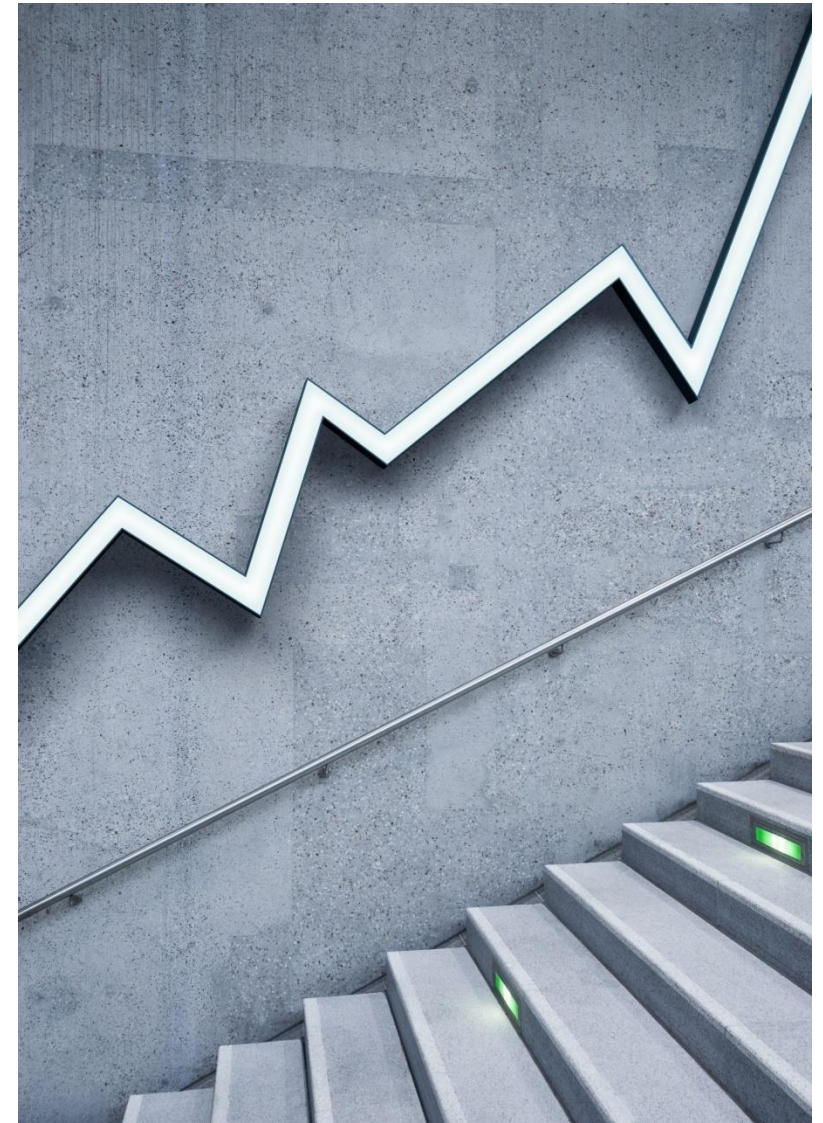


What kind of emotions university teachers and students experience related to assessment?

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Research projects

- The interaction between teaching and learning in higher education, 2009-2014
- What do course grades tell us about the quality of learning outcomes?, 2012-2014
- HowUTeach – developing a self-reflection tool for higher education teachers, 2017-2019



Quotation from teacher interview

I felt very anxious the whole week before the teaching about giving the lecture and making group work to happen. After the four-hour lecture I was so tired, that I just sat on the floor in my room and breath deep. It was so exhausting both mentally and physically.



Quotation from student interview


The fall semester went really well, but then in December I started working and there were still a couple of weeks left of the semester and then of course there were all these deadlines and exams and everything at the same time. And I was just so tired that I just couldn't handle all the essays, so I left them hanging and that sort of started the vicious circle--- and that was it, my enthusiasm sort of waned because of all the undone work.

