

ClinicalTrials.gov Protocol Registration and Results System (PRS) Receipt
Release Date: 06/27/2016

ClinicalTrials.gov ID: NCT01833104

Study Identification

Unique Protocol ID: ReSource

Brief Title: Plasticity of the Compassionate Brain

Official Title: A Longitudinal Study on the Trainability of Socio-affective and Cognitive Functions and Abilities.

Secondary IDs:

Study Status

Record Verification: June 2016

Overall Status: Active, not recruiting

Study Start: January 2013

Primary Completion: June 2016 [Anticipated]

Study Completion: June 2016 [Anticipated]

Sponsor/Collaborators

Sponsor: Max Planck Institute for Human Cognitive and Brain Sciences

Responsible Party: Sponsor

Collaborators: European Research Council (ERC)

Oversight

FDA Regulated?: No

IND/IDE Protocol?: No

Review Board: Approval Status: Approved

Approval Number: 376-12-05112012

Board Name: Ethics commission University of Leipzig, Germany

Board Affiliation: University of Leipzig, Germany

Phone: +49-341-97154

Email: ethik@medizin.uni-leipzig.de

Data Monitoring?: No

Plan to Share Data?:

Oversight Authorities: Germany: Ethics Commission

Study Description

Brief Summary: The purpose of the study is to look at the long term effects of a complex socio-affective mental training program on a neuroscientific-, hormonal-, behavioral-, biological, and subjective measures-level. The training protocol consists of a variety of meditation and other mental health techniques, which are trained over the period of 3-9 months (13 weeks per Module; 1-3 Modules)

Detailed Description: The ReSource Project is a unique, large-scale study on the effects of mental training techniques. Over a period of three to nine months, participants practice a wide range of mental exercises that are designed to enhance attentional control, body- and self-awareness, emotion regulation, self-care, compassion, empathy, and perspective taking. Overall, the aim of the training is to improve mental health and social skills. It may reduce stress, improve mental clarity, increase life satisfaction, and lead to a better understanding of others' views, values, and actions.

The ReSource Project is a secular program developed by a team of experienced meditation teachers, scientists, and psychotherapists.

Over the last decades, isolation, stress, and psychological tensions have been steadily increasing in our society. Mental training can alter stress responses, physical health, resilience, attention, perception, emotional experience, and social behavior. Evidence for these results is based on previous studies showing behavioral changes, as well as observed changes in brain function and structure. Moreover, health factors, such as peripheral autonomic responses, stress hormones, and immune parameters were significantly changed after training.

The ReSource Project consists of three consecutive modules: called "Presence", "Perspective", and "Affect". The Presence Module trains mindful attention to internal mental and physical processes. The Perspective Module focuses on socio-cognitive abilities, such as insight into the nature of the mind and self, and also the ability to assume the perspective of others. The Affect Module focuses on constructive ways of dealing with difficult emotions, and works to cultivate prosocial motivations and positive emotions such as compassion.

In contrast to most previous studies of just a few months, the ReSource Project will be conducted over a period of 3-9 months for three experimental cohorts (cohorts start in a shifted design; 2 cohorts train over a period of 9 months (all 3 Modules in different orders, 13 weeks per Module), 1 cohort trains over 3 months (only the Affect Module)), and will cover a wide range of practices intended to enhance cognitive and socio-affective skills. 2 retest control cohorts account for the effects of repeated testing.

Conditions

Conditions: Healthy Subjects

Keywords: Healthy subjects

Study Design

Study Type: Interventional

Primary Purpose: Basic Science

Study Phase: N/A

Intervention Model: Parallel Assignment

Number of Arms: 5

Masking: Open Label

Allocation: Randomized

Endpoint Classification: Efficacy Study

Enrollment: 332 [Anticipated]

Arms and Interventions

Arms	Assigned Interventions
Experimental: Training Cohort 1 (TC1) (N = 80) in the order "Presence - Affect - Perspective"	Behavioral: Presence - Affect - Perspective. As specified above however the order is interchanged between the cohorts TC1 and TC2.
Experimental: Training Cohort 2 (TC2) (N = 81) in the order "Presence - Perspective - Affect"	Behavioral: Presence - Perspective - Affect PRESENCE: Cultivate attentional skills & interoceptive body awareness. 2 exercises: "Breathing Meditation" & "Body Scan". PERSPECTIVE: Focus on cognitive aspects of compassion; take perspectives on thoughts, the self, & other people; observe more macroscopic dynamics within oneself, your inner "parts"; do not fully identify with them / be aware of their transiency; strengthen the ability to detach from one's own perspective, take the perspectives of others, trying to understand their thoughts, motives, feelings. 2 exercises: "Observing-thoughts Meditation" & "Perspective Dyad". AFFECT: Cultivate emotional/motivational aspects of compassion; cultivate a sense of benevolence, love, care, "opening the heart" for oneself and others; work with obstacles, e.g. fear, anger or sadness ("emotion acceptance"); pro-social motivations as an alley towards loving / benevolent feelings and as a consequence of them. 2 exercises: "Loving-kindness Meditation" & "Affect Dyad".
No Intervention: Retest Control Cohort 1 (RCC1) (up to N = 30) this is a non-intervention control group to access measurement effects and will be tested at each timepoint.	
Active Comparator: Training Cohort 3 (TC3) (N = 81) here, the "Affect Module" only intervention is administered.	Behavioral: Affect AFFECT: Cultivate emotional/motivational aspects of compassion; cultivate a sense of benevolence, love, care, "opening the heart" for oneself and others; work with obstacles, e.g. fear, anger or sadness ("emotion acceptance"); pro-social motivations as an alley towards loving / benevolent feelings and as a consequence of them. 2 exercises: "Loving-kindness Meditation" & "Affect Dyad".
No Intervention: Retest Control Cohort 2 (RCC2) (up to N = 60) this is a non-intervention control group to access measurement effects and will be tested at each timepoint.	

