

# COLUMBIA UNIVERSITY

## Development of the Global Post Trauma Symptom Scale

Lynn Murphy Michalopoulos, PhD

Associate Professor

Director of the Global Health and Mental Health Unit

# Funding and Acknowledgements

- Johns Hopkins University Applied Mental Health Research Group
  - Victims of Torture Fund at the United States Agency for International Development (USAID)
  - Collaborators: Paul Bolton, MBBS; Judy Bass, PhD; Emily Haroz, PhD; Megan Ritchey; Justina Yung, LSW; Samuel Monroe Barton, LSW; Nakita Joseph

# Overall Project

Development of new global instruments to  
measure common mental health problems  
related to torture and trauma

# Project Motivation

- Appropriateness of instruments
  - Most instruments used in global mental health were originally developed with Western populations – specific focus on PTSD
- Discrepancies in epidemiological footprints, particularly in the context of trauma and PTSD
  - Substantive and/or measurement issues
  - 0-99% prevalence rate of PTSD in LMIC (Steel et al., 2009)
- Global Mental Health Debate
  - Constructivist vs. universalist
- Develop appropriate and free instruments that can be applied in multiple settings and contexts
  - Enhance comparability between populations
  - Save time and resources
  - Important for treatment/interventions

# Project Steps

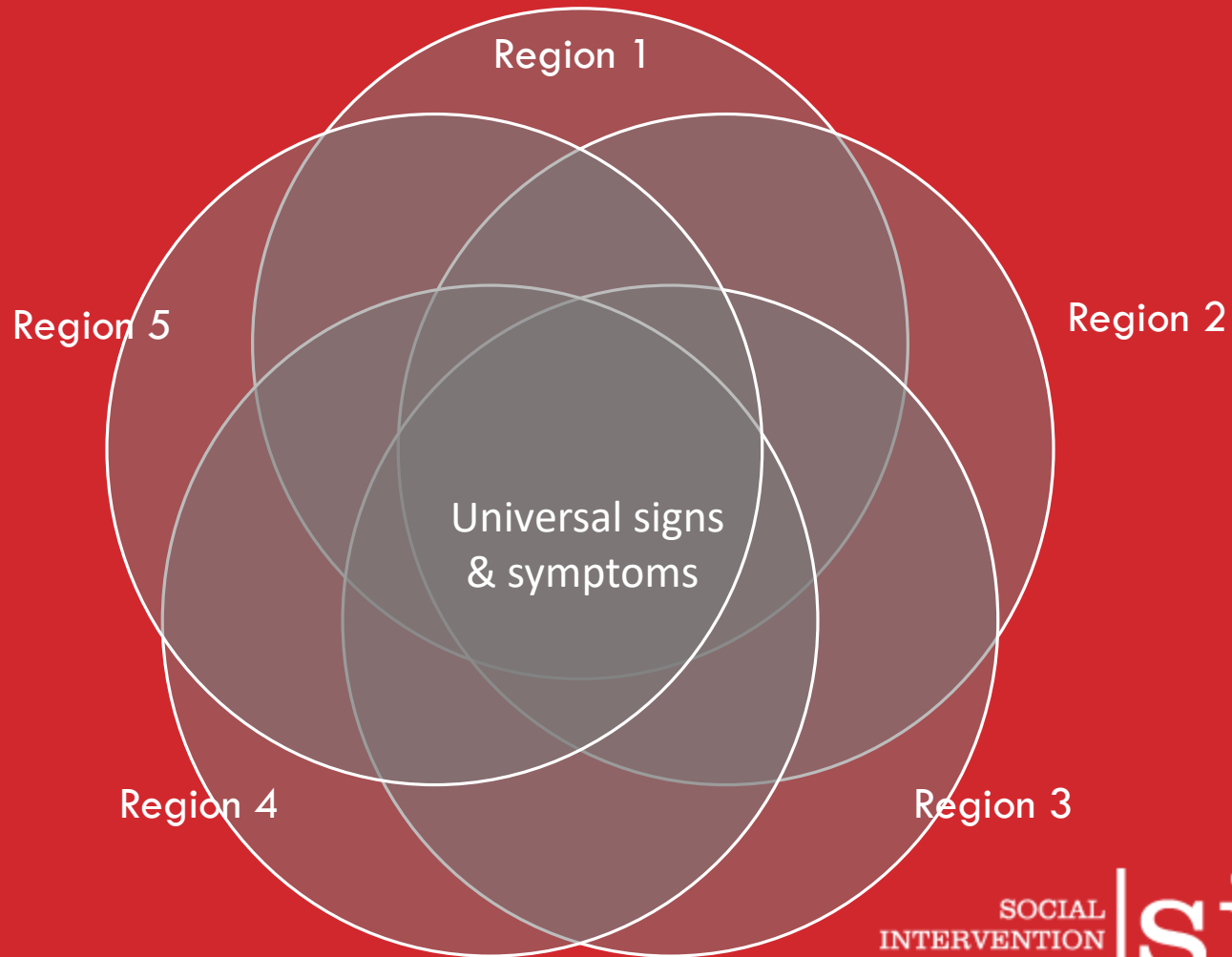
1. **Systematic review of qualitative studies related to post trauma symptoms**
2. Item response theory analysis of PTSD symptoms from a multi-country dataset to examine which symptoms perform the best across contexts
3. Draft instrument based on results
4. Consultation with experts
5. Piloting and validation of instruments: Thailand, South Africa, Zambia, Uganda, Ukraine

