

The Social Accumulator (SOAC)

An explanation model for digital interaction among human actors

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Agenda

- Introduction & problem statement
- The concept of a Social Accumulator (SOAC)
- Some Application scenarios & challenges
- Conclusion and Outlook

Introduction & Problem Statement

- The COVID19 pandemic led to a sudden and massive change to digital work that was unprecedented (at least in the DACH-region)
 - Across all sectors
 - Without alternative and
 - Interesting situation from the perspective of IT-supported KM
- The quick change towards digital [only] work held some surprises
 - 😊 The transition was easier than expected
 - ☹️ New way of working seemed to be exhausting
- Phenomenon of “Zoom Fatigue” was coined
 - Definition: *“Feeling tired/exhausted after video-conferencing sessions”*
 - Some possible reasons: close-up eye contact, seeing yourself, reduced mobility, cognitive load
 - Zoom Exhaustion & Fatigue Scale (ZEF) for the exploration
 - Source: <https://news.stanford.edu/2021/02/23/four-causes-zoom-fatigue-solutions/>



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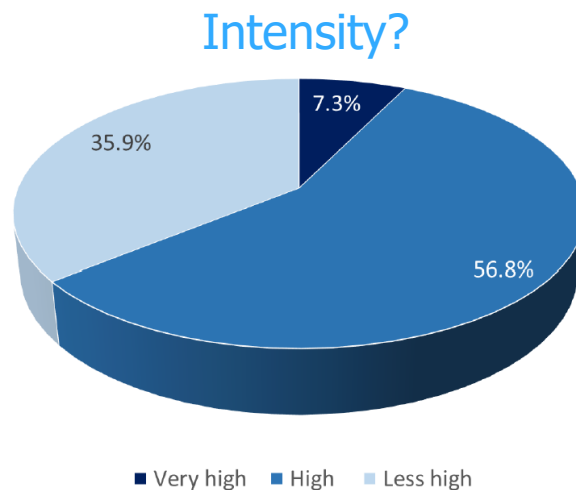
Introduction & Problem Statement (continued)

- A study of the German Institute for Employment and Employability explored
 - Was a common challenge in 2020 that puzzled a large percentage of lot of employees in quite intense ways
 - Second part of the study in 2021 showed some relaxation of the problem that was still persistent – authors assumed a “getting used to work that way” attitude of employees, still with impact on efficiency and effectiveness
 - Source https://www.ibe-ludwigshafen.de/zoom_fatigue/

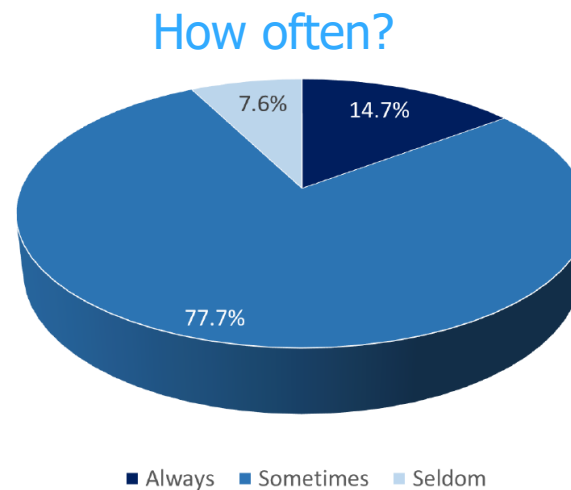


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1.3 At what intensity do you experience zoom fatigue?



1.2 How often do you experience zoom fatigue?



Approach to digital Work: The accumulator and Social Energy

- Observation of a perceived (=subjective) and individual energy level
 - Consumed over the working day
 - Metaphor to an accumulator as a storage device
 - Drawing the attention to a limit of capacity
- Social interactions are influencing the level of energy over the working day
 - → Definition Social Energy (SE): „*The amount of perceived energy that is being created or used during a social interaction using communication channels*“
 - Extensive digital communication/collaboration seem to use more SE than our “used to be” physical interactions
 - Interesting implication to Knowledge Work / Knowledge Management



Approach to digital Work: The accumulator and Social Energy

- Combination of the concept of Social Energy and the accumulator leads to the Social Accumulator (SOAC):
 - Definition SOAC: *“An explanation model for the social interaction of human actors based of the concept of creating/use of social energy stored in an (fictional) storage device, that can be loaded and discharged”*
- Draws on the idea to have a simple metaphor (or explanation model) to grasp the perception that some [digital] interactions seem to feel different (“harder”) than others
 - Creating awareness in the first place
 - Reflecting, becoming conscious and ultimately managing SE levels in subsequent phases



Charging and discharging aspects for the SOAC

Charging aspects:

