest or participation in previously enjoyed activities, or of feeling detached or estranged from other people, or of having markedly reduced ability to feel emotions. These avoidance or numbing symptoms often reflect behavioral, cognitive, or emotional strategies PTSD patients use in an attempt to reduce the likelihood of exposing themselves to trauma-related stimuli and to minimize the intensity of their psychological response if they are exposed to such stimuli. Individuals with PTSD may avoid strong emotions, especially those associated with the traumatic experience. They may separate the emotional aspects of their experiencing from the purely cognitive and cut themselves off from the emotional component, thus making it extremely difficult to participate in meaningful interpersonal relationships. The individual may also have a sense of a foreshortened future (e.g. not expecting to have a career, marriage, children, or a normal life span). These symptoms of avoidance and numbing must not have been present before exposure to the stressor. These criteria for the third essential diagnostic feature of PTSD are presented in Table 4.

**Table 4**

**Criteria for Diagnostic Feature #3 of PTSD:**

The individual persistently avoids stimuli associated with the trauma, and experiences numbing of general responsiveness, as indicated by at least three of the following:

- Efforts to avoid thoughts, feelings, or conversations about things associated with the trauma.
- Efforts to avoid activities, places, or people that arouse recollections of the trauma.
- Inability to recall an important aspect of the trauma.
- Markedly diminished interest or participation in significant activities.
- Feeling detached or estranged from others.
- Restricted range of affect (especially those associated with intimacy, tenderness, and sexuality).
- Sense of foreshortened future (e.g. does not expect to have a career, marriage, children, or a normal life span).

The fourth essential diagnostic feature of PTSD involves persistent symptoms of anxiety or increased arousal that were not present before the trauma. These symptoms may include difficulty falling or staying asleep, which may be due to recurrent nightmares during which the traumatic event is relived. Other symptoms may include irritability or outbursts of anger, difficulty concentrating or completing tasks, hypervigilance, or exaggerated startle response. The disturbance may initially meet the criteria for Acute Stress Disorder in the immediate aftermath of the trauma. The hyper-vigilance in PTSD may sometimes become so intense as to appear like paranoia. The startle response has a unique neurobiological substrate and may actually be the most pathognomonic PTSD symptom; research

indicates increased sympathetic nervous system activity. The criteria for the fourth, fifth, and sixth diagnostic features of PTSD are summarized in Table 5.

The fifth and sixth essential diagnostic features of PTSD describe the course of the disorder. Typically symptoms begin within the first three months after the trauma, with symptoms of anxiety and distress appearing in the immediate aftermath of the trauma and re-experiencing and avoidance symptoms developing next. The symptoms cause significant impairment to the individual's social and occupational functioning, which often include impaired relationships with others, marital problems, family discord, divorce, difficulties in parenting, loss of job, or involvement with the criminal justice system. Duration of the symptoms may vary from three months to longer than a year; the disorder may be acute or chronic. The severity, duration, and proximity of the individual's exposure to the original traumatic event are important factors in this disorder.

Even in mild cases of PTSD, individuals may have problems in relationships because they have a hard time feeling close to people or trusting people. They may feel detached, disconnected, or socially isolated because they have difficulty feeling or expressing positive feelings or because they avoid social situations. This often leads to a loss of friendships, support, and intimacy, and it increases fears and worries. PTSD sufferers may get into arguments and fights with people because of the angry or aggressive feelings that are common after trauma. They may lose important beliefs when a traumatic event makes them lose faith that the world is a good and safe place.

**Table 5**

#### Criteria for 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Diagnostic Features of PTSD

- 4 - Persistent symptoms of arousal, as indicated by 2 or more of the following:
- Difficulty falling or staying asleep
  - Irritability or outburst of anger
  - Difficulty concentrating
  - Hypervigilance
  - Exaggerated startle response
- 5 - Duration of disturbance is more than 1 month.
- 6 - The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

PTSD diagnosis and treatment are complicated by the fact that they frequently occur in conjunction with related disorders such as depression, substance abuse, problems of memory and cognition, and other problems of physical and mental health. The DSM IV definition of PTSD states that there may be increased risk of Panic Disorder, Agoraphobia, Obsessive-Compulsive Disorder, Social Phobia, Major Depressive Disorder, and Substance-Related Disorders.

## The PsychEval Personality Questionnaire

The PsychEval Personality Questionnaire (PEPQ) is a scientifically developed instrument that measures the full range of both normal and abnormal personality. Although the test was recently updated and re-standardized <sup>7</sup>, the PEPQ is a long-established measure that has over thirty years of research documenting its ability to

<sup>7</sup> Cattell, H.E.P., Russell, M.T., & Bedwell, S (2003). *PsychEval Personality Questionnaire Manual*. Champaign, IL: Institute for Personality and Ability Testing, Inc.

identify a full range of psychopathology from PTSD or Panic Disorder to Depression or Delusional Disorder.<sup>8</sup>

The PEPQ is a powerful tool for evaluating an individual's overall functioning. Unlike many of the more specific tests that are used for screening (such as the PTSD Symptom Scale, or the State-Trait Anxiety Inventory, or the Beck Depression Scale), the PEPQ measures the entire range of psychopathology in less than 90 minutes. Thus, the professional is able to identify in one testing not only whether the individual is suffering from PTSD, but, in addition, to find out whether the person might be suffering from other disorders, such as Depressive or Manic Depressive Disorder, Panic Disorder or Obsessive-Compulsive Disorder, Paranoid or Antisocial Personality Disorder, or some kind of underlying Schizophrenia or Psychotic Disorder.

The PEPQ is also a "combination measure" which provides essential information about both normal and abnormal parts of the individual's personality. In addition to identifying the pathology-oriented dimensions, the normal-range part of the test identifies the individual's enduring personality make-up. For example, it provides feedback about social skills and interpersonal relationships; assertiveness, independence, and leadership skills; self-control, follow-through, and integrity; emotionality and tension; and, creativity and openness to new ideas.

These normal-range personality traits provide the context for symptomatic behavior, and fundamentally affect the treatment process. The professional can use this information to understand the individual's readiness for therapy, the most effective approach to treatment, the individual's personal strengths and resources and ability to benefit from treatment, and the likely duration and prognosis of treatment for the individual. These important dimensions of normal personality are generally over-looked by tests measuring only psychopathology, but are an

essential part of the individual's functional personality.

Thus, the PEPQ provides a comprehensive evaluation of the individual's overall functioning in a relatively brief assessment. In addition to being useful in clinical diagnosis and treatment planning, the PEPQ can also be an effective tool in post-offer employment selection settings to screen out candidates who may have difficulty coping with job responsibilities and pressures due to the presence of clinical syndromes. This may be particularly true for jobs that involve security or public safety.

The PEPQ is designed to be administered to adults aged 16 and older. It contains 185 normal-range personality items in Part I and 140 abnormal-range personality items in Part II of the questionnaire, with overall readability at a fifth-grade level. The test is virtually self-administrable, and can be given in either a paper-and-pencil format or via computer testing. Thus, it can be administered to a single individual or to a group of individuals at one time. The test can be computer-scored or hand-scored.

The test generally takes about 75 to 90 minutes to administer. In addition, because the test items have been carefully refined to eliminate invasive or offensive language, resistance to the assessment is less likely to be a problem. Thus, the PEPQ can be particularly useful when receptivity or fatigue is a barrier to a valid assessment. Both parts of the test have recently updated norms (released in 2002), which are based on normative samples ages 16-85 of  $N=10,261$  for Part I, and ages 14-84  $N=1,763$  for Part II.

The internal consistency reliabilities for the PEPQ scales are presented in the manual, and indicate strong internal consistency and test-retest reliability. For the normal-range scales, internal consistencies averaged .76 and 2-week test-retest correlations averaged .80. For the abnormal scales, internal consistencies averaged .79 and test-retest correlations for a four-week interval averaged .67, even in a normal population.

<sup>8</sup> Krug, S.E. (1980). *Clinical Analysis Questionnaire Manual*. Champaign, IL: Institute for Personality and Ability Testing, Inc.

A computer-generated report, the PsychEval Personality Questionnaire Report (PEPQ), provides an automated interpretation of a test-taker's results. Another report, the Protective Services Report *Plus* (PSR+) interprets PEPQ results and applies the findings to issues that are related to selection and development within law enforcement and security-related occupations.

## Screening for Posttraumatic Stress Disorder with the PEPQ

The usefulness of the PEPQ in identifying various clinical syndromes is demonstrated in both the CAQ and the PEPQ Manuals. In particular, the PEPQ Manual presents score profiles for 15 diagnostic groups, including PTSD, depressive and dysthymic disorders, anxiety disorders, panic disorders, conduct disorders, substance dependence, phobias and obsessive-compulsive disorder, bipolar disorders, and paranoid and other psychotic disorders. Table 1 presents the score profile for the group of individuals diagnosed with PTSD.

The most distinguishing clinical scores for the PTSD group were on the following scales: Self-Reproach (SR), Low Energy State (LE), Threat Immunity (TI), Psychological Inadequacy (PS), Health Concerns (HC), Alienation/Perceptual Distortion (AP), and Anxious Depression (AD). All of these scores indicate a debilitating level of internal tension, agitation, anxiousness, and depression.

The PTSD group had the highest scores on the Self-Reproach (SR) scale of any of the 15 clinical groups. High scores are associated with feelings of guilt, shame, self-condemnation, and worthlessness. People with high scores tend to be self-critical, to feel that they have failed in their duties, and to blame themselves when anything goes wrong. They often feel that others don't care for them and may desert them. High scores on this scale are consistent with the typical PTSD symptoms of painful guilt feelings about surviving

when others did not or about the things they did to survive.

The PTSD group also showed elevated scores on three other scales that contribute to the overall Depression Index—the Low Energy State (LE), Anxious Depression (AD) and Health Concerns (HC) scales. High scores on the Low Energy State scale (LE) indicate high levels of psychomotor retardation, including difficulty sleeping, feeling unable to come up with enough energy to face the problems and stresses of everyday living, and feeling empty, low, and miserable. These scores suggest that the constant state of anxiousness and distress of PTSD sufferers tends to deplete their energy reserves.

**Table 7**

Differences between means scores of a group diagnosed with post traumatic stress disorder (DSM IV 309.81, N = 11) versus normal population scores.

PEPQ Scale Name	Mean score PTSD Group	Population Mean	Difference (Elevation)
Health Concerns	6.8	5.6	1.2
Suicidal Thinking	6.9	6.0	.9
Thrill Seeking	5.4	5.5	.1
Anxious Depression	6.4	5.4	1.0
Low Energy State	7.3	5.5	1.8
Self-Reproach	7.4	5.4	2.0
Apathetic Withdrawal	6.4	5.5	.9
Paranoid Ideation	6.0	5.4	.9
Threat Immunity	3.8	5.5	-1.8
Alienation/Perceptual Distortion	6.6	5.4	1.2
Obsessional Thinking	5.8	5.7	.1
Psychological Inadequacy	6.7	5.5	1.2

High scorers on the Anxious Depression scale tend to feel tense, nervous, and overwhelmed by things that others think are minor. Their tension, agitation, and nervousness keep them from feeling relaxed and able to pursue normal activities. They also report a lack of self-confidence and an inability to cope with sudden demands and emergencies. High scores on Anxious Depression represent an aspect of depression that can be quite incapacitating and profoundly distressing.

The PTSD group also showed elevated scores on the Health Concerns scale (HC) indicating a poor general sense of physical well-being. High scorers tend to feel weak, fatigued, sluggish, weary, run down, and generally in poor health. These kinds of vague and non-specific somatic symptoms make it hard for them to keep up their daily activities. They tend to feel generally unwell and in poor health. This kind of preoccupation with physical symptoms and bodily dysfunction is commonly found in depressive and psychotic disorders.

Beyond these four scales that contribute to the Depressive Index, the PTSD group also showed an elevated score on the Psychological Inadequacy scale (PS), which is the best overall indicator of low self-worth and inability to cope with daily life. High scorers on this scale tend to see themselves as having few good qualities and as being of little value to anyone. They report having difficulty making decisions, managing their own affairs, and meeting life's demands and challenges. High scores on this scale indicate a sense of inadequacy, distress, and inability to cope that go well beyond neurotic insecurities, and are typically found in people with depressive disorders, panic disorders, and psychotic disorders.

This PTSD sample showed below-average scores on the Threat Immunity scale (TI). Below-average scores indicate an elevated sensitivity to threats of physical danger and to social censure or conflict. Low scorers are highly inhibited and vulnerable to social and physical stress. Below average scores on this scale are consistent with the typical PTSD symptom of feeling constantly threatened.

In addition, the PTSD group showed an elevated score on the Alienation/Perceptual Disorder scale (AP). The item content for this scale indicates disordered thinking, distorted perceptions, and impaired reality testing, as well as alienation from other people. Although the items on this scale involve more subtle and differentiated content than asking about blatant psychotic symptoms, they do involve perceptual disturbance that involves tenuous reality testing.

Overall, these scores identify a PTSD profile of debilitating levels of anxiousness, internal agitation, and depression. In addition to distressing feelings of worthlessness, inadequacy, and self-condemnation, these individuals are likely to experience particular depressive symptoms of psychomotor retardation and somatic symptoms and to show some impairments in reality testing. This is consistent with the PTSD diagnosis.

## Importance of Early Assessment in Posttraumatic Situations

Exposure to violent and traumatic events can lead to psychological problems for a variety of essential personnel, including police officers, firefighters, and military or security personnel. Traumatic events may occur in a range of situations including natural disasters, military combat, violent crimes, terrorist attacks, kidnapping, torture or incarceration.

Early diagnosis of PTSD and other debilitating psychiatric disorders is essential to providing effective treatment. Lack of intervention may lead to social detachment and isolation, problems in thinking and concentration, occupational impairment, marital or family discord, agitation and aggressive outbursts, or involvement in the criminal justice system.

Because there are great individual differences in reactions to catastrophic stress, it is important to use proper assessment tools to differentiate normal, transitory reactions to stressful events from PTSD and other psychiatric disorder. In

addition, diagnosis and treatment of PTSD are complicated by the frequent co-occurrence of other disorders, such as depression, substance abuse, problems with aggressive behavior, panic disorder or agoraphobia, or psychotic mental disorders.

Because the PsychEval Personality Questionnaire (PEPQ) measures both normal and abnormal aspects of personality functioning, it is a powerful tool for evaluating the individual's overall functioning in a relatively brief timeframe. It also provides essential information about normal range personality that can be useful in understanding the individual's personal strengths and resources, their readiness for therapy, the most effective approach to treatment, and the likely duration of treatment. Careful diagnosis and early intervention for those who work in harms way can lead to effective treatment and positive outcomes for those who need them.

## About the Author

Heather E.P. Cattell, Ph.D. is the daughter of Raymond and Karen Cattell, and co-authored the fifth edition of the 16PF<sup>®</sup> Questionnaire with them. Trained as a clinical psychologist, she has worked at clinics and hospitals in the San Francisco Bay area and has taught many courses at the undergraduate and graduate level. For the last 19 years she has worked on various projects at the Institute for Personality and Ability Testing, Inc. (IPAT), including co-authoring *Essentials of 16PF Assessment*, developing 16PF computer-based interpretive reports, international translations, workshops, and the PsychEval Personality Questionnaire (updated CAQ).

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