



# CONSEQUENCES AND PSYCHOSOCIAL ASPECTS OF TRAUMATIC EXPERIENCES









## **Traumatic events**











#### What is a traumatic event?

#### **A1**

- Direct exposure
- Witnessing
- Learning that a relative or close friend was exposed

#### von

#### **Event**

- · Death/ threatened death
- · Actual or threatened serious injury
- Threat to the physical integrity

Α

- Direct exposure
- Witnessing
- Learning that a relative or close friend was exposed
- Indirect exposure to aversive details

#### von

#### **Event**

- Death/ threatened death
- · Actual or threatened serious injury
- · Actual or threatened sexual violence

DSM-IV-TR (APA, 2000) A2

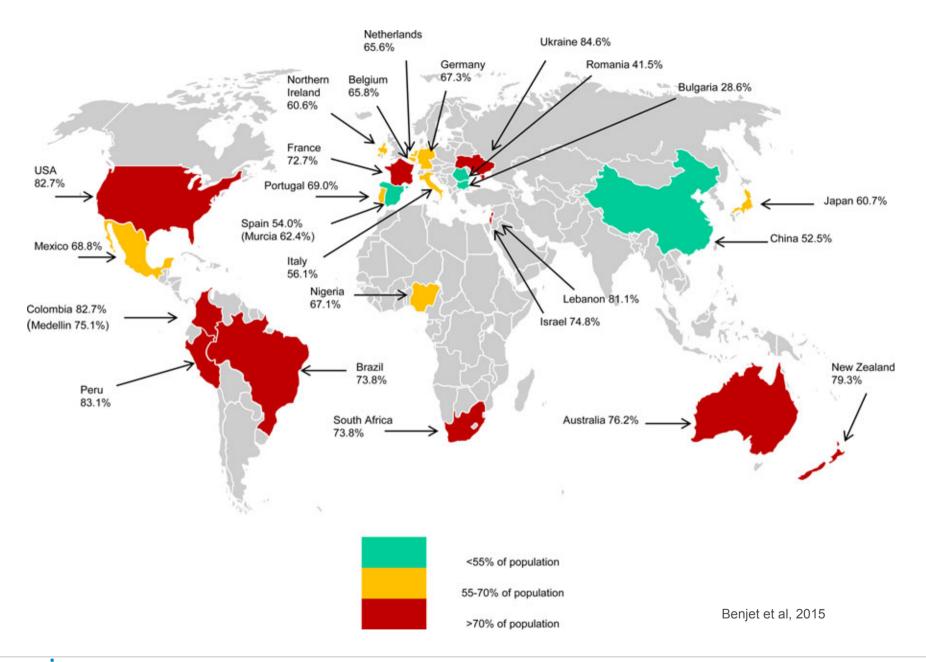
#### Reaction

- Intense fear
- Helplessness
- Horror

DSM-5 (APA, 2013)



