German Army Training Command

Training is our passion
German Army Training Command

Agenda

- Mission and Organization
- CHARLY III
- Preliminary Results and Way Ahead
Mission of German Army Training Command

- **command and control over** all schools and training centres as well as central training establishments

- **responsible for the specialist function of conducting training** in the German Army

- develop **fundamentals** for conducting **training**

- responsible for **preparing** and **providing training aids**

- prepare the standards for operating and utilizing all **simulation systems** used for training purposes in the German Army

- responsible for implementing the requirements in the field of **international cooperation** and **training cooperation**
Subordinate Training Centers

- Army Officer School
- Army NCO School
- MUNSTER Training Center
- Infantry Training Center
- Land Systems Technology Training Center
- Engineers Training Center
- International Helicopter Training Center
- Special Operations Training Center
- Army Combat Training Center
- Army Warfighting Simulation Center
- Bundeswehr UN Training Center
- Air Manoeuvre Training Center
Technology-Based Training in the Army

Modern Training Technology

Distance Learning

Digital Training Aids

Author Organization
Digital Training Aids

Mobile Apps

Augmented Reality
Preventive Training
for Psychological Fitness
in NCO Courses

Pilot Study
CHARLY III
(Chaos Driven Situations
Management Retrieval System)
## CHARLY III

<table>
<thead>
<tr>
<th>Development of CHARLY I</th>
<th>Development of CHARLY II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot study</strong> and prototype for EOD/IED personnel in 2009</td>
<td>Pilot study for medical personnel in 2010</td>
</tr>
</tbody>
</table>

**CHARLY III**

Development of specific scenarios for *infantry* and all soldiers in 2017

Including a *smartphone application*
Goal of Training

„From hero to pro“

• Knowledge about stress and trauma
• Learning methods how to handle stress
• Learning how to talk to comrades about stress
Goal of Training

„I will show **no weakness** (e.g. fear, panic, sadness, sorrow).“

„I have **everything under control**.“

„I don’t wail and moan.“

„**Stress** and psychological stressors are easy for me to handle.“

„I don’t talk.“

„I know that there will be situations that are beyond my control. I am prepared.“

„I know the risks of **psychological injury**.“

„It is **normal** after an extremely stressful situation to feel **stressed or troubled**. I am normal.“

„I know and use self-management strategies.“

---

This training is a chance for my own **health prevention**!
I will become my own **stress manager**!
CHARLY combines different methods:

**Multimedia simulation**
- Interactive dialogue
- Confrontation with stressful situations

**Coach leading through the program**

**Biofeedback via skin response measurement and heart rate variability**
- Measurement **before** and **during** a stressful situation
- Self-calming using stress-management techniques
- Measurement after the use of these techniques

**Computer gaming**
- Motivation
- Inducing Stress
- Point system and high-score as incentives

**Multimedia illustrations**
- Explaining context,
  - Such as the origin of PTSD
  - Stress reactions

**Method**
Virtual Coach

- Explains and leads through the training
- Comments
- Supports

Multimedia

- Context is explained by videos and interactive training
### Special characteristics of CHARLY

#### Biofeedback via heart rate variability
- Measurement before stress inducement
- Measurement after stress inducement
- Measurement after using relaxation techniques

#### Computer Game
- Increase in motivation
- Inducement of stress
Topics covered

Unit 1
SELF-AWARENESS

Experiment for experiencing a stress reaction including **biofeedback**

Unit 2 - 4
PSYCHO-EDUCATION

**Information** about **stress** and **trauma**
Stressful situations

- Patrol
- Combat
- Family
- Civilian Casualty
- Crime Scene
- Death of Comrade
Unit 5
RESILIENCE AS A PROTECTIVE FACTOR
Explaining an appropriate attitude for deployment

UNIT 6
INTROSPECTION
Explaining the relationship between thoughts and feelings
Topics covered

Unit 7 - 9, 11
SELF-CALMING

Stopping intrusive thoughts, imagination, PMR

Unit 10 + 12
SOCIAL SUPPORT

Dialogue on how to recognize an acute stress reaction
Interactive Dialogue with the Coach

PSYCHISCHE STÄRKE

WISSEN

PSYCHISCHE STÄRKE
TRAINIEREN


Für Sie ist es selbstverständlich, sich durch Sport körperlich fit zu halten. Sie wissen, dass Ihre körperliche Leistungsfähigkeit eine wichtige Voraussetzung ist für Ihre Einsatzfähigkeit.