Outcome Measures

Primary Outcome Measure:

1. Changes in several structural MRI measures (MRI-based cortical thickness, mprage; T1-mapping, mp2rage; automatic amygdala volumetry; tensor-based morphometry, Diffusion Tensor Imaging; Flair)
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Each structural MRI session has ca. 27-30 min of scan time. Investigation of long-lasting changes in cortical and sub-cortical networks after training. How do psychological traits and certain brain structures predict individual differences in training effects.

2. Changes in functional magnetic resonance imaging (fMRI) measure: Regulation and Generation of Emotions (RAGE)
[Time Frame: TC1, TC2, RCC1: Changes from T0 to T2 (T0 + 26 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months);]
[Safety Issue: No]
The measure is part of the MRI session and lasts for ca. 15-25 min. Goal is the Investigation of dynamic changes of functional MRI signals during affective and cognitive tasks in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects. All cohorts: after T0 only "Generation" part of paradigm. TC1, TC2 and RCC1: not assessed at T1.
3. Changes in functional magnetic resonance imaging (fMRI) measure: Resting State measurement
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
The measure is part of the MRI session and lasts for ca. 7 min. Goal is the Investigation of dynamic changes of functional MRI signals during resting state in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects.
4. Changes in functional magnetic resonance imaging (fMRI) measure: Emotional Anticipation (EmoAnt)
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
The measure is part of the MRI session and lasts ca. 15 min. Goal is the Investigation of dynamic changes of functional MRI signals during affective tasks in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects.
5. Changes in functional magnetic resonance imaging (fMRI) measure: Modulation of pain perception
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
The measure is part of the session and lasts ca. 20 min. Goal is the Investigation of dynamic changes of functional MRI signals during a pain perception task in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects.
6. Changes in functional magnetic resonance imaging (fMRI) measure: Cued flanker task (CueFla), an attention and orienting task
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
The measure is part of the MRI session and lasts 15 min. Goal is the Investigation of dynamic changes of functional MRI signals during an attention and orienting task in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects.
7. Changes in functional magnetic resonance imaging (fMRI) measure: a Theory of Mind and Social Cognition task (the EmpaToM)
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
The measure is part of the MRI session and lasts ca. 35-40 min. Goal is the Investigation of dynamic changes of functional MRI signals during a theory of mind and social cognition task in order to test the correlation of functional and structural network changes after training. How do psychological traits and certain brain structures predict individual differences in training effects.
8. Changes in stress physiology: "diurnal cortisol profile"
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

] Examination of the diurnal cortisol profile (awakening, day timeline): on two weekdays, subjects collect saliva samples during the day (7 timepoints, each ca. 3 min). This will be coordinated with the experience sampling via the smartphones.

9. Changes in autonomic nervous system functions: Physiological Resting Baseline (electrocardiogram (ECG), electrodermal activity (EDA), and breathing)

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

People sit quietly and no specific task given. We will use "Biopac MP150 Bionomadix" for measurement of autonomic activity (inferred from heart rate variability) by measuring a 3-point ECG in the chest area, as well as electrodermal activity (on the fingertips of the left index and middle finger), and breathing.

10. Changes in a Virtual Reality Setting: The Panopticon --> attention and change detection

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Part of the Virtual Reality Session (ca. 40 min): In a virtual world, we will look at attention and change detection in an unknown environment with emotional stimuli. It will happen on the same day as the MRI measurements and will be measured by counting the amount of changes of the virtual environment that could be detected. Behavioral measures will be combined with physiological data assessment during the test.

11. Changes in a Virtual Reality Setting: The Crowded Room --> changes in social distance to avatars

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Part of the Virtual Reality Session (ca. 40 min): In a virtual world, we will look at changes in social distance. It will happen on the same day as the MRT measurements and will be measured by detecting the preferred proximity to avatars within the virtual worlds. Behavioral measures will be combined with physiological data assessment during the test.

12. Changes in a Virtual Reality Setting: The Affect Gallery --> changes in affective preferences

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Part of the Virtual Reality Session (ca. 40 min): In a virtual world, we will look at changes in approach and avoidance behavior in terms of affective preferences of available affective stimuli. It will happen on the same day as the MRT measurements and will be measured by detecting the amount of exploratory behavior (approaching, examining objects with neutral or emotional content). Behavioral measures will be combined with physiological data assessment during the test.

13. Changes in a Virtual Reality Setting: Room 101 --> acute stress reactions

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Part of the Virtual Reality Session (ca. 40 min): In a virtual world, we will look at changes in acute stress reactions to aversive affective stimuli (e.g., ground shaking, bugs, sudden loud noise, angry avatars). It will happen on the same day as the MRT measurements. Behavioral measures will be combined with physiological data assessment during the test.

