EXPERT DAY 22ND JUNE 2011:

RESULTS & CONCLUSIONS



PHILIPS TUDelft TU/e



Expert Day 22nd June 2011: GRIP BOOK VOL. 1 Results & Conclusions MORNING SESSION:

### NTRO

### INTRODUCTION

On Wednesday 22nd June 2011, GRIP organised an Expert Day at Philips Design Eindhoven. The aim of the day was to collect information regarding job-related stress and to support decisions regarding future project activities as well as to facilitate networking. Besides the core GRIP members, – Evelien van de Garde (Eindhoven University of Technology), Helle Ullerup & Luc Geurts (Philips Design) and Mike Thompson (Design Academy Eindhoven) – experts from a variety of disciplines participated including Kees Blase (Landelijk Centrum Stress Management / Hart Focus), Jolant van den Haspel (Neuropsycholoog), Mark van der Hoek (365 / ArboNed), Esther van Houdt (Philips Design), Martin Ouwerkerk (Philips Research), Ryszard Malag (HSK Groep / Mental Advantage), & Bas Goudsmit (Eindhoven University of Technology).

In the morning session, the experts were invited to give a 20 minute presentation on their experiences with regard to the following topic:

HOW TO SUCCESSFULLY APPROACH JOB RELATED STRESS?

After each presentation we conducted a 10 minute Q&A involving all of the participants considering questions such as:



Is job related stress good or bad & when does good stress change to bad stress?

How and when do you assess job related stress (before, during, after intervention, own measurements or clients indication, subjective / objective)?

Does awareness of job related stress help or hinder in coping / prevention?

How do you and your clients rate the success of your interventions?

Which intervention is more successful: prevention / coping or a combination?

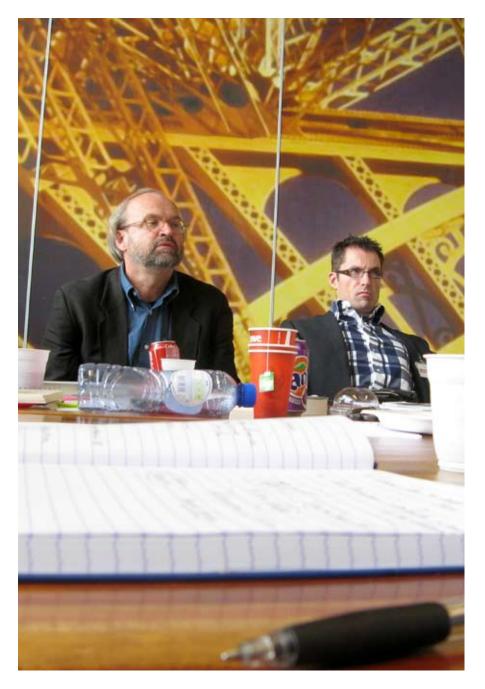
Is there a way to connect a particular stress profile or characteristic to a specific solution?

In the afternoon the GRIP core group took the opportunity to present some of their initial interests and ideas in a creative THINK TANK, where the experts were invited to be creative and discuss the pros, cons of each of topic.

This book provides an impression of the expert day itself, and the insights and conclusions that were derived from it.







### MORNING SESSION:

# BIOS

### **EXPERT BIOS**

Prior to the Expert Day, each of the Experts was asked to provide a short biography of themselves as well as their own personal response to the main question for the day, How to successfully approach job related stress?

This information was meant as a brief introduction to the presentations and as a way to create specific questions for each Expert, however, these responses are also give a strong indication into the experience and mindset of each of the guests, therefore, we have chosen to share these with you.



### RYSZARD MALAG

Ryszard Malag is a clinical and sports psychologist (HSK Groep & Mental Advantage) providing guidance, advice, training and therapy to help people optimise their performance at work.

According to Ryszard job related stress is successfully approached by relieving stress related symptoms, psycho education and psychological interventions. The key factors are physical self care, cognitive re-framing and sufficient regeneration time. It is also important to challenge the client to choose between quitting their job or adapting to the job requirements themselves and / or changing the job requirements. Ultimately this is up to the will of the client and / or their environment as they are the ones who suffer in the long run.