Aber denken Sie an einen Leistungssportler: Dieser trainiert neben seiner physischen Fitness auch seine mentale oder psychische Stärke, um auf alle Herausforderungen vorbereitet zu sein.

Was ist denn das genau, psychische Stärke?

Körperlich bin ich fit, das ist für mich die Hauptsache. Mit allem anderen komme ich gut klar.

Und wie kann mich Charly Mobile beim Training der psychischen Stärke unterstützen?
Exercises and Training Videos

LIEBLINGSDINGE
Freude am Spielen: Was oder womit haben Sie als Kind gerne gespielt? Probieren Sie es heute doch noch einmal aus. Welche Gedanken und Gefühle kommen dabei auf?
Gaming and Social Support

Das Psychosoziale Netzwerk

Auf Standortebene arbeiten Angehörige des Sanitätsdienstes, des Psychologischen Dienstes, des Sozialdienstes und der Militärselsorge eng und vertrauensvoll zusammen. Sie bilden gemeinsam ein Psychosoziales Netzwerk (PSN), welches interdisziplinäre psychosoziale Unterstützung für alle Angehörigen der Bundeswehr leistet. Auch ehemalige Soldatinnen und Soldaten können die Dienste des PSN in Anspruch nehmen und eine vertrauliche Beratung bei psychosozialen Problemstellungen erhalten. Die Wiederherstellung des körperlichen,
I. Motivation and Acceptance
- Target-oriented stress game
- Realistic deployment scenarios
- Multimedia information

II. Confrontation and Self-Efficacy
- Skin response measurement and heart rate variability
- Introducing a self-calming technique
- Stress inducement via gaming
- Confrontation with a stressful situation during deployment
- Using a self-calming technique

III. Blended-Training-Setting
- Coach and interactive training on the computer
- Presence of a psychologist
- Group debriefing
- Free training
From Hero to Pro - Change in attitude towards mental illness in deployed soldiers using the preventive computer program CHARLY (Wesemann, Kowalski, Zimmermann, et al., 2016)

• **Methods:** N = 35 combat soldiers deployed to Afghanistan, before and six months after deployment. Soldiers were randomly assigned to either the “CHARLY” group or the “traditional” training group. Using a knowledge quiz on PTSD and an attitude assessment on mental illness they tested for group-differences six months after deployment.

• **Results:** Attitude toward psychiatric disorders showed significantly better values for the CHARLY group (p = .017) while knowledge showed no significant group difference. The total group benefited from psycho-education by improving knowledge outcomes (p = .047).

• **Conclusions:** The detected positive and stable attitude change was shown to be effected by CHARLY. As attitude change is the central prerequisite for behavior modification it could reduce the lag-period in the seeking of professional care. As the method is highly economical this finding supports the use of CHARLY within the military deployment context.
Integrating Charly in an E-learning Platform

Class room education by a psychologist

- Basics of stress
- Biofeedback
- Use of the technology

E-learning phase

- Practical training using trainee laptops or computer rooms

Class room education and debriefing by a psychologist

- Debriefing
- Handing out the app
- Evaluation
Preliminary Results and Way Ahead

✓ Pilot study 2017: N=22 (2 senior NCO courses)
✓ Blended learning is generally approved by the participants
✓ Generation X and Y have a high expectation on the integration of technology into education
✓ Total ranking for Charly in e-learning Ø 2,7 (Scale 1-5)
✓ Most NCOs think that the program is helpful and important for deployment (Ø 2,4)
✓ Training is also of value for leadership training (Ø 2,4) and most of the NCOs can use some methods in everyday life
✓ Using it only in an e-learning format is not recommended (Ø 3,7), a workshop led by a psychologist should remain mandatory
✓ Also the training is recommended to take place in an earlier phase of the NCO courses for young NCOs
✓ Follow-Up study will take place in June 2018
We in the Army

Thank you for your attention

Questions

Training is our passion