# Step 1: Review of Qualitative literature

## AIM:

To identify a set of post trauma signs and symptoms that have been described in qualitative research in a range of cultures and settings

# Overlapping symptoms



# Methods

- Searched 9 databases to identify all articles that mentioned post trauma signs or symptoms
- Inclusion Criteria:
  - Qualitative research
  - Post trauma signs and symptoms as the main focus of the article
  - Limited to articles in English
  - Study population: adults aged 18 and above
- Data Extraction
  - **Symptoms associated with post trauma signs and symptoms mentioned in the text (any psychosocial problems mentioned)**
  - **Region**
- Use a priori and emergent coding to group together
  - based on current DSM-5 diagnostic criteria for PTSD
  - Emergent coding of symptoms that do not fit DSM-5



# Databases and Search Terms

**Databases:** Pubmed, Web of Science, PsychInfo, Scopus, Embase, Anthrosource, Anthropology Plus, Global Health, Sociological Abstracts, Google Scholar

## **PTS Search Terms:**

1st level search: “PTSD,” “Posttraumatic Stress disorder,” “posttraumatic stress,” “post traumatic stress,” “anxiety,” “trauma outcome,” “posttraumatic neuroses”

2nd level search: “anthropology,” “ethnology,” “cross cultural differences,” “cross-cultural comparison,” “ethnopsychology,” “cultural characteristics,” “ethnography,” “cross culture,” “idiom of distress,” “qualitative”

15,641 references identified through initial search

13,334 did not meet inclusion criteria (children/non-PTS focus/removal of duplicates)

2,307 references for abstract review

1,955 references excluded (did not meet inclusion criteria)

352 references for full text review

108 references excluded:

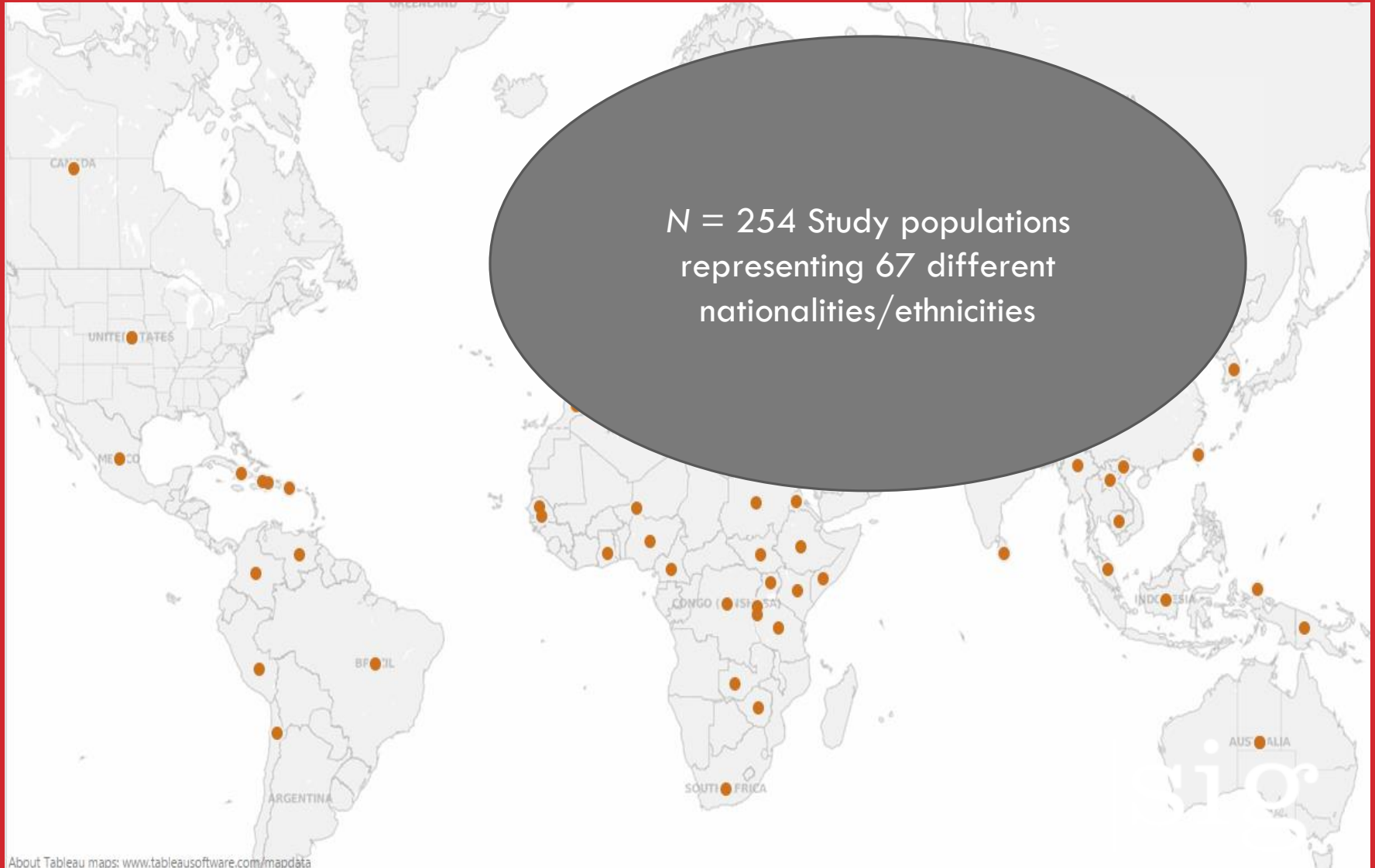
- Review articles
- Case studies
- Data not presented
- Could not find
- Less than n=8

244 articles included in final review

N=254 study populations

# Geographic Distribution

$N = 254$  Study populations  
representing 67 different  
nationalities/ethnicities



# Regional Variation

$N = 254$

Region	Frequency (%)
North American/European/Australian (non-native populations)	112 (44.1)
North America/European/Australian (native populations)	2 (0.8)
Latin America	29 (11.4)
Middle East/North Africa	22 (8.7)
East Asia	3 (1.2)
South Asia	8 (3.1)
Southeast Asia	17 (6.7)
Sub-Saharan Africa	43 (16.9)
Russia and Central Asia	2 (0.8)

# Contextual variation

$N = 254$

Contextual variables	Frequency (%)
<b>Gender</b>	
Male only	18 (7.0)
Female only	89 (35.0)
Mixed	147 (57.9)
<b>Displaced Populations</b>	71 (30.0)
<b>Torture Survivors</b>	23 (9.0)

# Contextual variation: Types of Trauma

## N=254

Trauma Type	Frequency (%)
<b>Non-interpersonal trauma</b> (natural disasters, physical health-related trauma, accidents, etc)	55 (21.7)
<b>Interpersonal trauma</b> (childhood abuse, intimate partner violence, torture, political violence, etc.)	186 (73.2)
<b>Both interpersonal and non-interpersonal/multiple traumatic events</b> (e.g., diagnosis of HIV with a history of childhood sexual abuse)	13 (5.1)

# Most frequently mentioned Symptoms N =254

Symptom	Frequency (%)
<b>Persistent negative emotional state</b>	207 (81.5)
<b>Detachment from others</b>	140 (55.1)
Fear	140 (55.1)
Alienation/isolation	119 (46.9)
<b>Inability to experience positive emotions</b>	117 (46.1)
<b>Intrusive distressing memories</b>	111 (43.7)
<b>Sleep disturbance</b>	107 (42.1)
Anger	105 (41.3)
<b>Persistent negative expectations</b>	103 (40.6)
No one understands	96 (37.8)
<b>Psychological reaction to trauma</b>	88 (34.7)
Intimate relationship problems	87 (34.3)
Anxiety	85 (33.5)