14. Computer-based experiment: Changes in the Inhibition and Alerting task (Stop-Signal-Reaction Time task).

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

In this task, two stimuli are presented consecutively (e.g., a pattern with horizontal lines). The two stimuli differ slightly and the participants are asked to identify the differences (e.g., length or direction of the lines). The difference between the two stimuli gradually decreases with each round. The point, at which the participants cannot distinguish between the two stimuli is called the perceptual sensitivity. After each round, the participants are asked to assess their level of certainty regarding their answers. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

15. Computer-based experiment: Changes in Working Memory Performance

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

The participants are presented with 4, 6 or 8 letters, which they have to remember over a short period of time (about 2 seconds). Then they are presented with another letter and are asked to state whether or not that letter was part of the set of letters presented beforehand. After each round, the participants are asked to assess their level of certainty regarding their answers. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

16. Computer-based experiment: Changes in the Task Emotional Switching Paradigm

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

The cognitive and affective flexibility is measured in this task. Participants are asked to complete comparable cognitive and affective task-switching tasks respectively. We use a task-cueing paradigm in which participants have to judge different stimuli. These stimuli are cognitive or affective in nature. The dependent variable is reaction time and accuracy in so-called "shift" or "no-shift" rounds, i.e. rounds which either have the same task as the round before ("no-shift") or rounds, which consist of a new task ("shift"). All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

17. Computer-based experiment: Changes in the Emotional Granularity task

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Participants are asked to judge the similarity of a number of adjectives which describe emotional states. Using network analysis and multi-dimensional scaling, the data regarding the proximity of the adjectives are transformed in a depiction of the emotional-concept networks of the participant. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

18. Changes in autonomic nervous system functions and computer experiment: Changes in the Socio-affective Video Task (SoVT)

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Participants watch a number of short clips (max. 15 sec) of news programs or documentaries. These clips have either neutral or have emotional (negative) content. After watching a clip participants report on their emotional state and on how much compassion they feel.

Additionally, we will use physiological data assessment of the following parameters during the task:

- respiration frequency (belt in the chest / abdominal area)
- heart rate (3-point ECG in the chest area)
- EDA

19. Computer-based experiment: Changes in the "Visual Spatial Perspective Taking Task" by Samson

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

In this computer-based task, participants see a person standing in a room, in which oval-shaped objects can be seen on the walls. The participants are asked to report on how many of these objects can be seen from their own perspective and how many objects the person in the room is able to see. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

20. Computer-based experiment: Changes in the "Emotional Attentional Blink" paradigm

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

In this task, a number of visual stimuli are presented consecutively for short periods of time (about 100ms). The relevant stimuli are embedded in a number of distractor-stimuli. The participants are asked to report on the number of perceived relevant stimuli. They are also supposed to identify them. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

21. Computer-based experiment: Changes in the "Trust Game"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 In this computer-based game, participants have to find their way through a labyrinth and solve little tasks on their way. They are under the impression, that there is another participant playing with them. The participant's readiness to share resources, necessary to complete the game, is measured. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
22. Computer-based experiment: Changes in the "Punishing Game"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 There are two parts to this game: 2nd person punishing and 3rd person punishing. In the 2nd person punishing game, there are two players. One Player (player A) has a larger amount of money at her disposal, than the other player (player B). The player with the larger amount of money can decide how she wants to split the money between herself and the other player. Then player B can decide whether he wants to punish player A by taking money from player A while using his own money (for each unit of money she spends three units are taken from the other player). After two rounds, the tasks of the players are reversed. In the 3rd person punishing game, the participants watch the interaction of anonymous players A and B. After each round, the participant can decide whether or not to punish the player, who split the money. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
23. Computer-based experiment: Changes in the "Dictator Game"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 In this game, participants can decide how they split a set amount of money between themselves and an anonymous player. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
24. Computer-based experiment: Changes in the "Self-complexity Task"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 In a first step, participants are asked to cluster 30 positive or negative personality traits around their depicted self in such a way, that the spatial closeness or distance reflects, how much they identify with the trait.

 In a second step, they are asked to choose selected items and pile them. The height of the stack then is thought to reflect the complexity of the self. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
25. Computer-based experiment: "Self-reference Task"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 In the first part of this task, participants are asked to judge adjectives regarding a) whether they apply to themselves, b) whether they apply to a famous person (e.g., Angela Merkel), or c) whether they meet linguistic criteria (e.g., whether they are written in capital letters). In the second part, participants are asked to identify the adjectives, which had been presented in the first part. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
26. Computer-based experiment: Changes in the "Mind-wandering task"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Aim of this measure is to access the amount and content of spontaneously generated cognition. Main focus is "day dreaming" or "mind wandering" that occurs, when our minds drift off, while working on a task.

 In this measure, subjects are asked to work on two little, rather boring PC-based exercises (1. choice reaction time task (CRT); 2. working memory (WM) task). During selective queries, they are then asked for the content and valence of their thoughts ("thought probe"). All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).

