



by Dr. Kerstin Liesefeld



HYPERSENSITIVITY – LIGHT AND SHADE!

When we talk about hypersensitivity, we firstly consider one of the two main types of personality, i.e. a marked form of sensory excitability, and, secondly, hyperaesthesia which is acquired through corresponding environmental influences (socialization, biography).



HYPERSENSITIVITY – LIGHT AND SHADE!

by Dr. Kerstin Liesenfeld

Sensory excitability (personality-linked or acquired) can be understood as a heightened readiness for and openness to perception, potentially fostering the reception of information (including all sensory stimuli) via object-recognition networks.

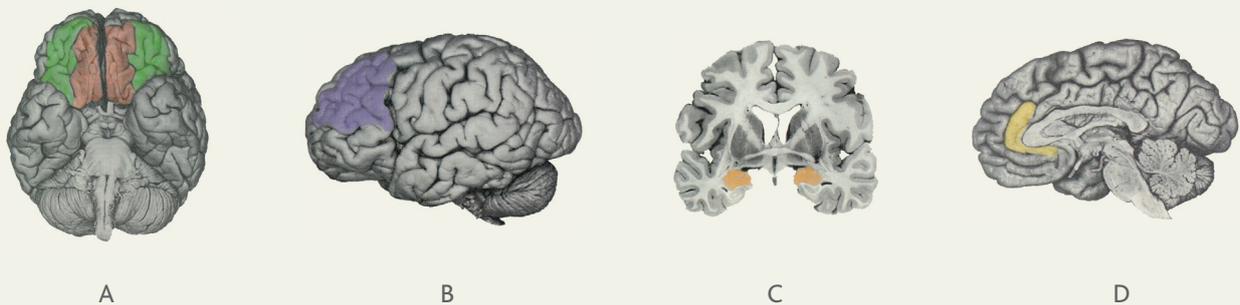
Even though our brains meanwhile produce record achievements and are in a position to process a great quantity of highly complex information, they were originally not designed for such performances. Brains were and still are set to 'maintenance'. For this reason, they are still unable to handle the millions of bites of information that bombard them every second. But there are filter functions in our brains that protect them from 'overloading'. These filters ensure that a maximum of 2,000 bites of information are absorbed per second.

The first filter information passes through, is the RAS (Reticular Activating System), located in the brain stem. The RAS obtains its input from the nerve ends of the sense organs, the face, the skin, muscles and internal organs and decides which information makes our brain into a 'thinking' or 'reactive' organ, i.e. whether the information moves to the prefrontal cortex or via the second filter, the limbic system, triggers off intuitive, uncontrollable and spontaneous responses such as attack, escape, feigning death or display behaviour.

So, hypersensitivity with the feature of heightened excitability implies the risk of absorbing too much information simultaneously, overloading the filter and acting 'reactively' instead of 'reflectively'. In this case, the corresponding neurotransmitters are negatively affected much more quickly than with less sensitive dispositions. Messengers like dopamine, which positively impacts curiosity, readiness to learn and joy, as well as serotonin, which stabilizes our mood and cognitive functionality, decrease, and the main stress hormone, cortisol, increases.

But the characteristic of hypersensitivity alone would not permit this conclusion. For what is absolutely decisive is not the willingness to perceive objects and absorb information, but rather the compensatory control mechanisms.

For example, if we gradually train our brains to consciously direct our attention towards information that is valuable and beneficial for us personally and to reduce our excitability with self-soothing tools, then we will absolutely be in a position to make a highly porous filter less permeable with this form of coping competence.



Emotional regulation in different areas of the prefrontal cortex (A, B and D), in the amygdala C
(Source: R. Davidson et. al.)

HYPERSENSITIVITY – LIGHT AND SHADE!

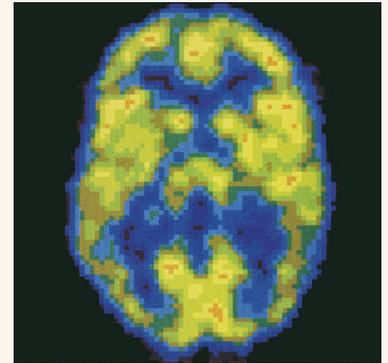
by Dr. Kerstin Liesenfeld

HOW CAN WE PROMOTE THIS BEST?