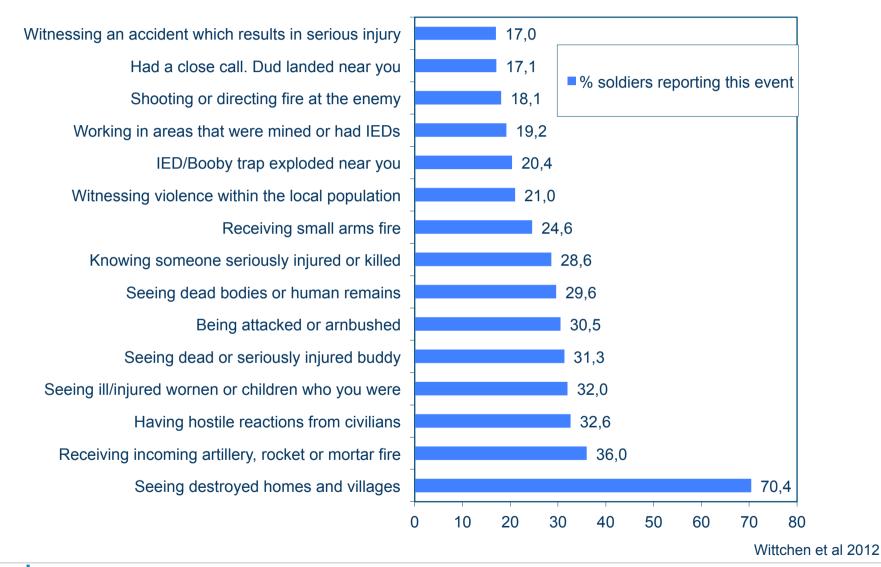








#### Events during deployment of German military forces in Afghanistan





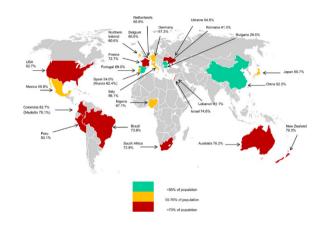


#### Consequences of traumatic event exposure - PTSD

## Prevalence of 12-month PTSD in European countries

	%	SE
Spain	0.4	0.1
France	1.4	0.3
Northern Ireland	3.8	0.5
Netherlands	1.2	0.3
Belgium	0.6	0.1
Germany	0.5	0.2
Ukraine	2.0	0.4
Romania	0.4	0.2
Bulgaria	0.9	0.2
Italy	0.4	0.1
United States	2.5	0.2
A -l 4l f   / 4 -   / (0.04.4)		

Adapted from Karam et al. (2014)



Conditional prevalence between 2.9% (France) and 17.6% (Northern Ireland)

Trautmann & Wittchen (2018)





# Possible reasons for cross-national heterogeinity in PTSD prevalence

- Differences in type and number of traumatic events as a consequence of historical, cultural and political factors
- Differences in the history of military conflicts, e.g.
  - Balcan wars





## Prevalence of current PTSD in war-affected Balkan countries

	%	SE
Bosnia and Herzegovina	35.4	1.9
Croatia	18.0	1.4
Kosovo	18.2	1.5
Republic of Macedonia	10.6	1.2
Serbia	18.8	1.6

Adapted from (Priebe et al. 2010)



Prevalence of 12-month PTSD in

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Adapted from Karam et al. (2014)

Trautmann & Wittchen (2018)





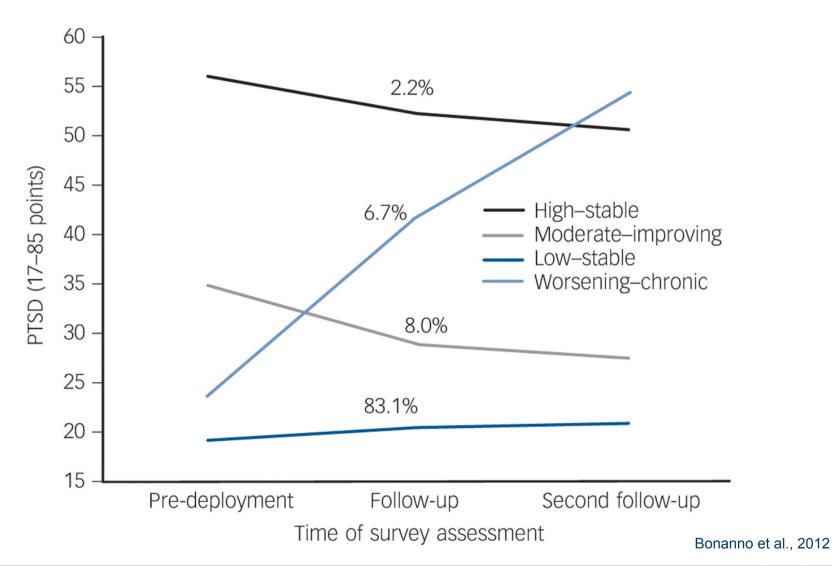
## Possible reasons for cross-national heterogeinity in PTSD prevalence

- Differences in type and number of traumatic events as a consequence of historical, cultural and political factors
- Differences in the history of military conflicts, e.g.
  - Balcan wars
  - World war II (consequences are still measurable in the third generation, possbily through epigenetic effects, Yehuda & Bierer, 2008)
- Cultural differencs, e.g. in terms of
  - Value orientations (Burri & Maercker, 2014)
  - Disclosure (Müller et al., 2008)