”

Why focus on emotions of teachers and students?

- Academic contexts are often considered as an 'emotion-free zone', although teaching and learning are charged with a variety of emotions
- Emotions influence cognition and motivation
- Teachers' emotions are associated with the quality of their teaching and in their willingness to develop their teaching
- Students' emotions are associated with the quality of their learning and study progress
- Students are influenced by teachers' emotions

(e.g. Sutton & Wheatley 2003; Trigwell et al., 2012)



What triggers negative emotions related to assessment?

Heavy workload (teachers and students)

Assessment is too challenging / too easy for the students

Experience of 'unfair assessment' (teachers and students) >> challenges in validity and reliability of assessment



Heavy workload

Teachers:

- Usually caused by the use of traditional assessment methods and summative assessment
- No use of peer- or self-assessment or formative assessment
- 'testing culture'

Students:

- Typically related with traditional exams
- Exams tend to take place during the same weeks
- Often related with surface approach to learning (memorising information)

The level of challenges

Teachers:

- Teachers often find it difficult to set an appropriate level of difficulty of assessment
- "50% of the students will fail this course..."
- Often related with lack of assessment criteria (aligned with learning objectives)
- Often related with the use of only one assessment method only

Students:

- Students often describe assessment as too challenging or too easy
 - Giving up, less effort
 - Fear: I'm gonna fail this...

Experience of unfair assessment is often related with problems in....

Reliability of assessment

Validity of assessment

Experience of 'unfair' assessment: lack of reliability

(Hailikari et al., 2014)

Assessment criteria are not always clear to the teachers themselves; this is reflected in the reliability of assessment

Teacher: *"If you think about the situation in this question, there are huge differences in the points even though the answers were principally of the same quality."*

"That is actually quite scary, the evaluation of the answers can vary two points depending on the time of the day, the mood or the order I've assessed the answers."

Student: *"That course didn't go perfect but I didn't expect such a poor grade." "I'd like to know why I got only 3.5 points for the first task..."*

Experience of 'unfair' assessment: lack of validity (Hailikari et al., 2014)

The exams do not always measure what is intended to measure; this is reflected in the *validity* of assessment

Teacher: *"You just have to remember things. For God's sake [surprised], you don't have to apply and integrate knowledge in any of these tasks. The fourth task is the only one but actually it's enough that you just remember what has been talked about."*

Student: *I actually **didn't** compare these concepts that much. It has obviously been enough that I've just written about these techniques one after another.*

Valence and activation of academic emotions (Pekrun, 1992)

	Positive	Negative
Activating	joy pride hope enjoyment	anxiety shame anger tense
Neutral	happiness	sadness
Deactivating	relief relaxed	boredom hopelessness exhaustedness

The relations between academic emotions and approaches to teaching

(Postareff & Lindblom-Ylänne, 2011; Postareff & Lindblom-Ylänne, 2015)

- Group 1: Teachers with a focus on content; no or very little interactivity (content-focused approach)
 - Emotions were seldom described; “emotion-free” teaching descriptions
 - Reluctance towards teaching
 - Often triggered by non-interactive teaching and use of traditional forms of assessment

“I am not an enthusiastic teacher. It is something you have to do if you want to hang around at the university”.

The relations between academic emotions and approaches to teaching

(Postareff & Lindblom-Ylänne, 2011; Postareff & Lindblom-Ylänne, 2015)

- Group 2: Teachers with a focus on the students; high level of interactivity (learning-focused approach)
 - Lots of emotionally charged descriptions
 - Mostly positive emotions such as enjoyment of teaching and enthusiasm
 - Often triggered by interactive situations and use of activating teaching and assessment methods

"When I teach I want to be myself and find a real connection with my students. I want to share my enthusiasm with them. Otherwise I cannot really teach".

