# Organizational justice during deployment: What shapes soldiers justice perceptions?

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Why studying Organizational Justice (OJ) in a military context?

Experiences during deployment

Mili. deployment	Leadership during deployment	"Normal" Work

High-risk   Normal aspects
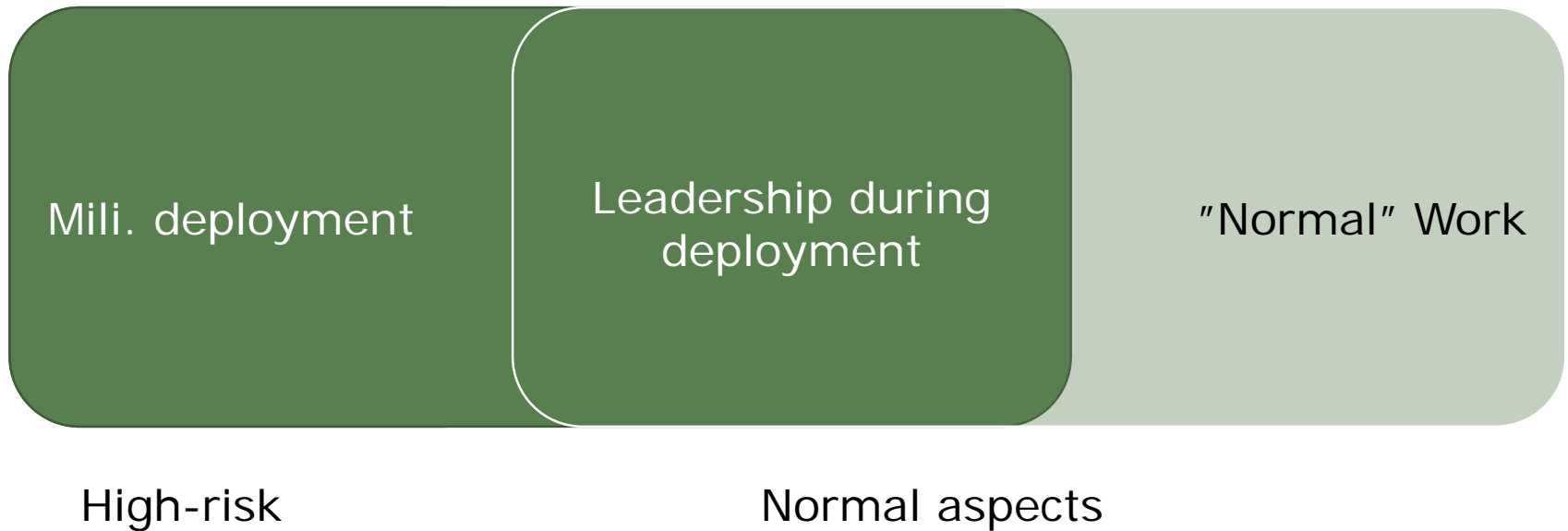
Perceptions of leadership during deployment

Perceptions of leadership, within:

- *Fairness*
- *Equal treatment*
- *Praise*
- *Interest in soldiers*
- *Concern for soldiers*

(Castro & McGurk, 2007; Du Preez, Sundin, Wessely, & Fear, 2012; Iversen et al., 2008; Jones et al., 2012; McGurk et al., 2014)

Organizational Justice:

Distributive justice: Fair distribution of rewards and resources.

Procedural justice: Through fair procedures.

Interactional justice: By fair leaders.

OJ; Health, Well-being, Functioning

Related, Civilian organizations:

- Stress reactions, health, lost workdays *(Elovainio et al., 2010; Robbins, Ford, & Tetrick, 2012)*

- Sickness *(Kivimäki et al., 2003)*

- Mental health *(Elovainio et al., 2010; Ndjaboué, Brisson, & Vézina, 2012)*

OJ; Health, Well-being, Functioning

Related, Military organizations:

- Self-sacrificial and Organizational Citizen Behaviour *(Olsen et al., 2012; Gurbuz, 2009)*

- Sexual harassment *(Rubino, 2018)*

- PTSD *(Elrond et al., 2018)*

PSYCHO-TRAUMATOLOGY

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BASIC RESEARCH ARTICLE

Leadership and post-traumatic stress disorder: are soldiers' perceptions of organizational justice during deployment protective?