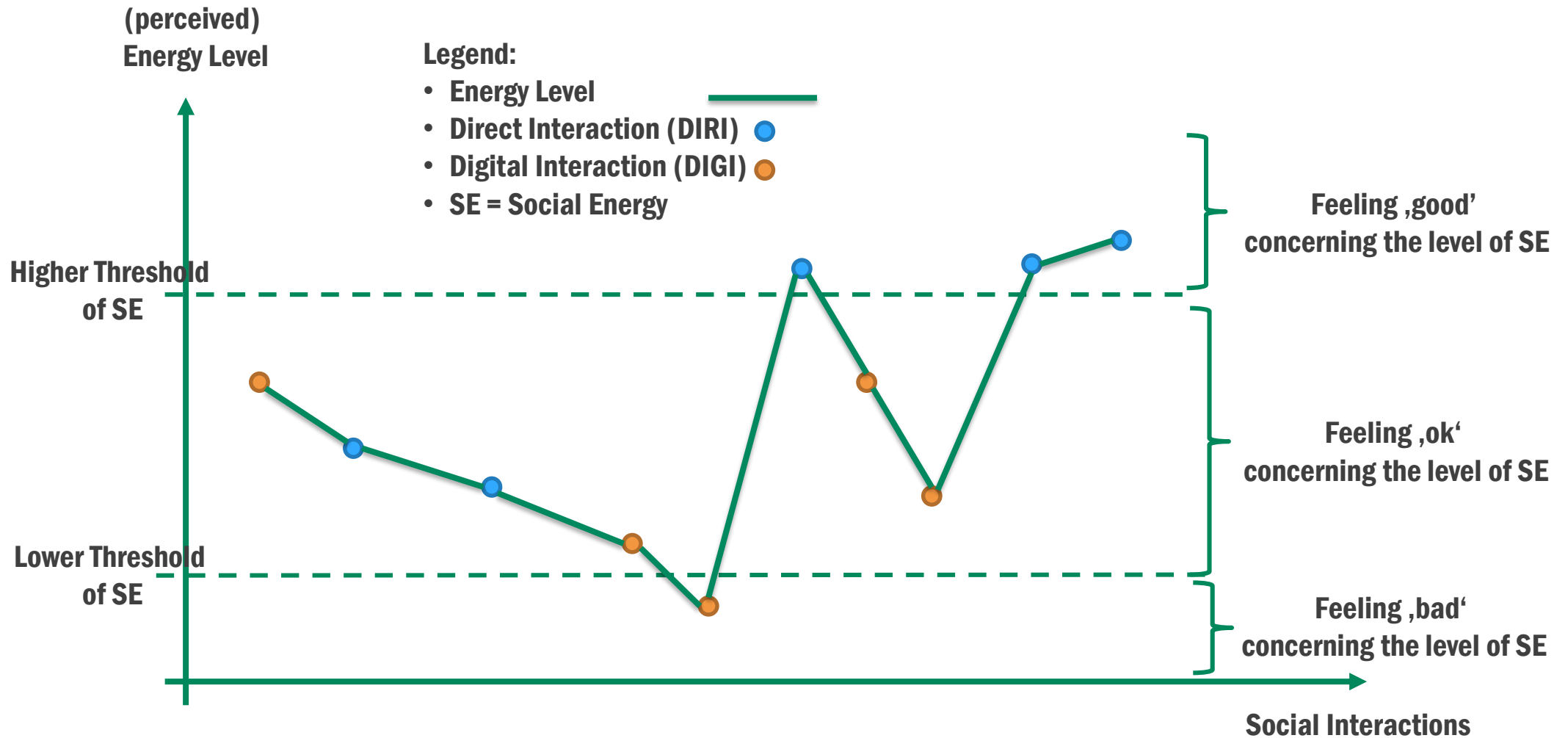
- ↪ A private conversation between two persons
- ↪ A productive group discussion with a dedicated outcome
- ↪ Informal exchange at the coffee corner
- ↪ A group experience at a team event



- ↪ Long sequences of (frequent) online meetings
- ↪ Little or no interactivity in online interactions
- ↪ Lacking the sense of belonging to a group
- ↪ Blurring of borders between work and private life

Discharging aspects:

SOC (State of Charge): How do you feel today?



How to use the SOAC?

- SOAC should be used as a mental model to create awareness
- Application areas of SOAC are dedicated for
 - Knowledge intensive collaborations
 - Largely distributed teams that are getting used to [fully] digital work
 - ...
- Three application areas are considered ...



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Application of SOAC #1: The educational setting

- Intensified use of Distant Teaching esp. in the part-time-studies where students are working and studying at the same time
- Expectations of students in respect to social interaction are quite different due to different learner types and preferences.
- The trend for bigger individualization under tightening resource constraints is another challenge
- **SOAC might help** to get the mix between presence and distance teaching right



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Application of SOAC #2: Professional Training

- The professional training sector changed substantially due to COVID-19
- Online training became more common, trainers became more used to and more knowledgeable in providing online trainings
- Online offers in the sector are here to stay – proper planning and execution of truly effective trainings are needed
- **SOAC might help** as a planning tool for trainings and to operational assess the SOC of the participants (real time polls)



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Application of SOAC #3: Managing [digital/distributed] teams

- The topic “New Work” as a new/renewed model for future work becomes more important in post-COVID times.
 - Evolving topic in the DACH region
- More distributed and digital work becomes a challenge for the management and leadership for teams in many sectors
- Monitoring & managing the social energy level of a group is becoming more important
 - To prevent energy “outages” that can affect team motivation and performance
- **SOAC might help as a managerial concept to understand and facilitate team collaboration.**



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Challenges and next steps

- Keeping the simplicity of the SOAC concept during practical application
 - Collecting feedback from the usage scenarios
- Develop visibility for the SOAC – e.g. by employing the visual metaphor in retrospective of teams
 - Using visualizations for self and group assessments of SOC
- Developing and reflecting on the specific (charging/discharging) factors of the SOAC including the attribution to the physical and digital interaction
 - Subject to future empirical research

- **Summary:** We presented the concept of a Social Accumulator (SOAC) as a mental model to explain the effects of human interaction with the focus on the digital domain & sketched three promising application scenarios.
- **Outlook:** The next research activities are:
 1. Collecting feedback from the community on the usefulness of the concept
 2. Empirical research on charging and discharging effects
 3. Application of the concept in the educational setting (own HEI)
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