

Global Psychotrauma Screen (GPS)

User guide

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The GPS in short

- The Global Psychotrauma Screen (GPS) is a screening instrument designed to identify reactions to a severe stressor / potentially traumatic event (17 yes/no questions)
- It also assesses risk or protective factors known to influence the development or course of symptoms (5 yes/no questions).
- The GPS begins with questions about the event or experience.
- It can be used in different settings such as in primary care, after disasters, or in clinical practice.
- The app provides direct feedback on the scores.
- Scoring positive above the cutoff or on certain domains (e.g. of posttraumatic stress disorder (PTSD)) may require more detailed follow-up assessments, e.g. with structured interviews for specific disorders.

Development of the GPS

The GPS was developed by an international group of experts representing traumatic stress societies worldwide, called the Global Collaboration on Traumatic Stress (Olf et al., 2020; Schnyder et al., 2017). The aim was to address the need for a brief instrument that would tap the potential wide range of acute or long-term consequences of very stressful / potentially traumatic events. The instrument should screen for more PTSD symptoms alone (see domains below). It was to be used in different settings such as in primary care, after disasters, or for quick screening in clinical practice. For details on its development see Olf et al. (2020).

The GPS and its domains

The GPS consists of 17 symptom items, and 5 risk/protective factor questions, each answered in a yes/no format, and one functioning item.

The English version is attached (Appendix 1). See website (<https://www.global-psychotrauma.net/gps>) for other languages.

The symptom domains covered in the GPS are:

- PTSD
- Disturbances in Self-Organization (DSO) as part of Complex PTSD
- Anxiety
- Depression
- Sleep problems
- Self-harm
- Dissociation
- Other physical, emotional or social problems
- Substance abuse

Risk and protective factors assessed are:

- Other stressful events
- Childhood trauma

- History of mental illness
- Social support
- Psychological resilience

The GPS app

The GPS is available in the underlined languages below through the GPS webapp (see <https://www.global-psychotrauma.net/gps>). The app allows to easily fill out the GPS and to receive immediate feedback on scores. Not all languages are available yet through the app, in those cases a pdf can be obtained through the website.

The GPS app version in addition to the 22 yes/no items also asks about the type of event and includes an item on functioning.

The GPS is currently available in 31 languages (for links to work go to the website):

- **Afrikaans:** [take GPS app](#) or [download pdf](#)
- **Amharic:** [download pdf](#)
- **Arabic:** [download pdf](#)
- **Armenian:** [take GPS app](#) or [download pdf](#)
- **Chinese:** [take GPS app](#) or [download pdf](#)
- **Croatian:** [take GPS app](#) or [download pdf](#)
- **Dutch:** [take GPS app](#) or [download pdf](#)
- **English:** [take GPS app](#) or [download pdf](#) or [<<audio>>](#)
- **Farsi/Persian:** [download pdf](#)
- **French:** [take GPS app](#) or [download pdf](#)
- **Georgian:** [take GPS app](#) or [download pdf](#)
- **German:** [take GPS app](#) or [download pdf](#)
- **Greek:** [take GPS app](#) or [download pdf](#)
- **Hausa:** [download pdf](#)
- **Hebrew:** [download pdf](#)
- **Indonesian:** [take GPS app](#) or [download pdf](#)
- **Italian:** [take GPS app](#) or [download pdf](#)
- **Japanese:** [take GPS app](#) or [download pdf](#)
- **Norwegian:** [take GPS app](#) or [download pdf](#)
- **Polish:** [take GPS app](#) or [download pdf](#)
- **Portuguese (Europe):** [take GPS app](#) or [download pdf](#)
- **Portuguese (Brazil):** [take GPS app](#) or [download pdf](#)
- **Russian:** [take GPS app](#) or [download pdf](#)
- **Slovak:** [take GPS app](#) or [download pdf](#)
- **Spanish:** [take GPS app](#) or [download pdf](#)
- **Spanish (Argentinian):** [take GPS app](#) or [download pdf](#)
- **Swahili:** [download pdf](#)
- **Turkish:** [take GPS app](#) or [download pdf](#)
- **Ukrainian:** [download pdf](#)
- **Xhosa :** [download pdf](#)
- **Yoruba :** [download pdf](#)

The English version has been translated into the languages listed above following the translation and cultural adaptation process by Sousa and Rojjanasrirat or similar (2011). Please note that some (African) languages are widely spoken across different countries and there might be instances the terminology may suit one country better than another. Please contact us if a specific country version is required.

Collect your own GPS data

For researchers and clinicians there is the possibility to get access to GPS app data collected through your own portal. Please contact us if you are interested.