### **KEES BLASE**

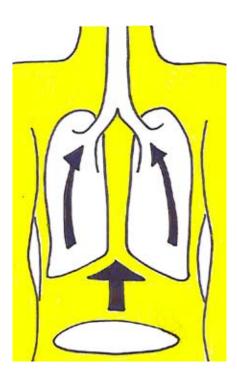
Kees Blase is a medical physicist, health psychologist, neurobiologist and currently Director of Research at Landelijk Centrum Stress Management, and Director of Education and Knowledge Centre Hartfocus.

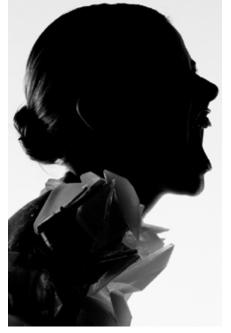
According to Kees a successful approach to job related stress starts with neuroception (the principle that you can regulate the autonomous nervous system) and cardiac resonance followed by a focus on emotion regulation. Cognitive and behavioural measures and trauma healing are most successful after these initial steps.

### **ESTHER VAN HOUDT**

41 years old, living in Amsterdam, single. Working for VTA design since 2005. Enjoys travel and styling.

According to Esther you should address job related stress in a very personal approach and realize there is still a taboo on the issue.





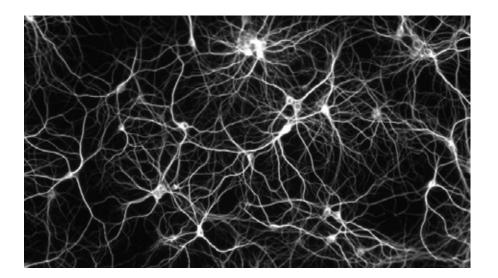
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### MARC VAN DER HOEK

Marc van der Hoek (365 / ArboNed), geschoold in commercie, dat was geen keuze maar een overtuiging. Gegroeid in gezondheidsmanagement, dat was geen keuze maar een samenloop van omstandigheden. Maar hij benadert deze zaken als topsport en dat is wel een keuze.

Volgens Marc kent een succesvolle aanpak twee routes. De eerste route is gericht op het ontwikkelen van bevlogenheid waarbij sprake is van twee relatief gescheiden processen: een uitputtingsproces en een motivatieproces. De tweede route is gericht op het creëren van een bevlogen werkklimaat met een belangrijke rol voor de leidinggevende en invloed van de medewerker op de vormgeving van eigen taken en werkprocessen.



### **JOLANT VAN DEN HASPEL**

Jolant van den Haspel is a neuropsychologist specialising in teaching people to regulate their stress level.

Jolant says, that to successfully approach job related stress requires knowledge of universal stress processes in the brain and recognition of the individuals own stress reactions (physiologically, motivationally and cognitive). She believes that by synchronising the rhythms of respiration and heartbeats it is possible to utilise the energy of stress for more optimal cognitive performance.

### **MORNING SESSION:**

### **EXPERT TALKS - INSIGHTS**

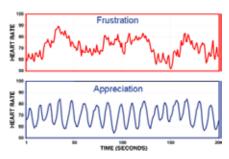
### RYSZARD MALAG

- · Regeneration time.
- · Choose to quit or adapt.
- Learn / get feedback about what happens to your body.
- Like with weight lifting, you need to find out about the limit, without going over the limit. Prevent life-threatening stress overload.
- · How to make people pay attention to the signals?
- What would you do when you win a million, stay in the job or quit? Would you do things differently?

### JOLANT VAN DEN HASPEL

- Losing control is terrible for people.
- · First get physiologically calm, then change your thoughts.
- People have to become active (breathing regulation), this makes you feel in control.
- The pre-frontal cortex should be activated in fight / flight situation, so that active control is possible.
- You can be very allergic of certain stress situations. You need to get social support, break associations.