27. Computer-based experiment: Changes in "Donation Task"; willingness to make donations in the economic computer experiment.
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 This economic game assesses the participant's willingness to donate to selected charity groups. In this game, they receive a certain amount of money and can decide, if and how much they would like to contribute. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
28. Computer-based experiment: "Social Discounting" Task
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Participants divide money between themselves and close friends, strangers, or enemies. All computer tasks are divided into 6 blocks and participants completed one block per week (1 hour each).
29. Changes in interoception: Heart Beat Perception Task
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Subjects are asked to silently count their heart beats in five intervals [15, 25, 35, 45, 55], presented in a random order, and note the counted number.
30. Changes in autonomic nervous system functions: Local Power Biofeedback and Heart Rate Biofeedback
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Local Power (LP), as short term estimate of high frequency heart rate variability is reported to the subjects. They observe a ball on a computer screen, which ascends in accordance with their LP. Goal is to make the ball rise. We will use the "Biopac MP150 Bionomadix" for measurement of respiration frequency (belt in the chest / abdominal area) as well as ECG and electrodermal activity.
31. Stress Physiology: "Trier Social Stress Test" (TSST)
 [Time Frame: Because it includes elements of deception, the TSST is only done once: Participants will either do the TSST at T0, T1, or T2] [Safety Issue: No]
 TSST: a standardized stress test, that induces stress in the laboratory. Here, cortisol and alpha-amylase are analyzed from saliva (Department of Biological and Clinical Psychology, Trier University), oxytocin (Max-Planck-Institute for Psychiatry, Munich) as well as the inflammatory markers Interleukin-6 (IL-6), brain-derived neurotrophic factor (BDNF) and C-reactive protein (CRP) are analysed from blood (Aghia Sophia Children's Hospital, Department of Clinical Biochemistry) and heart rate and heart rate variability (HRV) are assessed as adjunct measurement. Stress-related questionnaires will be filled out during the TSST as well.
32. Changes in autonomic nervous system functions: "Physiological Signature of Meditation states"
 [Time Frame: Only in TC1, TC2, TC3: Changes from T1, to T2, to T3; week 3 and 13 of each module.]
 [Safety Issue: No]
 Heart rate, body movement, respiratory frequency and heart rate variability are being measured during two meditation sessions in each training block (week 3 and 13). We use the non-invasive "Zephyr BioHarness 3 multi-sensor-device", which comes with a chest belt. After the meditation session, subjects are asked to answer a 5-item questionnaire.
33. Changes telomere length (+ number of neutrophils, lymphocytes, and monocytes)
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 During each measurement time point, blood samples will be collected from each subject and stored at -80 degrees Celsius. The aim is to test if the training leads to reduced shortening of the telomeres, the probes are sent to the Blackburn lab of UCLA in San Francisco, USA.

 Additionally, a complete blood count is drawn. Not aiming in diagnostic directions, the goal is to assess the status of neutrophils, lymphocytes, and monocytes in the probes. These are thought to be general markers of immune activity and are inspected in relation to telomere length. Blood counts will be assessed by a lab in Leipzig, Germany.
34. Training induced short-term changes in oxytocin blood level (pre/post Meditation)

[Time Frame: Changes pre/post a "Perspective" or "Affect" training session during T1, T2, or T3; Week 12 of Training (i.e. for arm one: between 11/21/13 - 12/23/13 or 3/3/14 - 4/5/14; for arm two: between 1/20/14 - 2/20/14 or 5/2/14 - 5/24/14). Pre/Post TSST] [Safety Issue: No]

Once during the training for each subject, before and directly after a 2h "Perspective" or "Affect" training session, a blood sample will be drawn and stored at -80 degrees celsius. To analyze blood levels of oxytocin, probes are sent to the Max-Planck-Institut für Psychiatrie, Munich, Germany (Department of Prof. Rainer Landgraf). The same procedure was done pre and post the TSST session.

35. Changes in amount of plasma levels (blood samples) of interleukin-6, brain-derived neurotrophic factor, C-reactive protein.

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months); Pre/Post TSST] [Safety Issue: No]

10 ml blood samples will be drawn. Plasma levels of interleukin-6, brain-derived neurotrophic factor (BDNF), C-reactive protein (CRP) will be assessed.

They are sent to the "First Dept of Pediatrics, Director, Division of Endocrinology, Metabolism and Diabetes, University of Athens Medical School, Aghia Sophia Children's Hospital, Athens, Greece" for analysis.

36. Changes in "subjective experience sampling by smartphones or by means of an internet platform"

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

All cohorts:

- weekly questions via online platform, concerning: actual affective condition, actual activity, actual thoughts, social closeness, quality of sleep (administered once a week via short questions online, duration 2-4 min.).

TC1, TC2, TC3:

- questions via online platform before and after all core training exercise participants perform at home; duration is ca. 2-4 min, concerning: actual effects and experiences after daily mental training practice.

All cohorts:

- experience- sampling via smartphones, concerning: valance and arousal of current emotional state using "single item affect grid" method. Current activity and situation. Current thoughts. Amount of significant or stressful events since last sampling and how positive or negative or stressful was this event. How did you cope with this event. (7-10 times for 2 consecutive days for each cohort at T0-T4).

Secondary Outcome Measure:

37. Questionnaire: Changes in "Adult temperament questionnaire (ATQ)"

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m).] [Safety Issue: No]

above: w=weeks, m=months. Administration of the questionnaire via an online platform. It assesses effortful control, extraversion, frustration, inhibitory control, negative affect, sadness, sociability, etc. TC1 and TC2 participants will not fill out the questionnaire at time point T2.

38. Questionnaire: Change in "ADHS-Selbstbeurteilungsfragebogen (ADHS-SB)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the German questionnaire via an online platform. It assesses symptoms of attentional deficits, attention deficit hyperactivity disorder (ADHD), hyperactivity.

39. Questionnaire: Change in "FFA Freiburger Fragebogen zur Achtsamkeit".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses non-judgmental acceptance of experience, awareness of experience, and mindfulness.