Scoring instructions

Several scores can be calculated. "GPS symptoms" is the sum score of all symptom items. "GPS Risk & Protective Factors" is the sum score of all the risk and protective factors. Subdomain scores are all mean item scores of the subdomain.

Scoring GPS items 1-21: No=0; Yes=1. GPS Item 22: No=1; Yes=0. (Note that in the GPS app data GPS22 is already recoded)

- **"GPS_Symptoms"**: Sum of items 1-16 + 18 (range 0-17).
- **"GPS_PTSD"** Sum of items 1-5 (range 0-5).
- **"GPS_DSO"** Sum of items 6-7 (range 0-2).
- **"GPS_CPTSD"** Sum of "GPS_PTSD" and "GPS_DSO" (range 0-7).
- **"GPS_Anxiety"** Sum of items 8-9 (range 0-2).
- **"GPS_Depression"** Sum of items 10-11 (range 0-2).
- **"GPS_Insomnia"** Items 12 (range 0-1).
- **"GPS_Self-harm"** Item 13 (range 0-1).
- **"GPS_Dissociation"** Sum of items 14-15 (range 0-2).
- **"GPS_SubstanceAbuse"** Item 18 (range 0-1).
- **"GPS_OtherProblems"** Item 16 (range 0-1).
- **"GPS_RiskProtect"** Sum of items 17 + 19-22r (range 0-5).

For researchers: SPSS syntax files are attached in Appendix 4.

GPS items 1 through 5 - stemming from the PC-PTSD-5 (Prins et al., 2016) - may be summed up to derive a total PTSD score (possible scores range from 0 to 5). A score of 3 or higher indicates possible PTSD with maximized sensitivity.

Preliminary data suggest that a cutoff 8 or 9 on the total symptoms score is indicative of PTSD (Frewen et al., 2021/in press, Haghi et al., under review), with 8 for maximized sensitivity, 9 for higher specificity.

It is advised that scoring positive above the total symptom cutoff or on certain domains is followed up with more detailed assessments, e.g. with structured interviews for specific disorders.

Norm scores and psychometric properties

Ongoing research suggests good internal reliability as well as concurrent validity with instruments measuring a range of psychotrauma related symptom domains (Olf et al., 2020 & 2021, Oe et al., 2020; Rossi et al., 2020; Rossi et al., 2021; Frewen et al., 2021/in press).

Cross cultural norm data have been collected in a large sample of over 7000 participants (Olf et al., 2021). Scores per gender in countries with samples sizes >100 are listed in Appendix 2. Means and SDs for GPS symptom score of males and females for specific countries with sample sizes > 100 are listed in Appendix 3.

GPS existing data sets

Please feel free to use existing data sets including the GPS to answer further research questions. These can be found [here](https://www.global-psychotrauma.net/data-sets) (https://www.global-psychotrauma.net/data-sets).

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Appendices

Appendix 1. GPS English version

Global Psychotrauma Screen (GPS)		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> </tr> </table> Participant Identification Number						
Gender	<input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Other							
Age (years)	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> </tr> </table>							
Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic.								
Briefly describe the event or experience that currently affects you the most:								
This event happened: <input type="checkbox"/> last month <input type="checkbox"/> last half year <input type="checkbox"/> last year <input type="checkbox"/> longer ago								
This event: <input type="checkbox"/> was a single event occurring, at age <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 15px;"></td><td style="width: 20px; height: 15px;"></td></tr></table> <input type="checkbox"/> happened during a longer period / multiple times, between ages <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 15px;"></td><td style="width: 20px; height: 15px;"></td></tr></table> and <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 15px;"></td><td style="width: 20px; height: 15px;"></td></tr></table>								
Which of the below characterize the event (more answers possible): Physical violence: <input type="checkbox"/> to yourself <input type="checkbox"/> happened to someone else Sexual violence: <input type="checkbox"/> to yourself <input type="checkbox"/> happened to someone else Emotional abuse: <input type="checkbox"/> to yourself <input type="checkbox"/> happened to someone else Serious injury: <input type="checkbox"/> to yourself <input type="checkbox"/> happened to someone else Life threatening: <input type="checkbox"/> to yourself <input type="checkbox"/> happened to someone else <input type="checkbox"/> Sudden death of a loved one <input type="checkbox"/> You causing harm to someone else <input type="checkbox"/> Corona virus (COVID-19)								
Considering the above event, <u>in the past month</u> have you....								
1. ... had nightmares about the past traumatic life event(s) you have experienced or thought about the event(s) when you did not want to?	<input type="checkbox"/> No <input type="checkbox"/> Yes							
2. ... tried hard not to think about past traumatic life event(s) or went out of your way to avoid situations that reminded you of the event(s)?	<input type="checkbox"/> No <input type="checkbox"/> Yes							
3. ... been constantly on guard, watchful, or easily startled?	<input type="checkbox"/> No <input type="checkbox"/> Yes							
4. ... felt numb or detached from people, activities, or your surroundings?	<input type="checkbox"/> No <input type="checkbox"/> Yes							
5. ... felt guilty or unable to stop blaming yourself or others for past traumatic life event(s) or any problems the event(s) caused?	<input type="checkbox"/> No <input type="checkbox"/> Yes							
6. ... tended to feel worthless?	<input type="checkbox"/> No <input type="checkbox"/> Yes							

7.	... experienced angry outbursts that you could not control?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
8.	... been feeling nervous, anxious, or on edge?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
9.	... been unable to stop or control worrying?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
10.	... been feeling down, depressed, or hopeless?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
11.	... been experiencing little interest or pleasure in doing things?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
12.	... had any problems falling or staying asleep?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
13.	.. tried to intentionally hurt yourself?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
14.	.. perceived or experienced the world or other people differently, so that things seem dreamlike, strange or unreal?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
15.	.. felt detached or separated from your body (for example, feeling like you are looking down on yourself from above, or like you are an outside observer of your own body)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
16.	.. had any other physical, emotional or social problems that bothered you?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
17.	... experienced other stressful events (such as financial problems, changing jobs, moving to another house, relational crisis in work or private life)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
18.	... tried to reduce tensions by using alcohol, tobacco, drugs or medication?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
19.	... missed supportive people near you that you could readily count on for help in times of difficulty (such as emotional support, watch over children or pets, give rides to hospital or store, help when you are sick)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
20.	During <i>your childhood</i> (0-18 years), did you experience any traumatic life events (e.g., a serious accident or fire, physical or sexual assault or abuse, a disaster, seeing someone be killed or seriously injured, or having a loved one die)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
21.	Have you <i>ever</i> received a psychiatric diagnosis or have you ever been treated for psychological problems (for example, depression, anxiety or a personality disorder)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
22.	Do you <i>generally</i> consider yourself to be a resilient person?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.	How would you rate your present functioning (at work/home)?	Poor 1 2 3 4 5 6 7 8 9 10 Excellent	

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Appendix 2. GPS symptoms and subdomain scores

	Female (n=6132) M (SD)	Male (n=1998) M (SD)	Total (n=8130) M (SD)
GPS_Symptoms	8.30 (4.67)	6.30 (4.77)	7.81 (4.77)
GPS_PTSD	0.54 (0.34)	0.40 (0.34)	0.50 (0.35)
GPS_DSO	0.45 (0.40)	0.33 (0.39)	0.42 (0.40)
GPS_CPTSD	0.51 (0.32)	0.38 (0.32)	0.48 (0.32)
GPS_Anxiety	0.67 (0.40)	0.52 (0.42)	0.63 (0.41)
GPS_Depression	0.62 (0.42)	0.48 (0.43)	0.58 (0.43)
GPS_Insomnia	0.60 (0.49)	0.46 (0.50)	0.57 (0.50)
GPS_Self-harm	0.11 (0.31)	0.06 (0.24)	0.10 (0.30)
GPS_Dissociation	0.26 (0.37)	0.19 (0.33)	0.24 (0.36)
GPS_SubstanceAbuse	0.32 (0.47)	0.30 (0.46)	0.31 (0.46)
GPS_OtherProblems	0.59 (0.49)	0.42 (0.49)	0.55 (0.50)
"GPS_RiskProtect"	3.22 (1.53)	2.75 (1.74)	3.10 (1.60)

Appendix 3. GPS symptoms scores per country

Means and SDs for GPS symptom score of males and females for countries with sample sizes > 100

Country	Gender	Number of respondents	GPS symptom score (Mean)	Standard deviation
Armenia	Male	81	7.52	4.29
	Female	231	8.58	3.48
	Total	312	8.30	3.73
Australia	Male	37	6.97	5.43
	Female	113	8.78	5.06
	Total	150	8.33	5.20
Austria	Male	48	3.98	3.88
	Female	125	6.14	4.26
	Total	173	5.54	4.26
Belgium	Male	74	5.35	4.43
	Female	197	7.54	4.51
	Total	271	6.94	4.58
Brazil	Male	153	6.40	4.76
	Female	556	8.02	4.30
	Total	709	7.67	4.45
Canada	Male	23	7.91	5.37
	Female	223	9.93	4.34
	Total	246	9.74	4.47
Chile	Male	44	8.39	4.04
	Female	116	10.09	4.10
	Total	160	9.63	4.14
China	Male	167	7.36	4.75
	Female	326	6.81	4.80
	Total	493	7.00	4.78
Croatia	Male	32	6.56	4.51
	Female	243	7.51	4.01
	Total	275	7.40	4.07
Cyprus	Male	33	5.82	4.15
	Female	96	6.72	4.67
	Total	129	6.49	4.55
France	Male	52	8.21	4.52
	Female	283	9.13	4.73
	Total	335	8.99	4.70
Georgia	Male	48	7.08	4.08
	Female	65	7.38	4.06
	Total	113	7.26	4.06

Germany	Male	22	7.95	5.92
	Female	190	10.58	4.89
	Total	212	10.31	5.06
Greece	Male	68	5.15	3.90
	Female	190	6.01	3.81
	Total	258	5.78	3.84
India	Male	61	5.52	3.91
	Female	116	7.18	4.52
	Total	177	6.61	4.38
Indonesia	Male	127	7.21	4.56
	Female	450	8.14	4.53
	Total	577	7.93	4.55
Italy	Male	26	6.31	4.25
	Female	102	7.05	4.10
	Total	128	6.90	4.12
Japan	Male	39	4.51	3.63
	Female	93	5.45	4.27
	Total	132	5.17	4.10
Netherlands	Male	70	6.54	4.58
	Female	156	7.12	4.92
	Total	226	6.94	4.81
Norway	Male	14	8.29	4.58
	Female	162	8.29	4.93
	Total	176	8.29	4.89
Poland	Male	28	9.07	5.56
	Female	255	10.59	4.18
	Total	283	10.44	4.35
Portugal	Male	149	5.44	4.79
	Female	142	6.47	4.48
	Total	291	5.94	4.66
Russian Federation	Male	219	2.60	3.43
	Female	222	5.01	4.01
	Total	441	3.81	3.92
South Africa	Male	28	6.75	4.09
	Female	182	9.53	4.72
	Total	210	9.16	4.72
Turkey	Male	31	8.06	4.84
	Female	111	8.16	3.90
	Total	142	8.14	4.10
United States of America	Male	141	9.23	4.72
	Female	677	10.53	4.42
	Total	818	10.31	4.50

Appendix 4 SPSS Syntax

SPSS Syntax for calculating GPS symptom and subdomain scores

*GPS symptom scores.

```
COMPUTE GPS_Sym = sum(gps1 to gps16 ) + gps18.
EXECUTE.
VARIABLE LEVEL GPS_Sym(SCALE).
```

*GPS Risk-protective factors.

** Note that when using the GPS app data the GPS22 (resilience item) has already been recoded, for hand coding see scoring instructions above).

```
COMPUTE RiskNrFactors = GPS17 + GPS19 + GPS20 + GPS21 + GPS22.
EXECUTE.
```

*GPS domain mean scores.

```
COMPUTE GPS_PTSD=SUM(GPS1,GPS2,GPS3,GPS4,GPS5)/5.
EXECUTE.
COMPUTE GPS_DSO=SUM(GPS6,GPS7)/2.
EXECUTE.
COMPUTE GPS_CPTSD= SUM(GPS1,GPS2,GPS3,GPS4,GPS5,GPS6,GPS7)/7.
EXECUTE.
COMPUTE GPS_Anx=SUM(GPS8,GPS9)/2.
EXECUTE.
COMPUTE GPS_Depr=SUM(GPS10,GPS11)/2.
EXECUTE.
COMPUTE GPS_Insomnia=SUM(GPS12).
EXECUTE.
COMPUTE GPS_Selfharm=SUM(GPS13).
EXECUTE.
COMPUTE GPS_Dissoc=SUM(GPS14, GPS15)/2.
EXECUTE.
COMPUTE GPS_Substance=GPS18.
EXECUTE.
COMPUTE GPS_Otherproblems=GPS16.
EXECUTE.
```

```
VARIABLE LABELS GPS_PTSD 'GPS PTSD'.
VARIABLE LABELS GPS_Anx 'GPS Anxiety'.
VARIABLE LABELS GPS_Depr 'GPS Depression'.
VARIABLE LABELS GPS_DSO 'GPS PTSD DSO'.
VARIABLE LABELS GPS_CPTSD 'GPS CPTSD'.
VARIABLE LABELS GPS_Insomnia 'GPS Insomnia'.
VARIABLE LABELS GPS_Selfharm 'GPS Self harm'.
VARIABLE LABELS GPS_Dissoc 'GPS Dissociation'.
VARIABLE LABELS GPS_Otherproblems 'GPS Other problems'.
EXECUTE.
```