



*Finnish Defence
Research Agency*

*The effect of job demands and social
support on peacekeepers' stress and
sense of coherence after deployment*



*ISMS Annual Conference 2015, Finnish National
Defence University*

Dr. Jenni Keskinen & Dr. Petteri Simola



Puolustusvoimat

Försvarsmakten • The Finnish Defence Forces



What we already know?

- Based on previous research, we have an impressive body of literature describing occupational well-being in the context of peace-keeping
 - Many studies suggest that majority of soldiers report to be doing relatively fine after deployment (Brounéus 2014, Pietrzak et al. 2012)
 - Severe stress reactions, such as PTSD, are more common after operations that have included combat exposure (Pietrzak et al. 2012)
 - However, peacekeepers do report experiences that hinder their occupational well-being
 - Some of these stressors are similar to other work-related stressors but some unique in the context of peace-keeping and modern war scenario
 - The most typical occupational stressors have been identified to relate to for instance (Campbell & Nobel, 2009; Brounéus 2014)
 - Work
 - Social-interpersonal
 - Family
 - Self-identity
 - Psychological environment
 - Cultural environment
 - Physical environment
 - In time, the different experiences may accumulate and cause stress reactions





What is stress and why does it matter?

- Stress

A reaction to a demanding situation, a result of a dynamic interaction between the person and the environment that is affected by individual's coping strategies but also highly dependent on situational factors (Lazarus & Folkman, 1984).

- Stress can have a direct effect on success of the operation and security.
- Stress is known to reduce individuals' attention, reaction time and memory capacity, disrupt situational awareness, decrease motivation and creativity as well as impair communication and moral judgement (Lieberman et al., 2002; Staal, 2004)
 - This reduces the ability to complete the task at hand on both individual and team level.





Relation between job demands and social support

- The balance between these two have been suggested to result in either well-being and work motivation or in occupational stress and at worst, in burn-out (Karasek, 1979; Van der Doef & Maes, 1999; Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004)).
 - High workload itself is not necessarily a severe source of stress but it becomes more detrimental when it is combined with low social support from peers and superiors or lack thereof.
 - Social support is an important personal resource since it helps provide access to other resources beyond those already feasible for the individual (Hobfoll et al 1990). Social support can therefore be described as a gateway to greater resource funds.





The aim of the study

- The aim of the present study was to analyze if experienced demands of the job and the social support was related to psychological well-being after deployment. The effect of the operation in question was also in the focus of our interest.
- The aim was approached from the perspective of following specific research questions:
 1. Were job demands and social support related to how stressed peacekeepers were after deployment?
 2. Were job demands and social support related to how coherent peacekeepers evaluated their life after deployment?
 3. Did the relation of job demands and social support to psychological well-being differ between soldiers returning from Afghanistan (ISAF) and Lebanon (UNIFIL)?





Participants

- The participants were 817 Finnish peacekeepers returning home between 2012 and 2014 from altogether over 10 different operations of which the most common were ISAF (48 %) and UNIFIL (38 %)
 - Half of them had been deployed for the first time and the other half had been deployed previously
 - Half of them were between 25 and 40 years, one third were under 25 years old and the rest over 40.
 - Over half of the participants were either married or in a relationship and about one third had children during and after the deployment.
 - Majority of them were working full-time after the deployment





Instrument

- The survey used measured peacekeepers experiences of the operation regarding
 - The operation environment
 - One's own duties
 - Experienced psycho-social well-being after the deployment
- The survey included several instruments, this study focused on
 - 1) **Stressors in the operation**
 - 51 items measuring for instance worry about the family members, experienced job demands, work load, and experienced of the leadership in the operation. (Adler, Litz, & Bartone, 2003). The items were measured on a one to three and on a one to five point Likert-scale.
 - This study examined especially the variables related to job demands and social support.
 - 2) **Stress-symptoms**
 - 11 items measuring the experienced level of general stress symptoms. The items were developed using a modified and shortened version of an originally 32 item questionnaire developed in Finnish Institute of Occupational Health (Leskinen, 2004)
 - 3) **Sense of Coherence**
 - 12 items (Antonovsky, 1993) modified from the original scale to better suite military purposes. The items form three scales: manageability, meaningfulness, comprehensibility.
 - 4) **Back ground variables**, specifically operation in which the individual was deployed.