40. Questionnaire: Change in questionnaire "Five Facets Mindfulness Questionnaire (FFMQ)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses awareness, describing, non-judging of experiences, non-reactivity, observing, mindfulness. This questionnaire is also filled out by the observers of participants.
41. Questionnaire: Change in "Multidimensional Assessment of Interoceptive Awareness (MAIA)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses different facets of interoceptive awareness.
42. Questionnaire: Change in "Self-Compassion Scale" by Kristin Neff (SCS).
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses self-compassion, self-kindness, self-judgment, over-identification, mindfulness, isolation, and common humanity.
43. Questionnaire: Change in "The Short Affect intensity scale (only serenity subscale) (SAIS)".
 [Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m). w=weeks; m=months] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses serenity, i.e. low arousal positive affect. TC1 and TC2 participants will not fill out the questionnaire at time point T2 and T3.
44. Questionnaire: Change in "Compassion scale - How I typically act towards others (COSN)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses compassion for others, common humanity, disengagement, indifference towards others, kindness towards others, mindfulness, separation.
45. Questionnaire Participants and Observer: Change in "Interpersonal Reactivity Index (IRI)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses empathic concern, empathic distress and ability to take other's perspective. This questionnaire is also filled out by observers of the participants.
46. Questionnaire: Change in "Types of Positive Affect (TTPAS)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses active, reactive and safe/warm positive affect.
47. Questionnaire: Change in "Fears of Compassion Scales (FOCS)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses fear of compassion from others or for self.
48. Questionnaire: Change in "Borderline Personality Questionnaire (BPQ)".
 [Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m).] [Safety Issue: No]
 above: w=weeks, m=months Administration of the questionnaire via an online platform. It assesses impulsivity, affective instability, relationships, abandonment, quasi-psychotic states, self image, emptiness, anger, suicide, borderline personality traits. TC1 and TC2 participants will not fill out the questionnaire at time point T2.
49. Questionnaire: Change in "Narcissistic Personality Inventory (NPI)".

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m).] [Safety Issue: No]

above: w=weeks, m=months Administration of the questionnaire via an online platform. It assesses narcissism, exhibitionism, entitlement, authority, superiority, exploitativeness, self-sufficiency, vanity.

TC1 and TC2 participants will not fill out the questionnaire at time point T2.

50. Questionnaire: Change in "Cognitive Emotion Regulation Questionnaire (CERQ)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses regulation via catastrophizing, positive refocusing, or blaming others strategy (self-blame, acceptance, rumination, positive refocus, planning refocus, planning refocus, positive reappraisal, perspective, catastrophizing, other blame)

51. Questionnaire Participants and Observers: Change in "Brief COPE" inventory.

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w) and at T4 (T3 + 4.5 or 10 m). Short version at T2 and T3; RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2, to T3, to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 o)] [Safety Issue: No]

above: w=weeks, m=months, T2 (T1+ 13 weeks), T3 (T2 + 13 weeks) Administration of the questionnaire via an online platform. It assesses several coping strategies. TC1 and TC2 participants will fill out a shorter version at time point T2 and T3. This questionnaires is also filled out by observers of participants.

52. Questionnaire: Change in "Berkeley Expressivity Questionnaire (BEQ)".

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m). w=weeks; m=months] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses expressivity of negative and positive emotions, and strength of expression impulse. TC1 and TC2 participants will not fill out the questionnaire at time point T2 and T3.

53. Questionnaire: Change in "Range and Differentiation of Emotion Scale (RDEES)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses range of experience emotions, and differentiation of experienced emotions.

54. Questionnaire: Change in "An Instrument to Measure Social Value Orientation (SVO) " by van Lange et al.

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses tendency to choose decisions that maximize other's output.

55. Questionnaire: Change in "Emotion Regulation of Others and Self (EROS)".

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m). w=weeks; m=months] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses internally focussed emotion regulation of positive and negative affect. TC1 and TC2 participants will not fill out the questionnaire at time point T2 and T3.

56. Questionnaire: Change in "Friendship, Compassionate and Self-Image Goals Scale".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses compassionate and self-image goals.

57. Questionnaire: Change in "Self Importance of Moral Identity Scale".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses the degree to which people's self-concepts center on moral traits.

58. Questionnaire: Change in "Self Dyadic Perspective-Taking Scale and Other Dyadic Perspective Taking Scale (SDPT /ODPT)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses global awareness and understanding of others and attempts and endeavours to understand the perspective of others.

59. Questionnaire: Change in "Self Construal Scale".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses the tendency to perceive oneself as interdependent with others or as an independent person.

60. Questionnaire Participants and Observers: Change in "Prosocialness Scale" by Capara.

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses the tendency to behave in a prosocial way (help and support others). This questionnaire is also filled out by observers of participants.

61. Questionnaire: Change in "Twenty Statement Test (TST)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses self reported self attitudes using an open-ended response format beginning with: "Who am I...".

62. Questionnaire: Change in "The Machiavellianism Scale".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses tendency to value own advantage over moral principles.

63. Questionnaire: Change in "NEO Fünf Faktoren Inventar (NEO FFI)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses personality traits such as neuroticism, extraversion, openness, agreeableness, conscientiousness, aesthetic interests, negative affect, sociability, etc.

64. Questionnaire: Change in "Pain Catastrophizing Questionnaire (PCS)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses rumination, magnification and helplessness regarding pain.