### ESTHER VAN HOUDT

- Social / human aspect of solutions.
- There is a taboo on stress / burnout. It is career suicide if it happens.
- I was like a hamster in a wheel, luckily my body stopped me.
- · If feel that my burnout was a blessing.
- Aim to find your personal stress markers/signals.

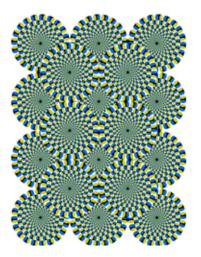
### MARC VAN DER HOEK

- · Prevention is active intervention.
- The mind doesn't know the word NO.
- Demands Resources Model: Target demands as well as resources.
- Good, bad & ugly: There is good & bad stress, but it can become ugly if you are not aware of it.
- · Recognition is key.

### KEES BLASE

- Bring body in a safe state.
- · Use of oxytocin in stress treatment.
- Use of pictures to trigger emotions.
- Heart coherence.
- Aim at intrinsic effect (breathing exercise makes you feel well and appeals to kids).
- How to achieve people to become disciplined in stress regulation?





### **EXPERT TALK CONCLUSIONS**

### TO DEAL WITH STRESS PEOPLE NEED TO BE:

- Motivated.
- In control (have the ability to act).
- Responsible.
- · Active with body & mind (balance / resonance).
- Aware (about their stress levels / body signals).
- Knowledgable (about techniques / methods).
- Socially active and supported.

### POTENTIALLY INTERESTING TARGET GROUPS:

- · Children (they can still make a difference in their lives).
- People in 40s / 50s: they have a lot of responsibilities / limited choice in their work.
- People with caring job (health care/education); they find it hard to say no to people
  who need their help (so tend to take up more work then they can deal with).

### POSSIBLE SOLUTIONS /APPROACHES:

- Demands / resources model.
- 3 steps in intervention: Body (heart coherence,) Emotions, Cognitions (Perception).
- Strive to obtain internal effects.
- Period of regeneration / time in between activities.
- · Finding optimal stress level (between good & bad, over / under regulation).
- Use of oxytocin.
- Use of cues, to trigger positive associations.
- · Use of pictures to stay in touch with emotions.
- · Group rhythm, breathing exercise, singing together, collective gym, flash mobbing.

### REMAINING QUESTIONS:

- How to use stress data?
- How to make people act upon the signals (slow moving threat, system overload in case of stress)?
- · How to achieve long-term benefits / changes / or measuring effect of long-term.
- Interventions?
- How to create/improve social support?

AFTERNOON SESSION:



### THINK TANK

Based on GRIP members' expertise, project discussions & literature insights several topics and ideas related to work-related stress were generated. In the creative THINK TANK session we presented 6 different topics/ideas to the experts. Each topic / idea consisted of a poster containing a title, short description, illustrations, as well as related questions. After presenting the topic / idea participants were invited to be creative and discuss the pros and cons of each topic, writing down any comments on post-it notes. After the expert day, the post-it notes were collected and digitalized to derive a short summary / conclusion for each topic / idea. The separate comments as well as the conclusions for each topic / idea will be presented in the next section.





### **REBRANDING STRESS:**

### STRESS BUCKET

### CONCEPT

The term stress has gained a wholly negative connotation and yet, there are two sides to stress (Positive / Negative), both having an influence over performance and wellbeing. What if we were to look at stress from a different perspective?

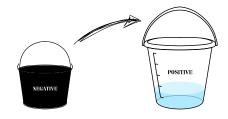
- What are potential implications of rebranding stress?
- In what context (time / space / social / personality / profession) might rebranding stress be successful?

Consider the stress bucket as a metaphor for coping with job-related stress:

### SCENARIO 1.



### SCENARIO 2.



### SCENARIO 3.



SCENARIO 4.



