



STO-MP-HFM-302-18

Consequences of Leadership Behavior for Job Satisfaction and Health in the Bundeswehr

**Berlin,
Tuesday 09th to Wednesday 10th April 2019**

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Agenda

- (1) The German Armed Forces (GAF) - Overview
- (2) Agenda 2014 -> Attractiveness
- (3) Empirical Data: Survey 2016
- (4) Questions and Measures
- (5) Findings
- (6) Conclusion



The German Armed Forces (GAF) - Overview

- In total: 250.000, thereof 185.000 soldiers.
- Manning Level: Army: 61.000; Air Force: 28.000; Navy: 16.000; Medical Services: 20.000; Support/Logistics: 27.000; Cyber and Information: 12.000; Administration: 39.000; Defence Technology: 11.000.
- 1000 different vocations within the GAF.
- 2011: Suspension of conscription.
- Dec. 2018: 3.488 soldiers in operations aboard (Focus: Resolute Support, Afghanistan: 1.206; MINUSMA, Mali: 890).
- Career service members: 30%; Temporary career volunteers (signed up for a fixed period): 65%; Short-service volunteers: 5%.
- Share of women in military service: 12% (Nov. 2018).



Agenda 2014: „Aktiv. Attraktiv. Anders“



A) Non statutory regulations:

- Leadership and organizational culture
- Mobilization of potentials
- Work-live balance
- Working autonomy
- Career development
- Health management
- Modernizations of quarters
- GAF and society

B) Statutory regulations:

- Working conditions
- Salary
- Social security



Employee survey 2016

Population:

All active members of the GAF (civ. + mil.)

Sample/Return:

3 197 usable questionnaires. Return: 33%
-> 2 121 soldiers

Method:

Paper & pencil, omnibus survey

Survey period:

13 June - 19 July 2016

Data collection:

ZMSBw

Conception, questionnaire, and data analysis:

ZMSBw, military sociology branch



**Wie attraktiv ist die
Bundeswehr als Arbeitgeber?**

Ergebnisse der Personalbefragung 2016

Gregor Richter

Forschungsbericht 113

August 2016

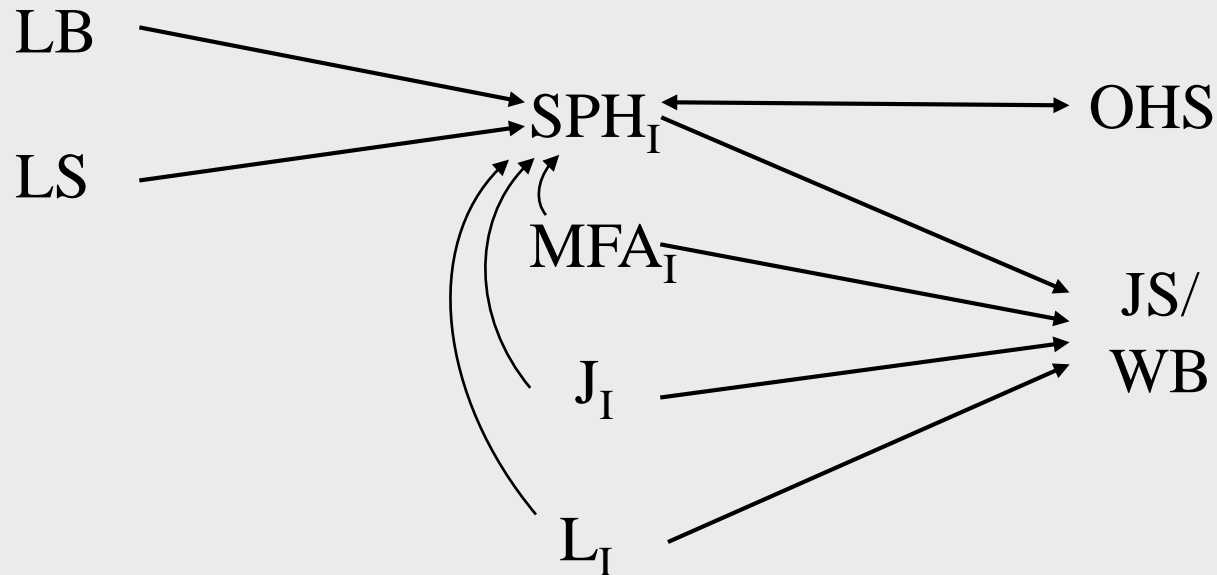


Research Questions

1. What influences soldiers' health in the Bundeswehr?
2. What influences soldiers' well-being in the Bundeswehr?
3. What effect does leadership have on health for soldiers in the Bundeswehr?



Explanatory Modell



LB (leadership behavior): a scale with 20 items to measure Civic Education and Leadership (Innere Führung).