65. Questionnaire: Change in "Unsicherheitstoleranz-Skala (Uncertainty Intolerance, UI-18)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses uncertainty intolerance, paralysis by uncertainty, negative affect by uncertainty and increased vigilance by uncertainty.

66. Questionnaire: Change in "Trier Inventory for Chronic Stress (TICS)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses work dissatisfaction, excessive demands at work, lack of social recognition, social isolation, chronic concern, chronic stress, and social tensions etc.

67. Questionnaire: Change in "Perceived Stress Scale (PSS-10)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses the degree to which situations in one's life are appraised as stressful.

68. Questionnaire: Change in "Parental Bonding Inventory (PBI)".

[Time Frame: TC1, TC2, RCC1, RCC2, TC3: T0 only] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses paternal and maternal care and overprotection.

69. Questionnaire: Change in "Freiburger Beschwerdeliste (FBL)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the German questionnaire via an online platform. It assesses general well-being, tiredness, emotional reactivity, sensory problems, gastrointestinal problems, nose/throat irritation, tension, pain, and cardiovascular problems.

70. Questionnaire: Change in "Pittsburgh Sleep Inventory (PSQI)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses sleep habits and sleep quality.

71. Questionnaire: Change in "Multi Motive Grid (MMG)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses hope for success and control, fear of rejection and failure or losing control, and hope for affiliation.

72. Questionnaire: Change in "Mental Health Continuum short form (MHC-SF)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses overall psychological well-being, emotional and social well-being, etc.

73. Questionnaire Participants and Observers: Change in "Satisfaction with Life Scale (SWLS)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses satisfaction with one's life. This questionnaire is also filled out by observers of participants.

74. Questionnaire: Change in "Becks Depression Inventory (BDI-2)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses severity of depression, affective and somatic symptoms of depression.

75. Questionnaire: Change in "Ego Resiliency Scale (ER-89)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses ego-resiliency.

76. Questionnaire: Change in "Experiences in Close Relationships - revised (ECR-RD)".

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m). w=weeks; m=months] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses anxiety and avoidance. TC1 and TC2 will not fill out this questionnaire at time point T2 and T3.

77. Questionnaire: Change in "UCLA Loneliness Scale".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses loneliness.

78. Questionnaire: Change in "Positive Affect Negative Affect Schedule (PANAS)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses positive and negative affect in the last weeks.

79. Questionnaire: Change in "modified Differential Emotions Scale (mDES)".

[Time Frame: Weekly; TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses positive and negative emotions. This questionnaire was assessed on a weekly basis.

80. Questionnaire: Change in "Toronto Alexithymia Scale (TAS-20)".

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

Administration of the questionnaire via an online platform. It assesses difficulties in identifying and describing emotions, as well as an externally oriented thinking style.

81. Questionnaire: Change in "Profile of Mood States - 2nd Edition (POMS-2)".

[Time Frame: Only once per participant during the TSST] [Safety Issue: No]

Administration of a paper & pencil version of the POMS mood scale, for each subject on that day, when they do the TSST stress test. It assesses mood states.

82. Questionnaire: Change in "STAI -X1 State, State Trait Anxiety Inventory".

[Time Frame: Only once per participant during the TSST] [Safety Issue: No]

Administration of a paper & pencil version, for each subject on that day, when they do the TSST stress test. It assesses state anxiety.

83. Questionnaire: Change in "Subjective Sensory Sensitivity questionnaire" following Fox et al. (2012)".

[Time Frame: Changes during the Presence Module (beginning and end of Module).] [Safety Issue: No]

Administration of a paper & pencil version of a measure for the visualisation of body sensations following Fox et al. (2012).

The measure will be administered at the start and the end of the first training block, the "presence block". The start of the presence block for arm one will be: Aug. 19th 2013 till Sept. 19th 2013. The start of the presence block for arm two will be: Okt. 7th 2013 till Okt. 30th 2013.

84. Questionnaire: Change in "Private Body Consciousness subscale of the Body Consciousness Questionnaire (PBCS)".

[Time Frame: TC1, TC2: Changes from T0 to T1 (T0 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). RCC1, RCC2: from T0 to T1 (T0 + 13 w), to T2 (T1 + 13 w), to T3 (T2 + 13 w), to T4 (T3 + 4.5 or 10 m). TC3: from T0 to T1 (T0 + 13 w), to T2 (T1 + 4.5 or 10 m).] [Safety Issue: No]

above: w=weeks, m=months; Administration of the questionnaire via an online platform. It assesses the noticing of body sensations. TC1 and TC2 will not fill out this questionnaire at time point T2

85. Questionnaire - Observer only: Change in "Perceived Responsiveness Scale (12 items)" filled out by observers.

[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months)]
[Safety Issue: No]

Administration of questionnaire via online platform. The scale is answered by observers of participants only. It assesses responsiveness to partner's disclosure of positive events.

86. Questionnaire - Observer only: Change in "Capitalization" by Gable et al., 2004 filled out by observers
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months)]
[Safety Issue: No]

Administration of questionnaire via online platform. The scale is answered by observers of participants only. It assesses positive reactions of partner by several subscales.

87. Questionnaire - Observer only: Change in "Dyadic Adjustment Scale (DAS)".
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months)]
[Safety Issue: No]

Administration of questionnaire via online platform. The scale is answered by observers of participants only. It assesses degrees to which respondent agrees with partner, do activities together, or satisfaction with partner.

