



Assessment powered by

NovoPsych

A Review of the Clinical Utility of the Impact of Event Scale Revised (IES-R): Percentile Rankings and Description of Latent Profiles

The Impact of Event Scale-Revised (IES-R) is a 22-item self-report measure designed to assess distress caused by a traumatic event and can assist clinicians in assessing for Post Traumatic Stress Disorder (PTSD). This technical review presents normative data from latent profile analysis of clinical populations, along with detailed percentile rankings and interpretive guidelines, to help clinicians better understand and utilise the assessment in practice.

Click to view information on the [IES-R](#)

October 2025

Developer & Author

Impact of Event Scale Revised (IES-R) was developed by Weiss and Marmar (1997):

Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.), *Assessing Psychological Trauma and PTSD: A Practitioner's Handbook* (pp. 399-411). New York: Guilford Press.

This document was developed to review contemporary literature and to describe original scoring methodologies and to provide interpretation material, enhance normative data and provide qualitative descriptors.

Authors of Technical Review

(not in authorship order)

Ben Buchanan DPsych

*CEO, NovoPsych
Adjunct Research Fellow, Monash University,
Melbourne, Australia*

[David Hegarty PhD*](#)

*Head of Psychometrics, NovoPsych
Adjunct Professional Fellow, Southern Cross
University, Coffs Harbour, Australia*

Simon Baker PhD

Research Fellow, NovoPsych

Carla Smyth PhD

*Research Fellow and Clinical Liaison,
NovoPsych*

Emerson Bartholomew MHealthPsych

*Research Fellow and Psychometrician,
NovoPsych*

Joseph Phillips PhD

*Research Fellow, NovoPsych
Adjunct Research Fellow, University of
Technology Sydney, Australia*

Hilah Kaufman PhD

*Measurement-Based Care Research Fellow
Psychologist*

Jane Wotherspoon PhD

Research Fellow, NovoPsych

Jamie Marshall PhD

*Research Fellow and Clinical Liaison,
NovoPsych*

Citation for this Paper

Bartholomew, E., Buchanan, B., Kaufman, H., Smyth, C., Baker, S., Phillips, J., Marshall, J., Wotherspoon, J., & Hegarty, D. (2025). A Review of the Clinical Utility of the Impact of Event Scale Revised (IES-R): Percentile Rankings and Latent Profile Exploration. <https://doi.org/10.17605/OSF.IO/GQ7PB>

Open Source Licence

The information in this document can be used without permission by researchers and clinicians and distributed under an [open source](#) licence.

Description

The Impact of Event Scale-Revised (IES-R) is a 22-item self-report measure used to assess Post-Traumatic Stress Disorder (PTSD) symptoms in adults following exposure to a traumatic event (Weiss, 2007). The IES-R was developed as a revision of the original Impact of Event Scale (Horowitz et al., 1979) to align more closely with DSM criteria for PTSD by adding items that assess hyperarousal symptoms. The scale asks respondents to rate how distressing specific difficulties have been during the past seven days with respect to a particular traumatic event.

Post-traumatic stress disorder is characterised by persistent and distressing symptoms that develop following exposure to actual or threatened death, serious injury, or sexual violence (American Psychiatric Association, 2013). PTSD affects approximately 6-9% of individuals in their lifetime (Kessler et al., 2005). The disorder involves a complex constellation of symptoms that can significantly impair functioning across multiple life domains.

The IES-R comprises three subscales which assess three core symptom clusters of PTSD as conceptualised in DSM:

1. **Intrusion:** measures intrusive thoughts and feelings, nightmares, and imagery associated with the traumatic event. Examples include reminders that bring back feelings about the event, pictures that pop into one's mind, thinking about the event when not intending to, and experiencing waves of strong feelings about it.
2. **Avoidance:** assesses efforts to avoid trauma-related thoughts, feelings, or reminders, as well as numbing of responsiveness. Examples include avoiding letting oneself get upset when thinking about the event, trying not to think about it, staying away from reminders, trying to remove it from memory, and feelings of numbness about it.
3. **Hyperarousal:** measures heightened physiological arousal and reactivity following the trauma. Examples include irritability and anger, feeling jumpy and easily startled, difficulty concentrating, trouble sleeping, feeling watchful and on guard, and having physical reactions to reminders.

Research has consistently demonstrated that the IES-R correlates significantly with other measures of PTSD symptomatology, including the PTSD Checklist (PCL) and the Clinician-Administered PTSD Scale (CAPS) (Creamer et al., 2003). It has also shown strong associations with anxiety, depression, and overall psychological distress (Asukai et al., 2002). Studies have found that higher IES-R scores are associated with impaired immune system functioning, reduced quality of life, and increased risk for comorbid psychiatric disorders (Kawamura et al., 2001).

In clinical practice, the IES-R can be used in several ways to support assessment and care. First, it acts as an efficient screening tool to identify individuals who may require further comprehensive assessment for PTSD. This is particularly valuable because many trauma survivors may not spontaneously disclose their symptoms due to shame, avoidance, or lack of awareness that their experiences constitute clinical concerns (Loewenstein, 2018). Identifying which symptom clusters predominate for a given individual is also beneficial for case formulation and treatment planning. For example, someone with elevated intrusion symptoms might benefit from trauma-focused cognitive-behavioural therapy emphasising cognitive restructuring, whilst someone with pronounced avoidance might require gradual exposure-based interventions. The scale also serves as an outcome monitoring tool, allowing clinicians to track symptom changes over time and assess treatment efficacy. Given that the IES-R specifically asks about symptoms experienced in the past seven days, it can be administered at regular intervals to monitor symptom severity and change over time during trauma-focused treatment.

The scale is event-specific and requires that respondents have experienced and identified a particular traumatic event before completing the measure. Clinicians should establish that a traumatic event has occurred and clarify which specific event the client is rating if multiple traumas have been experienced. When interpreting very low scores, it is important to confirm whether the client is responding in relation to an actual traumatic event, as scores near zero could reflect either effective coping or the absence of a relevant traumatic experience to assess.

Psychometric Properties

The IES-R demonstrates strong construct validity as a measure of post-traumatic stress symptoms. Convergent validity is supported by moderate to high correlations with other established PTSD measures. For example, Creamer et al. (2003) reported correlations of $r = .84$ with the PCL and $r = .77$ with the CAPS. The scale also shows theoretically consistent relationships with measures of anxiety ($r = .66$), depression ($r = .60$), and general psychological distress ($r = .67$) (Asukai et al., 2002). Discriminant validity has been established through the scale's ability to distinguish between trauma-exposed individuals with and without PTSD diagnoses (Creamer et al., 2003).