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ABSTRACT

Background: Soldiers' perception of leadership during military deployment has gained research attention as a potentially modifiable factor to buffer against the development of postdeployment post-traumatic stress disorder (PTSD). Within nonmilitary research, the organizational justice (OJ) framework, i.e. distributive justice, procedural justice (PJ) and interactional justice (IJ), has been found to relate to mental health outcomes. Aspects of OJ may, therefore, be protective against PTSD.

Objectives: We examined the prospective relationship between aspects of OJ, namely the perceptions of PJ and IJ by subordinate soldiers without leadership obligations in relationship to immediate superiors and PTSD.

Method: Participants were soldiers (n = 245) deployed to Helmand Province in Afghanistan in 2009. Logistic regression procedures were used. The primary analysis measured PTSD cases using the Structured Clinical Interview for DSM-IV-TR Axis-I Disorder (SCID) 2½ years after homecoming. PJ/IJ was measured during deployment with a 6-item composite measure ranging from 0 to 12. Supplementary primary analyses were performed with PJ/IJ measured before and immediately after deployment. A secondary PJ/IJ analysis also tested against four postdeployment measures with the Post-Traumatic Stress Disorder Checklist Civilian (PCL-C) dichotomized at screening symptom levels.

Results: Higher levels of perceived PJ/IJ for soldiers without leadership obligations during deployment had a prospective relation (OR = 0.86, 95% CI = 0.75–0.98) with PTSD on the SCID 2½ years after homecoming after adjustment for factors including predeployment PTSD symptoms, trauma and combat exposure, and state affectivity. Similar results were found by measuring PJ/IJ before (OR = 0.83, 95% CI = 0.71–0.95) but not immediately after homecoming (OR = 0.97, 95% CI = 0.85–1.11). A relationship with PTSD symptoms at the screening level at the four measurements of PCL-C was found, but only when predeployment PTSD symptoms were not controlled for.

Conclusions: These results suggest that PJ/IJ exercised by superiors in relation to military deployments may protect subordinate soldiers against the development of postdeployment PTSD.

HIGHLIGHTS
- Soldiers' perceptions of leadership in relation to military deployment can be understood through theories of organizational justice.
- Procedural and interactional justice before and during military deployment to a combat zone relates to postdeployment PTSD.
- Soldiers may be using perceptions of leadership as a proxy for judgements of safety in a combat zone.
- Modifying factors that lead to perceptions of procedural and interactional justice may protect against PTSD.

Liderazgo y trastorno por estrés postraumático: ¿Es protectora la manera en que los soldados perciben la justicia organizacional durante un despliegue militar?

Planteamiento: La percepción del liderazgo de los soldados durante un despliegue militar se ha ganado la atención de la investigación como factor potencialmente modificable para amortiguar el desarrollo del trastorno por estrés postraumático (TEPT) después de un despliegue militar. Dentro de la investigación no militar, se ha encontrado que el marco de justicia organizacional (JO) –es decir, justicia distributiva, justicia procedimental (JP) y justicia interaccional (JI)– está relacionado con resultados de salud mental. Algunos aspectos de la JO pueden, por lo tanto, proteger contra el TEPT.

Objetivos: Examinamos la relación prospectiva entre los aspectos de la JO, es decir, las percepciones de JP y JI de los soldados subordinados sin obligaciones de liderazgo en relación a sus superiores inmediatos y al TEPT. Método: Los participantes fueron soldados (n = 245) desplegados en la provincia de Helmand en Afganistán en 2009. Se usaron procedimientos de regresión logística. El análisis principal midió los casos de TEPT mediante la Entrevista Clínica Estructurada para los trastornos del Eje I del DSM-IV-TR (SCID, por sus siglas en inglés) dos años y medio después del regreso a casa. Se midieron la JP y la JI durante el despliegue con una medida compuesta de seis elementos que van de 0 a 12. Se realizaron análisis primarios adicionales, midiendo la JP y la JI antes e inmediatamente después del despliegue. Un análisis secundario de la JP y la JI también se comparó con cuatro medidas posteriores al despliegue con la Lista de verificación del trastorno por estrés

European Journal of Psychotraumatology

Study design, Main model

ISAF 7, Deployment
february – august 2009

| BEFORE | DURING | HOME COMING | 3 month AFTER | 7 month AFTER | 2½ years AFTER |

- PTSD symptoms (PCL-C)
- Demographics

- **Procedural/Interactional justice**
- Combat Exposure Scale
- Danger/Injury Scale
- Emotional state (PANAS POS/NEG)

- **PTSD Diagnosis (SCID interview)**

- Add. Deployments
- Add. Trauma exp.