#### PTSD as a heterogeneous disorder







## PTSD as a heterogeneous disorder

**Table 2.** Number of Heterogeneous Symptom Combinations to Meet or Not Meet *DSM* Criteria for Six Diagnoses

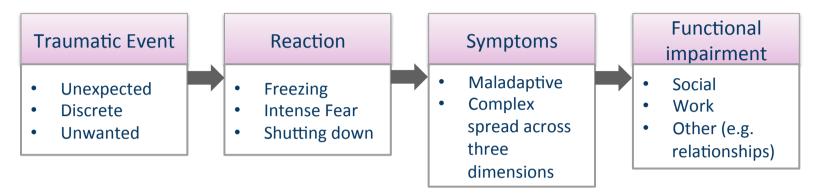
Disorder	DSM–III–R	DSM–IV	DSM-5
Posttraumatic stress disorder			
Possible combinations	84,645	79,794	636,120
Minimum combinations	2,100	1,750	3,150
Excluded presentations	35,370	42,253	107,973
Major depressive episode			
Possible combinations	227	227	227
Minimum combinations	126	126	126
Excluded presentations	154	154	154
Specific phobia			
Possible combinations	1	1	1
Minimum combinations	1	1	1
Excluded presentations	0	0	0
Social phobia			
Possible combinations	1	1	1
Minimum combinations	1	1	1
Excluded presentations	0	0	O
Obsessive-compulsive disorder			
Possible combinations	3	3	3
Minimum combinations	2	2	2
Excluded presentations	0	0	O
Panic disorder			
Possible combinations	7,814	54,698	23,442
Minimum combinations	715	715	715
Excluded presentations	377	377	377

Galatzer-Levy & Bryant (2013)

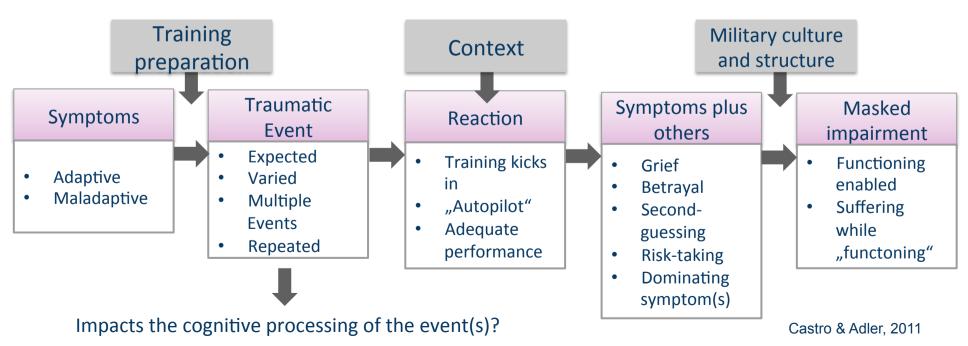




#### DSM-IV: PTSD model: victim focused



#### Occupational model of PTSD

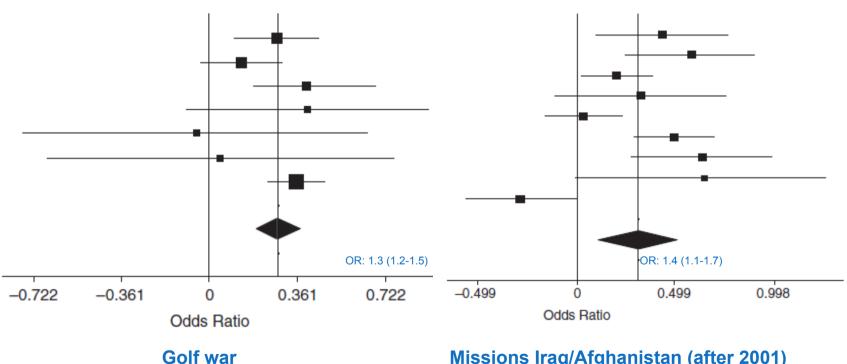


#### Traumatic events and substance use

Epidemiologic Reviews © Commonwealth of Australia 2015.

Vol. 37, 2015 DOI: 10.1093/epirev/mxu014 Advance Access publication: January 14, 2015

#### Alcohol Use and Substance Use Disorders in Gulf War, Afghanistan, and Iraq War **Veterans Compared With Nondeployed Military Personnel**



**Missions Iraq/Afghanistan (after 2001)** 

Kelsall et al., 2015





#### Traumatic events and psychosis

**Table 2** Rates of narrowly defined psychotic symptoms (three or more symptoms) according to the four exposure states formed by trauma (exposed v. non-exposed) and psychosis proneness (high v. low)

Psychosis proneness	Trauma	
	Non-exposed	Exposed
	% (n/N)	% (n/N)
Low	2.2 (34/1582)	4.0 (13/322)
High	4.2 (19/449)	11.2 (19/169)
Test of null hypothesis: $\chi^2=4.6$ , $P=0.032^{\circ}$		