The relations between academic emotions and approaches to teaching

(Postareff & Lindblom-Ylänne, 2011; Postareff & Lindblom-Ylänne, 2015)

Group 3: Teachers in the middle of a development process

- More negative emotions than among other teachers
- Uncertainty, fear, nervousness, low self-efficacy
- Often triggered by non-interactive teaching and conventional assessment practices

"In principal I know how I could make my teaching more interactive, but I'm afraid of trying new things".

Differences in emotions between slow pace students and fast pace students

Hailikari, Kordts-Freudinger & Postareff, 2016:

- Slow pace students expressed a variety of negative emotions that were not mentioned by fast pace students,
 - Loneliness, depression, anger, non-commitment, feeling of incompetence

Postareff, Mattsson, Lindblom-Ylänne & Hailikari, 2017:

- Deep approach, fast progress, good success, positive emotions
- Surface approach, slow progress, poor success, negative emotions
- Deep approach, fast progress, good success, negative emotions
 - Aim to succeed, strong focus on assessment

HowUTeach –project

HowUTeach – self- assessment tool for teachers

- The project focused on higher education teachers' pedagogical competence, experiences of their working environment and well-being
- The main goal was to increase teachers' awareness of these elements through developing a research-based self-assessment tool "HowUTeach" including feedback

Research:

- HowUTeach survey results
- Interviews
- Smart rings + Learning Tracker

Dimensions of HowUTeach self-assessment tool

- **Approaches to teaching**
 - Interactive learning-focused
 - Transmissive content-focused (information transmission)
 - Unreflective teaching
 - Organized teaching
- **Experiences of work environment**
 - Interest and relevance
 - Support from colleagues
 - Autonomy
- **Integration of teaching and research**
- **Well-being**
 - Stress (general and teaching-related)
 - Burnout (exhaustion, inadequacy, cynicism)
 - Self-efficacy
 - Anxiety (concentration disruption, worry)
 - Recovery from work-related stress
 - Self-compassion

	Stress	Teaching-related stress	Burnout: exhaustion	Burnout: inadequacy	Burnout: cynicism	Self-efficacy	Anxiety: Concentration disruption
Learning-focused	-.018	-.062	.028	-.119	-.119	.082	-.251*
Content-focused	.152	.120	-.015	.039	.103	-.076	.165
Unreflective teaching	.154	.340**	.218*	.293**	.306**	-.357**	.401**
Organized teaching	.220*	.044	.002	-.116	-.157	.171	-.111

Correlations between approaches to teaching and dimensions of well-being

Important role of reflection

- Awareness of own decisions related to teaching and assessment and ability to draw conclusions on how they influence student learning is highly important
- The teacher in the examples had not thought about the assessment at all but assessment was based on repeating assessment in a similar manner from one year to another

Deeper insight into teachers' well-being

Interviews of 33 university teachers (2018-2019) in research-intensive universities with:

- Learning-focused approach to teaching
- Enthusiastic
- Positive attitude towards teaching

