

Identifying psychological functioning subgroups of refugee trauma survivors

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Acknowledgements; study team

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Overall aim and purpose

The overall aim of this study was to develop and refine a hypothesized multifactorial model that predicts psychological health for refugee trauma survivors.

Purpose:

- To build on existing rudimentary theory
- To contribute to understanding the complex relationships among factors that influence the psychosocial health of high risk refugees
- To inform intervention development



Purpose of these analyses

- First step in model development: secondary analysis to describe the sample
- Identify possible subgroups of refugee trauma survivors based on levels of trauma and psychological functioning (latent classes).



Data set: Somali and Oromo community survey

5 year community-based study in Somali and Oromo communities (NIH-NIMH-R01, PI Jaranson)

Purpose:

- Define the prevalence and characteristics of torture survivors
- Identify physical, social and mental health problems associated with torture
- Define mental health and other care needs



Summary of findings

- N=1134
- Stratified (Male/Female) (Somali/Oromo)
- Men and women suffered similarly
 - *exposure to torture: men 45%; women 43%*
 - *trauma count: men 19; women 22*
- 3 distinct subgroups of women
 - *subgroup of older women responsible for more than six children*
 - *increased exposure to trauma*
 - *increased problem scales and PTS sx*



If you want to learn more...

Robertson, C. L., Halcon, L., Savik, K., Johnson, D., Spring, M., & Butcher, J., et al. (2006). Somali and Oromo refugee women: Trauma and associated factors. *Journal of Advanced Nursing, 56*(6), 577-587

Halcón, L., Robertson, C.L., Savik, K., Johnson, D.R., Spring, M.A., Butcher, J.N., Westermeyer, J.J., Jaranson, J.M. (2004). Trauma and coping in Somali and Oromo refugee youth. *Journal of Adolescent Health, 35*, 17-25.

Jaranson, J., Butcher, J., Halcón, L., Johnson, D., Robertson, C., Savik, K., Spring, M., Westermeyer, J. Somali and Ethiopian refugees: Correlates of torture and trauma(2004). *American Journal of Public Health, 94*(4), 591-598.

Spring, M., Westermeyer, J., Halcón, L., Savik, K., Jaranson, J., Robertson, C., Johnson, D.R. & Butcher, J. (2003). Sampling in difficult-to-access refugee and immigrant communities. *Journal of Nervous and Mental Disorders, 191*(12), 813-819.



Methods

- Setting: Twin Cities region in Minnesota
- Sample: 449 participants from a large epidemiological study (N=1129) of the prevalence of trauma, torture and associated factors in the Somali and Oromo communities.
- Design: Secondary data analysis



Latent class analysis

Why this first step?

- Method to find subtypes of related cases from multiple measured variables.
- Similar to cluster analysis – given a sample of subjects with several variables measured, is there a number of basic groups they fall in?
- Are observed measured variables a result of the unobserved, underlying different groups of subjects included in a sample?



The latent classes

- Number and membership based on:
 - *dichotomized scores from standardized measures of psycho-social problems*
 - *gender, ethnicity*
 - *level of reported exposure to torture, trauma*
- Age, religion, number of children, years in the US, marital status, employment, English skills, and education were compared across the resulting classes to further assess their utility.



Variable origin

- Gender
- Ethnicity
- Trauma count: Trauma event scale (RPS main survey)
 - *variance for trauma count allowed to be different in each latent class*
- Any torture: yes/no (RPS main survey)



Dichotomized variable origin

- PTS sx: PTSD Checklist-Civilian Version
 - *Dichotomized cutpoint: 50*
- Functional impairment: Sheehan Disability Inventory
 - *Dichotomized cutpoint: 4*
- Somatic sx: Revised Hopkins Symptom Checklist
 - *Dichotomized cutpoint: 3*
- Social support: Duke-UNC Functional Social Support Questionnaire
 - *Dichotomized cutpoint: 3*



Results

- 6 classes
- Classes included all combinations of high/low trauma and functioning levels.



Young single Oromo men n=34

Torture	27 (79%)
Trauma count	25.7(9.8)
PCL	60.9(6.8)
Disability	7(4-9)
Somatic sx	3.2(1.2-4.3)
Social support	2.0(1.3-2.9)
Oromo	28(82%)
Women	0
Age	37.2(7.3)
Spouse	5(16%)
Job	17(53%)
English	20(59%)
Education	HS grad
Children	1(0-32)

Young single Oromo men

- High trauma
- High symptoms
- Low social support
- Employed
- English
- HS grad



Young Single Oromo Men n=16

Torture	16(100%)
Trauma	35.7(3.8)
PCL	38.8(19.3)
Disability	5(2-10)
Somatic	3.0(1.2-4.7)
Soc support	3.6(1.2-5)
Oromo	16(100%)
Women	0
Age	35.1(12.7)
Spouse	6(38%)
Job	16(100%)
English	12(75%)
Education	VoTech
Children	0(0-40)

Young single Oromo men

- High trauma
- Low PCL
- mid somatic
- High disability
- High social support
- Employed, English,
- High education
- No kids

We are interested in these folks



Young, mostly single Somali men n=99

Torture	13(13%)
Trauma	6.2(2.7)
PCL	25.5(8.4)
Disability	0(0-10)
Somatic	1(1-4.7)
Soc support	2.9(1-5)
Oromo	4(4%)
Women	28(28%)
Age	33.7(15.8)
Spouse	24(25%)
Job	51(52%)
English	62(63%)
Education	HS grad
Children	0(0-7)

Mostly single Somali men

- Lower trauma
- Lower symptoms
- Mid social support
- Employed
- English
- HS grad
- No kids



Older Somali and Oromo women n=25

Torture	18(72%)
Trauma	34.8(11.0)
PCL	60.2(10.7)
Disability	7.3(4.7-9.7)
Social support	2.1(1-3.8)
Somatic	2.8(1.7-4.5)
Women	25(100%)
Age	49.2(11.3)
Married	6(24%)
Job	4(16%)
Education	none
Children	8(0-19)

Older Somali and Oromo women

- High trauma
- High symptoms
- Low social support
- Low education
- Low employment
- Many children



Somali and Oromo Women n=96

Torture	96(100%)
Trauma	32.4(5.7)
PCL	33.2(10.1)
Disability	.33(0-8)
Somatic	1.3(1-2.9)
Soc support	2.9(1.3-5)
Oromo	46(48%)
Women	70(73%)
Age	42.6(13.0)
Spouse	30(31%)
Job	39(41%)
English	40(42%)
Education	< HS
Kids	2(0-20)

Mostly women, Somali and Oromo

- High trauma
- Low symptoms
- Mid social support
- Some with partners
- Some employed
- Lower education
- Kids

We are interested in these folks



Everyone else n=168

Torture	43(26%)
Trauma	19.4(4.7)
PCL	27.3(10.0)
Disability	0(0-8)
Somatic	1.2(1-3.3)
Soc support	3.1(1.1-5)
Oromo	83(49%)
Women	87(52%)
Age	35.0(14.3)
Spouse	65(40%)
Job	99(59%)
English	107(64%)
Education	HS grad
Children	0(0-14)

Men, women, Somali, Oromo

- Lower trauma
- Low symptoms
- Mid social support
- Somewhat married, employed
- HS grads
- No kids!



Limitations

- Cross sectional data
- Self reported data
 - *survey developed with much community and staff input, but does not guarantee validity*
- No random sampling
 - *demographics similar to 2000 census, public schools, smaller surveys done in Twin Cities*
- Potentially significant variables not measured (or available)



Discussion

- Description of sample
- First step in a very complex model
 - *beyond the usual four groups*
- Identified groups we have seen before: older women, Oromo men
- Contributed to development of hypothesized model



Summary

- High trauma/torture
- Most are doing ok
- Many high trauma/high symptom participants have decent social support, are learning English, employed, raising children, staying married
- Some have manageable sx in spite of high trauma
- Some are really struggling



Next step

Build a model