I. Adjusted for gender, socio-economic status, urbanicity, cannabis use, and time 0 DSM-IV mental disorder.

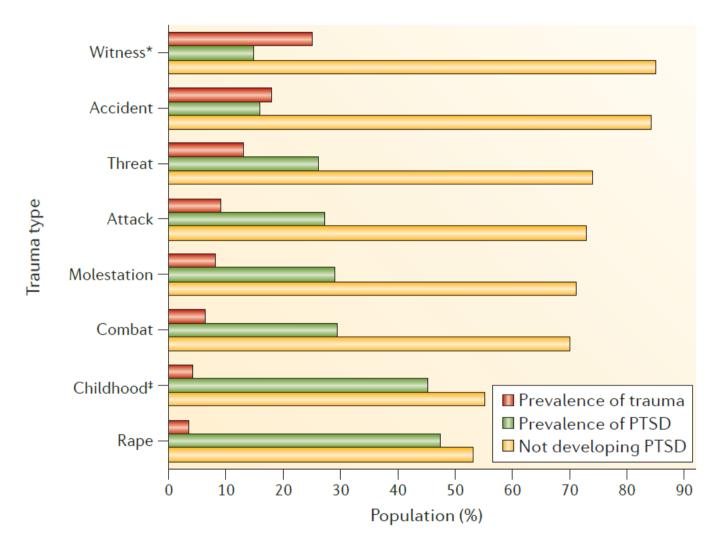




Table 2: Summary of review findings on consequences of child maltreatment—evidence for an association in prospective and retrospective studies

	Prospective studies*	Retrospective studies*
Education and employment		
Low educational achievement	Moderate	Weak
Low skilled employment	Moderate	Lacking
Mental health		
Behaviour problems as child/adolescent	Strong	Strong
Post-traumatic stress disorder	Strong	Strong
Depression	Moderate	Strong
Attempted suicide	Moderate	Strong
Self-injurious behaviour	Weak	Weak
Alcohol problems	Moderate	Strong
Drug misuse/dependence	Weak	Strong
Physical health and sexual behaviour		
Prostitution/sex trading	Moderate	Strong
Teenage pregnancy	Inconsistent	Strong
Promiscuity	No effect	Strong
General adult health	Lacking	Moderate
Chronic pain in adulthood	No effect	Weak
Obesity	Strong	Weak
Health-care use/costs	Lacking	Moderate
Quality of life	Lacking	Lacking
Aggression, violence, criminality		
Criminal behaviour	Strong	Strong

