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Soft Skills I: Understanding personality
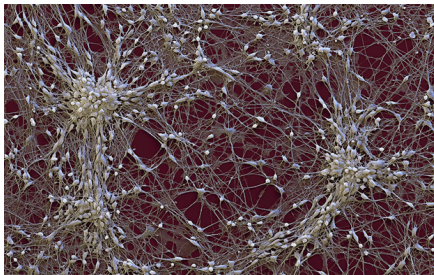
PA017 SW Engineering II → Aspects of SW Development Management

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Personality & Neuronal Network

- human brain $\approx$ 100 billion neurons
- each neuron connected with others via approx. 1500 synapses $\rightarrow 15 * 10^{22}$ neural connections
- 2% of body weight, but consumes 20 % of energy (standby), up to 35% under workload

Personality & Neuronal Network

- ~~Neurons = hardware, mind = software~~
- Brain is a *"wetware"* – *HW can change itself by running SW*
- Neurons create connections and form structures by thinking, learning, experiencing emotions...
    - Repeated patterns even transcript to DNA (DNA methylation) – evolution
    - Connections that are weak and are not reinforced will perish – forgetting

Personality & Neuronal Network

- Individual neurons do not bear information
- Information is created by a aggregation of many neurons activated through synapses
- Simple subnetworks are connected to build up higher-level concepts, perceptions, associations
    - based on information
    - based on emotions that are experienced

Importance of emotions

- From evolutionary perspective, strength of external stimuli is defined by emotional value
- Stimuli that might be lethal are associated with negative emotions (phobias)
- Stimuli that increase survival chance are associated with positive emotions
- Emotionally weak stimuli will be forgotten easily
- Growing-up in emotionally poor environment may lead to inability to experience emotions (emotional centers in brain had atrophied)

Wetware property

- Brain does not distinguish between internal and external stimuli
    - Thinking of stressful or anxious stimulus can cause physiological stress response
    - Meditation or imaginative techniques may calm you down
    - An image of authority may regulate your behavior even when that person is not around
- Experiencing is the only known way how to change neuronal network structure – that's why psychotherapy works

Personality – Nature vs. Nurture

- Nature: We inherit personality traits from parents
  - Talents
  - Intelligence
  - Resistance to stress
  - Anxiety level
- Nurture: Personality traits are supported or suppressed by parenting
  - Adequate responses to child needs
  - Love, care, safety
  - Developing talents
  - Compensation or exaggeration of anxiety

Attachment theory

- Sensitive age of a child – 0-4 years
- How parents (typically mother) respond to child needs will affect child's personality structure
- The structure cannot be reworked later in life, only modified through long-term relationships
- Attachment types:
  - Secure
  - Insecure – subtypes:
    - Anxious–ambivalent
    - Anxious-avoidant
    - Fearful-avoidant (disorganized)

Personality structure – consequences

- Typical responses of a person to certain situations (stress, illness, unexpected change) or types of inputs (appraisal, critique...) will persist and can be predicted
  - in teamwork
  - in personal relationships
  - in IT projects
- Emotional maturity is independent from intelligence
- Unexpected and illogical reactions are caused by emotions

Emotional maturity

Emotional maturity is typically indicated by abilities to:

- adequately perceive and face reality
- perceive life events positively
- learn from experience (success & failure)
- withstand frustration
- constructively manage criticism or hostility

Facing reality – Protecting Ego

- We all have Ego – conscious self-perception of own strong & weak aspects, self-experience
- However, many *wetware* processes (or contents) are subconscious