Analysis

1. **Descriptives** for the scales (stress, sense of coherence, experienced demands of the job, and experience social support for the job) in the interest of this study were calculated. The internal consistency of each sum variable was tested with Cronbach's alpha.
2. **A cluster analysis (K-means)** was conducted to distinguish subgroups based on job demands and social support. Before the cluster analysis, the values of the sum variables were standardized because of the different scales in them.
3. The clusters were **cross-tabulated** to form a 2 x 2 table indicating four different types of profiles of the participants based on experienced job demands and social support.
4. The profiles were compared with each other in relation to stress and sense of coherence with **ANOVA** (significance level $p < .05$) and to operation in question with **cross-tabulation and accompanying χ^2 -test** (significance level $p < .05$). Effect sizes for ANOVA were calculated with η^2 and the effect sizes for χ^2 -tests were calculated using Cramer's v .





Stress symptoms and sense of coherence

- Results in general suggested that participants did not report high levels of stress.
- Sense of coherence on the other hand, was reported to be very high by the participants. In general they expressed high levels of manageability, meaningfulness, comprehensibility in one's own life.

Sum variable (scale)	Mean	Standard deviation	Cronbach's alpha
Stress (1-5)	1.3	0.39	.883
Sense of Coherence (1-5)	4.6	0.41	.886





The experienced demands and social support for one's own job

- Participants reported to experience their job in the operation as not very demanding or unmeaningful. Furthermore, they experienced rather little problems regarding “experienced leadership” and “group cohesion” which indicated an experience of good social support on average.

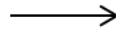
Sum variable (scale)	Items included	Mean	Standard deviation	Cronbach's alpha
Work load (1-3)	<i>"Rush, tight work schedule"</i> <i>"Lack of rest"</i> <i>"Night work"</i> <i>"The monotony of work"</i>	1.4	0.41	.685
Experiencing the work as not meaningful (1-5)	<i>"Appreciation of one's own work"</i> <i>"Clarity and meaningfulness of the operation"</i> <i>"A clear picture of one's duties"</i> <i>"Division of duties between individuals"</i> <i>"Meaningfulness of work"</i> <i>"Feedback from work"</i>	2.0	0.64	.820
Group cohesion (1-5)	<i>"Team spirit"</i> <i>"Support from comrades"</i> <i>"Relationships between comrades"</i> <i>"Coping of comrades"</i>	4.4	0.56	.817
Experienced leadership (1-5)	<i>"Chain of command and distribution of responsibilities in the Finnish leadership"</i> <i>"Behavior and acts of immediate superiors"</i> <i>"Availability of information"</i> <i>"Availability and reliability of logistics and maintenance"</i> <i>"Possibilities for rest and recuperation (R&R) on base"</i> <i>"Introduction to work"</i>	3.7	0.67	.722