### PTSD prevalence depending on trauma type

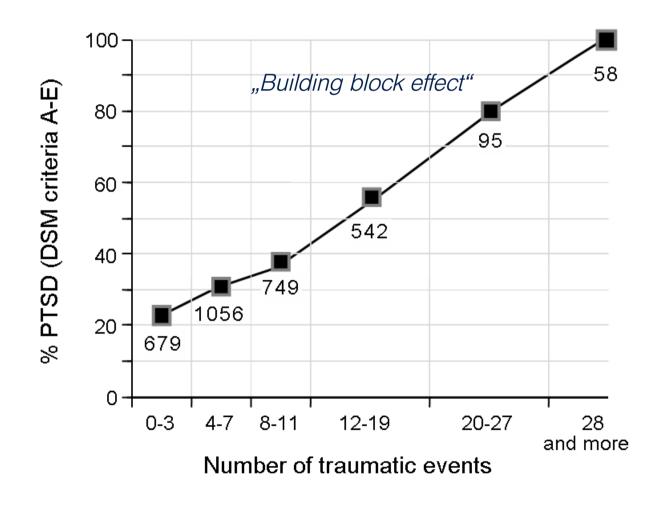


Yehuda et al., 2015





### PTSD prevalence depending on the number of events

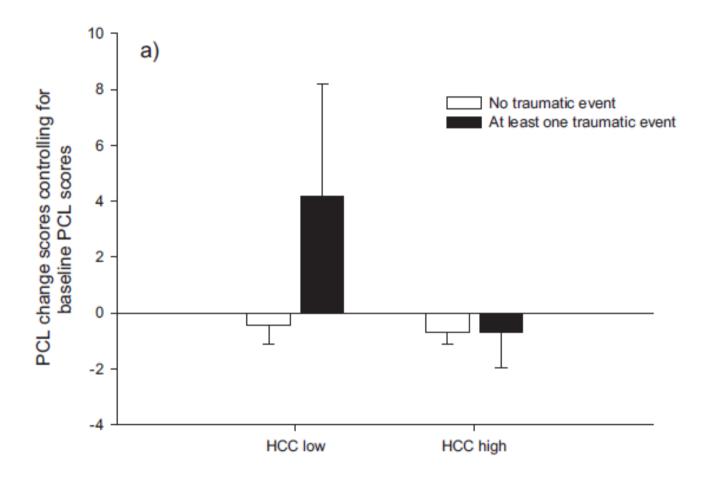


Neuner et et al., 2004





## Stress system - cortisol

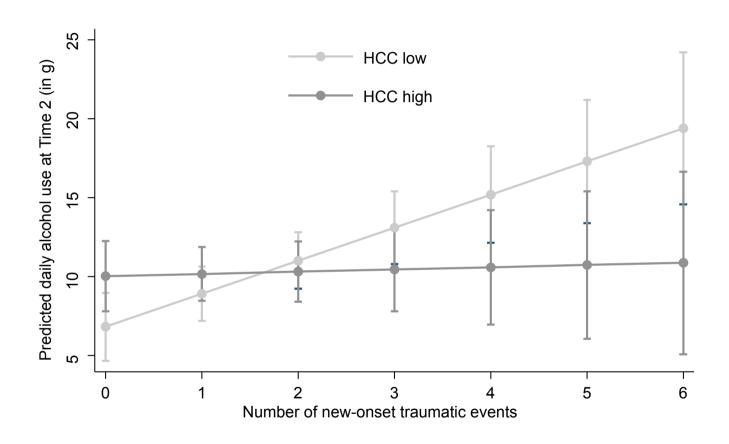


Steudte-Schmiedgen et al (2015)





## Stress system - cortisol

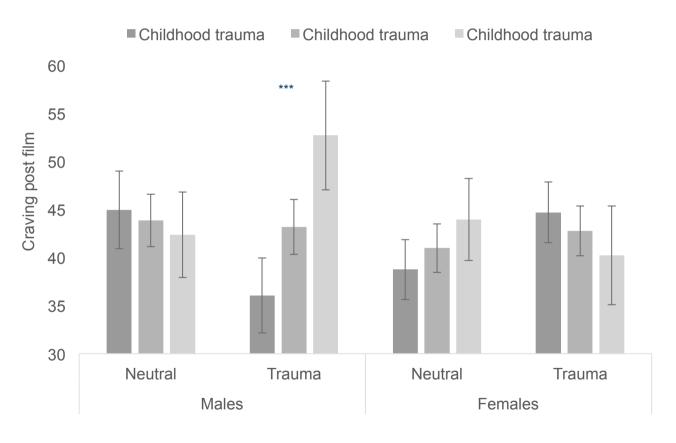


Trautmann et al (2017)





#### Childhood trauma



Trautmann et al (2018)





### Summary of possible moderators



- Trauma characteristics
- Early adversities
- Sex
- · Genetic factors
- · Stress system functioning
- Brain structure and functioning
- Personality traits
- Cognitive factors
- Emotion processing

#### Examples

Severity, chronicity

Abuse, neglect

Female sex as risk factor

FKBP5, CRHR1, 5-HTT, DRD2, COMT

Cortisol, Norepenephrine

Amygdala, hippocampus, PFC

Intelligence, empathy, hardiness, flexibility

Attention, appraisal

Emotion regulation, acceptance

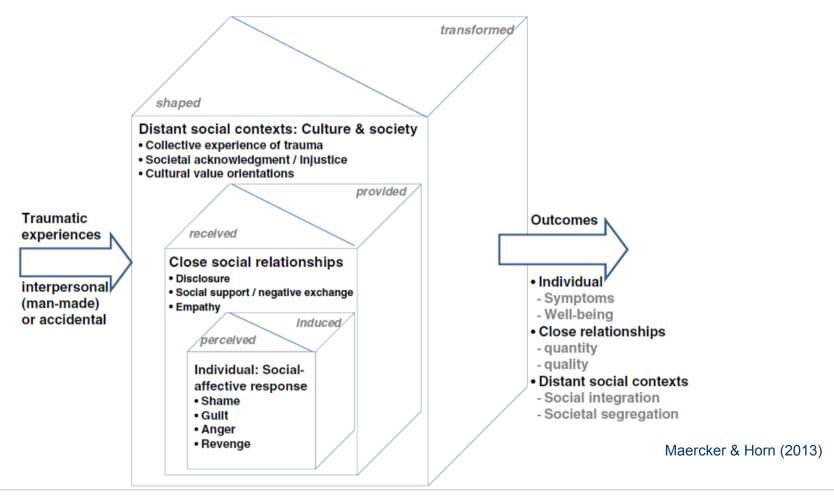
Zoladz & Diamond, 2013; Ryan et al, 2016





#### The role of psychosocial processes

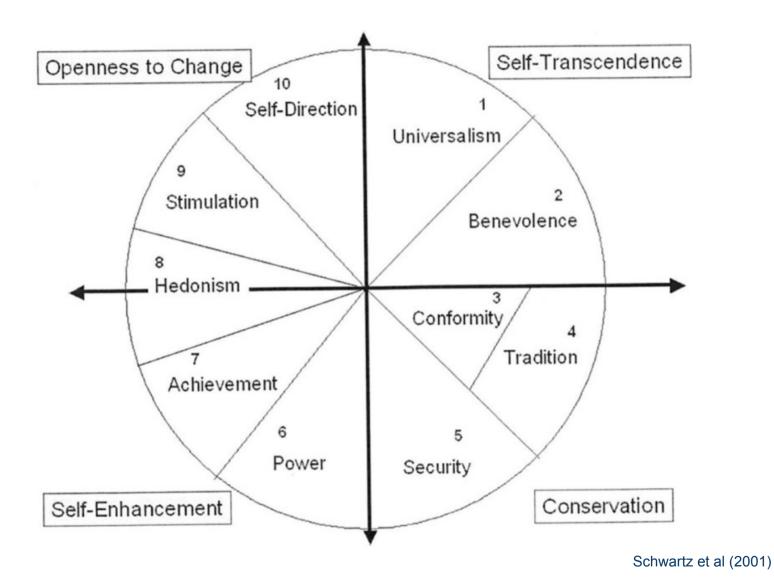
- The consequences of trauma exposure do not only depend on individual factors
- Interaction between the individual and the social environment







#### Die role of value orientations







#### Die role of value orientations

Association with	<b>PTSD</b>	probability
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Variable	OR	p
Results without resilience		
Universalism	2.32	0.024
Power (PO)	0.52	0.029
Hedonism (HE)	0.48	0.010
Results incl. resilience		
RS-11	0.89	<0.001
Universalism	2.97	0.014
Power (PO)	0.54	0.046

Zimmermann et al (2014)

Universalism Power

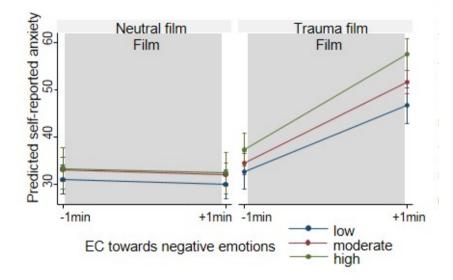
Understanding, appreciation, tolerance, and protection for the welfare of other people Social status and prestige, control or dominance over people, and resources

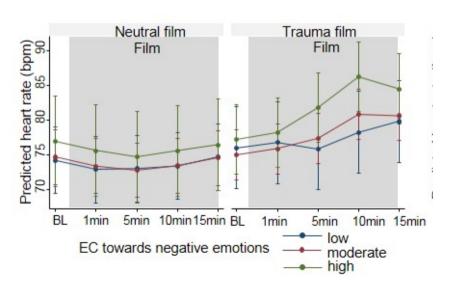
Schwartz et al (2001)

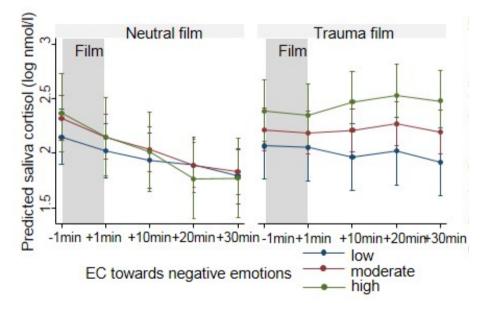




#### Empathy and witnessing trauma





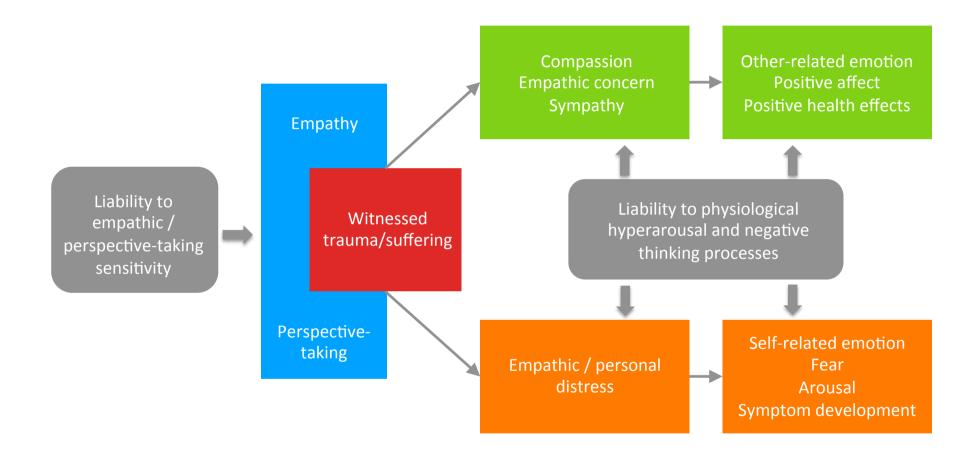


Trautmann et al (2018)