88. Questionnaire - Observer: Change in "Ten Item Personality Scale (TIPI-10)"
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months)]
[Safety Issue: No]

Administration of questionnaire via online platform. The scale is answered by observers of participants only. It assesses personality traits such as emotional stability, openness, conscientiousness, agreeableness, extraversion. This questionnaire has also been used for matching the cohorts into their respective groups.

89. Questionnaire - Observer only: Change in "Inclusion of Other in the Self Scale (IOS)"
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months)]
[Safety Issue: No]

Administration of questionnaire via online platform. The scale is answered by observers of participants only. It assesses the feelings of closeness to others

90. Stress physiology: Changes in "Long-term cortisol levels from hair samples"
[Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]

During each measurement time point, the subjects are asked for small hair samples from the back of their head. It will be sent to a cooperating lab in Dresden to assess long-term stress by analyzing the the amount of cortisol in hair samples.

91. Assessment of gene variants / polymorphisms
[Time Frame: Blood samples are taken once during T0] [Safety Issue: No]

Analyze the connection between gene variants, personality traits, training effects, behavior, brain activation.

- Arginine-vasopressin-receptor gene; microsat. Polym., RS1 and RS3
- oxytocin-receptor gene; rs53576
- catechol-O-methyltransferase gene, rs4680
- serotonin-transporter 5HTTPLR gene (SCL6A4, S/L Allele and rs25531)
- monoamine-oxidase A gene (rs6323)
- mu-opioid-receptor gene (rs6323)
- neuropeptide Y (NPY); rs5573, rs5574, rs16139, rs16147
- tryptophan hydroxylase-2 gene (rs4570625)
- Gene for a-subunit of L-type calcium channel Cav1.2; CACNA1C gene (rs1006737)
- Gene for a-subunit of nico. acetylch. receptor channel, CHRNA4 gene (rs1044396)
- Deletion mutation of a-2-beta adrenoreceptor gene
- Cannabinoid-receptor 1 gene (CNR1); rs6454674, rs806380, rs806377, rs1049353
- Dopamine D4 Receptor gene (DRD4); rs1800955, VNTR Exon 3 repeat allele
- Dicarboxylate/amino acid cation sodium transporter (DAT1); rs27072, VNTR repeat allele

92. Questionnaire: Change in "Affiliation Tendency and Rejection Sensitivity Scales"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses affiliation tendency and rejection sensitivity.
93. Questionnaire: Change in "Spontaneous Activity Questionnaire (SAQ)"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses self-reported fidgeting and mind-wandering behavior.
94. Questionnaire: Change in "Spontaneous and Deliberate Mind Wandering Scales (MDD, MDS)"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses self-reported deliberate and spontaneous mind wandering behavior.
95. Questionnaire: Change in "Subscales from the NEO Persönlichkeitsinventar nach Costa and McCrae - revised version (NEO-PI-R)"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses subscales of personality traits such as warmth, gregariousness, assertiveness, activity, seeking excitement, positive emotions, and extraversion.
96. Questionnaire: Change in "Soziale Erwünschtheits-Skala-17 (SES-17)"
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses the tendency to respond in a socially desirable way.
97. Questionnaire: Change in "State-Trait Anxiety Inventory (STAI-X2; STAI-Trait)".
 [Time Frame: TC1, TC2, RCC1, RCC2: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 13 weeks), to T3 (T2 + 13 weeks), to T4 (T3 + 4.5 months or 10 months). TC3: Changes from T0 to T1 (T0 + 13 weeks), to T2 (T1 + 4.5 months or 10 months)] [Safety Issue: No]
 Administration of the questionnaire via an online platform. It assesses trait anxiety. It was used of screening possible participants for the study.

Other Pre-specified Outcome Measures:

98. Questionnaire: "Psychopathologie der Familie / Psychopathology in family members".
 [Time Frame: Only once per participants at time point T0] [Safety Issue: No]
 German Paper/Pencil questionnaire that assesses psychopathological occurrences in family members.
99. Questionnaire - Matching: Score of "Test d2 - Revision (d2R)" attention task.
 [Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject takes the d2 test in paper & pencil version..] [Safety Issue: No]
 The d2 Test is a timed test of selective attention/concentration. In response to the discrimination of similar visual stimuli, the test measures processing speed, rule compliance, and quality of performance, allowing estimation of individual attention and concentration performance. It was used of matching participants into cohorts.
100. Questionnaire - Matching: Score of "Ten Item Personality Inventory (TIPI-10)" personality test.
 [Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
 The TIPI is designed to assess the constellation of traits defined by the Five Factor Theory of Personality. It was used of matching participants into cohorts.
101. Questionnaire - Matching: Score of "Mental Health Continuum short form (MHC-SF)".

[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses overall psychological well-being, emotional and social well-being, etc. It was used of matching participants into cohorts.