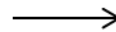


Clusters

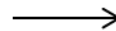
Experiencing the work as not meaningful



Work load



Experienced leadership

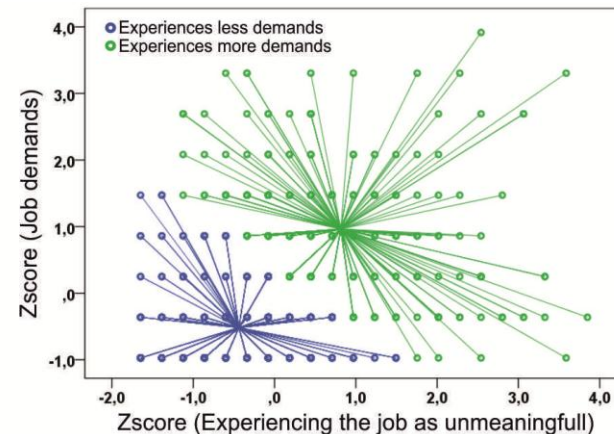
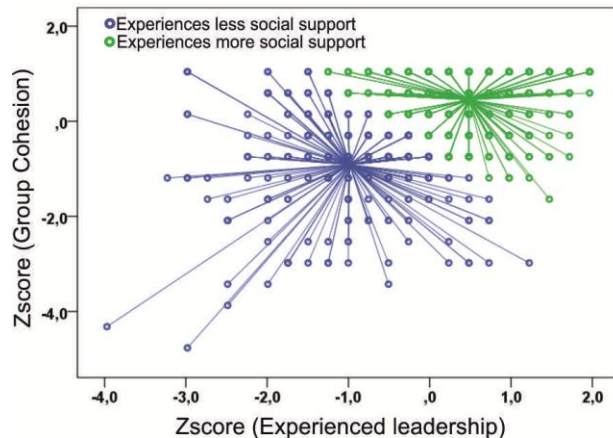


Group cohesion



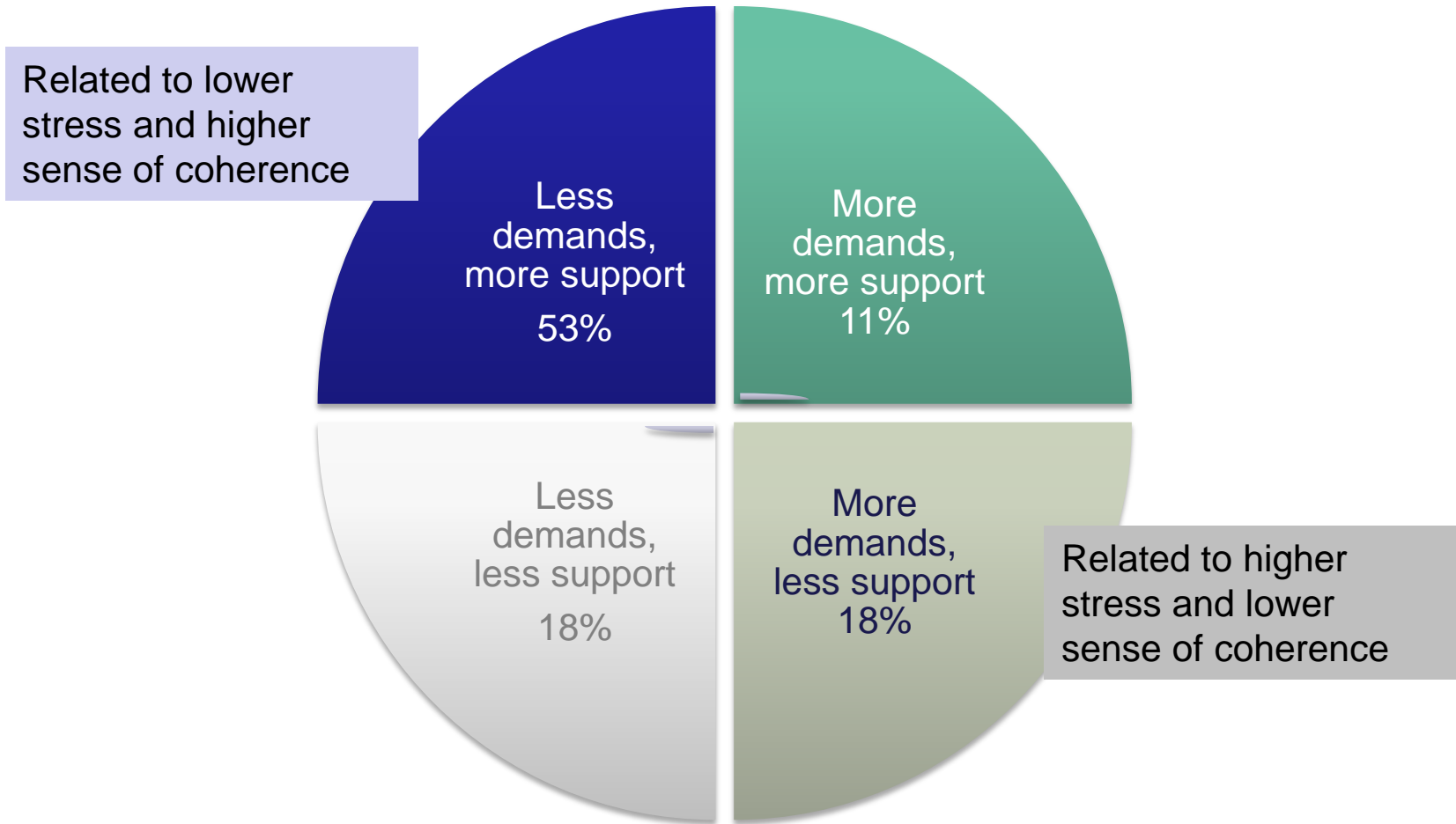
- 1) Higher job demands
- 2) Lower job demands