### COMMENTS

- First redefine stress (definition of stress is very personal).
- · Putting it into a wider perspective.
- Stressor's, coping with stress, & the effect / consequence of stress.
- Positive terms help; rebranding is important.
- · Rebranding to sell.
- Because of name there was no snowball effect for stress management course, but there was for 'healthy teaching / police' etc.
- Stress erasers has a negative name (whereas for marketing reasons more positive names good be applied).
- There is a difference in terminology for business people and the man in the street.
- What will people be looking for at google (e.g. Stress).
- The experts look for new wording.
- I am challenged, not stressed.
- Stress is a challenge to the body.
- · Stress: challenge to the homeostasis of the body.
- · Stress for someone, is like failing.
- · Smiley face (we should communicate in pictures to trigger emotions).
- The word should be about emotion; the next 10 years it is about emotions.
- The term 'challenge' relates too much to will, without the emotional part.









- Veerkracht, resilience, vitality.
- Vitality / resilience / challenge.
- Resilience / vitality should be in the buckets.
- Overspannen, burnout, veerkracht.
- Stress generate energy.
- Stress / tension / energy.
- Arousal / opwinding / flow.
- Arousal is positive stress.
- You need two buckets to be balanced.

The definition of stress is very personal. First stress should be (redefined from a broad perspective. Distinction between general recognition of terms related to stress and business potential (positive / negative connotation). Various alternatives are mentioned (e.g. stress, burnout, challenge (lacking emotional component), vitality, resilience, tension, energy, arousal). Experts suggest to update word choice when terms become popular (stress / burnout), The next 10 years is about emotions.



### **FORECASTING & PLANNING:**

### STRESS AGENDA

### CONCEPT

Taking stress management one step further we imagine an interactive stress agenda where the individual is able to manage their stress in relation to their activities. Each activity is assigned a stress rating, visualised through colour coding. Each daily rating is a based on a combination of all the activities scheduled for that day. The agenda allows you to manage your stress level by shifting stressful activities to low stress days so as to keep the stress level as balanced as possible.

- How to assign stress ratings to specific activities?
- · Does the user or system provide the ratings?
- · Does the system learn?
- Is this data for individual or group use?
- What are the moral implications?
- What would be the implications for social support?

1.



2.



3.



4.



### COMMENTS

- · Agenda can help you to plan, make possibility to choose.
- · Agenda opens the possibility to manage stress level.
- Like the idea of planning your stress, to give it structure (perhaps 3D plot).
- Great idea, it is a solution.
- In sports it is different to work (how to manage / organize work / activities / stress).
- Fit in / add tool to make decision in the moment (via agenda).
- Make an ecosystem for stress.
- An agenda can help you plan: "Do not disturb me".
- T-shirt with do not disturb sign.
- A goal gives motivation (through agenda).
- Talk to other planning experts (e.g. hairdresser only planning appointments up to 2 weeks in advance).
- Rethink agenda structure too! If it detects a lot of stress it could suggest recovery moments, and perhaps activities.
- · Maybe use something with flow; graphically like waves.
- Agenda is not mindful, maybe this could be fit into agenda.
- Make a system where you manage challenges; organize & facilitate it as a manager.
- How to deal with interruptions? (If it does not go according to agenda: energy drain, hemisphere, boundary problem).







- The environment doesn't always allow for moment / environment to concentrate.
- Choose which way to look at things (miss the train or win some time; glass half full or half empty; In book Pagano: not half truth both whole; thus glass is half full AND half empty).
- How to deal with mismatch between subjective and objective measurements.
- Look at the distinction between objective and subjective measures.
- Skin conductance monitoring.
- Physio / analog scale; subjective rating.
- Rate system: physio / analog scale.
- Combine the agenda with personal stress levels is important.
- Take circadian rhythms into account.
- Identify stressful moments in the day regardless of activities (circadian rhythm).
- Better to target individual (self power), not organization from top.
- Stress is on an individual level.
- Self power of the individual.

In general the Stress Agenda is positively perceived (helps to plan / manage stress, easy to understand visualization of stress in time), though it is not very mindful. It is seen as a tool for individuals, it is not clear yet how to adapt it for groups or how to share with external people who do not use the system. Some suggestions for improvement were offered (e.g., talking to other planning experts, different visualization of stress levels, add personal coach). There is potential for subjective as well as objective measures (possibly combinations of physio / analogue scale, galvanic skin conductance, circadian rhythm, or manual planning). Some questions remain regarding motivation and engagement; How about people that do not use agenda system (e.g. who do not plan); How to make this work in practice? (Environment, interruptions, the schedule should not become too similar / boring); It needs to bring something/clear benefit (not just the hassle of planning / scheduling).