#### Empathy and witnessing trauma



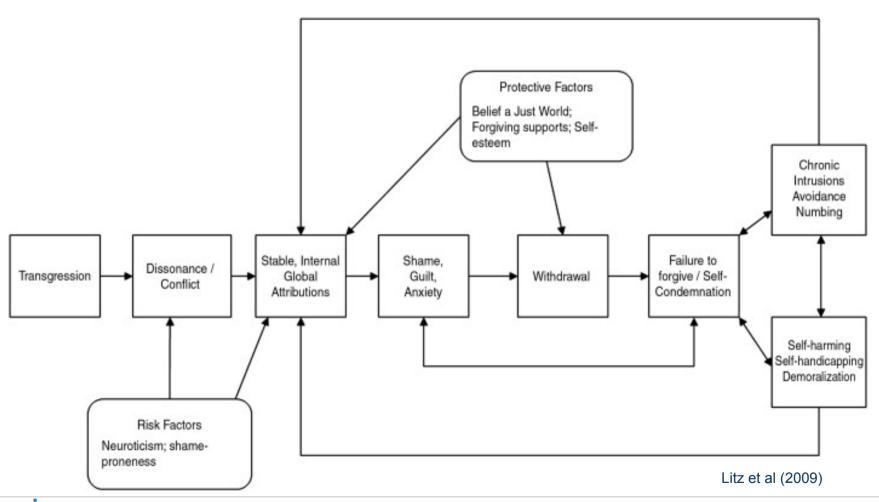
Adapted from Tone & Tully (2014)





#### Moral injury

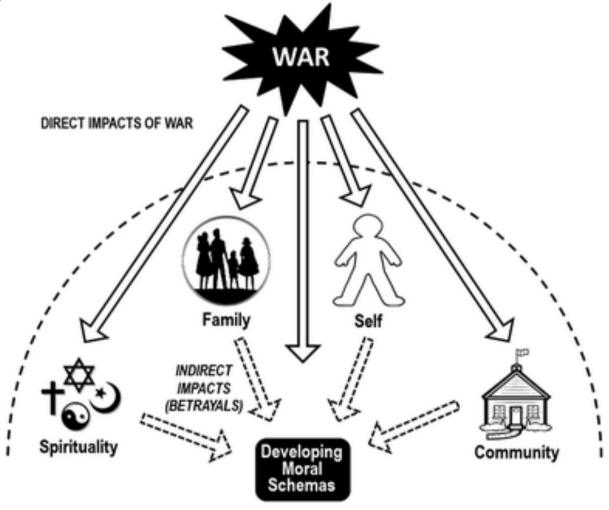
• "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations"







## Moral injury



Nash & Litz (2013)





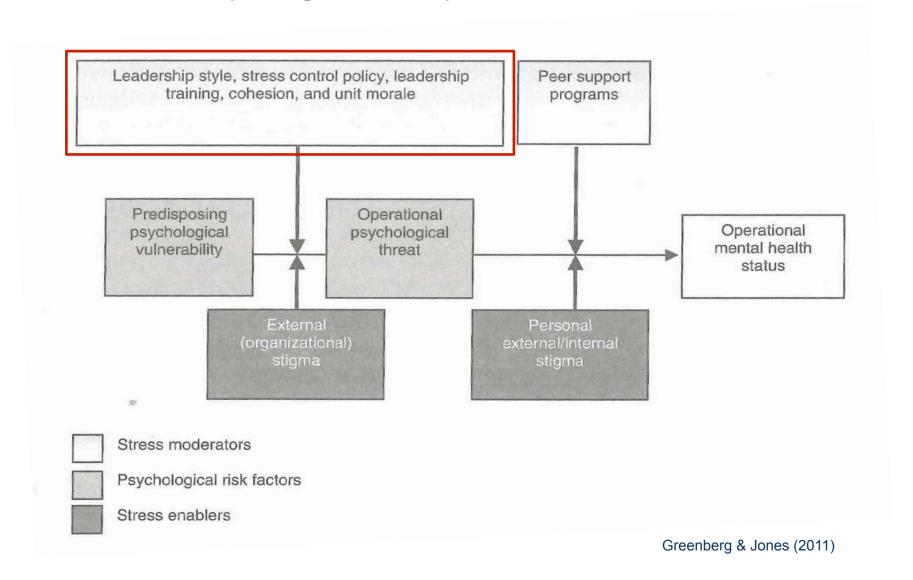
#### Treatment of Moral injury

- Establish Trust
- Detailed Disclosure of Morally Injurious Events
- Imaginal Dialog with a Compassionate Moral Authority
- Apportioning Blame
- Make or Seek Amends
- Acceptance

Nash & Litz (2013)

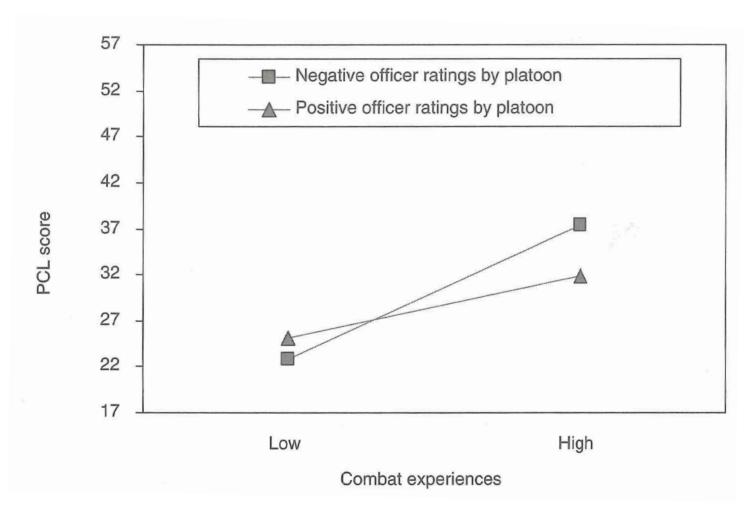








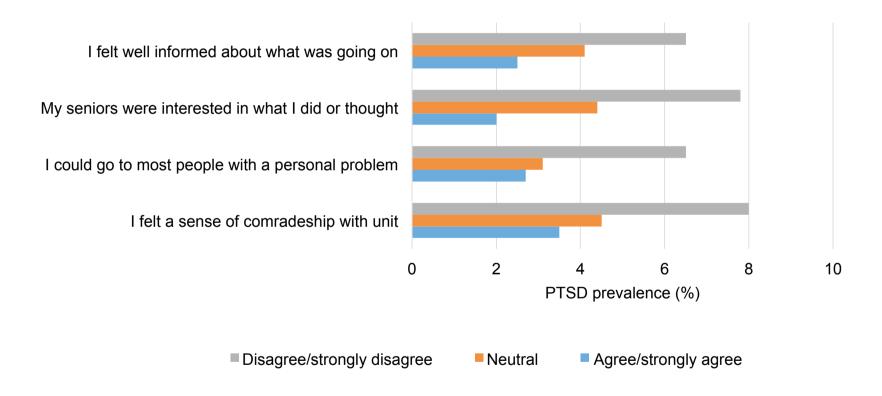




Bliese et al (2011)





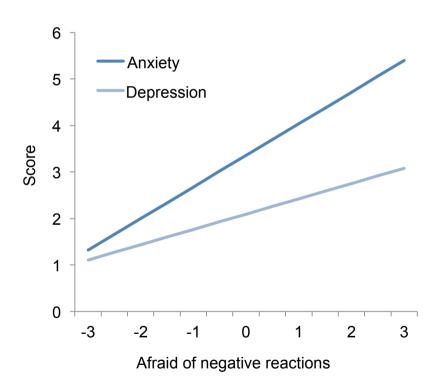


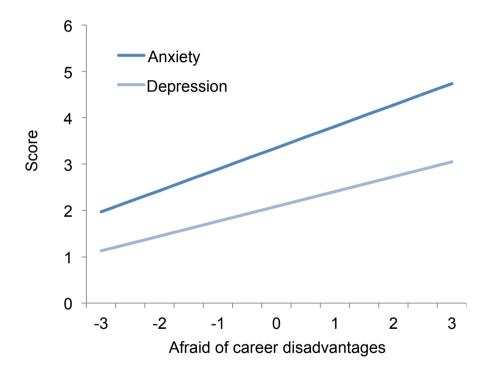
Iversen et al (2008)





## The fear of stigma









#### Summary

- Traumatic experiences are highly prevalent even in the general population
- Traumatic experiences are associated with a variety of mental health impairents
- Only a minority of trauma exposed individuals develops mental disorders
   → Important to consider moderating factors
- Numererous potential moderators are already known or under current investigation
- Psychosocial factors usually receive less attention although they seem to be of major importance
- Interpersonal processes (e.g. empathy), morale, stigmatization and leadership are promising targets to improve mental health in trauma-exposed individuals













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