LS (leadership satisfaction): was measured with the question “How satisfied are you, all in all, with the leadership style of your immediate superior?”

OHM (Occupational Health Management): was measured by asking, whether it influences the attractiveness of the Bundeswehr as an employer and whether the participants already had had any experiences with Occupational Health Management.

JS/WB (job satisfaction/well-being): was measured with the question “How satisfied are you at present, all in all, with your service in the Bundeswehr?”

+ **four indexes**



Construction of Indexes

1. Socio Psychological Health Index (SPH_I)

The Socio Psychological Health Index consists of four items. Two items represent how much the Bundeswehr cares about soldiers' health (Are there healthy working conditions? And Does the Bundeswehr offer extensive social benefits, such as free medical care?). The other two items represent hygiene factors in the sense of Herzberg (1987): salary (Are you well paid?) and personal life (Is it possible for you to reconcile family and service well?). These aspects are considered to influence soldiers' health conditions directly.

2. Military-Family-Adaption Index (MFA_I)

The Military-Family-Adaption Index includes the items “You rarely have to move because of your job.”, “You don't have to work more than 41 hours a week.”, “You always have off on weekends.” and “You rarely have to do business trips.” These aspects influence recreation as a resource for coping with stress and are to be considered as general factors on psychological and physical well-being.

3. Justice Index (J_I)

The justice index contains the items “Men and women are treated equally.”, “There are clear responsibilities in an obvious hierarchy.”, “There is comradeship and teamwork.” and “I can have a say in important issues.” Social justice is considered to have a strong influence on peoples' well-being.

4. Learning Index (L_I)

The learning index includes the items “I can unfold and develop.”, “I can regularly take on new tasks.”, “I can often learn new things.” and “I can foster my training and education on a regular basis.” Learning is a key aspect of personal growth and well-being.



Indexes: basic statistics

- The Socio Psychological Health Index (N = 2 085) shows a Cronbach's $\alpha = .63$, a mean $M_a = 2.8^1$ and standard deviation $SD = .80$.
- The Military-Family-Adaption Index (N = 2 015) has a Cronbach's $\alpha = .68$ a mean $M_a = 2.9$ and standard deviation $SD = .85$.
- The Justice Index (N = 2 071) shows a Cronbach's $\alpha = .62$ a mean $M_a = 2.9$ and standard deviation $SD = .99$.
- The Learning Index (N = 2 111) shows a Cronbach's $\alpha = .84$ a mean $M_a = 2.9$ and standard deviation $SD = .82$.



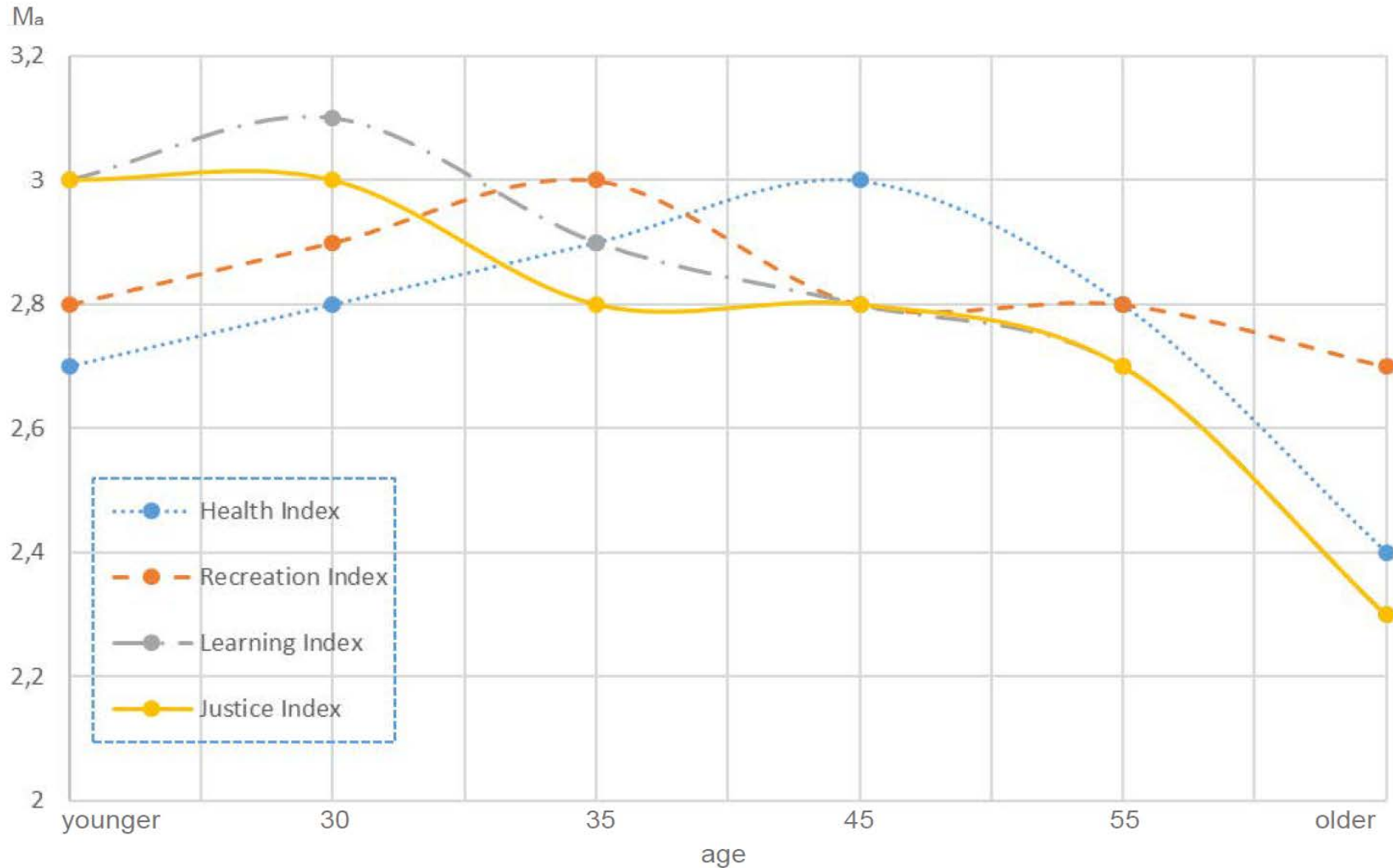
Age and Indexes (I)