### STRESS DATA & VISUALISATION:

### **MAPPING STRESS**

### CONCEPT

New technologies such as Galvanic Skin Sensors allow us to collect data on an individuals stress level in relation to time space and people. This data could in turn be used to create new visualisations of stress. Mapping stress in the workplace may allow experts to pinpoint causes of stress both on an individual and group level. It could form the basis of improving stress awareness, further discussion with colleagues or stress experts, or simply for reorganising the workspace / activities.

- What data should be collected and visualised?
- · What should this data reveal on both an individual and group level?
- · How might we put this data visualisation to good use?
- Who should / should not have access to this data?







### COMMENTS

- · Average work week 32 hours, how can you get a burnout from just this.
- There are 168 hours per week, and only 32 in a working week, why only targeting stress at work?
- · Why are you framing the stress problem to work (office).
- · The client needs the awareness.
- Device can help us to signal problems (for clients and / or coach).
- · People themselves need to know what causes stress.
- · Whenever there is feedback, motivation goes up.
- It could work like a fire alarm, a stress alarm. Just before exceeding threshold play music or encourage group singing.
- · Prevention; Stress alarm rings, and then you need to sing.
- Connect it with a task to measure it well.
- It must be connected to tasks, because there are so many factors / causes.
- · It is not about finding patterns, but about deviations.
- These visualization can provide info regarding type of work, work environment; work structure.
- It is a combination of work environment & how work is organized.
- Synchronicity.
- · If there are too many highs & lows it might be worrying.



- · There are so many unconscious things that trigger stress.
- · Your kid being sick could influence the data.

Few comments were noted, many related to work organization / planning (i.e. stress agenda). Perhaps this idea of Mapping Stress did come across to the experts very well. Some concerns are raised by experts regarding usefulness (e.g. Why only targeting stress at work / related to work). There is however potential that it will help to create awareness for clients/coaches/managers (it might reveal interesting / unexpected situations / locations) by finding deviations in patterns. We concluded that Mapping Stress is not a bad idea; rather the applications that we suggested were not clear. For example, we can imagine the mapping tool could be used for office analysis (time, spatially & socially), for helping to make a selection of other stress tools specifically related to the context, or for office planning (interior redesign, activity planning, group forming etc.).



### PHYSICAL & SOCIAL ENVIRONMENT:

### REACTIVE OFFICE

### CONCEPT

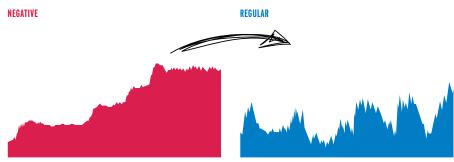
It is well known that the environment (both physical and social) has an influence on peoples mood and behaviour. For example, the colour of a room may enlighten or bore you, or the relationship with your colleagues may motivate or frustrate you. Clearly there is a dialogue between the individual and the environment, so how can we make better use of this line of communication to influence our levels of stress?

- In what context should the environment (physical & social) be reactive to stress?
- To what stress signals (positive or negative) should the environment react / evolve?
- What natural responses should the environment provide? e.g. influence levels of Melatonin and Seratonin etc.
- Could / should we influence good and bad stress?
- When should we trigger / suppress good or stress? e.g. employee's perspective versus employers.

### BEFORE

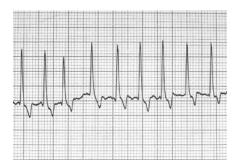






### COMMENTS

- · Music connects to heartbeat.
- Music active / relaxed.
- · ADHD like heavy metal.
- · Lago's baroque relaxation / Schubert more active.
- · Music therapy (Google to find related studies).
- · Light influencing melatonin / cortisol.
- Color influence.
- In Asian countries they use aroma control (lavender-calm).
- Asian countries aromatherapy (lavender calm, citrus stimulating).
- · Smell is most efficient, but effect only lasts a few seconds.
- Smells most influencing.
- Light colours, music, pictures of animals / waterfalls, aromatherapy, today no flowers.
- · How to create a learning environment (colour / light for resilience / activating.
- Learning environment with music/color/all senses (change... activate) [not able to read post-it].
- It is about optimal performance.
- · React to activity (creativity / relaxation).
- · Anticipating office.
- Family photos are important (One expert says he can't concentrate if he sees them).