Population: Danish soldiers (N=243), No leadership responsibility.

Previous Results

Table 3: Multivariate relation with PTSD at SCID in Logistic Regression Models, PJ/IJ during deployment

Model description	'Basic model'	'Main model'	'Pre. depressive model'
Predeployment variables			
Age		1.04 (0.95 - 1.13)	1.05 (0.96 - 1.22)
Female[b]		1.04 (0.13 - 5.24)	0.63 (0.03 - 4.61)
PCL-C score		1.01 (0.95 - 1.08)	0.93 (0.82 - 1.04)
BDI score			1.07 (0.94 - 1.22)
During deployment variables			
DIS	1.16 (1.01 - 1.35)*	1.08 (0.92 - 1.29)	1.00 (0.83 - 1.19)
CES	1.01 (0.91 - 1.12)	1.00 (0.89 - 1.12)	1.05 (0.93 - 1.20)
PANAS positive score		1.05 (0.99 - 1.13)	1.07 (1.00 - 1.17)
PANAS negative score		1.08 (0.97 - 1.19)	1.09 (0.98 - 1.21)
PJ/IJ	0.85 (0.74 - 0.96)*	0.86 (0.75 - 0.98)*	0.85 (0.73 - 0.98)*
Postdeployment variables			
Add'l. deployment before SCID	0.71 (0.28 - 1.83)	0.69 (0.25 - 1.94)	0.76 (0.26 - 2.30)
Add'l. trauma exp. before SCID		1.37 (1.05 - 1.80)*	1.44 (1.08 - 1.94)*
Nagelkerke (pseudo) R^2	0.14	0.24	0.26
-2 Log likelihood	131.72	119.13	108.75
χ^2 (df)	15.91 (4)**	28.50 (10)**	28.40 (11)*

OR = Odds ratio; SCID = Structured Clinical Interview for DSM-IV-TR Axis-I Disorder; PCL-C = Post-traumatic Stress Disorder Checklist, Civilian; DIS = Danger/Injury Scale; CES = Combat Exposure Scale; PANAS = Positive and Negative Affect Schedule; PJ/IJ = Procedural and Interactional Justice

Better Procedural and Interactionel Justice:
1. Related during deployment (Odds Ratio 0.86), scale 0-12
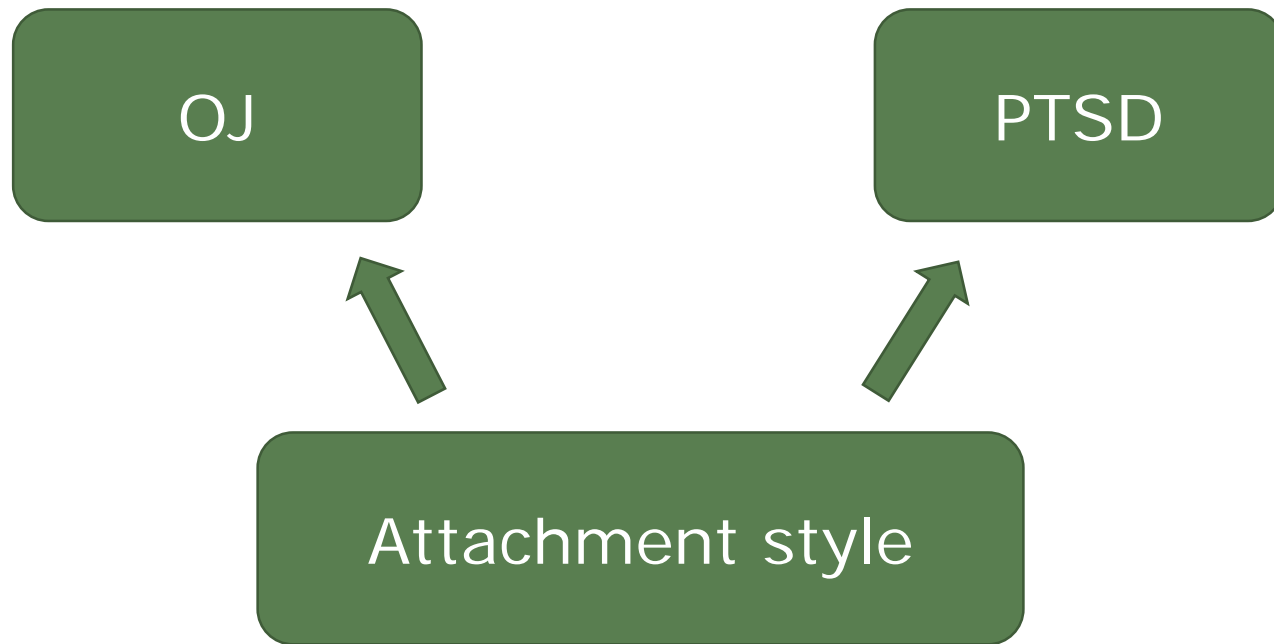2. Related before (Odds Ratio 0.83), but not immediately after deployment.