For hypersensitive dispositions in particular, it is important to ensure adequate sleep, exercise and physical health. According to the most recent study by the Karolinska Institute, sleep is still the 'protection factor' number 1 against over-arousal. Exercise provably also contributes towards reducing stress hormones and producing dopamine and serotonin. Although this certainly seems correct for all dispositions, higher information porosity is in particular associated with a higher risk of more quickly reaching one's own limits of 'overloading'.

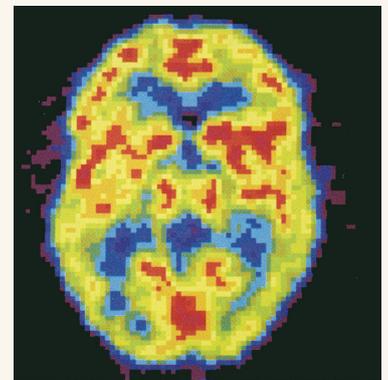
On the other hand, given suitable treatment and acquired self-regulatory skills, hypersensitivity promotes enormous competences, such as precision, learning from mistakes, more profound emotions, holistically higher processing, and more intensive and greater self-growth. This is essentially related to the fact that a heightened form of perception implies a higher ability to differentiate, i.e. a higher degree of maturity. So, in such a case a competence like sensitivity is very 'intelligent'. If we comprehend this form of maturation as one of two poles (everything in our brain is laid out for rhythm and a form of bipolarity!), the possible other pole is theoretically a similarly high differentiation potential of the antagonistic, i.e. opposite network. This can be imagined as a kind of seesaw connecting the object identification network to the extension memory (i.e. our knowledge from experience). The extension memory is located in the prefrontal cortex and enables us to integrate on a higher level, saves our experiences, values and identity and makes creativity possible, thus constituting a major portion of our system of self. If the seesaw is pressed down one-sidedly on the rather narrow object identification side by heightened sensory excitability, we will require a very specific energy source (i.e. that of self-regulation), which will reduce the negative mood to the point that we can tip the seesaw to the other side and the extension memory. This energy source can be acquired and trained.

If we treat hypersensitivity properly, undreamt of treasures associated with this sensitivity can be salvaged.



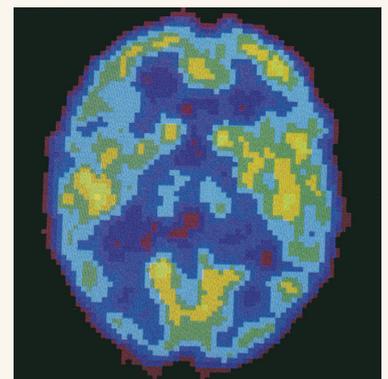
DREAMLESS SLEEP

This pet scan shows little activity during dreamless sleep.



REM SLEEP

During REM phases (rapid eye movement) the brain is highly active.



REGULAR SLEEP

During regular sleep this image shows a calm state of the brain.

Source:
M.S. Sweeny-Brain, the complete mind.

HYPERSENSITIVITY – LIGHT AND SHADE!

by Dr. Kerstin Liesenfeld

WHAT SHOULD BE HEEDED IN COACHING, TEACHING OR THERAPY?

Hypersensitive dispositions perceive sensory stimuli and information (both negative and positive) much more intensively. So, as a consequence stress hormones (such as cortisol) are produced much more quickly, and too high a concentration may have negative effects on optimum brain function and a healthy organism.

For the coach, teacher or therapist – place the seesaw on the pole of the inner expanse of the person being trained or coached:

- Convey less instead of more information
- Use the 'dopamine delight', i.e. strengthen positive experiences by:
 - An atmosphere of well-being
 - Caring and considerate treatment
 - Co-operation that can be sensed
 - Inspiration
 - Motivation
 - Inquisitiveness
 - Music
 - Humour
 - Optimism
 - Freedom of choice
 - Exercise

For the person being trained or coached – learn autonomy in the flexible alternation between object recognition and the enormous inner expanse of the extension memory:

- Learn self-control competences such as:
 - Correct breathing techniques
 - Isometric cross-over exercises
 - Pressing acupuncture spots
 - Soothing visualization techniques
 - Meditation
- Learn additional cognitive filter functions such as:
 - Regular breaks (for separating out and focusing)
 - Targeted periods of stimuli instead of permanent exposure (e.g. concrete times for e-mails, no push, but pull functions, no acoustic signals with text or e-mail messages etc.)
 - Fixed times for sleep and exercise

If we treat hypersensitivity properly, undreamt of treasures associated with this sensitivity can be salvaged. Enjoy yourself and find fulfilment in discovering yourself.

Warm regards!

Dr. Kerstin Liesenfeld (Ph.D.)