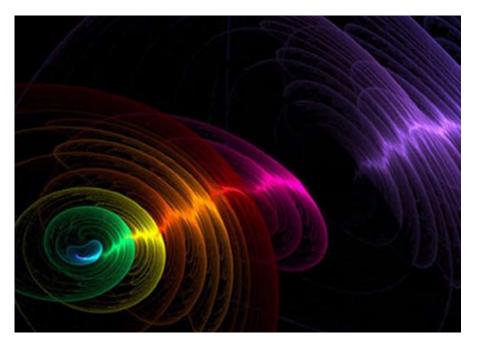






- People's settings are personal.
- How personal.

Adaptation of environment is possible via music / light / color / smell / rhythms / visualization of certain images (e.g. waterfalls, animals etc.); questioning how personal the adaptation of the environment should be; try to optimize the environment to the specific activity (e.g. relaxing, learning, creativity). We realize that many things have already been done in this area, and we'd like to do something new (e.g. supporting synchronisation of rhythms within groups of colleagues, vibrating table / desk for balancing your pulse).





### **MOTIVATION & GAMIFICATION:**

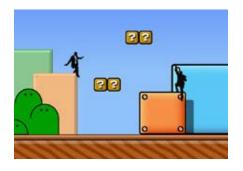
### **POSITIVE VIBES**

### CONCEPT

The next generation has been raised by gaming elements making them very reward driven. The concept is a game that aims to build up a positive attitude towards stress and at the same time it is a tool to enable individuals to push their personal stress borders. The game runs 24 / 7 in the background (latent), and supports to make choices regarding stress coping and balancing work related issues. Progress in learned or applied coping skills is shown in a game-like fashion and can be shared with others via social networks. By offering gaming elements such as challenges, levels, acquiring skills, virtual characters, storytelling and surprises, the player is emerged and engaged in a fun way without being aware that he is dealing with stress.

- What kind of skills (in relation to stress) should people learn from this game?
- How do you translate the lessons learned in a game into real life?
- How might you tailor game challenges to the individuals stress profile?







### COMMENTS

- Mechanism design; trigger people to get to the next step.
- · Mechanism design (game levels).
- · Without feedback there is no going up or down.
- · Know how to be in your optimal performance area.
- Using cues for relaxation asks for training (i.e. 5x per day, for 30 sec. after 2 weeks the cue works).
- Make a fist when stressed, create positive associations.
- Try to make connections in game and activate them in real life.
- A wish is to have a device to train you in stressful moments.
- Jolant makes a fist in training; you can use this to repeat in stressful situation (cueing, must be repeated a lot).
- Make a game where you learn a positive association, that you can use in a stressed situation.
- Stay-calm-in-a stressed-situation-game = perfect.
- Look at learning theory, maybe you don't need a game... so you can control stress without a device.
- Look at learning theory, people need to be able to do it without device or game.
- A skill to learn: Train to stay relaxed in stressful circumstances; To stay in control.
- Let people experience 3D mouse.







- A game to develop stress skills: 3D mouse, discover a new dimension (a game to learn how to use it).
- Extrinsic motivation if reward stops, then also the behavior stops.
- Extrinsic motivation is dangerous. It is best to experience well-being as the reward.
- Give the player a reward: A smile / mastery.
- Game: Reward gives you points to: get a course, a day off, (no success if people don't like gaming).
- Mastery is the reward, then they will repeat. There should be a chance at mastery
- · How come BINGO is so interesting?
- It is about experiencing a state of well-being.
- Children like a simple breathing game / app the most.
- Make people feel it / intrinsic (e.g. breathing exercise was successful to kids.
- Examples of games / applications: neuro-feedback, heartmath, divine.
- Control alpha waves / beta waves.
- Loe Feijs relaxation.
- Using gaming as breaks in work.
- Use gaming in breaks... It motivates people to do it.
- Make variation: relax game, normal game, relax game.
- Let people create their own games to enhance success.
- Let kids create their own game.

Motivation plays a crucial role in dealing with stress according to the experts. Games can be used for different purposes: as a break for work / activities (aimed at relaxation; should offer variation, possibly create own game) or to actively learn stress / relaxation-skills. Games relate to learning theory & mechanism design (levels in games). Games could use / rely on positive associations, choose intrinsic over extrinsic motivation, and provide feedback.



### THE PLACEBO EFFECT:

### MIND GAMES

### CONCEPT

The placebo effect occurs when a simulated medical intervention exhibits positive results simply because the recipient believes in its benefits. In clinical tests it is often found that placebo's, used as mere controls, perform equal to genuine medication. Rather than, using a placebo as a control, could they be used to create a successful approach for diagnosing or treating job-related stress?

- Do you use any techniques that may influence peoples perception and ability to deal with stress?
- How might price, design, access to treatment, or advertising effect the perceived success of the diagnosis or treatment?
- How can this perception be enhanced by using physical objects / props? e.g. uniforms, technical / medical items, terminology etc.
- Would a placebo product / service be deceiving or helping people?





### COMMENTS

- Influence of authority / environment on belief that treatment works.
- Stage an experience around the placebo.
- Create a belevenis / experience / ambiance.
- · You have to do it secretly otherwise it stops.
- Mindfulness is placebo? (It is proven that it works).
- Mindfulness is placebo (They believe it works; make them believe it works).
- If you ask people to think about nice feeling / experience / ideal situation you create a stronger belief.
- · Giving attention to things of value.
- Hypnosis / NLP.
- Say: You are very vital (instead of you are not stressed).
- · Try to create an internal effect.
- It is about what people DO want, and you (as a coach) guide them.
- · Empowering people.
- · This concept is about helping (not deceiving).
- · Let's design/write the holy stress bible.
- Possible to use a placebo to benchmark against other ideas.
- Need to create a believable environment design environment / context / objects.







A placebo helps people to achieve what they (already) want by creating an entire experience (by adapting e.g. environment/use of language / creating desirable associations / food choice); some existing techniques rely on placebo effect (cueing). Placebo's relate to beliefs, and should have an internal effect.











### 1 WEEK LATER:

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### **GENERAL CONCLUSIONS**

We may conclude that the expert day was a very successful event in which GRIP project members were exposed to many different thoughts, issues and approaches regarding work-related stress. We have gained new inspiration to continue and refine the scope of our project and see potential for future collaborations. In this section we will shortly describe with which topics / ideas we would like to continue, as well as indicate directions for future research.

### TO BE CONTINUED...

On Monday 27th June, after discussing the conclusions from the Expert Day it became clear that we needed to further focus our research. We put the six themes to the vote with the following results:

- The Placebo Effect: Mind Games (4 votes).
- · Analysis & Use of Stress Data (Mapping Stress & Stress Agenda; 3 & 2 votes).
- Motivation & Gamification: Positive Vibes (2 votes).
- Physical & Social Environment: Reactive Office (1 vote).

We acknowledge that there is crossover with several topics and therefore plan to merge topics together, hence The Placebo Effect & Mind Games and Mapping Stress & Stress Agenda will be merged together.

### FUTURE RESEARCH DIRECTIONS:

- Compare alternative stress maps / planning tools (possibly incl. placebo stress map).
- See which type makes people more aware of their (groups) stress levels?
- See which type makes people more motivated to change their behavior?
- Social support is addressed in TU/e student projects (possible using group rhythms).
- Possibly we could aim to investigate long term effects.
- Find collaboration to further develop use of oxytocin?
- · Investigate how to technically support use / efficiency of cueing.

EXPERT DAY 22ND JUNE 2011:

# RESULTS & CONCLUSIONS

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