How old are you?	Socio Psychological Health Index M_a	Military-Family-Adaption Index M_a	Learning Index M_a	Justice Index M_a
17 to 25 years	2.7	2.8	3.0	3.0
26 to 30 years	2.8	2.9	3.1	3.0
31 to 35 years	2.9	3.0	2.9	2.8
36 to 45 years	3.0	2.8	2.8	2.8
46 to 55 years	2.8	2.8	2.7	2.7
56 years and older	2.4	2.7	2.3	2.3
Eta ²	.01***	.01**	.04***	.03***

Remarks: ZMSBw Personal Survey 2016. Comparison of means; significances: * $p < .05$, ** $p < .01$, *** $p < .001$.



Age and Indexes (II)





Ranks and Indexes

NATO Rank-Codes (Dienstgradgruppen)	Socio Psychological Health Index M_a	Military-Family- Adaption Index M_a	Learning Index M_a	Justice Index M_a
OR-1 to OR-5 (Mannschr./Uffz. m. P.)	2.7	2.8	3.2	3.1
OR-6 to OR-9 (Uffz. m. P.)	2.9	2.9	2.9	2.9
OF-1 to OF-2 (Leutnante & Hauptleute)	2.9	3.1	2.5	2.7
OF-3 to OF-9 (StOffz. & Generale/Admirale)	2.7	3.0	2.5	2.5
Eta ²	.02***	.02***	.10***	.06***

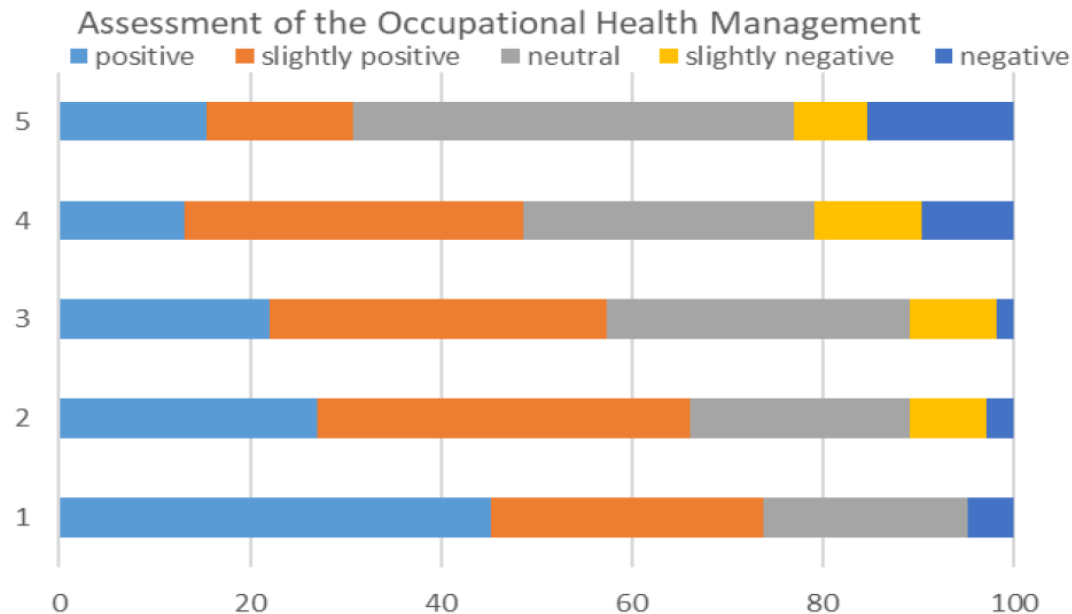
Remarks: ZMSBw Personal Survey 2016. Comparison of means; significances: * $p < .05$, ** $p < .01$, *** $p < .001$.



