

# Psychological resilience

The impact of resources pre and during deployment on post-deployment

Trends, Research and Statistics

LtCol dr. Coen van den Berg









The Impact of Resources pre and during Deployment on Post-Deployment Psychological Resilience

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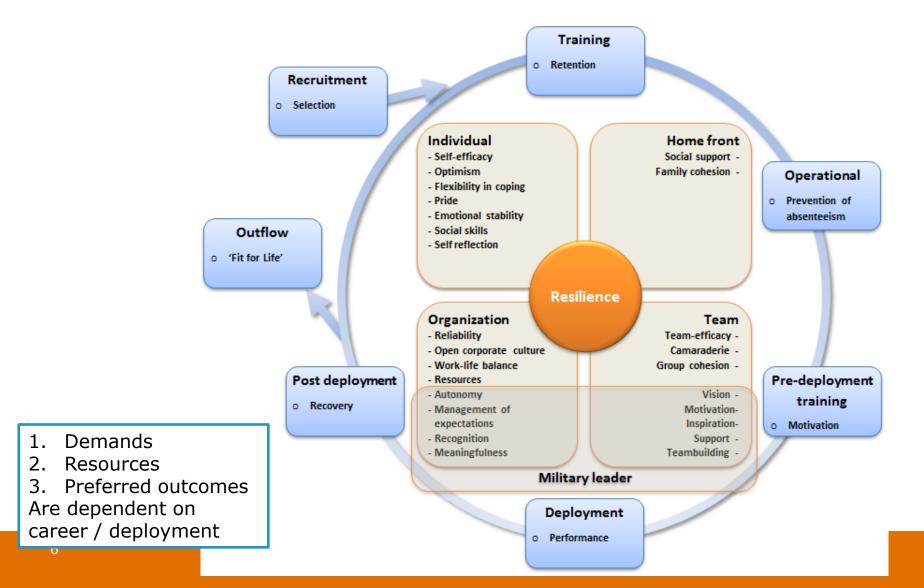




### Outline

- Resources from Mental Resilience pre and during deployment
- Mental resilience and morale
- Effects of Mental Resilience on (screening) mental problems after deployment
- Hierarchical regression analyses
- Results
- Discussion







### Data

Pre deployment (morale) N=572During deployment (morale) N=526After deployment (aftercare) N=155

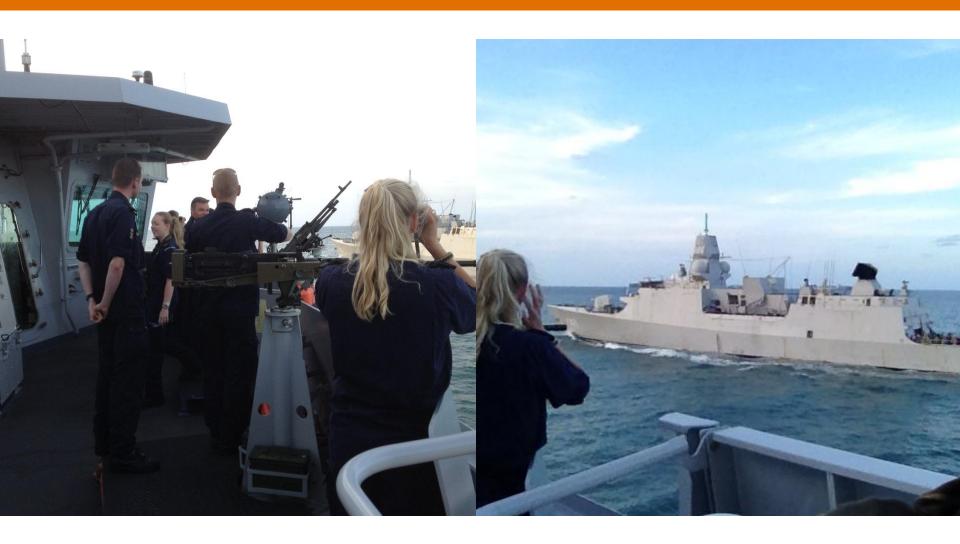
Pre-After N=47During-After N=60

Reasons for difference in respons (Morale and Aftercare):

- Armed Forces Branch
- Rank
- Impact of the mission

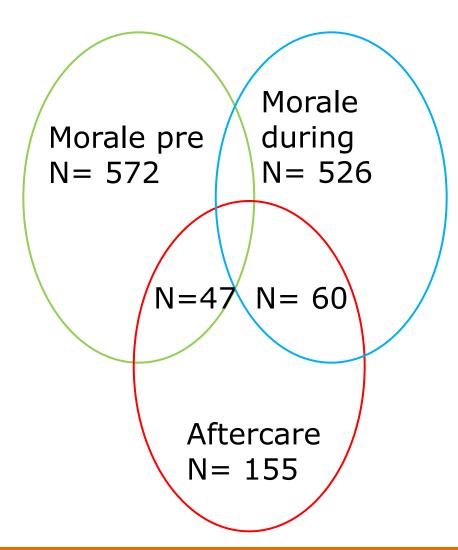








### **Dataset**





### Screening for post deployment psychological effects

- 1. Fatigue
- 2. Sleep disorders (problems)
- 3. Depression
- 4. Loneliness (short loneliness scale; 6 items)
- 5. Alcohol
- 6. Hostility
- 7. PTSD
- 8. Post Traumatic Growth



### Mental Resilience factors

### Individual:

Emotional Stability
Optimism
Coping diversity
Self efficacy task
self efficacy stress
self efficacy recovery
Cultural competence
Social competence
Asking for help\*