- 1) Higher experienced social support
- 2) Lower experienced social support



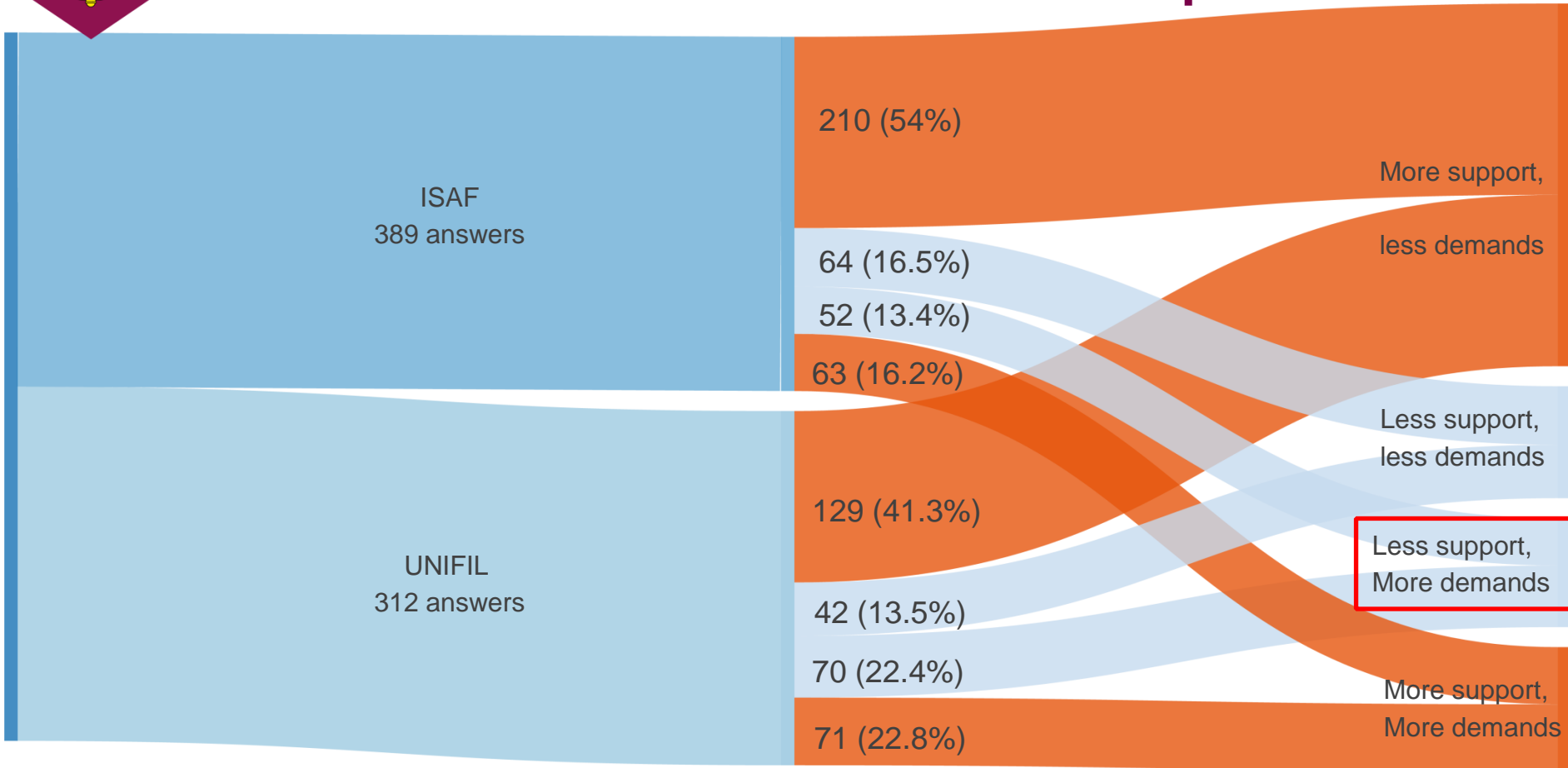


Profiles based on clustering and cross-tabulation





The distribution of clusters in different operations



Note. $\chi^2 = 18.823$, $df = 3$, $p = 0.000$, Cramer's $v = 0.164$

Findings indicated that the relation between the balance between social support and job demands and socio-psychological well-being in terms of stress and sense of coherence was evident both in ISAF and UNIFIL.





Conclusions

- Well-being after deployment was high
 - Post deployment life was experienced comprehensible, manageable and meaningful (a.k.a. SOC).
 - Only few post deployment stress symptoms
- Importance of social support
 - Needs to be focused on during deployment
 - Needs to be monitored during deployment

→ Improving social support during deployment may improve well-being after deployment





References

- Adler, A. B., Litz, B. T., & Bartone, P. T. (2003). The Nature of the Peacekeeping Stressors. In T. W. Britt & A. B. Adler (Eds.), *The Psychology of the Peacekeeper. Lessons from the Field* . pp. 149–169. Praeger Publishers, USA.
- Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science & Medicine*, 36(6), 725–33.
- Brounéus, K. (2014). On return from peacekeeping: A review of current research on psychological well-being in military personnel returning from operational deployment, *Journal of Military and Veterans Health*, 22(1), 24-29.
- Campbell, D. J., & Nobel, O. B.-Y. (2009). Occupational Stressors in Military Service: A Review and Framework. *Military Psychology*, 21(sup2), S47–S67. doi:10.1080/08995600903249149
- Lazarus & Folkman, 1984
- Lieberman, H. R., Bathalon, G. P., Falco, C. M., Georgelis, J. H., Morgan, I. C. A., Niro, P., & Tharion, W. J. (2002). The “Fog of War”: Documenting Cognitive Decrements Associated with the Stress of Combat.
- Leskinen, J. (2004). Saloseudulta EU-isänniksi - Lypsykarjayrittäjät muutosmurroksessa. Seurantatutkimus 1997–2001.
- Pietrzak, E., Pullman, S., Cotea, C., & Nasveld, P. (2012). Effects of deployment on mental health in modern military forces: A review of longitudinal studies, *Journal of Military and Veterans’ Health*, 20(3), 24-36.
- Staal, M. A. (2004). *Stress, Cognition, and Human Performance: A Literature Review and Conceptual Framework*. Hanover.