What about Occupational Health Management?

Socio Psychological Health Index	Does occupational health management influence the attractiveness of the Bundeswehr as an employer?				
	positive	slightly positive	neutral	slightly negative	negative
1 (1 – 1,49)	45.2	28.6	21.4	0.0	4.8
2 (1,5 – 2,49)	27.0	39.2	23.0	7.9	2.9
3 (2,5 – 3,49)	22.0	35.3	31.8	9.1	1.8
4 (3,5 – 4,49)	13.2	35.5	30.5	11.2	9.6
5 (4,5 – 5)	15.4	15.4	46.2	7.7	15.4
Σ	23.0	36.2	28.5	8.7	3.6

Remarks: ZMSBw Personal Survey 2016. Numbers in percent.



Remarks: ZMSBw Personal Survey 2016. Abscissa in percent, ordinate shows Health Index from 1 (high) to 5 (low).



What influences Well-Being?

Independent variable	model 1	model 2	model 3	model 4	model 5
Age	.02	.02	.02	.02	.02
Service level group	-.07*	-.08**	.05	.07**	.07**
Sex (1=male)	-.07**	-.04	-.05*	-.06**	-.05**
Socio Psychological Health Index	-	.42***	.32***	.28***	.27***
Learning Index	-	-	.43***	.35***	.35***
Justice Index	-	-	-	.18***	.18***
Military-Family-Adaption Index	-	-	-	-	-.00
R ²	.01	.18	.35	.36	.36

Remarks: ZMSBw Personal Survey 2016. Effect strength in beta; significances: *p<.05, **p<.01, ***p<.001.

The dependent variable in all models is job satisfaction.



Leadership Influences Health

	M_a	$r_{\text{Pearson}}^{\text{SPH}_I / \text{Leadership}}$
My immediate superior is recognized as an authority.	2.3	.12***
My immediate superior is unbureaucratic in his actions.	2.5	.12***
My immediate superior takes time for me and does know me well.	2.5	.13***
My immediate superior talks openly to his subordinates about fears or special experiences, including death and wounding.	3.2	.13***
The demand and promotion of intercultural competence is personally close to the heart of my immediate superior.	2.8	.16***
It is easy for my immediate superior to convey the political sense of a task as well.	2.7	.16***
He trusts the skills of his subordinates.	2.2	.16***
He is professionally competent.	2.0	.16***
My immediate superior leads in partnership.	2.8	.16***
He is happy to accept suggestions from subordinates.	2.4	.16***
For his subordinates, he always leads the way with good example.	2.6	.17***
He gives me certainty of action in every situation.	2.6	.17***
He gets through difficult situations together with his subordinates.	2.6	.18***
Rebuke and, above all, praise are elementary leadership elements for him.	2.7	.18***
Gender equality is an indispensable element of his leadership.	2.2	.18***
I trust my immediate superior.	2.3	.18***
In his decisions he takes proposals from subordinates into account.	2.5	.18***
He is able to assess himself critically.	2.8	.19***
He regularly involves his subordinates in the service design.	2.7	.19***
He takes into account the needs I have in relation to my family life.	2.3	.23***
How satisfied are you, all in all, with the leadership style of your immediate superior?	2.4	.16***

Remarks: ZMSBw Personal Survey 2016. Significances: * $p < .05$, ** $p < .01$, *** $p < .001$.



Leadership Influences Health?

Independent variable	model 1	model 2	model 3	model 4	model 5
Age	.01	.10***	.09***	.09***	.09***
Service level group	.02	-.10***	-.05*	-.02	-.03
Sex (1=male)	-.09***	-.08***	-.80***	-.08***	-.08***
Military-Family-Adaption Index	-	.53***	.51***	.48***	.48***
Learning Index	-	-	.15***	.07**	.06*
Justice Index	-	-	-	.19***	.18***
Satisfaction with leadership	-	-	-	-	.07**
R ²	.01	.28	.30	.32	.33

Remarks: ZMSBw Personal Survey 2016. Effect strength in beta; significances: *p<.05, **p<.01, ***p<.001.



Conclusion

*It is maybe not organizational culture only that eats leadership for breakfast,
but complexity in general.*