102. Questionnaire - Matching: Score of "Compassion scale - How I typically act towards others (COSN)".
[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses compassion for others, common humanity, disengagement, indifference towards others, kindness towards others, mindfulness, separation. It was used of matching participants into cohorts.
103. Questionnaire - Matching/Observers: Score of "Perceived Stress Scale (PSS-10)".
[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses the degree to which situations in one's life are appraised as stressful. It was used of matching participants into cohorts. This questionnaire is also filled out by observers of participants.
104. Questionnaire - Matching/Observer: Score of "Five Facets of Mindfulness Questionnaire (FFMQ)".
[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses awareness, describing, non-judging of experiences, non-reactivity, observing, mindfulness. This questionnaire is also filled out by the observers of participants. It was used of matching participants into cohorts.
105. Questionnaire: Score of "Grundlagenintelligenztest Skala 2- Revision without WS/ZF-R" (Intelligence Test)
[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
German Paper/Pencil Questionnaire that assesses Non-verbal Intelligence.
106. Qualitative Elicitation Interviews and Interviews about subjective Experience during the study (1-2 hours)
[Time Frame: only TC1, TC2, or TC3: Voluntarily, possible during each Training Module] [Safety Issue: No]
On a voluntary basis and with written consent, conducted qualitative interviews with some of the participants, where they are able to describe the subjective experience of the whole training. The interviews will be video-taped with the consent of the participants.
- We will be using depth-interview techniques that assess not only what the subjects experience but also how they process it.
- Interviews will be done by a interview specialist with a degree in Psychology and Philosophy.
- The data will be treated in accordance with data protection laws. In further publications, all statements of the subjects will be anonymized, the tapes will be erased after transcription. In case they agreed to be video-taped, the material will potentially be used for a video documentation of the whole ReSource Project.
107. Questionnaire - Matching: Score in "Self-Compassion Scale" by Kristin Neff (SCS).
[Time Frame: 2 months before T0 and during initial proband screening phase of the project, each subject fills out this questionnaire at the online recruiting webpage via secure connection.] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses self-compassion, self-kindness, self-judgment, over-identification, mindfulness, isolation, and common humanity. It was used of matching participants into cohorts.
108. Questionnaire - Screening/Matching: "Major Depression Inventory (ICD-10, MDI)"
[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses mild to severe depression. It was used of screening possible participants for the study
109. Questionnaire - Screening/Matching: "Toronto Alexithymia Scale (TAS-20)".
[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses difficulties in describing emotions, tendency to focus attention externally, alexithymia, identification of emotions. It was used of screening possible participants for the study.
110. Questionnaire - Screening/Matching: "State-Trait Anxiety Inventory (STAI-X2; STAI-Trait)"

[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses trait anxiety. It was used of screening possible participants for the study.

111. Questionnaire- Screening: "Patient Health Questionnaire - D (PHQ-D)

[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Administration of the questionnaire via an online platform. It assesses psychological health and drug abuse. It was used of screening possible participants for the study.

112. Screening - Interview: DIA-X for Axis II psychiatric disorders of DSM-IV and clinical interviews for personality disorders (SCID-II)

[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Interview with possible participants. It assesses psychological disorders. It was used of screening possible participants for the study.

113. Screening - Interview: DIA-X for Axis I psychiatric disorders of DSM-IV

[Time Frame: Screening procedure of each participant before matching into cohorts] [Safety Issue: No]
Interview with possible participants. It assesses psychological disorders. It was used of screening possible participants for the study.

Eligibility

Minimum Age: 20 Years

Maximum Age: 55 Years

Gender: Both

Accepts Healthy Volunteers?: Yes

Criteria: Inclusion Criteria:

- is a healthy, normal subject

Exclusion Criteria:

- can not participate in the kick-off retreats
- does not have a PC with internet connection at home
- does not speak and understand German fluently
- has studied or is studying Psychology/Psychotherapy
- has a daily meditation practice
- attended a meditation retreat within the last 2 years
- exceeds normal BDI
- not able to lie still in MRT scanner for scanning duration
- is pregnant or in lactation or plans to become pregnant
- has had a larger surgery or plans to have one during the next year
- has metal parts in the body (due to MRT scanning)
- has a cardiac pacemaker
- carries an insulin or medicine pump
- carries a shunt
- has a heart valve
- has an inner ear implant
- carries metal, piercings or electronics on / in the body, that cannot be removed
- has a tattoo in the head / throat area
- works in the field of metal processing (if that leads to small metal parts on the body, that cannot be removed)
- has dyslexia or ametropia
- has claustrophobia (MRI scanner)
- has severe hearing problems (MRI scanner)
- has limitations with motor functions
- has or had a severe injury in the head area

- has or had a neurological disease (meningitis, cerebral hemorrhage, cerebral infarct, brain trauma, coma etc.)
- has or had epilepsy
- has a severe disease targeting the musculoskeletal system
- has a heart disease
- has a (peripheral) vascular disease, circulatory disorder, Raynaud's disease
- has a liver disease
- has a respiratory disease
- has an affected kidney
- has an advanced multiple sclerosis
- has an infection (e.g., HIV)
- is in treatment due to chronic pain
- is on medication that effects the central nervous system (psychotropic drugs) during the last three months
- has been diagnosed with a mental health disease and is in treatment at the moment or within the last 2 years
- reaches clinical scores in the following questionnaires: TAS-20, MDI, STAI-trait, PHQ;
- reaches clinical scores following DSM-IV as determined by a SCID I and SCID II clinical interview

Contacts/Locations

Study Officials: Tania Singer, Prof. Dr.
Study Chair
Max Planck Institute for Human Cognitive and Brain Sciences

Locations: Germany
Max Planck Institute for Human Cognitive and Brain Sciences
Leipzig, Sachsen, Germany, 04103

Max Planck Institute, Humboldt University, Campus Nord, Haus 5
Berlin, Berlin, Germany, 10099

References

Citations:

Links: URL: <http://www.resource-project.org>
Description Homepage of the ReSource Project Webpage

Study Data/Documents: