

# SPSS Syntax for Calculating PTSD Symptoms and Diagnosis using the City Birth Trauma Scale

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## Variable labels

The variable labels used in this example are given in Table 1. If you use other variable labels you will need to use the 'find & replace' tool to substitute/insert your variable names.

**Table 1. Variable labels used in the syntax**

City BiTS item	Variable label
Q1	city.q1.A.crit
Q2	city.q2.A.crit
Q3	city.q3.re.experiencing
Q4	city.q4.re.experiencing
Q5	city.q5.re.experiencing
Q6	city.q6.re.experiencing
Q7	city.q7.re.experiencing
Q8	city.q8.avoidance
Q9	city.q9.avoidance
Q10	city.q10.neg.cog.mood
Q11	city.q11.neg.cog.mood
Q12	city.q12.neg.cog.mood
Q13	city.q13.neg.cog.mood
Q14	city.q14.neg.cog.mood
Q15	city.q15.neg.cog.mood
Q16	city.q16.neg.cog.mood
Q17	city.q17.hyper.arousal
Q18	city.q18.hyper.arousal
Q19	city.q19.hyper.arousal
Q20	city.q20.hyper.arousal
Q21	city.q21.hyper.arousal
Q22	city.q22.hyper.arousal
Q23	city.q23.dissociative
Q24	city.q24.dissociative
Q25	city.q25.start
Q26	city.q26.last

Q27	city.q27.distress
Q28	city.q28.prevent
Q29	city.q29.drugs

### Derived variables created

The syntax will produce the derived variables shown in Table 2.

**Table 2. Derived variables created by the syntax**

Variable label	What it reports	Possible range
CITY.PTSS.LEVEL.B.RE.EX	Total re-experiencing symptoms score	0-15
CITY.PTSS.LEVEL.C.AVOID	Total avoidance symptoms score	0-6
CITY.PTSS.LEVEL.D.COG.MOOD	Total negative cognitions & mood score	0-21
CITY.PTSS.LEVEL.E.HYPER	Total hyperarousal score	0-18
CITY.PTSS.LEVEL.TOTAL	Total PTSD symptoms score	0-60
CITY.PTSS.LEVEL.DISSOCIATION	Total dissociative symptoms score	0-6
CITY.A.CRITERION.STRESSOR	If person meets DSM PTSD criterion A for a traumatic event	0=no, 1=yes
CITY.B.CRITERION.RE.EX	If person meets DSM PTSD criterion B for re-experiencing (1 or more symptoms)	0=no, 1=yes
CITY.C.CRITERION.AVOID	If person meets DSM PTSD criterion C for avoidance (1 or more symptoms)	0=no, 1=yes
CITY.D.CRITERION.COG.MOOD	If person meets DSM PTSD criterion D for negative cognitions & mood (2 or more symptoms)	0=no, 1=yes
CITY.E.CRITERION.HYPER	If person meets DSM PTSD criterion E for hyperarousal (2 or more symptoms)	0=no, 1=yes
CITY.F.CRITERION.DURATION	If person meets DSM PTSD criterion F for duration of symptoms (longer than 1 month)	0=no, 1=yes
CITY.G.CRITERION.DISTRESS	If person meets DSM PTSD criterion G for distress and impairment	0=no, 1=yes
CITY.DISSOCIATION	If person meets DSM PTSD criteria for PTSD with dissociation (1 or more symptoms)	0=no, 1=yes
CITY.H.CRITERION.EXCLUSION	If person meets DSM PTSD exclusion criteria where symptoms might be caused by drugs, physical illness etc.	0=no, 1=yes
CITY.PTSD.YES.NO	If person meets DSM PTSD criteria for PTSD diagnosis	0=no, 1=yes
CITY.PTSD.DISSO.YES.NO	If people who meet PTSD criteria meet criteria for PTSD with dissociative symptoms	0=no, 1=yes 9=not applicable (no PTSD)

## SPSS Syntax

```
COMPUTE CITY.PTSS.LEVEL.B.RE.EX=SUM(city.q3.re.experiencing to city.q7.re.experiencing).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.B.RE.EX 'SUM OF CITY Q3 TO Q7'.
```

```
EXECUTE.
```

```
COMPUTE CITY.PTSS.LEVEL.C.AVOID=SUM(city.q8.avoidance to city.q9.avoidance).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.C.AVOID 'SUM OF CITY Q8 TO Q9'.
```

```
EXECUTE.
```

```
COMPUTE CITY.PTSS.LEVEL.D.COG.MOOD=SUM(city.q10.neg.cog.mood to city.q16.neg.cog.mood).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.D.COG.MOOD 'SUM OF CITY Q10 TO Q16'.
```

```
EXECUTE.
```

```
COMPUTE CITY.PTSS.LEVEL.E.HYPER=SUM(city.q17.hyper.arousal to city.q22.hyper.arousal).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.E.HYPER 'SUM OF CITY Q17 TO Q22'.
```

```
EXECUTE.
```

```
COMPUTE CITY.PTSS.LEVEL.TOTAL=SUM(city.q3.re.experiencing to city.q22.hyper.arousal).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.TOTAL 'SUM OF CITY Q3 TO Q22'.
```

```
EXECUTE.
```

```
COMPUTE CITY.PTSS.LEVEL.DISSOCIATION=SUM(city.q23.dissociative to city.q24.dissociative).
```

```
VARIABLE LABELS CITY.PTSS.LEVEL.DISSOCIATION 'SUM OF CITY Q23 TO Q24'.
```

```
EXECUTE.
```

```
COMPUTE CITY.A.CRITERION.STRESSOR = 0.
```

```
EXECUTE.
```

```
IF (city.q1.A.crit = 1 OR city.q2.A.crit = 1) CITY.A.CRITERION.STRESSOR = 1.
```

```
EXECUTE.
```

```
VARIABLE LABELS CITY.A.CRITERION.STRESSOR 'city criterion A for stressor'.
```

VALUE LABELS CITY.A.CRITERION.STRESSOR

0 'NO'

1 'YES'.

EXECUTE.

COMPUTE CITY.B.CRITERION.RE.EX = 0.

EXECUTE.

IF (city.q3.re.experiencing > 0 OR city.q4.re.experiencing > 0 OR

city.q5.re.experiencing > 0 OR city.q6.re.experiencing > 0)

CITY.B.CRITERION.RE.EX = 1.

EXECUTE.

VARIABLE LABELS CITY.B.CRITERION.RE.EX 'city criterion B for re-experiencing'.

VALUE LABELS CITY.B.CRITERION.RE.EX

0 'NO'

1 'YES'.

EXECUTE.

COMPUTE CITY.C.CRITERION.AVOID = 0.

EXECUTE.

IF (city.q8.avoidance > 0 OR city.q9.avoidance > 0)

CITY.C.CRITERION.AVOID = 1.

EXECUTE.

VARIABLE LABELS CITY.C.CRITERION.AVOID 'city criterion C for avoidance'.

VALUE LABELS CITY.C.CRITERION.AVOID

0 'NO'

1 'YES'.

EXECUTE.

COMPUTE CITY.D.CRITERION.COG.MOOD = 0.

EXECUTE.

COMPUTE temp\_count = (city.q10.neg.cog.mood > 0) +  
                  (city.q11.neg.cog.mood > 0) +  
                  (city.q12.neg.cog.mood > 0) +  
                  (city.q13.neg.cog.mood > 0) +  
                  (city.q14.neg.cog.mood > 0) +  
                  (city.q15.neg.cog.mood > 0) +  
                  (city.q16.neg.cog.mood > 0).

EXECUTE.

IF (temp\_count >= 2) CITY.D.CRITERION.COG.MOOD = 1.

EXECUTE.

DELETE VARIABLES temp\_count.

EXECUTE.

VARIABLE LABELS CITY.D.CRITERION.COG.MOOD 'city criterion D for cognition and mood'.

VALUE LABELS CITY.D.CRITERION.COG.MOOD

0 'NO'

1 'YES'.

EXECUTE.

COMPUTE CITY.E.CRITERION.HYPER = 0.

EXECUTE.

```
COMPUTE temp_count = (city.q17.hyper.arousal > 0) +  
    (city.q18.hyper.arousal > 0) +  
    (city.q19.hyper.arousal > 0) +  
    (city.q20.hyper.arousal > 0) +  
    (city.q21.hyper.arousal > 0) +  
    (city.q22.hyper.arousal > 0).
```

EXECUTE.

IF (temp\_count >= 2) CITY.E.CRITERION.HYPER = 1.

EXECUTE.

DELETE VARIABLES temp\_count.

EXECUTE.

VARIABLE LABELS CITY.E.CRITERION.HYPER 'city criterion E for hyperarousal'.

VALUE LABELS CITY.E.CRITERION.HYPER

0 'NO'

1 'YES'.

EXECUTE.

DATASET ACTIVATE DataSet1.

RECODE city.q26.last (0=0) (ELSE=1) INTO CITY.F.CRITERION.DURATION.

EXECUTE.

VARIABLE LABELS CITY.F.CRITERION.DURATION 'city criterion F for duration'.

VALUE LABELS CITY.F.CRITERION.DURATION

0 'LESS THAN 1 MONTH'

1 '1 TO 3 MONTHS'

2 '3 MONTHS OR MORE'.

EXECUTE.

COMPUTE CITY.G.CRITERION.DISTRESS = 0.

EXECUTE.

IF (city.q27.distress > 0 OR city.q28.prevent > 0) CITY.G.CRITERION.DISTRESS = 1.

EXECUTE.

VARIABLE LABELS CITY.G.CRITERION.DISTRESS 'city criterion G for distress and impairment'.

VALUE LABELS CITY.G.CRITERION.DISTRESS

0 'NO'

1 'YES'.

EXECUTE.

COMPUTE CITY.DISSOCIATION = 0.

EXECUTE.

IF (city.q23.dissociative > 0 OR city.q24.dissociative > 0) CITY.DISSOCIATION = 1.

EXECUTE.

VARIABLE LABELS CITY.DISSOCIATION 'city with or without dissociative symptoms'.

VALUE LABELS CITY.DISSOCIATION

0 'NO - WITHOUT DISSOCIATIVE SYMPTOMS'

1 'YES - WITH DISSOCIATIVE SYMPTOMS'.

EXECUTE.

RECODE city.q29.drugs (0=0) (ELSE=1) INTO CITY.H.CRITERION.EXCLUSION.

EXECUTE.

VARIABLE LABELS CITY.H.CRITERION.EXCLUSION 'city criterion H for exclusion'.

VALUE LABELS CITY.H.CRITERION.EXCLUSION

0 'NOT EXCLUDED'

1 'EXCLUDED'.

EXECUTE.

EXECUTE.

COMPUTE CITY.PTSD.YES.NO = 0.

EXECUTE.

IF (CITY.A.CRITERION.STRESSOR = 1 AND

CITY.B.CRITERION.RE.EX = 1 AND

CITY.C.CRITERION.AVOID = 1 AND

CITY.D.CRITERION.COG.MOOD = 1 AND

CITY.E.CRITERION.HYPER = 1 AND

CITY.G.CRITERION.DISTRESS = 1 AND

(CITY.F.CRITERION.DURATION = 1 OR CITY.F.CRITERION.DURATION = 2) AND

CITY.H.CRITERION.EXCLUSION = 0) CITY.PTSD.YES.NO = 1.

EXECUTE.

VARIABLE LABELS CITY.PTSD.YES.NO 'PTSD yes or no'.

VALUE LABELS CITY.PTSD.YES.NO

0 'NO PTSD'

1 'YES PTSD'.

EXECUTE.

COMPUTE CITY.PTSD.DISSO.YES.NO = 9.



EXECUTE.

IF (CITY.PTSD.YES.NO = 1 AND CITY.DISSOCIATION = 1) CITY.PTSD.DISSO.YES.NO = 1.

IF (CITY.PTSD.YES.NO = 1 AND CITY.DISSOCIATION = 0) CITY.PTSD.DISSO.YES.NO = 0.

EXECUTE.

VARIABLE LABELS CITY.PTSD.DISSO.YES.NO 'PTSD with or without dissociation – only for those with PTSD'.

VALUE LABELS CITY.PTSD.DISSO.YES.NO

0 'PTSD WITHOUT DISSOCIATION'

1 'PTSD WITH DISSOCIATION'

9 'NOT APPLICABLE (NO PTSD)'.

EXECUTE.