1

Teachers with low or no stress

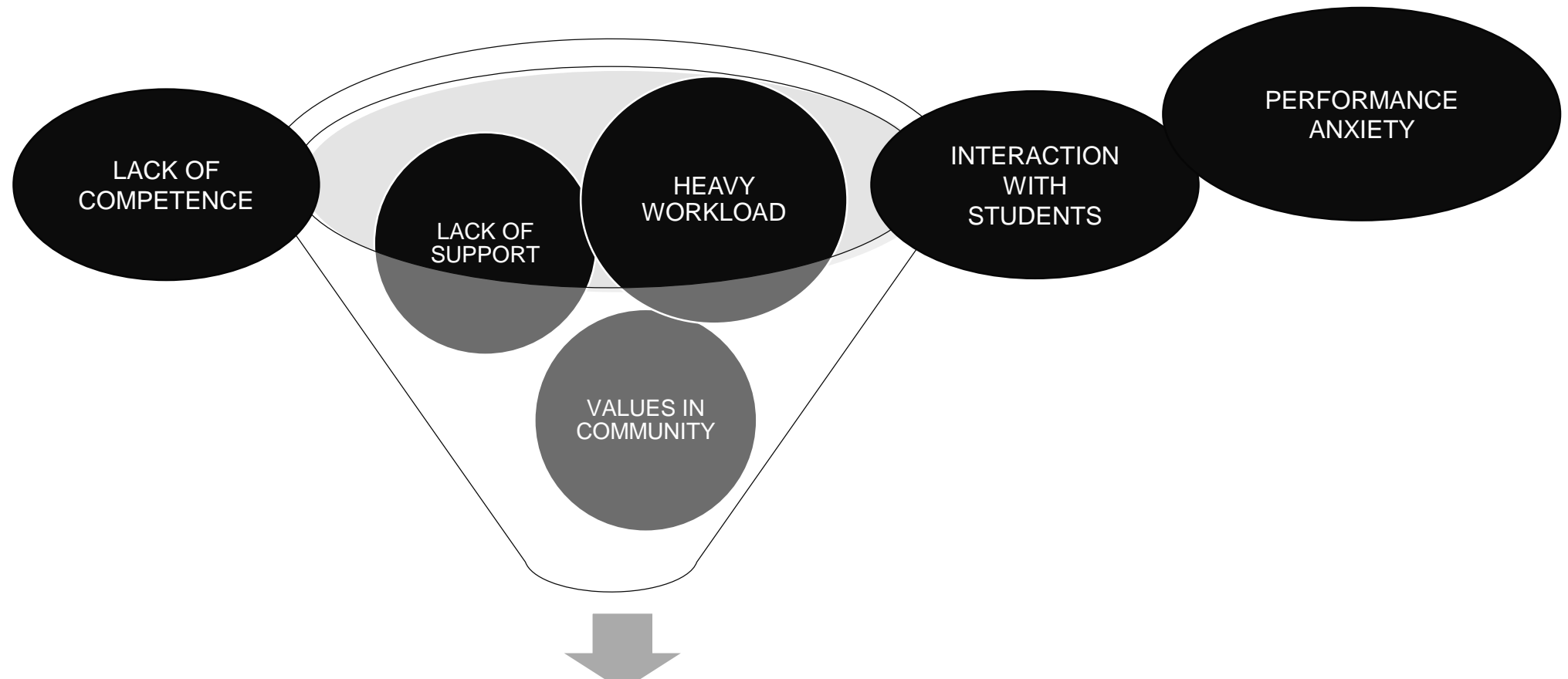
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Teachers with occasional but severe stress

3

Teachers with recurring, prolonged, and severe stress

What challenges teachers' well-being?



Feelings of inadequacy, distress, exhaustion

SHAME FRUSTRATION FEAR STRAIN NERVOUSNESS

Physiological measures: Smart Rings and Learning Tracker



- Questionnaire and interview data are self-report methods which assess conscious, explicit processes (see Pekrun, 2013)
- How to measure emotional processes which often remain implicit?

How to
measure
implicit
emotional
processes?

Moodmetric Smart Ring

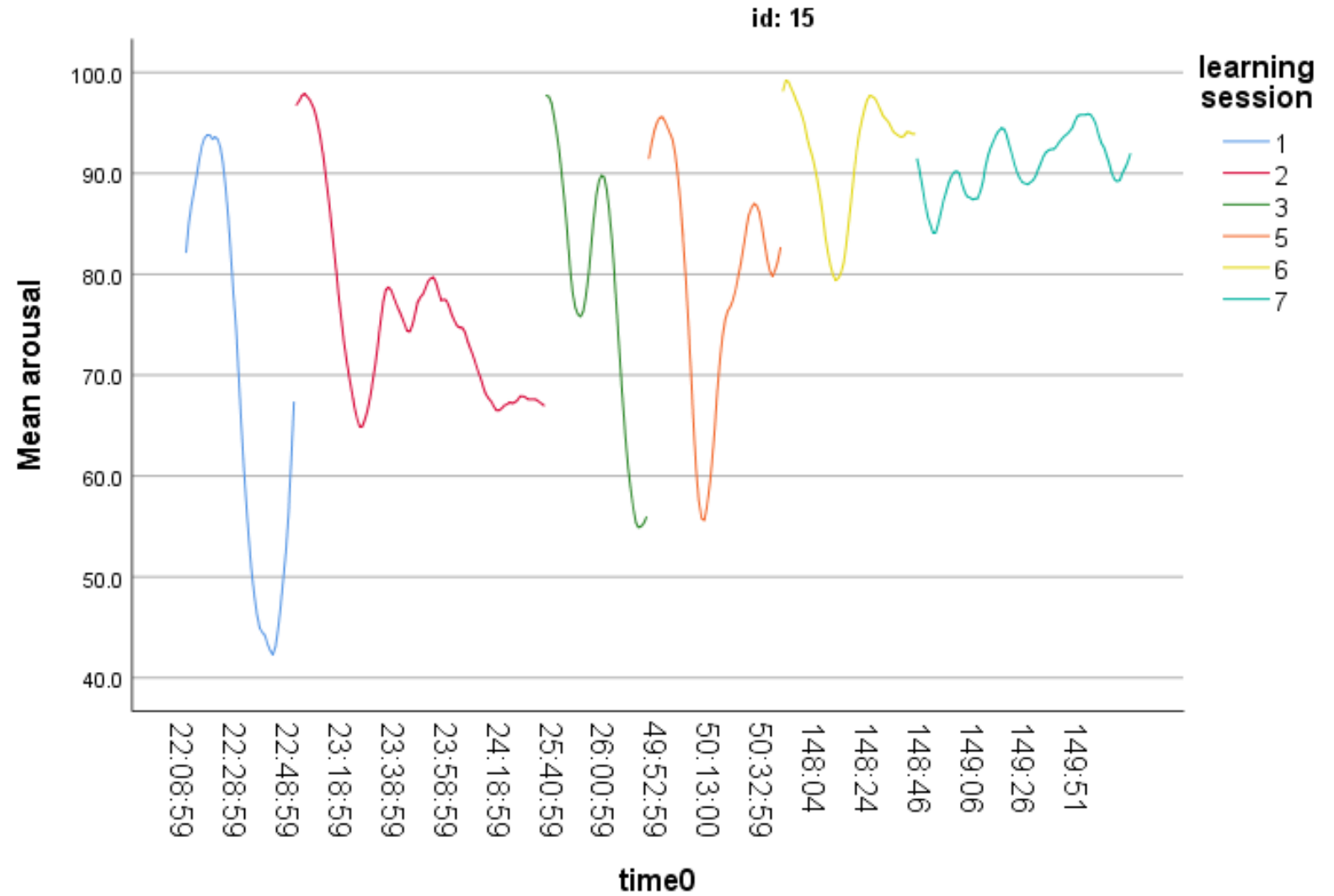
- A biosensor that measures electrodermal activity from sweat glands of the skin (EDA) (Suoja et al., 2017)
- reflects arousal of sympathetic nervous system activity; psychological and emotional states → emotional sweating (Boucsein, 2012)

LearningTracker -smart device application

- Experience sampling method
- Teachers indicate in real time
 - the beginning and the end of a working - sequence (e.g. assessment, teaching session)
 - the context of working (place and company)
 - Prospective and retrospective activity and emotions (valence and activation)



Arousal levels of an individual student during different learning episodes (Hartikainen & Nokelainen, in press)



Conclusions



Recognizing the important role of emotions in teaching and learning is important



Ability to reflect on own teaching and assessment increases well-being



Clear assessment criteria form the basis of reliable and valid assessment



From summative to formative, from teacher-led assessment to self- and peer-assessment



From testing to developing