# Top Most frequent symptoms by region

	Western	Latin America	Middle East	South Asia	Southeast Asia	Sub-Saharan Africa
1	<b>Detached from others</b>	Fear	Fear	Headaches/ migraines*	Fear	<b>Detachment from others</b>
2	Fear	<b>Inability to experience positive emotions</b>	Alienation/ Isolation	<b>Intrusive distressing memories</b>	<b>Sleep disturbance</b>	Alienation/ Isolation
3	<b>Intrusive distressing memories</b>	Headaches/ Migraines*	<b>Inability to experience positive emotions</b>	<b>Negative expectations</b>	Thinking too much*	<b>Negative expectations</b>
4	<b>Inability to experience positive emotions</b>	Alienation/ Isolation	<b>Negative expectations</b>	<b>Exaggerated startle response</b>	<b>Inability to experience positive emotions</b>	Sadness
5	Alienation/ Isolation	<b>Intrusive distressing memories</b>	<b>Detachment from others</b>	<b>Problems with concentration</b>	Chest pain/ pressure in the chest*	<b>Problems with concentration</b>

East Asia; Western indigenous populations; Russia and Central Asia not included here because of limited number of study population ( $n=2$ ); \* significant difference at  $p<.003$



<b>1. Persistent negative emotional state</b>	<b>26. psychological reaction</b>	<b>51. avoid thoughts or memories related to the trauma</b>
<b>2. Fear</b>	<b>27. unable to function/cope</b>	<b>52. life has become meaningless</b>
<b>3. Detachment from others</b>	<b>28. sense of loss</b>	<b>53. alcohol abuse</b>
<b>4. Sleep disturbance</b>	<b>29. physical pain</b>	<b>54. fear of trauma recurring</b>
<b>5. Alienation/isolation</b>	<b>30. depressed mood</b>	<b>55. lack of control</b>
<b>6. Inability to experience positive emotions</b>	<b>31. thoughts of suicide</b>	<b>56. loneliness</b>
<b>7. Persistent negative expectations</b>	<b>32. can't eat/lack of appetite</b>	<b>57. despair/distress</b>
<b>8. Intrusive distressing memories</b>	<b>33. general somatic complaints</b>	<b>58. loss of faith and trust</b>
<b>9. Anger-</b>	<b>34. sense of silence</b>	<b>59. hypervigilance</b>
<b>10. Crying</b>	<b>35. flashbacks</b>	<b>60. trembling/shaking</b>
<b>11. Sadness</b>	<b>36. guilt</b>	<b>61. chest pain/pressure in the chest</b>
<b>12. Trauma-related dreams</b>	<b>37. inability to socialize</b>	<b>62. helplessness</b>
<b>13. Excessive worry</b>	<b>38. exaggerated startle response</b>	<b>63. apathy</b>
<b>14. Intimate relationship problems</b>	<b>39. memory loss/forgetful</b>	<b>64. madness/psychosis/feel as if gone crazy</b>
<b>15. Headaches/migraines</b>	<b>40. withdrawn</b>	<b>65. issues related to the heart</b>
<b>16. Problems with concentration</b>	<b>41. shame</b>	<b>66. chronic disease</b>
<b>17. Anxiety</b>	<b>42. sense of uncertainty</b>	<b>67. dizziness</b>
<b>18. Family problems/discord</b>	<b>43. avoid external reminders</b>	<b>68. ongoing sense of panic</b>
<b>19. Ruminating about a problem/thinking too much</b>	<b>44. heart palpitations/cardiovascular problems/heart conditions</b>	<b>69. sorrow</b>
<b>20. No one understands</b>	<b>45. de-realization</b>	<b>70. vision problems/eye problems/weak or tired eyes</b>
<b>21. Diminished interest in activities</b>	<b>46. pain/suffering (emotional)</b>	<b>71. damaged</b>
<b>22. Fatigue/weakness/exhaustion</b>	<b>47. loss of sense of self</b>	<b>72. visual hallucinations</b>
<b>23. Irritable behavior or angry outbursts</b>	<b>48. confusion/disorientation</b>	
<b>24. Agitation/irritation/frustration</b>	<b>49. upset stomach/digestive problems</b>	
<b>25. Reckless or self-destructive behavior</b>	<b>50. problems with community relationships</b>	

# Next Steps for GPTSS Item Bank

- Inclusion of Item Response Theory Results
- Expert Review Panel
- Group Together Signs and Symptoms with common meaning to reduce burden- Global Post Trauma Symptom Scale
- Publication of Results
  - Systematic Review of qualitative results under review
- Pilot Testing and Validation
  - Cognitive interviews
  - Validation
  - Thailand, South Africa, Uganda, Ukraine

# Thank you!

- Lynn Murphy Michalopoulos
- [lm2996@columbia.edu](mailto:lm2996@columbia.edu)