Ego-defensive mechanisms
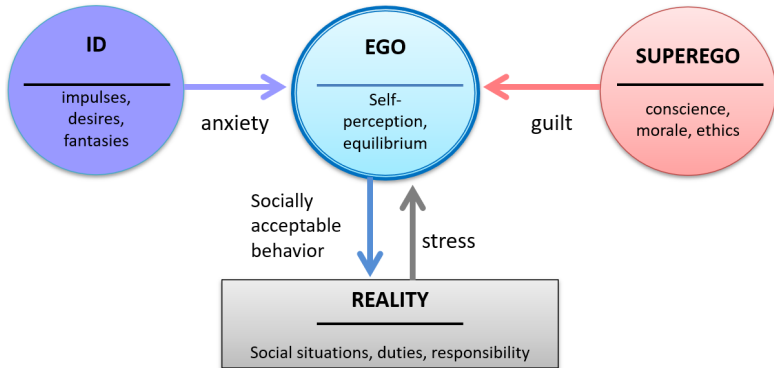
Ego-defensive mechanisms

- subconscious or mostly subconscious mental processes which motivate behavior
- are used to mitigate anxiety, mental harm or conflicts
- may help to adapt to stress, but they might also be pathological (not helping)
- have impact on perception, thinking or experiencing reality

Awareness of ego-defensive mechanisms will allow you to understand illogical or nonsensical behavior.

Primitive ego-defensive mechanisms

- **Denial**: ignoring reality that is threatening or hard-to-accept
- **Somatization**: developing physical symptoms and paying attention to it (instead of conflict)
- **Projection**: denial of own unacceptable traits of behavior and attributing it to someone else
- **Regression**: avoiding conflict by child-like behavior (wrath, crying, refusing to communicate...)

Higher ego-defensive mechanisms

- **Racionalization**: developing rational arguments for unacceptable behavior
- **Intellectualization**: using abstract thinking to avoid complex or ambiguous feelings
- **Supression**: subconscious decision to ignore some parts of reality. Unlike denial, it does not include active ignorance of obvious facts
- **Identification**: accepting originally conflicting content, later this is perceived as own
- **Introjection**: accepting conflicting content, but this is not perceived as own

Mature ego-defensive mechanisms

- **Humor**: accenting funny aspects of conflicting situations to mitigate unpleasant feelings
- **Inhibition**: conscious decision to not think about something conflicting
- **Asceticism**: avoiding pleasant experience to avoid related internal conflict
- **Sublimation**: transforming unacceptable internal motives to behavior that is socially acceptable

Selected types of personality structure

Why is it important to know personality types?

- To know how to recognize different types (in a team)
- To be aware of what behavior to expect from them
- To be aware of what behavior cannot be expected from them
- To understand how they can benefit or harm a project

Disclaimer: The below presented personality structures represent certain categories. In reality, perceiving them as scale is useful, since people typically show behavior from multiple scales at various levels of development within these scales

Schizoid structure

- emotionally distant, limited ability to experience warm emotions or anger towards other people
- prefers solitary activities, does not enjoy social contact
- prefers "*inner empire*" – own reasoning, fantasies, introspection
- low interest in other people, insensitive towards social expectations or conventions
- prefers principles over relationships

Histrionic structure

- self-centered, seeks attention and appreciation of others
- demonstrates emotions that are in fact shallow (not genuine)
- can be easily influenced by others
- does not have consistent opinions, will agree with contradictory statements when talking to different people
- may be unreliable, not keeping-up to own word
- pays attention to physical appearance, may be seductive
- may lie, confabulate or manipulate to make impression

Impulsive structure

- emotionally unstable
- cannot control emotional reactions
- small input may result in explosive reaction
- may be aggressive, enjoy confrontations and trigger conflicts
- after they cool down, they act like nothing happened

Narcissistic structure

- grandeous self
- presents own qualities and achievements, expects appreciation
- is satisfied only when delivers superior performance
- after achieving some goal, they may loose attention

Paranoid structure

- perceives neutral comments as harmful, nit-picky, petty
- feel underpreciated, hardly admits own wrongdoing
- does not forget injustice and tends to build-up long-term spite
- tends to trigger conflicts

Personality Resumé

- Personality is a long-term pattern that can be modified partially, but not changed
- Knowing project participant can help predict their reactions to stress or certain situations
- Some people are not suitable for certain roles
- You cannot change people, but you can learn how to get along with them better
- People will like you if they will feel better in your presence

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