The IES-R exhibits excellent internal consistency across multiple studies and populations. Cronbach's alpha for the total score ranges from $\alpha = .92$ to $\alpha = .96$ (Asukai et al., 2002; Creamer et al., 2003; Weiss, 2007). The subscales also demonstrate good to excellent internal consistency: Intrusion ($\alpha = .87$ to $.94$), Avoidance ($\alpha = .84$ to $.87$), and Hyperarousal ($\alpha = .79$ to $.91$) (Creamer et al., 2003; Weiss, 2007). Test-retest reliability over intervals of one to six months has been found to be good, with correlation coefficients ranging from $r = .89$ to $r = .94$ for the total score (Weiss, 2007).

Regarding dimensionality, factor analytic studies have consistently supported the three-factor structure corresponding to intrusion, avoidance, and hyperarousal symptoms. Confirmatory factor analyses have demonstrated that this three-factor model provides acceptable to good fit across diverse trauma-exposed samples (Asukai et al., 2002; Creamer et al., 2003). Alternative models, including a single-factor solution and a two-factor model, have been tested but generally show poorer fit compared to the three-factor structure. The three-factor model aligns with theoretical conceptualisations of PTSD symptomatology and has been replicated across multiple countries and cultural contexts, supporting it as the most empirically and clinically robust representation of the IES-R's structure.

An important consideration highlighted by Weiss (2007) is that whilst PTSD diagnostic criteria were revised in the DSM-5 to separate avoidance and numbing criteria and increase the number of associated symptoms from 17 to 20, this revision does not fundamentally change the phenotype of PTSD. The IES-R continues to have utility in screening for PTSD symptoms despite not perfectly mapping onto DSM-5 criteria (Coffey & Berglind, 2006).

Clinical normative data for the IES-R were obtained from a sample of individuals with confirmed PTSD diagnoses ($n = 71$) reported by Rash et al. (2008). PTSD status was determined using structured diagnostic interviews and the CAPS to assess Criteria B-F. This sample was drawn from the United States and had a mean total IES-R score of 45.4 ($SD = 17.8$) and provides a clinical comparison for interpreting scores.

Community normative data for the IES-R present unique challenges because the scale is administered in relation to a specific traumatic event, making it difficult to establish a general population reference. Most normative data comes from trauma-exposed populations rather than general community samples. One study provided such a sample of ($n = 999$) general population respondents who completed the IES-R (Aljaberi et al., 2022). Their mean scores ($M = 21.06$, $SD = 16.30$) were comparably lower than a widely cited earlier sample of ($n = 182$) individuals involved in motor vehicle accidents ($M = 34.98$, $SD = 19.80$) (Beck et al., 2008). While this community sample was promising, it included no Western or predominantly English-speaking countries in its composition.

NovoPsych carried out a Latent Profile Analysis (LPA) to determine if a 'sub-clinical' subsample/latent profile existed within the wider clinical dataset ($N = 10,560$) composed of individuals who had completed the IES-R in therapeutic settings. LPA is a person-centred statistical approach that identifies distinct, latent subgroups within a population based on patterns of responses in combination with maximum likelihood estimation, and model fit indices such as Akaike and Bayesian Information Criteria (AIC/BIC), as well as likelihood ratio tests and entropy estimators. In other words, LPA is a statistical technique that looks for naturally occurring sub-groups of people based on how they answered the IES-R. Here, LPA allows for the potential extraction of meaningful comparison groups from real-world data. NovoPsych's LPA analysis identified three distinct profiles: Sub-Clinical ($M = 16.43$, $SD = 8.71$), Clinical ($M = 43.41$, $SD = 7.39$), and Severe ($M = 67.34$, $SD = 8.07$). Notably, the sub-clinical profile extracted from NovoPsych data demonstrated a *lower* mean score than the normative sample reported by Aljaberi et al. (2022), suggesting it

represents individuals who, despite being in clinical settings, are managing any trauma-related distress well and are thus an appropriate comparison group.

Cut-off scores for the total have been established based on research examining the relationship between IES-R scores and the presence or absence of a PTSD diagnosis. A score of 24 or above indicates that PTSD is a clinical concern, with those scoring in this range who do not have full PTSD likely experiencing some PTSD symptoms (Asukai et al., 2002). A score of 33 or above represents the optimal cut-off for probable PTSD diagnosis, providing the best balance between sensitivity and specificity (Creamer et al., 2003). Research has also found that scores of 37 or above are high enough to suppress immune system functioning, even 10 years after the traumatic event (Kawamura et al., 2001).

Based on cut-off scores provided in the literature (Asukai et al., 2002; Creamer et al., 2003; Kawamura et al., 2001), several severity categories are provided below to aid in the interpretation of the IES-R Total Score:

- **Low** (raw score 0-23): Minimal to mild distress related to the traumatic event
- **Clinically Significant** (raw score 24-32): Notable trauma-related symptoms
- **Probable** (raw score 33-36): Symptoms consistent with PTSD
- **Extreme** (raw score 37+): Severe PTSD symptoms

Category	Raw Score	Interpretation
Low	0-23	Minimal to mild distress related to the traumatic event
Clinically Significant	24-32	Notable trauma-related symptoms
Probable	33-36	Symptoms consistent with PTSD
Extreme	37+	Severe PTSD symptoms

Scoring & Interpretation

The IES-R produces a total score ranging from 0-88, with higher scores indicating a greater frequency and severity of post-traumatic stress symptoms. Three subscale scores with differing ranges are also produced:

- **Intrusion** (8 items: 1, 2, 3, 6, 9, 14, 16, 20): intrusive thoughts, nightmares, intrusive feelings, and imagery associated with the traumatic event (range 0-32)
- **Avoidance** (8 items: 5, 7, 8, 11, 12, 13, 17, 22): efforts to avoid trauma-related thoughts, feelings, or reminders, as well as numbing of responsiveness (range 0-32)
- **Hyperarousal** (6 items: 4, 10, 15, 18, 19, 21): heightened physiological arousal and reactivity following the trauma (range 0-24)

The total score is also expressed as an average score from 0-4 (by taking the raw score and dividing it by the number of items), and as a percentile rank based on the sub-clinical profile from NovoPsych's Latent Profile Analysis. This percentile contextualises the client's score relative to treatment-seeking individuals who have been exposed to a traumatic event, and who have low symptoms or who are managing their symptoms well. For example, a client's score at the 70th percentile means that 70% of individuals in the sub-clinical group scored lower, indicating the client has a higher level of trauma-related distress compared to their sub-clinical peers.

Severity ranges are given for the total score, with a total score exceeding 24 (average score 1.09: Average Likert score above "A little bit") indicates PTSD symptoms are clinically relevant. A score of 33 or above (average score 1.50)

represents an appropriate cut-off for probable PTSD. A score of 37 (average score 1.68) or more is indicative of severe symptoms that have been associated with significant functional impairment and physiological issues such as immunosuppression.

Severity descriptors for the total score are based on cut-off scores in the literature, detailed here:

- **Low** (raw score 0-23: Average score <1.08): Minimal to mild distress related to the traumatic event.
- **Clinically Significant** (raw score 24-32: Average score between 1.09 and 1.45): Notable trauma-related symptoms.
- **Probable** (raw score 33-36: Average score between 1.46 and 1.64): Symptoms consistent with PTSD.
- **Extreme** (raw score 37+: Average score > 1.65+): Severe PTSD symptoms.

For tracking clinical progress, changes of half a standard deviation (approximately 9 total score points) are considered clinically meaningful, following the minimally important difference guidelines (Norman et al., 2003; Turner et al., 2010). Monitoring scores over time allows clinicians to assess treatment effectiveness and adjust trauma-focused interventions as needed.

On first administration, results are shown in a stacked average score bar graph, which displays the total average score. A second bar graph of the three subscale average scores is shown next, allowing each symptom cluster's relative contribution to overall distress to be seen. A comparison graph is also presented showing the respondent's raw score relative to a group of trauma-exposed but well coping individuals and a sample of patients with a confirmed PTSD diagnosis.

When administered multiple times, two line graphs are generated, the first tracks the total average score and the second shows the subscale average scores over time to visualise changes in symptom patterns. Severity ranges for the subscales use a gradient, with Likert response labels on the right for reference. Response table descriptors for the subscales also follow this logic:

- A little bit = Average score 0-1
- Moderately = Average score 1.1-2
- Quite a bit = Average score 2.1-3
- Extremely = Average score 3.1-4

Interpretation at the subscale level may also be clinically useful. For example, a high score on the Avoidance subscale relative to the Intrusion subscale may suggest that the client's avoidance strategies may be temporarily 'successful' in keeping intrusive symptoms at bay. However, this avoidance pattern is likely impeding progress by preventing natural emotional processing of the trauma.

Supporting Information

Percentile Calculations

The sub-clinical comparison group for the IES-R total score was derived through latent profile analysis of a large dataset ($N = 10,560$) comprising individuals who completed the IES-R in therapeutic settings. This method is a person-centred statistical approach that identifies distinct subgroups within a population based on patterns of responses (see figure 1).

Three distinct profiles were identified for the total score:

- **Sub-Clinical Profile:** $M = 18.56$, $SD = 10.47$ (individuals without trauma-related distress or who are managing trauma-related distress well)
- **Clinical Profile:** $M = 43.38$, $SD = 8.72$ (individuals with moderate PTSD symptoms)
- **Severe Profile:** $M = 66.29$, $SD = 10.58$ (individuals with severe PTSD symptoms)

Notably, the sub-clinical profile demonstrated lower mean scores than normative samples reported in the literature, suggesting it represents individuals who have relatively low trauma-related distress. As the raw data for the sub-clinical group was available, percentiles were calculated directly.

For the clinical comparison group, a sample of individuals with confirmed PTSD diagnoses ($n = 71$) was used (Rash et al., 2008). This group had a mean total IES-R score of 45.4 ($SD = 17.8$). As raw data for this sample was not available, percentiles were extrapolated from the mean and standard deviation following the below method:

For each possible total score value (ranging from 0 to 88), the corresponding z-score was calculated using the sub-clinical profile parameters:

$$z = (X - 45.40) / 17.80$$

where X is the total score. These z-scores were then converted to percentiles using the cumulative normal distribution function:

$$\text{percentile} = \Phi(z) \times 100$$

where Φ is the standard normal cumulative distribution function.

Percentile Tables

Table 1. Total Score Percentile Distributions for the Sub-Clinical Latent Profile and PTSD Comparison Groups.

Total			
Average Score	Raw Score	Sub-Clinical	PTSD
0.00	0	1	1
0.05	1	4	1
0.09	2	6	1
0.14	3	8	1
0.18	4	11	1
0.23	5	13	1.2
0.27	6	15	1.3
0.32	7	17	1.5
0.36	8	20	1.8
0.41	9	23	2
0.45	10	26	2.3
0.50	11	28	2.7
0.55	12	31	3
0.59	13	34	3.4
0.64	14	36	3.9
0.68	15	39	4
0.73	16	42	5
0.77	17	46	5.5
0.82	18	50	6
0.86	19	54	7
0.91	20	57	8
0.95	21	61	9
1.00	22	65	9
1.05	23	69	10
1.09	24	73	11
1.14	25	77	13
1.18	26	81	14
1.23	27	86	15
1.27	28	90	16
1.32	29	95	18
1.36	30	96	19
1.41	31	97	21
1.45	32	98	23
1.50	33	99	24
1.55	34	99	26
1.59	35	99	28
1.64	36	99	30



1.68	37	99	32
1.73	38	99	34
1.77	39	99	36
1.82	40	99	38
1.86	41	99	40
1.91	42	99	42
1.95	43	99	45
2.00	44	99	47
2.05	45	99	49
2.09	46	99	51
2.14	47	99	54
2.18	48	99	56
2.23	49	99	58
2.27	50	99	60
2.32	51	99	62
2.36	52	99	64
2.41	53	99	67
2.45	54	99	69
2.50	55	99	71
2.55	56	99	72
2.59	57	99	74
2.64	58	99	76
2.68	59	99	78
2.73	60	99	79
2.77	61	99	81
2.82	62	99	82
2.86	63	99	84
2.91	64	99	85
2.95	65	99	86
3.00	66	99	88
3.05	67	99	89
3.09	68	99	90
3.14	69	99	91
3.18	70	99	92
3.23	71	99	92
3.27	72	99	93
3.32	73	99	94
3.36	74	99	95
3.41	75	99	95
3.45	76	99	96
3.50	77	99	96
3.55	78	99	97

3.59	79	99	97
3.64	80	99	97
3.68	81	99	98
3.73	82	99	98
3.77	83	99	98
3.82	84	99	98
3.86	85	99	99
3.91	86	99	99
3.95	87	99	99
4.00	88	99	99

Table 1.1. Intrusion Subscale Percentile Distributions for the Sub-Clinical Latent Profile and PTSD Comparison Groups.

Intrusion			
Average Score	Raw Score	Sub-Clinical	PTSD
0.00	0	1	2
0.13	1	8	3
0.25	2	14	4
0.38	3	21	5
0.50	4	28	7
0.63	5	36	9
0.75	6	45	11
0.88	7	54	14
1.00	8	63	17
1.13	9	73	21
1.25	10	81	25
1.38	11	88	29
1.50	12	92	34
1.63	13	95	39
1.75	14	97	44
1.88	15	99	49
2.00	16	99.3	54
2.13	17	99.6	59
2.25	18	99.8	64
2.38	19	99.9	69
2.50	20	99.9	74
2.63	21	99.9	78
2.75	22	99.9	81
2.88	23	99.9	85
3.00	24	99.9	88
3.13	25	99.9	90

3.25	26	99.9	92
3.38	27	99.9	94
3.50	28	99.9	95
3.63	29	99.9	97
3.75	30	99.9	97
3.88	31	99.9	98
4.00	32	99.9	99

Table 1.2. Avoidance Subscale Score Percentile Distributions for the Sub-Clinical Latent Profile and PTSD Comparison Groups.

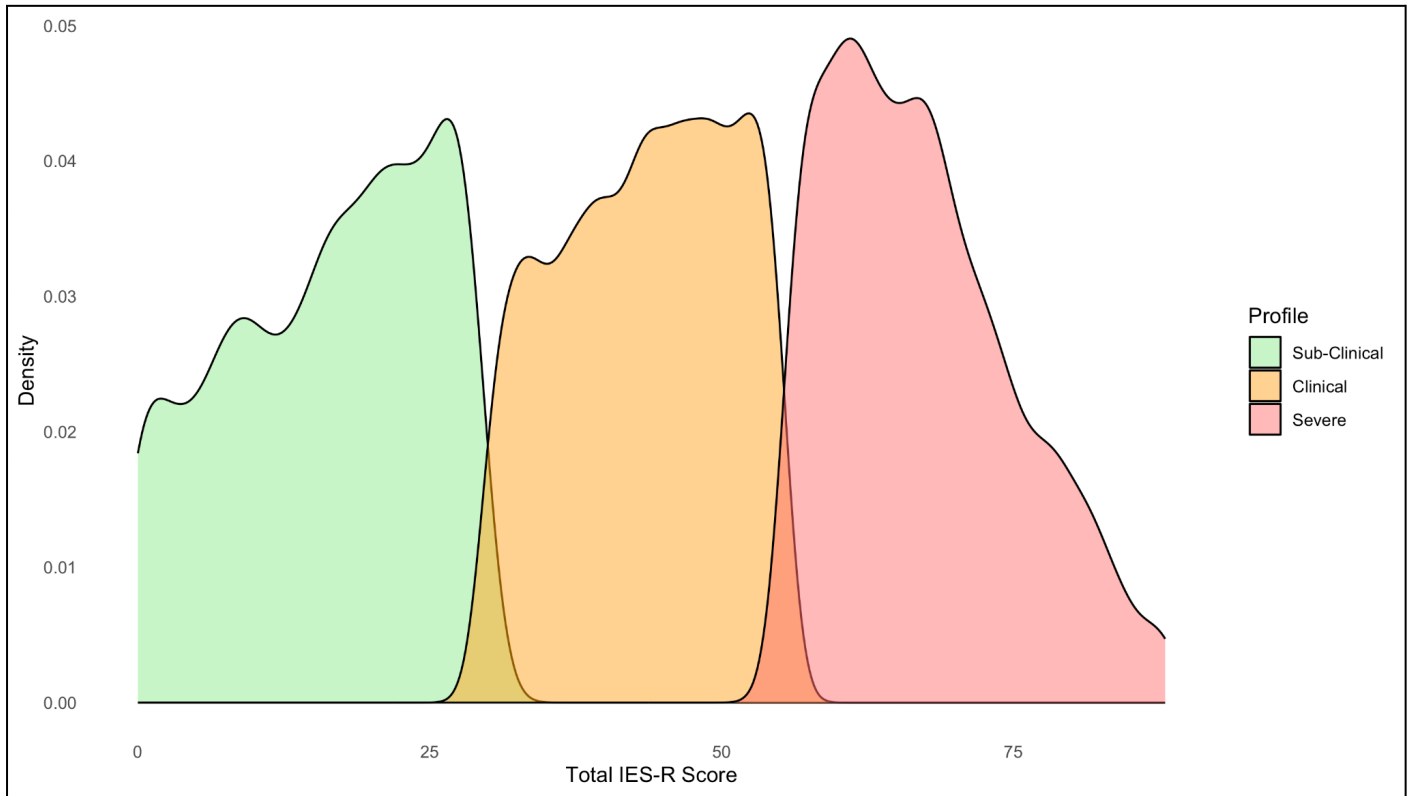
Avoidance			
Average Score	Raw Score	Sub-Clinical	PTSD
0.00	0	1	10
0.13	1	13	14
0.25	2	19	18
0.38	3	24	22
0.50	4	32	27
0.63	5	39	33
0.75	6	45	39
0.88	7	54	45
1.00	8	62	52
1.13	9	71	58
1.25	10	77	65
1.38	11	84	71
1.50	12	89	76
1.63	13	92	81
1.75	14	95	85
1.88	15	97	88
2.00	16	98	91
2.13	17	98.6	94
2.25	18	99	95
2.38	19	99.4	97
2.50	20	99.7	98
2.63	21	99.7	99
2.75	22	99.9	99
2.88	23	99.9	99
3.00	24	99.9	99
3.13	25	99.9	99
3.25	26	99.9	99
3.38	27	99.9	99
3.50	28	99.9	99

3.63	29	99.9	99
3.75	30	99.9	99
3.88	31	99.9	99
4.00	32	99.9	99

Table 1.3. Hyperarousal Subscale Score Percentile Distributions for the Sub-Clinical Latent Profile and PTSD Comparison Groups.

Hyperarousal			
Average Score	Raw Score	Sub-Clinical	PTSD
0.00	0	1	3
0.17	1	12	4
0.33	2	24	6
0.50	3	34	8
0.67	4	46	11
0.83	5	56	14
1.00	6	67	18
1.17	7	77	22
1.33	8	85	27
1.50	9	91	33
1.67	10	95	38
1.83	11	97	44
2.00	12	98.6	51
2.17	13	99	57
2.33	14	99.7	63
2.50	15	99.8	69
2.67	16	99.8	74
2.83	17	99.9	79
3.00	18	99.9	83
3.17	19	99.9	87
3.33	20	99.9	90
3.50	21	99.9	92
3.67	22	99.9	94
3.83	23	99.9	96
4.00	24	99.9	97

Figure 1. Density Distributions for NovoPsych's Identified Latent Profiles.



Density is analogous to the concentration of people in a score range, with the area under any section of the curve between two x-axis scores giving you the proportion/percentage of people in that range. In regards to the y-axis scores, the numbers are not so important on their own, attention should be given to their relative height (higher = more concentration), width, peak (most common scores) and overlap (profile boundaries).

Interpretive Text

The interpretive report for the IES-R is constructed from several components that are conditionally displayed based on the client's scores and assessment history. The report follows a structured format designed to provide clinicians with meaningful insights into the client's post-traumatic stress symptom profile.

If the client has completed the IES-R previously, the report begins with a comparison of current results to previous scores based on the minimally important difference (MID = 4 points): "The Impact of Event Scale Revised (IES-R) was administered on [current date]. Since the client completed the initial IES-R on [initial date] ([days] days ago), the client's total score has [change description]."

If this is the first administration, the report begins with: "The Impact of Event Scale Revised (IES-R) was administered on [date]."

Total Score Interpretation

The report always includes an interpretation of the total IES-R score:

"The client obtained a total score of [score] out of a possible 88, which falls at the [percentile][ordinal suffix] percentile compared to a sub-clinical sample. [Interpretation based on descriptor]."

The interpretation text varies based on the descriptor categories:

Low (raw score 0-23, average score 1.08 and lower):

"This indicates minimal to mild distress related to the traumatic event. Individuals scoring in this range generally experience few intrusive thoughts, limited avoidance behaviours, and minimal hyperarousal symptoms. Whilst some trauma-related distress may be present, it typically does not significantly impair daily functioning. This level of symptoms is common for those who did not develop PTSD as a result of their trauma due to resilience, social support networks and other protective factors."

Clinically Significant (raw score 24-32, average score 1.09-1.45):

"This indicates notable trauma-related symptoms that warrant further clinical attention. Individuals scoring in this range experience a concerning level of post-traumatic stress that may be interfering with daily functioning and well-being. PTSD is a clinical concern at this level; those with scores in this range who do not have full PTSD will likely be experiencing some notable symptoms."

<Top two highest scored items>

Probable (raw score 33-36, average score 1.50-1.64):

"Individuals scoring in this range are experiencing substantial post-traumatic stress symptoms across multiple domains that are likely causing significant impairment. This level of symptoms strongly suggests the presence of PTSD symptoms. A comprehensive diagnostic assessment is indicated to confirm PTSD diagnosis and rule out comorbid conditions."

<Top three highest scored items>

Extreme (raw score 37 and higher, average score 1.68 and higher):

"This indicates severe and persistent PTSD symptoms. Scores at this level are high enough to potentially suppress immune system functioning, even years after the traumatic event. Individuals scoring in this range are typically

experiencing pervasive and intrusive thoughts/memories/images, significant avoidance that burdens daily life, and intense hyperarousal that can interfere with sleep, relationships, and daily life. The severity of symptoms strongly indicates a comprehensive assessment is warranted."

<Top four highest scored items>

Subscale Interpretations

If at least one subscale falls in the Clinically Significant range or higher, interpretation is provided for the highest-scoring subscale(s). Subscales are presented in order of severity, with the highest-scoring subscale described first.

Intrusion Subscale

"The responses on the Intrusion subscale indicate [substantial/notable/marked] difficulties with intrusive trauma-related memories and imagery. This pattern suggests the client experiences frequent unwanted memories, nightmares, or flashbacks related to the traumatic event. Intrusive symptoms may include reminders bringing back distressing feelings, pictures of the event popping into mind, waves of strong emotions, or re-experiencing the event so vividly that it feels like it is happening again. In therapy, trauma-focused cognitive-behavioural therapy (TF-CBT) or Eye Movement Desensitisation and Reprocessing (EMDR) may be beneficial for processing these intrusive memories and reducing their frequency and intensity.

Items with the highest ratings were:

[Top 3 highest-scored *Intrusion* items]"

Avoidance Subscale

"The responses on the Avoidance subscale indicate [substantial/notable/marked] efforts to avoid trauma-related thoughts, feelings, and reminders. This pattern suggests the client actively tries to prevent themselves from thinking about or being reminded of the traumatic event, and may experience emotional numbing or detachment. Avoidance behaviours, whilst understandable as protective strategies, often maintain PTSD symptoms by preventing natural emotional processing of the trauma. In therapy, graduated exposure techniques may be beneficial to help the client gradually approach previously avoided trauma-related stimuli in a safe, controlled manner, thereby reducing avoidance patterns and facilitating emotional processing.

Items with the highest ratings were:

[Top 3 highest-scored *Avoidance* items]"

Hyperarousal Subscale

"The responses on the Hyperarousal subscale indicate [substantial/notable/marked] heightened physiological arousal and reactivity. This pattern suggests the client experiences persistent heightened alertness, irritability, difficulty concentrating, sleep disturbances, exaggerated startle response, and physical reactivity to trauma reminders. These hyperarousal symptoms reflect a nervous system that remains in a state of heightened threat detection following the traumatic event. In therapy, interventions targeting physiological arousal may be beneficial, including relaxation training, breathing techniques, mindfulness practices, and potentially medication to address sleep disturbances and anxiety. Establishing safety and stabilisation is crucial before engaging in trauma processing work.

Items with the highest ratings were:

[Top 3 highest-scored *Hyperarousal* items]"

Developer

Weiss, D. S. (2007). The Impact of Event Scale-Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A practitioner's handbook* (2nd ed., pp. 168-189). Guilford Press.

References

Aljaberi, M. A., Lee, K. H., Alareqe, N. A., Qasem, M. A., Alsalahi, A., Abdallah, A. M., Noman, S., Al-Tammemi, A. B., Mohamed Ibrahim, M. I., & Lin, C. Y. (2022). Rasch modeling and multilevel confirmatory factor analysis for the usability of the Impact of Event Scale-Revised (IES-R) during the COVID-19 pandemic. *Healthcare, 10*(10), 1858. <https://doi.org/10.3390/healthcare10101858>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

Asukai, N., Kato, H., Kawamura, N., Kim, Y., Yamamoto, K., Kishimoto, J., Miyake, Y., & Nishizono-Maher, A. (2002). Reliability and validity of the Japanese-language version of the Impact of Event Scale-Revised (IES-R-J): Four studies of different traumatic events. *Journal of Nervous and Mental Disease, 190*(3), 175-182. <https://doi.org/10.1097/00005053-200203000-00006>

Beck, J. G., Grant, D. M., Read, J. P., Clapp, J. D., Coffey, S. F., Miller, L. M., & Palyo, S. A. (2008). The impact of event scale-revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders, 22*(2), 187-198. <https://doi.org/10.1016/j.janxdis.2007.02.007>

Coffey, S. F., & Berglund, G. (2006). Screening for PTSD in motor vehicle accident survivors using PSS-SR and IES. *Journal of Traumatic Stress, 19*(1), 119-128. <https://doi.org/10.1002/jts.20106>

Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the Impact of Event Scale-Revised. *Behaviour Research and Therapy, 41*(12), 1489-1496. <https://doi.org/10.1016/j.brat.2003.07.010>

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218. <https://doi.org/10.1097/00006842-197905000-00004>

Kawamura, N., Yoshiharu, K., & Nozomu, A. (2001). Suppression of cellular immunity in men with a past history of post-traumatic stress disorder. *American Journal of Psychiatry, 158*(3), 484-486. <https://doi.org/10.1176/appi.ajp.158.3.484>

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593-602. <https://doi.org/10.1001/archpsyc.62.6.593>

Loewenstein, R. J. (2018). Dissociation debates: Everything you know is wrong. *Dialogues in Clinical Neuroscience, 20*(3), 229-242. <https://doi.org/10.31887/DCNS.2018.20.3/rloewenstein>

Norman, G. R., Sloan, J. A., & Wyrwich, K. W. (2003). Interpretation of changes in health-related quality of life: The remarkable universality of half a standard deviation. *Medical Care, 41*(5), 582-592. <https://doi.org/10.1097/01.MLR.0000062554.74615.4C>

Rash, C. J., Coffey, S. F., Baschnagel, J. S., Drobos, D. J., & Saladin, M. E. (2008). Psychometric properties of the IES-R in traumatized substance dependent individuals with and without PTSD. *Addictive Behaviors, 33*(8), 1039-1047. <https://doi.org/10.1016/j.addbeh.2008.04.006>

Turner, D., Schönemann, H. J., Griffith, L. E., Beaton, D. E., Griffiths, A. M., Critch, J. N., & Guyatt, G. H. (2010). The minimal detectable change cannot reliably replace the minimal important difference. *Journal of Clinical Epidemiology*, 63(1), 28-36. <https://doi.org/10.1016/j.jclinepi.2009.01.024>

Weiss, D. S. (2007). The Impact of Event Scale-Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A practitioner's handbook* (2nd ed., pp. 168-189). Guilford Press.



Assessment Questions



NovoPsych

Impact of Event Scale - Revised (IES-R)

Instructions:

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to (the event). How much were you distressed or bothered by these difficulties?

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Any reminder brought back feelings about it	0	1	2	3	4
2	I had trouble staying asleep	0	1	2	3	4
3	Other things kept making me think about it	0	1	2	3	4
4	I felt irritable and angry	0	1	2	3	4
5	I avoided letting myself get upset when I thought about it or was reminded of it	0	1	2	3	4
6	I thought about it when I didn't mean to	0	1	2	3	4
7	I felt as if it hadn't happened or wasn't real	0	1	2	3	4
8	I stayed away from reminders about it	0	1	2	3	4
9	Pictures about it popped into my mind	0	1	2	3	4
10	I was jumpy and easily startled	0	1	2	3	4
11	I tried not to think about it	0	1	2	3	4
12	I was aware that I still had a lot of feelings about it, but I didn't deal with them	0	1	2	3	4
13	My feelings about it were kind of numb	0	1	2	3	4
14	I found myself acting or feeling as though I was back at that time	0	1	2	3	4
15	I had trouble falling asleep	0	1	2	3	4
16	I had waves of strong feelings about it	0	1	2	3	4



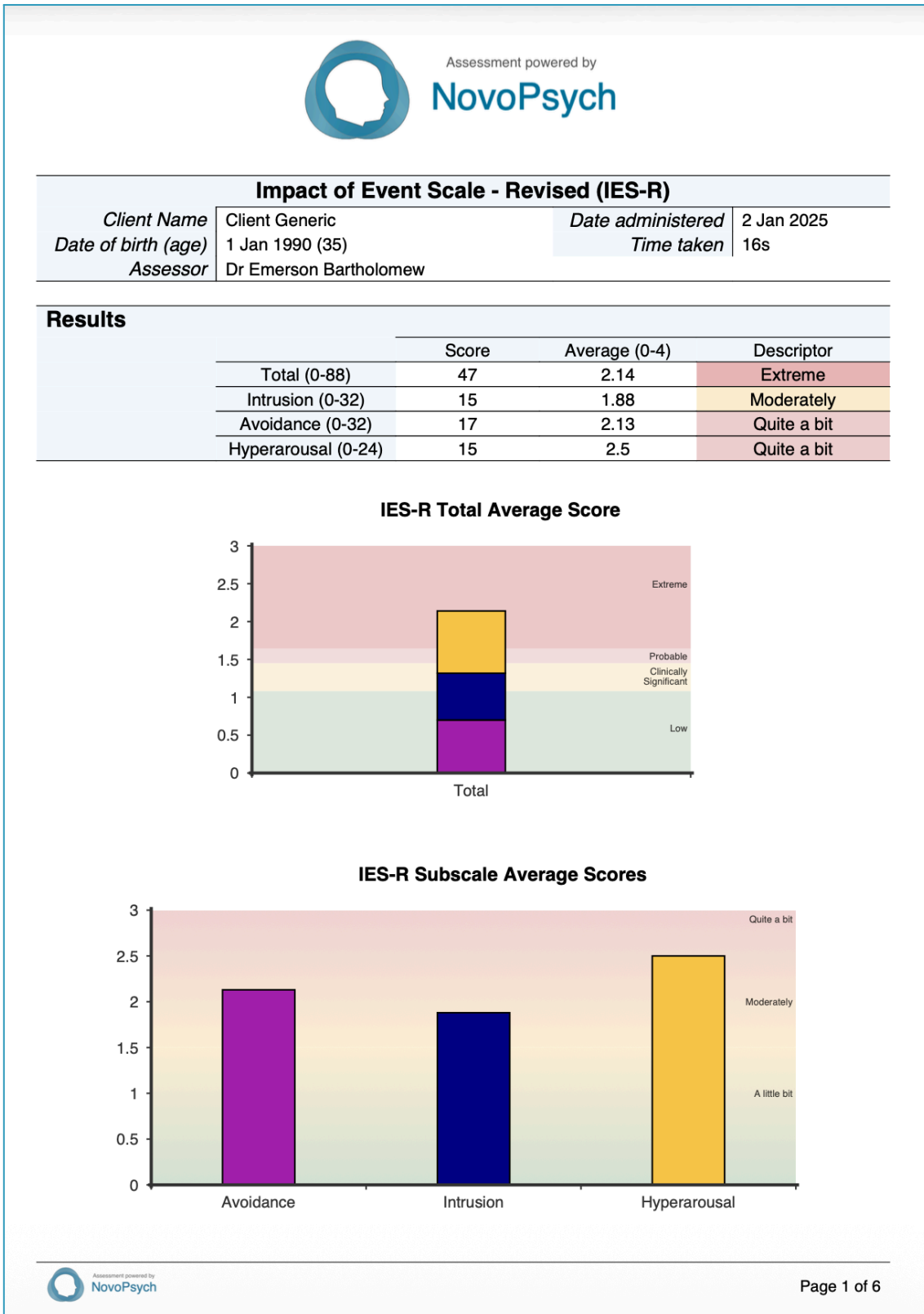
		Not at all	A little bit	Moderately	Quite a bit	Extremely
17	I tried to remove it from my memory	0	1	2	3	4
18	I had trouble concentrating	0	1	2	3	4
19	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart	0	1	2	3	4
20	I had dreams about it	0	1	2	3	4
21	I felt watchful or on-guard	0	1	2	3	4
22	I tried not to talk about it	0	1	2	3	4

Developer Reference:

Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.), *Assessing Psychological Trauma and PTSD: A Practitioner's Handbook* (pp. 399-411). New York: Guilford Press. The original Impact of events Scale (IES) was developed in the 1980s

[Administer Online](#)

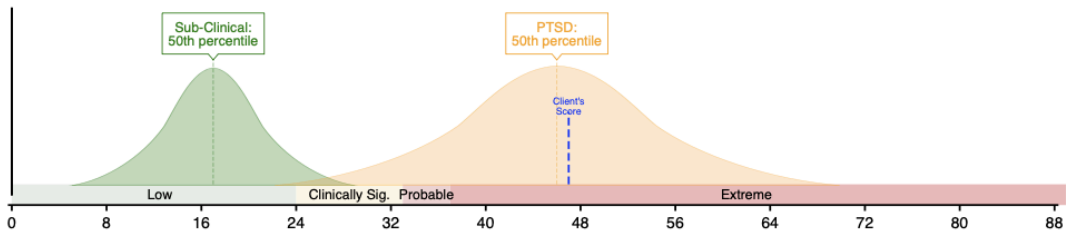
Sample Result





Client Name | Client Generic

Total Impact of Event Score in Relation to Comparison Groups



Interpretation

The Impact of Events Scale Revised (IES-R) was administered on 02 January 2025. The client obtained a total score of 47 out of a possible 88, which falls at the 99th percentile compared to a sub-clinical sample. This score falls within the 'Extreme' range, indicating severe and persistent PTSD symptoms. Scores at this level can potentially suppress immune system functioning, even years after the traumatic event. Individuals scoring in this range are typically experiencing pervasive and intrusive thoughts/memories/images, significant avoidance, and intense hyperarousal that can interfere with sleep, relationships and daily life. The severity of symptoms strongly indicates comprehensive assessment.

Items with the highest ratings were:

- 19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart (Extremely)
- 21. I felt watchful or on-guard (Extremely)
- 6. I thought about it when I didn't mean to (Quite a bit)
- 12. I was aware that I still had a lot of feelings about it, but I didn't deal with them (Quite a bit)

Intrusion:

The responses on the Intrusion subscale indicate notable difficulties with intrusive trauma-related memories and imagery. This pattern suggests the client experiences frequent unwanted memories, nightmares, or flashbacks related to the traumatic event. Intrusive symptoms may include reminders bringing back distressing feelings, pictures of the event popping into mind, waves of strong emotions, or re-experiencing the event so vividly that it feels like it is happening again. In therapy, trauma-focused cognitive-behavioural therapy or Eye Movement Desensitisation and Reprocessing (EMDR) may be beneficial for processing these intrusive memories and reducing their frequency and intensity.

Items with the highest ratings within the Intrusion subscale were:

- 6. I thought about it when I didn't mean to (Quite a bit)
- 16. I had waves of strong feelings about it (Quite a bit)
- 20. I had dreams about it (Quite a bit)



Client Name | Client Generic

Avoidance:

The responses on the Avoidance subscale indicate substantial efforts to avoid trauma-related thoughts, feelings, and reminders. This pattern suggests the client actively tries to prevent themselves from thinking about or being reminded of the traumatic event, and may experience emotional numbing or detachment. Avoidance behaviours, whilst understandable as protective strategies, often maintain PTSD symptoms by preventing natural emotional processing of the trauma. In therapy, graduated exposure techniques may be beneficial to help the client gradually approach previously avoided trauma-related stimuli in a safe, controlled manner, thereby reducing avoidance patterns and facilitating emotional processing.

Items with the highest ratings within the Avoidance subscale were:

- 12. *I was aware that I still had a lot of feelings about it, but I didn't deal with them (Quite a bit)*
- 22. *I tried not to talk about it (Quite a bit)*
- 5. *I avoided letting myself get upset when I thought about it or was reminded of it (Moderately)*

Hyperarousal:

The responses on the Hyperarousal subscale indicate substantial heightened physiological arousal and reactivity. This pattern suggests the client experiences persistent heightened alertness, irritability, difficulty concentrating, sleep disturbances, exaggerated startle response, and physical reactivity to trauma reminders. These hyperarousal symptoms reflect a nervous system that remains in a state of heightened threat detection following the traumatic event. In therapy, interventions targeting physiological arousal may be beneficial, including relaxation training, breathing techniques, mindfulness practices, and potentially medication to address sleep disturbances and anxiety. Establishing safety and stabilisation is crucial before engaging in trauma processing work.

Items with the highest ratings within the Hyperarousal subscale were:

- 19. *Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart (Extremely)*
- 21. *I felt watchful or on-guard (Extremely)*
- 18. *I had trouble concentrating (Quite a bit)*

Scoring and Interpretation Information

The IES-R produces a total score ranging from 0-88, with higher scores indicating a greater frequency and severity of post-traumatic stress symptoms. Three subscale scores with differing ranges are also produced:

- Intrusion (8 items: 1, 2, 3, 6, 9, 14, 16, 20): intrusive thoughts, nightmares, intrusive feelings, and imagery associated with the traumatic event (range 0-32)
- Avoidance (8 items: 5, 7, 8, 11, 12, 13, 17, 22): efforts to avoid trauma-related thoughts, feelings, or reminders, as well as numbing of responsiveness (range 0-32)
- Hyperarousal (6 items: 4, 10, 15, 18, 19, 21): heightened physiological arousal and reactivity following the trauma (range 0-24)

The total score is also expressed as an average score from 0-4 (by taking the raw score and dividing it by the number of items), and as a percentile rank based on the sub-clinical profile



Client Name Client Generic

from NovoPsych's Latent Profile Analysis. This percentile contextualises the client's score relative to treatment-seeking individuals who have been exposed to a traumatic event, and who have low symptoms or who are managing their symptoms well. For example, a client's score at the 70th percentile means that 70% of individuals in the sub-clinical group scored lower, indicating the client has a higher level of trauma-related distress compared to their sub-clinical peers.

Severity ranges are given for the total score, with a total score exceeding 24 (average score 1.09: Average Likert score above "A little bit") indicates PTSD symptoms are clinically relevant. A score of 33 or above (average score 1.50) represents an appropriate cut-off for probable PTSD. A score of 37 (average score 1.68) or more is indicative of severe symptoms that have been associated with significant functional impairment and physiological issues such as immunosuppression.

Severity descriptors for the total score are based on cut-off scores in the literature, detailed here:

- Low (raw score 0-23: Average score <1.08): Minimal to mild distress related to the traumatic event.
- Clinically Significant (raw score 24-32: Average score between 1.09 and 1.45): Notable trauma-related symptoms.
- Probable (raw score 33-36: Average score between 1.46 and 1.64): Symptoms consistent with PTSD.
- Extreme (raw score 37+: Average score >1.65+): Severe PTSD symptoms.

For tracking clinical progress, changes of half a standard deviation (approximately 9 total score points) are considered clinically meaningful, following the minimally important difference guidelines (Norman et al., 2003; Turner et al., 2010). Monitoring scores over time allows clinicians to assess treatment effectiveness and adjust trauma-focused interventions as needed.

On first administration, results are shown in a stacked average score bar graph, which displays the total average score. A second bar graph of the three subscale average scores is shown next, allowing each symptom cluster's relative contribution to overall distress to be seen. A comparison graph is also presented showing the respondent's raw score relative to a group of trauma-exposed but well coping individuals and a sample of patients with a confirmed PTSD diagnosis.

When administered multiple times, two line graphs are generated, the first tracks the total average score and the second shows the subscale average scores over time to visualise changes in symptom patterns. Severity ranges for the subscales use a gradient, with Likert response labels on the right for reference. Response table descriptors for the subscales also follow this logic:

- A little bit = Average score 0-1
- Moderately = Average score 1.1-2
- Quite a bit = Average score 2.1-3
- Extremely = Average score 3.1-4

Interpretation at the subscale level may also be clinically useful. For example, a high score on the Avoidance subscale relative to the Intrusion subscale may suggest that the client's avoidance strategies may be temporarily 'successful' in keeping intrusive symptoms at bay. However, this avoidance pattern is likely impeding progress by preventing natural emotional



Client Name	Client Generic
	processing of the trauma.

Client Responses

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Any reminder brought back feelings about it	0	1	2	3	4
2	I had trouble staying asleep	0	1	2	3	4
3	Other things kept making me think about it	0	1	2	3	4
4	I felt irritable and angry	0	1	2	3	4
5	I avoided letting myself get upset when I thought about it or was reminded of it	0	1	2	3	4
6	I thought about it when I didn't mean to	0	1	2	3	4
7	I felt as if it hadn't happened or wasn't real	0	1	2	3	4
8	I stayed away from reminders about it	0	1	2	3	4
9	Pictures about it popped into my mind	0	1	2	3	4
10	I was jumpy and easily startled	0	1	2	3	4
11	I tried not to think about it	0	1	2	3	4
12	I was aware that I still had a lot of feelings about it, but I didn't deal with them	0	1	2	3	4
13	My feelings about it were kind of numb	0	1	2	3	4
14	I found myself acting or feeling as though I was back at that time	0	1	2	3	4
15	I had trouble falling asleep	0	1	2	3	4
16	I had waves of strong feelings about it	0	1	2	3	4



Client Name | Client Generic

Client Responses (cont.)

		Not at all	A little bit	Moderately	Quite a bit	Extremely
17	I tried to remove it from my memory	0	1	2	3	4
18	I had trouble concentrating	0	1	2	3	4
19	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart	0	1	2	3	4
20	I had dreams about it	0	1	2	3	4
21	I felt watchful or on-guard	0	1	2	3	4
22	I tried not to talk about it	0	1	2	3	4