### Home Front

Social support Family Cohesion

### **Team**

Team efficacy
Team cohesion
Transformational leadership

# Organization

Open corporate culture
Reliability\*
Work-life balance
Resources
Autonomy
Expectation management
Recognition
Meaningfulness

		DURIN	G-DEPLO	YMENT	PRE DEPLOYMENT											
	Mental well-being after deployment						Mental well-being after deployment									
	Engage ment	Vitality	Physic al	Mental	Sleep	Engage ment	Vitality	Physic al	Mental	Sleep						
Individual																
Emotional Stability																
Optimism																
Coping diversity																
Self efficacy task																
self efficacy stress																
self efficacy recovery																
Cultural competence																
Social competence																
Asking for help*																
Home Front																
Social support																
Family Cohesion																
Team																
Team efficacy																
Team cohesion																
Transformational																
leadership																
Organization																
Open corporate culture																
Reliability*																
Work-life balance																
Resources																
Autonomy																
Expectation management																
Recognition																

				PRE DEPLOYMENT											
		Mental well-being after deployment							Mental well-being after deployment						
		Fatigue	Sleep problems	Depression	Alcohol	Hostility	Lone	Fatigue	Sleep problems	Depression	Alcohol	Hostility	Loneliness		
Total	$R^2$	.62	.37	.49			.49				.41	.49			
Individual	$R^2$	.28*	.26*	.30*											
Emotional Stability			.37**												
Optimism															
Coping diversity															
Self efficacy task															
self efficacy stress															
self efficacy recovery Cultural competence		51*	51**	43*											
Social competence															
Asking for help*											.17				
Home Front	Δ R <sup>2</sup>										56**				
Social support															
Family Cohesion		.18**										.20*			
Team	$\frac{\Delta}{R^2}$	.37*													
Team efficacy												81**			
Team cohesion		42**													
Transformational leadership				(.18)			.05								
Organization	<b>∆</b> D2														



## **Fatigue**

- Fatigue is considered an important indicator for possible mental problems. About 10% of service members returning from deployment are screened positive for fatigue.
- Fatigue is largely explained by mental resilience aspects measured during deployment: R<sup>2</sup>=.62
- No effect found for pre deployment mental resilience
- Individual and team matter
  - Individual: **self efficacy recovery** (Beta=-.51)
  - Team: **team efficacy** (Beta=.37)

transformational leadership (Beta=-.42)



# Sleep disorders (problems)

- Sleep problems are frequently related to possible mental problems. About 10% of service members returning from deployment are screened positive for sleep problems\*.
- Sleep problems are significantly explained by mental resilience aspects measured during deployment: R<sup>2</sup>=.37
- No effect found for pre deployment mental resilience
- Individual factors matter
  - Individual: **Emotional stability** (Beta=-.37)
  - self efficacy recovery (Beta=-.51)



### Depression

- Depression: about 8-10% of service members returning from deployment are screened positive for depression.
- Depression is significantly explained by mental resilience aspects measured during deployment: R<sup>2</sup>=.49
- No effect found for pre deployment mental resilience
- Individual factors and organizational support matter
  - Individual: **self efficacy recovery** (Beta=-.43)
  - Organization: Meaningfulness (Beta=-.13)



### Loneliness

- Loneliness: was not measured in the before 2013.
- Loneliness is significantly explained by mental resilience aspects measured during deployment: R<sup>2</sup>=.49
- No effect found for pre deployment mental resilience
- Organizational support matters
  - Work-life balance (Beta=-.36)
  - Recognition (Beta=-.35)



### **Alcohol**

- Alcohol: about 8% of service members returning from deployment are screened positive for alcohol problems.
- Alcohol problems are significantly explained by mental resilience aspects measured Pre deployment: R<sup>2</sup>=.41
- No effect found for during deployment mental resilience
- Home front support matters
  - Social support (Beta=-.56)



# Hostility

- **Hostility**: about 8% of service members returning from deployment are screened positive for hostility.
- Hostility problems are significantly explained by mental resilience aspects measured Pre deployment: R<sup>2</sup>=.49
- No effect found for during deployment mental resilience
- Team support matters
  - Team cohesion(Beta=-.81)

		PRE	-DEPLOYN	1ENT	DURING DEPLOYMENT											
	Mental well-being after deployment						Mental well-being after deployment									
	Engage ment	Vitality	Physic al	Mental	Sleep	Engage ment	Vitality	Physic al	Mental	Sleep						
Individual																
Emotional Stability																
Optimism																
Coping diversity																
Self efficacy task																
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Organization	<b>∆</b> D2														



### **Conclusions**

- 1. Longitudinal studies are important
- 2. Response in all phases should be as high as possible
- 3. Possible advantages of combination research data collected by military psychologists and added instrument by research partners
- 4. Resources for Mental Resilience pre and during deployment influence mental health issues after deployment
- 5. Fatigue, Sleepproblems, Depression and Loneliness are influenced by Mental Resilience resources during deloyment
- 6. Alcohol problems and hostility are influenced by Mental Resilience resources during peloyment
- 7. No relation was found to PTSD or Post Traumatic



Questions?

Vragen?

Fragen?

Pitanja?

Questions?

Küsimust?

Spørgsmål?

Spørsmål

Frågor?

Gaji jilmum?

Klausimai?

Jautājumi?

Soalan?

Întrebări?

Soru?

Preguntas?

Gè wèntí?