Now: Making these results usable

1. Understanding of what shapes these perceptions during the deployment cycle.

2. Understanding of the pathways in which they operate, in the military context.

3. Shaping intervention for the Danish Defense.
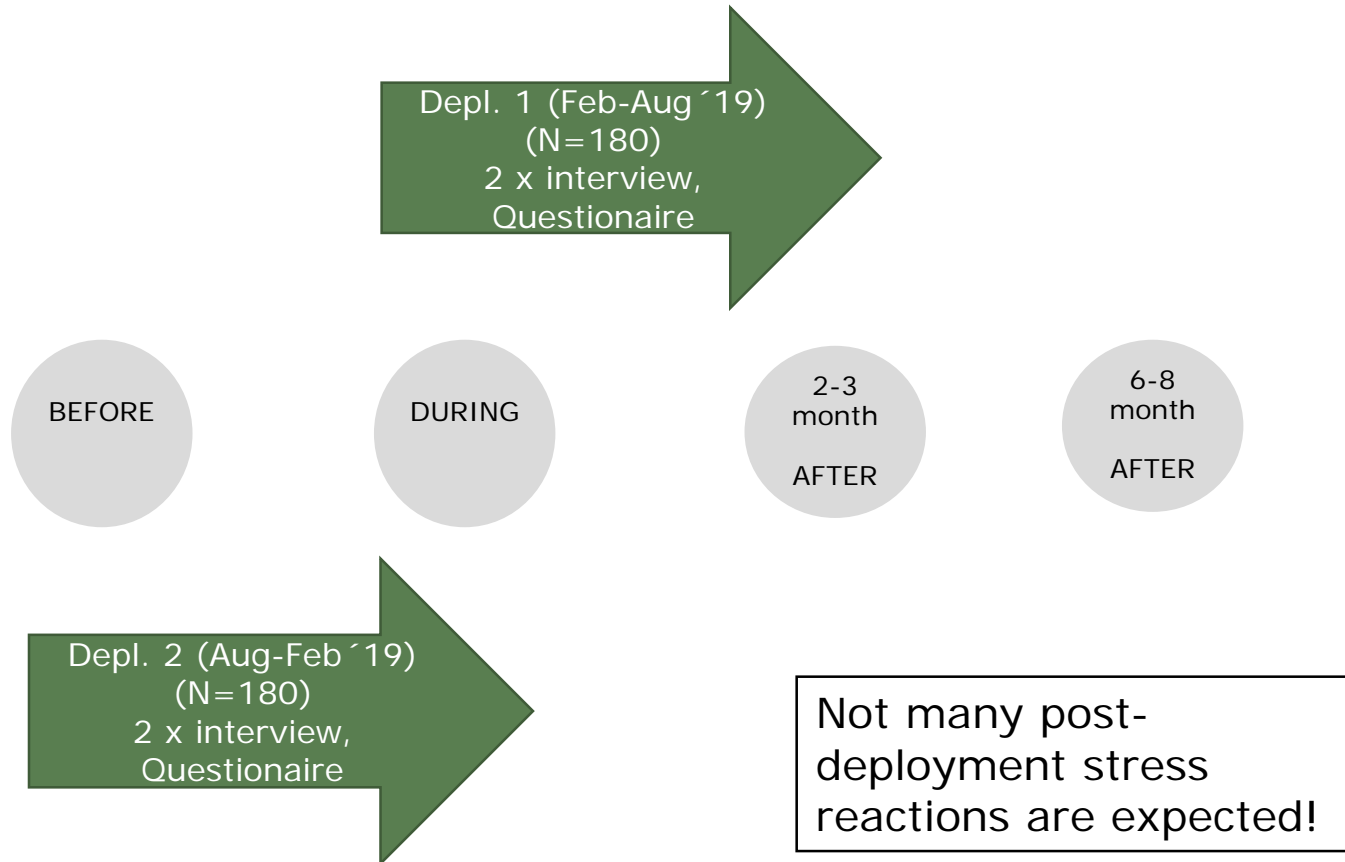
Confounding
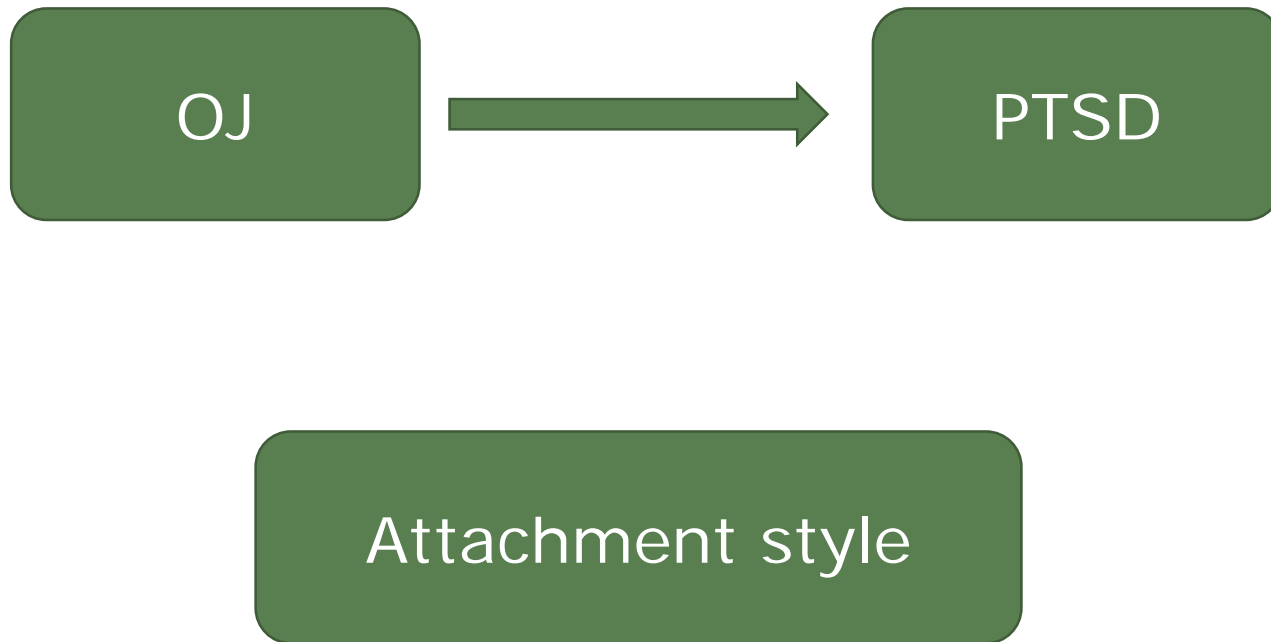
Confounding

Approach

Explorative approach, with weight on practical aspects.

Balancing research and practical outputs.

- Research aspects, w/weight on quantitative parts.

- Results for the defense, w/ weight on qualitative aspects.

Population

**Depl. 1 (Feb-Aug´19)
(N=180)
2 x interview,
Questionaire**

BEFORE

DURING

2-3 month

AFTER

6-8 month

AFTER

**Depl. 2 (Aug-Feb´19)
(N=180)
2 x interview,
Questionaire**

Not many post-deployment stress reactions are expected!

Tentative results, Pilot Interviews

Perceptions of fairness:

- *Have to; Mission before person; Tough love.*

- *Mainly awareness of unfairness.*

- *Perceptions as a group and individual phenomenon.*

Tentative results, Pilot Interviews

Factors for formation

- *Rumors and stories central to perception.*

- *Deployment specific: High-risk vs. Boredome.*

- *Throughout deployment: Less acceptance.*

Tentative results, Pilot Interviews

Handling of fairness:

- Leaders up-front and proactive with asking; explaining.

- However limits: Obvious unfairness.

- Rewards: Needs legitimacy.

Thanks!

The paradox of justice:
"People want to be treated equally, but uniquely"
(Bies, 2013)